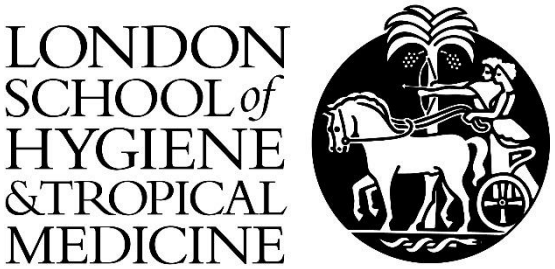

Involving Men in Maternity Care in Burkina Faso: An Intervention Study

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Thesis submitted in accordance with the requirements for the Degree of Doctor of Philosophy

University of London

April 2017

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FUNDING: My studies at LSHTM were funded by a 1+3 studentship awarded by the Economic and Social Research Council (ESRC). This study was funded by the Strengthening Evidence for Programming on Unintended Pregnancy (STEP UP) Research Programme Consortium. An additional grant of £2000 for fieldwork was given by the Faculty of Epidemiology and Population Health, LSHTM.

DECLARATION

I, Marina A.S. Daniele, confirm that the work presented in this thesis is my own.

Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

ABSTRACT

Background

The Sustainable Development Goals draw attention to the need for further improvements in reproductive health in low-resource settings. In Burkina Faso, the uptake of postpartum contraception, postnatal care attendance and the practice of exclusive breastfeeding are low. Men take many decisions that affect women and newborns' health, despite having little exposure to health information. We hypothesised that a strategy to involve men in facility-based maternity care, in an urban area with high antenatal care attendance, would improve adherence to recommended healthy practices after birth.

Methods

This was a mixed-methods study. Focus group discussions and consultations informed the development of an intervention with three components: A) a group discussion with male partners of pregnant women, B) a couple counselling session during pregnancy, and C) partner participation in the pre-discharge postpartum consultation. This was tested through a randomised controlled trial. 1144 pregnant women were enrolled in 5 primary health centres in Bobo-Dioulasso, and randomised 1:1 to intervention or control (routine care only). Participants were followed up at 3 and 8 months postpartum. For process evaluation, 40 semi-structured interviews were conducted with women, men and health workers.

Results

Three quarters of male partners in the intervention arm attended at least 2 of 3 components. The intervention increased attendance at outpatient postnatal care (at least 2 consultations), exclusive breastfeeding at 3 months postpartum, effective modern contraception use at 8 months postpartum, especially long-acting methods, and improved an unvalidated measure of relationship adjustment. Several factors influencing adherence to the intervention emerged from the qualitative process data. The intervention appears to have worked mainly by increasing male knowledge on key topics and promoting couple communication and shared decision-making. Providers reported specific implementation challenges.

Conclusion

Gender-transformative interventions to involve men as supportive partners in maternity care can improve adherence to recommended healthy practices among postpartum women.

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ANC	Antenatal care
ARV	Anti-retrovirals
BCC	Behaviour change communication
BF	Breastfeeding
BEmONC	Basic Emergency Obstetric and Newborn Care
CEmONC	Comprehensive Emergency Obstetric and Newborn Care
CHW	Community Health Worker
COC	Combined oral contraceptives
CPR	Contraceptive prevalence rate
DHS	Demographic and Health Survey
DV	Domestic violence
EBF	Exclusive breastfeeding
EmONC	Emergency Obstetric and Newborn Care
FGM	Female genital mutilation
FP	Family planning
FGD	Focus group discussion
GBV	Gender-based violence
HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome
HTSP	Healthy timing and spacing of pregnancies
IEC	Information, education and communication
IMR	Infant mortality rate
IPV	Intimate partner violence
IUD	Intra-uterine device
LAM	Lactational Amenorrhea Method
LA/PM	Long-acting or permanent methods (of contraception)
LARC	Long-acting reversible contraception
LMIC	Low and/or middle-income countries
LRT	Likelihood Ratio Test
LSHTM	London School of Hygiene & Tropical Medicine
MDGs	Millennium Development Goals
MNH	Maternal and neonatal health
MMR	Maternal mortality ratio
NGO	Non-governmental organisation

NMR	Neonatal mortality rate
OR	Odds ratio
PHC	Primary health centre
PMTCT	Prevention of mother-to-child transmission (of HIV)
PNC	Postnatal care
PP	Postpartum
PPFP	Postpartum family planning
RA	Research assistant
RCT	Randomised controlled trial
RD	Risk difference
RH	Reproductive health
RMNH	Reproductive, maternal and neonatal health
RMNCH	Reproductive, maternal, neonatal and child health
SBA	Skilled birth attendance
SDGs	Sustainable Development Goals
SGA	Small for gestational age
SRH	Sexual and reproductive health
STI	Sexually-transmitted infection
TFR	Total Fertility Rate
UN	United Nations
UNFPA	United Nations Population Fund
UNICEF	United Nations Fund for Children
VCT	Voluntary counselling and testing (for HIV/AIDS)
WHO	World Health Organization

ACKNOWLEDGEMENTS

I could not have completed this PhD without the unwavering support of my Supervisor Dr Veronique Filippi, since my application to join the London School of Hygiene & Tropical Medicine and throughout my time there. Her encouragement and faith in my progress and in the project have been highly motivating. Many thanks also to the other members of the PhD advisory committee Dr Rasmane Ganaba, Prof Simon Cousens, Dr Clementine Rossier and Dr Sophie Sarassat, for their invaluable support and advice. I am also grateful to Dr Maurice Yaogo for his guidance during my MSc summer project, to Dr Isabelle Lange for her comments on the qualitative component, and to Seydou Drabo for suggestions on the intervention design. I would like to thank staff at the Population Council for their important advisory input, and especially Dr Ian Askew, Dr Harriet Birungi, Dr Placide Tapsoba, Ms Gisele Kabore and Ms Nancy Termini. Thank you to all academics who have commented or otherwise contributed to this piece of work throughout these years, including Dr Jenny Cresswell, Dr Rebecca French, Dr Carine Ronsmans, and Dr Kazuyo Machiyama at the London School, as well as colleagues from other institutions that I had the pleasure of meeting at conferences. Special thanks also to Dr Alberta Bacci for her encouragement and support during my studies.

I would like to thank the Economic and Social Research Council for funding my Masters and PhD studies for four years at the School, and the STEP UP Consortium for funding the research. I am also grateful to the Infectious Diseases Epidemiology Department at LSHTM for additional research funding provided.

I am indebted to various people in Bobo-Dioulasso, Burkina Faso, for their essential support in conducting my fieldwork. I am very grateful to Dr Rasmane Ganaba for his approachability for discussions, and his useful suggestions stemming from his vast experience of the field. In particular, I would like to acknowledge the exceptional support of Ms Djeneba Ouedraogo, the field coordinator. Her tireless dedication, rigour, honesty and insight were invaluable for the project and it was a personal pleasure to work with her. Many thanks also to Mr Henri Some for his key role in data management, and to Mr Seydou Drabo, Dr Blahima Konate, Mr Achille Soulama and Mr Issiaka Bamba, for their thorough work on qualitative data collection. I would like to thank the five Research Assistants who carried out the quantitative interviews, Ms Chantal Millogo, Ms Antoinette Sanou, Ms Fatoumata Traore, Ms Adjaratou Soulama, and Ms Fatoumata Drabo. Thank you to Ms Diane Ouedraogo, and to the data entry staff. It was also a pleasure to be supported by the friendly and efficient administrative staff at AfricSanté, including Mr Edgar Diboulo, Ms Nana Abga, Ms Emma Bationo, and Mr Hamadou Siribie.

I would like to thank the Chief of the District of Dafra for granting us permission to conduct the study there, and to express my gratitude to each and every study participant for making this study possible. Many thanks to all of the health workers who dedicated their time and effort to

the project activities, and in particular to Mr Bachirou Doussa, Ms Pauline Doly, Mr Issouf Maiga, Ms Haoua Maiga, Ms Roukietou Konkobo, Ms Angele Ouedraogo, and Ms Fadima Sanou.

I would like to express my heartfelt thanks to my wonderful partner Chris Grollman, to all my family including my parents Juliet and Luigi, my sisters and brothers Frederica, Carolina, Stuart, Joe and Jess, and Chris's parents Tim and Julia, for accompanying and sustaining me throughout these years of study. Thank you to my other sisters Anna Benedetti and Francesca Vezzini. It has made my journey far more pleasant to have the company and support of my friendly office mates and other LSHTM peers, including Francesca Cavallaro, Rachel Scott, Susie Schaffnit, Clara Calvert, Giorgia Gon, Lenka Benova, Tina Sorensen, Ruth Farmer, Lori Miller, Rebecca Harris, Mardieh Dennis, Kerry Wong, Julia Pescarini, Chris Jarvis, Onikepe Owolabi, Claudia Di Girolamo, Ludovica Ghirardi, Gaurav Sharma, Sophie Rhodes, Richard Clarke, Enny Cruz, Bindu Sunny, Schadrac Agbla, Rose Wilson, and Alejandro Rodriguez. Equally, I would like to thank all my other friends and housemates in London and the UK, including Josina Calliste, Nadia Correia, Liz Bailey, Lisa Findley, Faye Dayan, Katie Higgins, Sarah Myers, Joanna Rankin, Ben Chacko, Marina Barsy, Laura Latina, Daniel Atenas, Sean Matheson, Bruno Basilio, Marta Balcyn, Puja Chakravarty, Karthik Kamalakar, and all the folks at Carlile Close no.5. Thank you to my friends in Burkina Faso who made me feel welcome, in particular to Pascal Sanou, Ousseni Bance, Dramane Ouedraogo, Maria Bacardit, Emilie Pigeon-Gagné, and Las Diarra. Thank you also to my friends in Italy and other countries, who have supported me from afar.

Last but not least, many thanks to the London School administrative staff including Sylvia Marinova, Jenny Fleming and Lauren Dalton, and to the friendly Refectory, cleaning and security staff.

1. BACKGROUND

In this Chapter, I will begin by summarising the priorities and challenges that the global community faces in improving reproductive, maternal and newborn health (Subchapter 1.1). In particular, I will focus on the health needs of mothers and newborns during the postnatal/postpartum period. I will explain the ways in which these can be addressed through known interventions, including increasing the coverage of postnatal care and promoting beneficial practices such as exclusive breastfeeding and postpartum family planning (1.2). I will then provide an overview of the Burkina Faso country context, health system and status quo for reproductive health, focusing on care-seeking and key behaviours in the postpartum period (1.3). I will summarise the main points made in the Conclusion (1.4).

1.1. Priorities in global reproductive, maternal and newborn health

The last few decades have seen an unprecedented surge in efforts to tackle the global burden of maternal, newborn and child mortality. In the last couple of years, the global community has been taking stock of the successes and failures of the Millennium Development Goals (MDG) framework, revealing the extent of its unfinished agenda (Requejo et al., 2015). Despite substantial reductions, progress was not sufficient to meet the targets for maternal and child mortality (Alkema et al., 2016, You et al., 2015). Furthermore, despite increases in the use of health services and in the coverage of key interventions such as skilled birth attendance (SBA), quality of care in facilities has too often remained low. Inappropriate and untimely care (too little, too late, or too much, too early) is a common problem, and ultimately compromises safety and wellbeing (Miller et al., 2016). Attention has also been drawn to the extent of disrespectful and abusive care prevalent in facilities across the world (Bohren et al., 2015). Although global fertility has been declining (United Nations, 2015), unmet need for family planning still remains high (United Nations DoEaSA, 2015). Unwanted/mistimed pregnancies and abortions also contribute to the burden of maternal and newborn ill-health (Say et al., 2014, Singh et al., 2013, Kozuki et al., 2013).

Importantly, improvements in reproductive, maternal and newborn health (RMNH) have been uneven between settings and have failed to reach the most vulnerable within populations (Graham et al., 2016). Among world regions, Sub-Saharan Africa has double the world average for unmet need for contraception (24% of women in union of reproductive age) (United Nations DoEaSA, 2015), the highest levels of under-5 mortality (83 per 1000 live births) (UNICEF, 2015) and of maternal mortality (546 per 100,000 live births) (World Health Organization, 2015b).

In the coming years, progress in achieving RMNH goals will be influenced by social, economic, demographic and environmental changes. Increasing urbanisation, for example, may accentuate

income inequalities rather than alleviate them (Kruk et al., 2016). The launch of the Sustainable Development Goals (SDG) framework in 2015 has emphasised the need to ensure equity while reducing ill-health by "leaving no-one behind". In the same year, the Global Strategy for Women's, Children's and Adolescents' Health 2016-2030 called for synergic efforts to improve survival by eliminating preventable deaths, enabling women and children to thrive and transform their communities (Temmerman et al., 2015). Success will be determined by the extent to which programmes engage with the social determinants that connect health and development, alongside putting in place the crucial health system strengthening efforts that are needed in order to deliver accessible, high-quality services and respectful care (Sharma et al., 2015).

1.2. The postnatal/postpartum period

The first six weeks after childbirth are known as the postnatal/postpartum period (World Health Organization, 2010). During this time, the mother and newborn are exposed to specific health risks, but dedicated preventative and curative interventions can promote wellbeing and save lives (World Health Organization, 2014). In this study, I will specifically focus on postnatal care (PNC), the practice of exclusive breastfeeding (EBF) and the initiation of postpartum family planning (PPFP), which can make important contributions to reducing maternal and infant mortality and morbidity.

1.2.1. Postnatal care

In recent decades, there has been increasing recognition of the high burden of maternal and neonatal mortality associated with the first few hours, days and weeks after childbirth. For mothers, the risk of dying decreases gradually throughout the postpartum period, but remains elevated throughout the first six months (Ronsmans and Graham, 2006). The risk of death is especially high after an abortion or stillbirth (Hurt et al., 2008). Causes of maternal deaths in the postpartum period include direct causes such as haemorrhage, complications of hypertension and sepsis, indirect causes including HIV/AIDS and malaria, and other causes such as accidents, murders and suicides (Say et al., 2014). There is also a significant burden of largely unmeasured and untreated maternal morbidity, often with permanent sequelae (Firoz et al., 2013). Neonatal mortality comprises almost half of infant mortality, indicating slower progress in reduction efforts (Lawn et al., 2014). Three quarters of neonatal deaths happen in the first week of life and most are due to direct causes such as prematurity, severe infections and asphyxia (Lawn et al., 2005).

The majority of maternal and newborn mortality and morbidity are preventable through known, cost-effective interventions (Lassi et al., 2013). Postnatal care[1] (PNC) has the potential for averting many deaths and disabilities by enabling timely diagnosis and treatment of complications and illnesses. In addition, it provides essential support for potentially life-saving home behaviours, such as breastfeeding (BF), and provides opportunities to counsel families on postpartum contraception to avoid frequent, poorly spaced pregnancies. The emotional and psychosocial support available through PNC is also crucial in order to reduce the risk of maternal depression. The receipt of PNC within 48 hours is associated with an almost two thirds reduction in the risk of neonatal death (Baqui et al., 2009), and the expansion of PNC coverage has been shown to be highly cost-effective in reducing infant mortality (Darmstadt et al., 2005).

However, postnatal care has been identified as the weakest link in the continuum of care throughout the childbearing period (Warren, 2006, World Health Organization, 2014). Women participating in Demographic and Health Surveys (DHS) are asked questions about whether they or the baby had a health check-up after birth. Based on these data, the reported median PNC coverage for the Countdown to 2015 countries is 58% for mothers and just 28% for newborns (Victora et al., 2016b). Historically, the amount of detail on PNC collected through DHS surveys has been limited, in comparison with antenatal care (ANC), although the Phase 7 questionnaire now includes a question on the content of the pre-discharge PNC consultation (Demographic and Health Surveys Program, 2015).

A common service model is to ask the mother to return to the facility with the baby for PNC (World Health Organization, 2005). However, women may not attend PNC because they feel well and therefore consider it unnecessary (Rossier and Hellen, 2014). Other reasons for not attending may include concerns about quality of care (Srivastava et al., 2015), lack of awareness of danger signs, or cultural restrictions keeping women at home (Koblinsky, 2005). The lack of ANC, low household wealth, low education and rural residence are also associated with lower levels of PNC attendance (Titaley et al., 2009, Fort et al., 2006). Initiatives to raise awareness of the importance of routine PNC attendance among women, families and communities, and to educate them about danger signs for mother and newborn are needed. For example, there is evidence that assisting women and their partners to develop a birth plan during pregnancy increases their PNC attendance (Magoma et al., 2013). The testing of new approaches to stimulate demand for PNC services is required.

[1] Although the terms "postpartum care" and "postnatal care" are often used interchangeably, a few years ago the WHO called for the adoption of "postnatal care" as a single term for the purposes of describing care provision to both the mother and the newborn in the first six weeks (42 days) after birth (WORLD HEALTH ORGANIZATION 2010. WHO Technical consultation on postpartum and postnatal care. Geneva: WHO.) In this thesis, I will adhere to this recommendation.

At the same time, improvements in service delivery need to be put in place. Until recently, international recommendations suggested a timing of postnatal contacts following the formula "6 hours, 6 days, 6 weeks and 6 months" (World Health Organization, 1998). In 2014, the WHO issued new guidelines to address the timing, number, place and content of PNC of mothers and newborns in the first 6 weeks of life in low and middle-income settings (World Health Organization, 2014). These recommend that healthy mothers and newborns receive care in the facility for at least 24 hours after birth, or receive PNC within 24 hours in the case of a home birth. Following discharge, at least 3 postnatal contacts are recommended for all mothers and newborns, on day 3 (48–72 hours), between days 7–14 after birth, and six weeks after birth (World Health Organization, 2014). In the first week, home visits are recommended, in order to reduce access barriers. It has been estimated that postnatal home visits could avert 30-60% of newborn deaths (World Health Organization and UNICEF, 2009).

Governments and donors need to take steps towards implementing and standardising the care schedule in line with this new guidance. Despite challenges, such as human resources constraints and inadequate provider skills (Lugina et al., 2001), lessons can be learnt from the experience of postpartum home visitation pilot projects implemented in resource-limited settings such as in Ghana (Kirkwood et al., 2013), Zambia (Ransjo-Arvidson et al., 1998), India (Bang et al., 2005) and Bangladesh(Baqui et al., 2009). Specifically, the integration of community health workers (CHWs) into the PNC service may be a useful strategy (Gogia and Sachdev, 2010, Darmstadt et al., 2009). Importantly, governments also need to improve data collection on PNC delivery and related outcomes in routine health management information systems.

1.2.2. Exclusive breastfeeding

The WHO and UNICEF recommend that newborns be breastfed within one hour of birth and be exclusively breastfed for the first six months of life, with no additional food or drink (including water) (World Health Organization and UNICEF, 2003). Infants should continue to be breastfed until age 2 or beyond, alongside the introduction of appropriate complementary foods from 6 months of age.

Breastfeeding provides immunity and protection from pathogens, decreasing the risk of diarrhoea and pneumonia (Victora et al., 1989). In particular, exclusive breastfeeding (EBF) provides protection against respiratory and gastrointestinal morbidity in infants (Duijts et al., 2010, Ogbo et al., 2017), and is associated with lower child mortality (Azuine et al., 2015). Breastfed infants may have lower rates of obesity and chronic diseases such as diabetes later in life compared to those who are not breastfed or breastfed for shorter periods (Horta et al., 2015). Breastfeeding mothers are less likely to develop breast and ovarian cancer and type 2 diabetes (Chowdhury et al., 2015), and improving breastfeeding practices could prevent 20,000 breast

cancer deaths per year (Victora et al., 2016a). Exclusive or predominant breastfeeding can also delay ovulation and therefore contribute to Healthy Timing and Spacing of Pregnancy (HTSP) (Chowdhury et al., 2015).

Overall, the scaling up of recommended practices related to breastfeeding to a near-universal level could save more than 800,000 child lives (Victora et al., 2016a), and result in $300 billion savings for the world economy thanks to short- and long-term health, economic and environmental gains (Rollins et al., 2016). The promotion of EBF could therefore have substantial benefits. However, globally, only 43% of infants are exclusively breastfed during the first six months of age (UNICEF, 2016b). For West and Central Africa, the estimate is 30%.

A good level of support by health systems, families, communities and workplaces is required in order to enable women to comply with breastfeeding recommendations. A range of initiatives are needed to achieve this. Crucially, efforts to promote awareness of recommended practices at the family/community level are required (World Health Organization, 2003). In maternity facilities, the implementation of the Ten Steps to Successful Breastfeeding of the Baby-Friendly Hospital Initiative (BFHI) has the potential to improve the quality of the professional support provided to families (Perez-Escamilla et al., 2016). The WHO has called for countries to develop and strengthen legal measures for the enforcement of The International Code of Marketing of Breastmilk Substitutes (World Health Organization, 2016c). Enacting legislation in line with ILO Convention 183 is also necessary in order to ensure that women's employment is compatible with breastfeeding (International Labour Organization, 2000). This convention also applies to atypical forms of dependent work, including in the informal sector. However, new approaches to raise awareness about the importance of EBF and promote its practice are also needed that target women, families and communities.

1.2.3. Postpartum family planning

In 2001, family planning (FP) use after childbirth began to receive international attention following the publication of an analysis of DHS data from 27 countries, which showed that 65% of women in the first year postpartum wanted to avoid a pregnancy in the following 12 months but were not using contraception (Ross and Winfrey, 2001). The failure to adopt a contraceptive method in a timely manner after childbirth can result in short birth intervals. Evidence from cohort studies has shown that intervals of less than 18 months are associated with infant mortality, preterm birth and the birth of small for gestational age (SGA) newborns (Kozuki et al., 2013). Older studies have also shown that intervals of less than 15 months are associated with higher rates of induced abortion, miscarriage and stillbirth (DaVanzo et al., 2007), and that child mortality and malnutrition decrease with the increasing length of birth intervals (Rutstein, 2005, Rutstein, 2008). An association has also been found between short birth intervals and uterine rupture in the case of previous caesarean sections (Conde-Agudelo et al., 2007). For

healthy timing and spacing of pregnancies (HTSP), the WHO recommends that women wait a minimum of two years following live birth, and a minimum of 6 months following an abortion, before attempting another pregnancy (World Health Organization, 2007b).

Averting closely-spaced pregnancies (less than 2 years apart) has the potential to substantially reduce child mortality (Rutstein and Winter, 2015). This could be achieved through the scale-up of postpartum family planning (PPFP), defined as "the prevention of unintended and closely spaced pregnancies through the first 12 months following childbirth" (World Health Organization, 2013). The continuum of care throughout the antenatal, intrapartum and postnatal period provides numerous opportunities to make contact with a large portion of the population and to offer broader preventative and curative services, including PPFP. Integrating FP with maternity care may offer "acceptable, timely and effective ways of reaching postpartum women and addressing their FP needs" (World Health Organization et al., 2012). For example, an analysis of DHS data from Kenya and Zambia has shown that FP use by women after birth was associated with attendance at a higher number of antenatal consultations (Do and Hotchkiss, 2013). This is likely to be due to the fact that ANC provides a window of opportunity to promote contraceptives.

A vast range of contraceptive options are safe and should be available for use by women during the first year postpartum, depending on their individual circumstances (World Health Organization and Center for Communication Programs, 2011). In the absence of breastfeeding, ovulation can return within 45 days postpartum (Jackson and Glasier, 2011), however several methods can be initiated earlier than this. The postpartum intra-uterine device (IUD) and female sterilisation can be initiated straight after birth (World Health Organization, 2013), and progesterone-only methods (the progesterone-only pill, the injectable and the implant) can be initiated at 6 weeks postpartum in breastfeeding women. The length of protection afforded by breastfeeding varies in function of its exclusivity and of time since birth, and is at the basis of the Lactational Amenorrhea Method (LAM) (Labbok et al., 1997). This is a highly effective yet temporary method, therefore it is important for programmes to ensure a smooth transition to other methods when the required conditions are no longer fulfilled. For women who are still amenorrheic, it is recommended that providers use the standardised WHO checklist (World Health Organization, 2016a) or a biochemical pregnancy test in order to easily exclude a new pregnancy and avoid delays in method provision. Women and families should receive personalised counselling and accurate information about their options, taking into account the fact that interest in PPFP may vary according to socio-cultural norms and expectations about the resumption of sexual intercourse following childbirth (Mbekenga et al., 2013).

Several interventions have attempted to expand and improve the quality of PPFP services, for example by integrating birth spacing messages into prenatal and postnatal consultations (Abdel-

Tawab et al., 2008) or improving provider knowledge and skills (Mwangi and Warren, 2008). Some educational interventions have been successful in improving the uptake of PPFP (Sonalkar et al., 2014), although there is conflicting evidence on whether the discussion of contraception during pregnancy is effective (Adanikin et al., 2013, Smith et al., 2002), and on whether it is more effective than postpartum counselling (Lopez et al., 2015). Demand-stimulating and awareness-raising initiatives at the community level, such as home visitation programmes, have shown promise (Sebastian et al., 2012, Vernon, 2009). However, more research is needed in this area.

1.3. Reproductive health in Burkina Faso: an overview

1.3.1. Country context

Burkina Faso is a landlocked country in West Africa, bordering with Niger, Mali, Ivory Coast, Ghana, Togo and Benin. In 2015, it ranked 183rd in the world based on the Human Development Index, and 44.5% of its population had an income considered to be below the poverty line ($1.25 per day) (United Nations Development Programme, 2015). The country is a member of the Economic Community of West African States (ECOWAS) and exports gold and cotton. Its population, projected to reach 18.6 million in 2016, has been growing at an annual rate of 2.9% between 2010 and 2015 (United Nations Statistics Division, 2016). Most of the population live in rural areas, with 30% living in cities (United Nations Statistics Division, 2016). Life expectancy at birth is 59 for women and 57 for men (United Nations Statistics Division, 2016). HIV prevalence is 1.2% among women of reproductive age, versus 0.8% among men (INSD, 2012).

The majority of the population practices Islam (61%), followed by Christianity (23%), and traditional religion or animism (15%) (INSD, 2008). There are about 60 ethnic groups, the largest being the Mossi (53%), followed by the Peulh (8%), Gourmantche (7%) and Bobo (5%). French is the official language, but many national languages are spoken, most of which correspond to a specific ethnic group.

1.3.2. Status of women and implications for reproductive health

The majority of women of reproductive age participate in income-generating activities but few have a formal employment for which they receive regular salaries (Storeng et al., 2013). Most work in the informal economy and street vending is a common activity (INSD, 2012). These occupations are combined with domestic work and subsistence agriculture. Based on the Gender Inequality Index, which reflects reproductive health, women's empowerment and economic activity, Burkina Faso ranks 144th globally, suggesting high levels of inequality between men and women (United Nations Development Programme, 2015). This is reflected by data published in the latest Demographic and Health Survey (conducted in 2010), which suggests

that only 23% of women are able to read and write, compared to 38% of men (INSD, 2012). Among women in union, 42% are in polygamous marriages, and decisions concerning important household expenses and health care seeking are mostly made by men (INSD, 2012). Three quarters of women experience some form of barrier to accessing health care, ranging from the need to ask for permission (21%), money (72%), distance (44%), or not wanting to go alone (18%) (INSD, 2012).

In 2009, Amnesty International published a comprehensive report on maternal mortality in Burkina Faso, which documents how women's low status and lack of power make it difficult for them to access services and achieve optimal reproductive health (Amnesty International, 2009). The report was based on field visits, case studies, and stakeholder interviews. About a third of women in Burkina Faso marry during adolescence and give birth to their first child before the age of 18 (INSD, 2012), which is associated with poor birth outcomes (UNICEF, 2005). Three quarters of Burkinabe women have undergone a form of female genital mutilation (FGM) (INSD, 2012), another harmful practice, rooted in gender inequality, which is linked to severe health consequences (UNICEF, 2016a). One in ten women in Burkina Faso has experienced domestic violence (INSD, 2012), which is linked to poor health outcomes (Verma and Collumbien, 2003), including adverse effects on women's psychological health (Ellsberg et al., 2008), increases in pregnancy complications and preterm birth (Andersson et al., 2011, Chambliss, 2008), and a higher risk of contracting HIV (Jewkes et al., 2009). In addition, West African women may be at increased risk of contracting sexually transmitted infections (STIs) in the postpartum period as a result of the practice of postpartum abstinence and the associated increase in men's extra-marital sexual contacts (Cleland et al., 1999).

1.3.3. Health system and human resources

The national health system in Burkina Faso is composed of three tiers. At the first or national level there are 3 university teaching hospitals (*Centre Hospitalier Universitaire* or CHU). At the second or regional level are 9 regional hospitals (*Centre Hospitalier Regional* or CHR). At the third or district level there are 47 District hospitals (*Centre medical avec antenne chirurgicale* or CMA) and 35 District hospitals not providing surgical care (*Centre Medical* or CM). Within districts, there are also 1643 primary care centres (PHCs) known as *Centres de Santé et de Promotion Sociale* or CSPS. Throughout this thesis, I will refer to these as primary health centres or PHCs. Each PHC serves an average of 10883 people (Ministère de la Santé, 2015a). These PHCs may provide some or all of the basic emergency obstetric and neonatal care (BEmONC) functions (Gabrysch et al., 2012).

The health system in Burkina Faso is under-resourced, with only 6% of the health budget spent on health in 2013, a fall from previous years (Ministère de la Santé, 2015a). This is far from the 2001 Abuja target of 15% (World Health Organization, 2011). There is also a scarcity of skilled

providers. The number of doctors has been gradually growing, but there were only 857 in the whole country in 2014, a ratio of 1:20 864 people (Ministère de la Santé, 2015a), which is among the lowest physician densities in the world (World Health Organization).

In the reproductive health domain, the total number of midwives in the country is 1743, an increase by two thirds since 2010. There are both female and male midwives in Burkina Faso (*Sage Femme d'Etat* or SFE and *Maieuticien d'Etat* or ME). Roughly 400 midwives are qualifying every year in BF from the state academies (*Ecoles Nationales de Sante Publique*), however there is still only one midwife per 10,253 population (Ministère de la Santé, 2015a). The government's response has been to train *accoucheuses auxiliaires* and deploy them to the rural areas, whilst midwives have been concentrated in referral hospitals. These professionals have a basic level of primary education (*Certificat d'édudes primaries elementaires*) and have completed a two-year training programme. The *accoucheuse* is the professional who attends by far the largest number of births and provides the highest number of ANC and PNC consultations in the country (INSD, 2012). A number of *accoucheuses* are undergoing a further 18-month training course to become *accoucheuses brevetées.*

In urban PHCs, midwives and *accoucheuses* work side by side, whereas in rural areas the *accoucheuse* is usually the sole provider of maternity and FP services. Since 2013, the government has abandoned the *accoucheuse* programme and will be training only midwives in the future. My understanding is that this is because the *accoucheuse* education programme does not meet the international standards of training for midwives and nurses (completion of secondary education as entry requirement and a 3-year course) (International Confederation of Midwives, 2010), and therefore *accoucheuses* cannot be classed as skilled birth attendants (World Health Organization, 2004). However, there are still a total of 3040 *accoucheuses auxiliaires* working in the public sector, meaning they still far outnumber midwives (Ministère de la Santé, 2015a). Virtually all midwives work in the cities (Ministère de la Santé, 2011).

1.3.4. Maternal and newborn health

There is a high burden of maternal and child mortality and morbidity in Burkina Faso. The maternal mortality ratio (MMR) is estimated at 371 deaths per 100,000 live births (World Health Organization, 2015b). Although the MMR dropped by about 50% since 1990, the MDG target of 142 was missed. The under-5 mortality rate is 89 per 1000 live births, meaning that Burkina Faso did not achieve its MDG target of 67, despite an annual reduction rate of 3.3% since 1990 (and an overall 56% decline from 202) (UNICEF, 2015). The infant mortality rate is 61 per 1000 live births and the neonatal mortality rate is 27. A national strategy for the reduction of maternal and neonatal mortality was put in place in 2006, focused on increasing skilled birth attendance (SBA), access to Emergency Obstetric and Newborn Care (EmONC), contraceptive use and community engagement (Ministère de la Santé, 2006a). However, the

numbers suggest that despite considerable progress in recent decades, action is needed to further reduce avoidable deaths among women and children. The legal framework in Burkina Faso stipulates that abortion is illegal except to save the life of the woman, if the foetus is diagnosed with an incurable condition, or in cases of rape and incest (Assemblee Nationale Burkina Faso, 1996).

Data from the latest DHS (conducted in 2010) on select maternal and newborn health (MNH) indicators are presented in Table 1 for the country level and for urban areas (INSD, 2012).

The national reproductive health policy states that women should attend at least one antenatal visit per trimester, plus another before birth (Ministère de la Santé, 2010a). According to the country level DHS data, almost all women (95%) attend antenatal care (ANC), but only a third attend four or more consultations, and less than half of first consultations occur in the first trimester (INSD, 2012). Information, education and communication (IEC) on a variety of topics, including family planning, is supposed to be provided to women and families by maternity services during the antenatal and postnatal periods, and during child care visits (Ministère de la Santé, 2010a). This usually takes the form of a group talk (*causerie educative*) given to the women who have come to attend ANC, prior to the start of the clinic (Daniele, 2014). Antenatal, postnatal, child growth consultations and vaccinations are free for all (Ministère de la Santé, 2002). However, my observations of client-provider interactions in Bobo-Dioulasso showed that women were sometimes asked to purchase gloves and ANC booklets, and were turned away if they have no money (Daniele, 2014). These data were collected as part of a qualitative study conducted in 2013 (further details in Subchapter 4.1).

The majority of women (66%) deliver in health facilities, a large increase since the 2003 DHS survey, when only 38% women had facility births (INSD, 2004). In urban areas, facility birth is almost universal. The cost of normal birth, caesarean section and emergency obstetric care have been subsidised by 60-80% since 2006 and this was the case throughout the duration of this study (Ministère de la Santé, 2006b). The cost was waived for the poorest 20% of the population and transport in the case of complications was also free. Although this did not affect participants during the study period, all essential maternal and newborn care services became free at the point of use from the 2nd April 2016 throughout the country. It seems likely that fee exemptions will increase the utilisation of maternity services in the coming years, as occurred following the introduction of the 2006 subsidy policy (Ridde and Olivier de Sardan, 2012).

According to the national policy, women and newborns should receive a postnatal check-up at 6 hours postpartum or prior to discharge from the facility, and are subsequently expected to return for outpatient postnatal check-ups at 6 days and 6 weeks after birth (Ministère de la Santé, 2010a). The latest DHS reports that 72% of mothers received their first postnatal check-up within 48 hours of birth, but it does not report on subsequent outpatient check-ups (INSD,

2012). Service statistics from the facilities where my 2013 study was conducted in Bobo-Dioulasso (two urban and two rural) suggest that over the preceding 6-month period about 60% of women attended outpatient PNC, of which half attended both recommended appointments (Daniele, 2014). In a similar study conducted in PHCs in Ouagadougou, Rossier and Hellen found that only a maximum of 30% of women attended the 6th week postpartum visit (Rossier and Hellen, 2014). They attributed low attendance to the failure of health workers to inform women of the appointment, and to the fact that women do not see the appointment as important if they are feeling well.

Less than half of newborns are breastfed within one hour of life (42%), and early initiation is more common among more educated women (INSD, 2012). Exclusive breastfeeding is only practiced for less than a month (median), and only one quarter of infants are still exclusively breastfed by 3 months postpartum. Most infants under 5 months of age are given water, as well as breast milk, as milk is not perceived as a source of water (UNICEF, 2012). Traditionally, mothers bathe babies and give them enemas using herbal decoctions made from specific roots and leaves, and also give them some of the infusion to drink (Taverne, 2000). These practices are performed from the first few weeks of life, and are thought to stimulate the baby's appetite, give strength and confer resistance to illnesses. Older women are usually the ones encouraging these practices (Hofmann et al., 2009). There is an established vaccination calendar for infants aged up to 16-18 months, plus monthly contacts for child growth check-ups in the first year. Three quarters of children receive all childhood immunizations (INSD, 2012).

Table 1: MNH indicators for Burkina Faso

	Country level	Urban areas
Antenatal care attendance (at least 1 consultation)	95%	99%
Antenatal care attendance (at least 4 consultations)	34%	45%
Facility births	66%	94%
Median age at first birth	19.5	20.6
Median duration of exclusive breastfeeding	< 1 month	< 1 month
Median duration of breastfeeding	2 years	22 months

1.3.5. Fertility and family planning

The national authorities of Burkina Faso have acknowledged for some time that rapid population growth poses a challenge for the country's development (Ministère de l'Economie et des Finances, 2011). In recent years, the government has issued plans setting regional targets for contraceptive prevalence rates (CPR) and has committed itself to increasing its financial contribution to the purchase of contraceptives, relative to donors (Ministère de la Santé, 2013). However, one quarter of women of reproductive age still have an unmet need for family

planning (INSD, 2012), placing the country among those with the highest levels in the world. There is still, therefore, a long way to go.

Data from the 2010 Demographic and Health Survey on select indicators related to fertility and family planning are presented in Table 2 for the country level and for urban areas (INSD, 2012). Contraceptive prevalence has increased in recent years, from 9% in the 2003 DHS to 15% in the most recent round, while unmet need has declined (INSD, 2004, INSD, 2012). The overall demand for FP is 45%, which is comparable with the West African average as estimated by FP2020 (FP2020). Contraceptive prevalence is three times higher in urban areas, compared with rural areas. The total fertility rate (TFR) is 6.0 births per woman, down from 6.9 recorded in the previous DHS. Over half of women in union wish to wait at least two years before their next birth, and 23% want to limit. Out of women in union 14% are using modern methods and 1% a traditional method. The most commonly used modern methods are injectables (5%), implants (3%) and male condoms (3%). (INSD, 2012).

Birth intervals are fairly long, and only 13% of births occur less than 2 years apart (INSD, 2012). At one year postpartum, 59% of women are still considered to be in a condition of postpartum non-susceptibility, due to postpartum abstinence and amenorrhea. A third of women have not restarted sex within the first year postpartum (INSD, 2012). This is linked to a strong tradition of postpartum abstinence which has parallels in other parts of Sub-Saharan Africa (Page and Lesthaeghe, 1981, Bezner Kerr et al., 2008, Arts et al., 2011, Mbekenga et al., 2011). This practice is traditionally associated with postpartum spousal separation, meaning that the woman and baby go to live with their mother-in-law for several months, or sometimes with their own family, and have limited contact with the baby's father.

Although, to this day, postpartum non-susceptibility plays an important role in maintaining healthy birth intervals, its length declined by about 5 months between the last two DHS surveys (INSD, 2004, INSD, 2012). A slightly older study from Burkina Faso attributed these trends to urbanisation, economic development, and social and cultural changes (Dehne, 2003). The length of breastfeeding, key to amenorrhea, has begun to decline and is lower in cities (INSD, 2004, INSD, 2012). This may well decline further as more women enter the workforce and are unable to feed their babies frequently. In the same period, the median duration of postpartum abstinence has also fallen by 5 months. These changes explain the shortening of postpartum non-susceptibility and are likely to lead to the increased exposure of postpartum women to the risk of rapid repeat pregnancy. The latest DHS suggests that the period of non-susceptibility is longer in rural areas (INSD, 2012). However, longer birth intervals are observed in cities, among better-educated and wealthier women, suggesting that family planning use affords longer protection compared to traditional ways of achieving birth spacing. Promoting PPFP is therefore

important in Burkina Faso in order to maintain healthy birth intervals, as well as to enable women to achieve their desired family size.

However, findings from my 2013 study in Bobo-Dioulasso area suggested that only a small proportion of women commenced a FP method during routine PNC (Daniele, 2014). Similarly, the PopDev cohort study, also conducted in Bobo-Dioulasso and surrounding areas, showed that only 12% of postpartum women started a FP method within the first two months after birth (*internal communication*)[2]. Only about a third were using a method by 6-7 months postpartum, despite the fact that about half had their periods again and three quarters had resumed intercourse. This confirms the findings of an older cohort study, which showed that among women who had an uncomplicated delivery in six urban hospitals, one year after birth 69% were menstruating and 74% had resumed intercourse, however only 32% were using modern contraception (Ganaba et al., 2010).

Table 2: Fertility and FP indicators for Burkina Faso

	Country level	Urban areas
TFR	6.0	3.9
Desired number of children	5.2	3.3
Contraceptive prevalence rate (CPR)	15%	34%
Unmet need (women in union)	24%	21%
Unmet need for spacing	17%	14.5%
Unmet need for limiting	7%	7%
Median duration of postpartum amenorrhea	12.4 months	9.4 months
Median duration of postpartum abstinence	7.7 months	6.3 months
Median birth interval	3 years	3.5 years

There are several reasons which can explain the low uptake of FP, and PPFP specifically, in Burkina Faso.

The qualitative study I conducted in the Bobo-Dioulasso area revealed shortfalls in quality of postpartum family planning (PPFP) services offered at PHC level (Daniele, 2014). During the

[2] The full title of the PopDev study was "Productivity, family planning & reproductive health: an interdisciplinary study in Burkina Faso", and it aimed to assess the relationship between women's work and RH outcomes. It ran between 2012 and 2014 and included a secondary analysis of existing data, a cohort study, and an anthropological study in Bobo-Dioulasso and surrounding villages. It was a collaboration between LSHTM, AfricSanté, University of Oslo and Lariss and, like this study, was embedded within the STEP-UP consortium. The results of the PopDev study have not yet been published in a peer-reviewed journal, however they have been circulated internally. I will refer to them throughout the thesis because they are highly relevant to this study's setting and provide some of the only data available. Where possible, rather than to internal communications, I will refer to a research brief that is publicly available: DRABO, S., KAGAMBEGA, A., KEITA, A., KONTIEBO, S., MONTEL, L., FILIPPI, V., SOUBEIGA, A., STORENG, K. T., DA, S., ALLAHISSEM, C., GALI GALI, I. & YAOGO, M. 2015. Compte rendu d'etude: Projet PopDev au Burkina Faso. Available : http://maternalhealthgroup.lshtm.ac.uk/files/2014/05/PopDev-policy-brief_webpage.pdf [Accessed 15 Feb 2016]: London School of Hygiene & Tropical Medicine, London..

observation of client-provider interactions it emerged that staff sometimes lacked the skills to provide certain methods, were reluctant to promote them, and lacked the time or were unwilling to fully engage with women to ensure they made informed choices. We observed that opportunities to counsel women on PPFP during pregnancy and post-delivery were often missed. Another major barrier for women seeking contraception after two months postpartum is the providers' requirement that they have their period or otherwise prove they are not pregnant (Rossier and Hellen, 2014).

Some problems we observed were structural, including stock out issues and the presence of legal barriers. All professionals involved in maternity care are authorised to administer natural FP methods, barrier methods and combined oral contraceptives (COC). This includes *accoucheuses* and community health workers (*agents itinerants de santé* or AIS). However, implants and intra-uterine devices (IUDs) can only be provided by qualified nurses (*Infermier d'Etat* or IDE), midwives, mid-level providers (*Attaches de Sante'*) and doctors (Ministry of Health, 2010 a). In practice, this means that the most effective methods are not available to the majority of Burkinabe women, who only have access to *accoucheuses* locally. When such a limited number of contraceptive options are available, women may have to settle for a method that is not ideal for them (WHO 2010) and may be unable to switch to another method in case of side effects, leading to discontinuation (Cleland et al., 2006).

Access to FP products remains problematic for parts of the population. Contraceptives are 75% subsidised and accessory products needed for insertion, check-ups and reversals of methods are officially free (Ministry of Health, 2005) (Ministry of Health, 2011 b). The prices of contraceptives are supposed to be revised every year at the national level and during the study they ranged from 10 CFA for the male condom, to 1000 CFA for the implant (0.01 to 1 GBP) (Ministry of Health, 2005). However, not all women are able to afford these prices, and their cost may have to be added to the price of transport to reach the facility, and other opportunity costs such as the loss of several hours' work. Furthermore, our study revealed that payment for gloves is commonly demanded, as well as for accessory products such as the speculum for an IUD check-up (Daniele, 2014).

Demand-side factors must also be taken into consideration when exploring reasons for low FP uptake. Despite substantial reductions in child mortality over the same period, desired family size has not changed since 2003 and remains high, at 5.5 children per woman (INSD, 2004, INSD, 2012). Over a third of women do not intend to use contraception in the future (INSD, 2012). The unmet need for limiting births is nearly 3 times lower than that for spacing (INSD, 2012). This may be due to the persistence of ambivalent attitudes towards the continuation of childbearing within a pronatalist culture, and to an unwillingness to commit to cessation (Page and Lesthaeghe, 1981), or, in some areas of the country, to the belief that Islam is against

contraception (Dehne, 2003). Misconceptions about fertility return and fears of side-effects have been documented, and the persistence of stigma against postpartum sex means that some women are reluctant to access services even if they live with their partner and might resume intercourse any time (Daniele, 2014, Rossier and Hellen, 2014). There is evidence that some women may feel coerced or pressurized into resuming intercourse sooner than desired, and before they have begun contraception (Rossier and Hellen, 2014).

1.4. Conclusion

In this Chapter, I have shown that despite the progress made in recent years, there is still work to be done to improve RMNH worldwide, as emphasised by the launch of the SDG framework in 2015. This is especially relevant to Burkina Faso and other low-resource settings with high maternal and newborn mortality and low contraceptive prevalence. Women and children in Burkina Faso face the additional challenges of high levels of gender inequality, and may face difficulties or be reluctant to access an under-resourced health system, which is not always able to provide high standards of care.

The postnatal/postpartum period provides crucial opportunities to address the health needs of mothers and newborns. PNC coverage is essential in order to detect health problems and support the adoption of preventative interventions and healthy practices, such as EBF and PPFP. There is a need, therefore, to develop strategies that can increase care-seeking in the postnatal period and facilitate the adoption of behaviours that can enhance the health and wellbeing of families at this vulnerable time. Alongside the implementation and scale-up of known solutions, more research is needed to test innovative approaches.

2. INVOLVING MEN: CHALLENGES AND OPPORTUNITIES

This Chapter will explore the role of male partners in reproductive health and the influences that they exert over decision-making, with a particular focus on Sub-Saharan Africa (Subchapter 2.1). The degree to which men currently participate in facility-based reproductive health care in the region will also be described (2.2). I will then discuss why increasing male involvement in maternity services may be a useful strategy in order to improve maternal and newborn health (2.3), and present an overview of different programmatic approaches and of the official endorsements of male involvement strategies (2.4). Finally, I will address gender issues that are relevant to male involvement interventions (2.5). The key points of the Chapter will be summarised in the Conclusion (2.6).

2.1. The influence of male partners on reproductive health in Sub-Saharan Africa

The influence of women's social network and community on their reproductive health (RH) has been increasingly recognised in recent decades (Roth and Mbizvo, 2001). The ecological systems approach suggests that individuals do not exist in isolation, but that their behaviour is subjected to the influence of family, peers, structural factors and wider sociocultural norms (McLeroy et al., 1988, Breslow, 1996). In particular, the "household production of health" framework (Berman et al., 1994) and family system theory (White and Klein, 2002, Turk and Kerns, 1985) situate the mother-child dyad within a family, where they are influenced by other significant actors. In particular, non-Western societies may have a more collectivist orientation (Triandis and Gelfland, 1998). Decisions may be made collaboratively and involve grandparents, other blood relatives and community neighbours (Panter-Brick et al., 2014). The role of grandmothers, and especially mothers-in-law, may be particularly influential for maternal and newborn health, as they often play a primary role in caring for postpartum women and babies (Aubel, 2012).

The role of male partners has also received increasing attention because, in many contexts, they exert considerable influence on women's use of health services, and therefore, indirectly, on MNH outcomes (Dudgeon and Inhorn, 2004). In many parts of Sub-Saharan Africa, men are heavily involved in decisions related to women's use of RH services. Studies from the region show that men may influence women's use and timing of use of ANC (Gross et al., 2012, Gharoro and Igbafe, 2000), place of delivery and use of skilled care (Mrisho et al., 2007, Danforth et al., 2009, Mpembeni et al., 2007, Ganle et al., 2015, Aarnio et al., 2013, Magoma et al., 2010), and the organisation of referrals and transport for maternal complications (Pembe et al., 2008, Warren, 2010). Women may be especially dependent on men when payment for

specialist hospital care is required (Banos et al., 1996). Male partners also play a role in decisions related to child immunization (Babirye et al., 2011). In Burkina Faso, male family members often decide on the use of ANC or skilled care at delivery (Somé et al., 2013), and are usually responsible for organising transport (De Allegri et al., 2015). Although many Burkinabe women work outside the home and some have disposable income, in 75% of households decisions on seeking health care for the woman are taken principally by the husband, and for a fifth of women gaining permission is an important barrier to seeking care (INSD, 2012).

Several studies indicate that although many women in Sub-Saharan Africa have a good level of knowledge on recommended infant feeding practices (Reinsma et al., 2012, Otoo et al., 2009), pressure from their families and social networks affects their ability to adhere to these (Agunbiade and Ogunleye, 2012, Olayemi et al., 2007, HDI, 2011). Male partners and older women, in particular the mother-in-law, have a strong influence on feeding practices in many countries, including Burkina Faso (Hofmann et al., 2009, UNICEF, 2012). However, these family members usually have lower levels of knowledge of evidence-based recommendations, because of their limited contact with health services (Aniebue et al., 2010, Bezner Kerr et al., 2008, Infant & Young Child Nutrition Project, 2011). In many traditional societies in Sub-Saharan Africa, breast milk is perceived to be insufficient to meet the baby's needs for nutrition and hydration, therefore family members are usually sceptical of EBF and encourage the introduction of complementary foods before the age of 6 months (Otoo et al., 2009, Davies-Adetugbo, 1997, Arts et al., 2011, Fjeld et al., 2008).

There are many ways in which men influence breastfeeding practices, either directly or indirectly. Traditionally, one of men's mostly cited roles is to provide financial support. However, if he doesn't materially provide for the mother this may cause her to resume work outside the home earlier than planned, which may compromise her ability to exclusively breastfeed for the recommended period (Ajibade et al., 2013). While grandmothers often remain the principal authoritative source on feeding (Aubel, 2012), in urban areas the male partner may have a stronger role to play, for example in relation to the introduction of complementary foods. The introduction of formula milks and industrial porridges (such as Nestle's *Cerelac*) is seen by some as a mark of social status and of the man's ability to provide (Engebretsen et al., 2010, Otoo et al., 2009, Fjeld et al., 2008), as well as his contribution to bonding with the child and allowing the mother to rest (Mbekenga et al., 2011). Another important factor is the persistence of postpartum abstinence taboos and women's belief that having sex may spoil the milk and make the child sick (Arts et al., 2011, Rossier and Hellen, 2014, Mbekenga et al., 2011). This may lead women to end or limit breastfeeding if they want to resume sex, or if they decide to resume out of fear that their partner will look for sex elsewhere (Reinsma et al., 2012). For HIV-positive women, the ability and willingness to adhere to EBF may be particularly complex due

to stigma (Buskens et al., 2007), but is easier for women who are supported by their families and partner and are able to disclose their status (Maru et al., 2009, Matovu et al., 2008).

Throughout Sub-Saharan Africa, men are also heavily implicated in decisions regarding the number of children to have and the use of contraception (Ajah et al., 2015, Orji et al., 2007, Nattabi et al., 2011, Mbizvo and Bassett, 1996, Berhane et al., 2011), and in some settings consider themselves to be the principal decision-maker on these matters (Mosha et al., 2013, Maiga et al., 2007). Several studies suggest that men may have lower levels of knowledge on contraception compared to women, and may disapprove of its use for fear of side effects, higher desired fertility, or anxieties related to gender roles such as concerns about the woman's fidelity (Babalola and Neetu, 2012, Kassa et al., 2014, Withers et al., 2015). Correspondingly, in Burkina Faso, some men believe that contraception will cause infertility or that contraception may enable their wives to cheat on them (PopDev project, *personal communication*). Men wish to have more children than women (6.3) and only 10% say that they don't want any more children (INSD, 2012). The agreement of male partners is not required by law for reversible contraceptive methods (Assemblee Nationale Burkina Faso, 2005), nevertheless 35% of postpartum women who were not using a FP method cited the husband's opposition to FP as a reason (PopDev, *internal communication*). A strong association has been found in other countries between women's uptake of FP and their partner's approval (Mohammed et al., 2014, Eliason et al., 2013, Esber et al., 2014, Prata et al., 2015), and perceived male opposition acts as a disincentive (Averbach et al., 2012, Randrianasolo et al., 2008). Evidence from Burkina Faso and Nigeria suggests that while some women use contraception without informing their husband, this is perceived as undesirable and risky (Daniele, 2014, Babalola and Neetu, 2012).

In general, men's decision-making power is linked to their greater control over household finances (Amooti-Kaguna and Nuwaha, 2000, Ngom et al., 2000) and to the persistence of patriarchal gender norms (Nwokocha, 2007). Men's views may be more influential when women are reliant on their social networks for economic and logistic support (Moyer et al., 2014), or when decisions are made by mothers-in-law (Gupta et al., 2015). Men take decisions that may be more or less conducive to optimal health outcomes for women and children, depending on their level of knowledge, awareness, and attitudes. When they have low knowledge or low levels of formal education, couples are likely to be less well-prepared for birth (August et al., 2015) or to have a birth plan (Kakaire et al., 2011). A study in Tanzania found that women living in male-headed households were less likely to deliver in facilities (Mrisho et al., 2007). Similarly, dimensions of women's autonomy were strongly predictive of ANC and immunization services utilisation in Ethiopia and Eritrea (Gebremariam, 2007), and household economic decision making by women was associated with contraceptive use in a multi-country analysis (Do and Kurimoto, 2012).

2.2. Levels and determinants of male involvement of men in maternity care

Although men exert a strong influence on key behaviours that affect RH, they do not routinely participate in maternity care in many parts of the world. Most studies from Sub-Saharan Africa report that a third or less of male partners have ever accompanied their spouses to ANC or PNC, though the proportion who actually took part in the consultations is likely to be lower (Ganle and Dery, 2015, Iliyasu et al., 2010, Van den Berg (editor), 2015, Nkuoh et al., 2010). In urban Burkina Faso, observations of routine maternity care in facilities in the cities of Bobo-Dioulasso and Ouagadougou have shown that men are not usually involved in maternity care, rarely accompany their wives to antenatal and postnatal care appointments, and have scarcely any contact with health workers (Rossier and Hellen, 2014, Daniele, 2014). However, there is evidence that ANC attendance by men may be higher in settings where it has in effect become compulsory, a problematic local interpretation of national policy in certain countries (see General Discussion, Subchapter 11.6) (Påfs et al., 2015, Vermeulen et al., 2016). In some settings, particularly private hospitals where labour wards are sufficiently spacious, male presence at the birth appears to be becoming more common (Kululanga et al., 2012b). A survey of multiparous female ANC attendees in Nigeria has shown that only 44% had ever been accompanied by their male partner to ANC, but 64% reported that their partner was present last time they gave birth (Olayemi et al., 2009).

Most surveys suggest that formal education, marriage, employment and city residence are predictors of male involvement in ANC (Iliyasu et al., 2010, Kariuki and Seruwagi, 2016, Katz et al., 2009). Male education was associated with presence at birth in a survey from Nigeria (Olayemi et al., 2009) and a qualitative study from Malawi (Kululanga et al., 2011). However, whereas ANC attendance was associated with older age among Ugandan men (Kariuki and Seruwagi, 2016), younger men were more likely to participate in Nigeria (Iliyasu et al., 2010) and to opt for couple voluntary counselling and testing for HIV (VCT) rather than individual VCT in Kenya (Katz et al., 2009). Factors limiting participation in Uganda also included the presence of other family members in the household, and the strength of peer influence (Kariuki and Seruwagi, 2016). Monogamy is associated with higher involvement in most studies (Ditekemena et al., 2012, Olayemi et al., 2009). In Burkina Faso, women's empowerment, including economic empowerment, is associated with higher levels of male accompaniment to ANC (Jennings et al., 2014).

Men's attitudes towards their own involvement vary. Several studies show that men are theoretically willing to participate in maternity care, but that they generally do not do so, except in the case of complications (Adelekan et al., 2014, Ganle and Dery, 2015, Aarnio et al., 2013, Kwambai et al., 2013, Nkuoh et al., 2010). Surveys show that the majority of women are willing to be accompanied by their male partners (Vermeulen et al., 2016, Nanjala and Wamalwa,

2012), except where there is a concern about HIV status disclosure, domestic violence or alcohol abuse (Ditekemena et al., 2012).

There are several reasons why men do not take part in maternity care, including a range of social or cultural barriers (Ditekemena et al., 2012). There is evidence from various parts of Sub-Saharan Africa suggesting that many men perceive pregnancy and maternity care to be a women's affair, or that they think pregnancy support is a female role, and that their participation is therefore not required or is "not in our culture" (Ganle and Dery, 2015, Nanjala and Wamalwa, 2012, Nkuoh et al., 2010). Qualitative research conducted as part of the PopDev study has shown that these beliefs are also prevalent in Burkina Faso (*internal communication*). Men's role is often perceived to be that of financial provider, paying for care bills and transport, and sometimes looking after the home or other children if there is no female relative to do so (Adelekan et al., 2014, Kwambai et al., 2013, Kululanga et al., 2012b, Olayemi et al., 2009). Men may think that accompanying women is a sign of weakness, that they may not be seen as total men (Onyango et al., 2010), or that it would be inappropriate for them to take part given that pregnancy is the equivalent of an initiation process for women (Mohlala et al., 2012). Another reason commonly reported by men for not participating is that they are too busy or cannot take time off from work to spend long hours at the clinic waiting to be seen (Adelekan et al., 2014, Singh et al., 2014, Nkuoh et al., 2010, Onyango et al., 2010).

Several studies suggest that up to half of men fear that if they accompanied their partners to ANC or to give birth they would be perceived as being dominated by or taking orders from their wives, and thus be ridiculed by their peers (Adelekan et al., 2014, Ganle and Dery, 2015, Nanjala and Wamalwa, 2012, Onyango et al., 2010). A study from Cameroon suggests instead that men fear they'd be perceived as jealous by the community if they attended the clinic with their pregnant spouse (Nkuoh et al., 2010). Qualitative studies focused on the experiences of men who attended their partners' births have shown that these men are willing to support their spouses, but often experience difficulties in navigating the contradictory roles dictated by tradition and by the modern expectation of being a supportive companion (Kaye et al., 2014, Mbekenga et al., 2011).

However, there is also ample evidence of service-level barriers to male partner participation (Ditekemena et al., 2012). Traditionally, reproductive health (RH) services are female-oriented, ignoring the influence that men exercise over women's choices (Mbizvo and Bassett, 1996). In some cases, men are actually excluded or prevented from entering the consultation room and "made to wait outside in the sun" (Mohlala et al., 2012, Kululanga et al., 2012b). Clinic infrastructure is often not couple-friendly, and men's presence may not be possible due to congestion and concerns for privacy (Kwambai et al., 2013, Kaye et al., 2014). Opening hours may not be favourable to men who work (Ganle and Dery, 2015). However, staff attitude is also

sometimes a problem. Men report negative experiences, being treated rudely, and being ridiculed by staff and "asked if they have also gone to hospital to deliver" (Nanjala and Wamalwa, 2012, Vermeulen et al., 2016).

Health workers may be overworked or not have the inclination to encourage men to attend. They may not tell women that their husbands are welcome, and women may not share the invitation with their partners for fear of a negative reaction (Vermeulen et al., 2016). My qualitative findings from Bobo-Dioulasso suggest that some health workers believe that involving male partners is important, however during my observations they made no effort to encourage women to invite them, while at the same time blaming men for not wanting to attend (Daniele, 2014). Where men are invited, this is usually only in the context of prevention of mother-to-child transmission of HIV (PMTCT) and specifically for HIV testing. Men may not be given any other health information about other topics, such as the importance of SBA or birth preparedness (Magoma et al., 2010). In Rwanda, once HIV testing is complete men are not allowed to participate in the actual health consultation (Påfs et al., 2015). The impression is that even where men's presence is tolerated, they are not given much attention, and that services are often not ready to welcome men who want to act as supportive partners (Mullick et al., 2005). Men who attended their partners' births felt excluded, helpless, unprepared and unsupported, and reported tensions with health workers who perceived them as excessively demanding (Kululanga et al., 2012b). Men's negative experiences have also included witnessing health workers behaving abusively towards their female partners (Ganle and Dery, 2015, Vermeulen et al., 2016).

Other concerns limiting men's participation include staff asking them for money, including informal payments (Ganle and Dery, 2015, Adelekan et al., 2014, Vermeulen et al., 2016, Nanjala and Wamalwa, 2012). Up to half of men may be reluctant to attend for fear that they will be forced into testing for HIV or disclosing their status (Nanjala and Wamalwa, 2012, Mukobi, 2012), but some also fear being pressurised into vasectomies or disclosing extramarital sexual activity (Withers et al., 2015, Onyango et al., 2010). Having multiple partners may itself be a reason to not attend for men who fear being seen accompanying a different woman (Mohlala et al., 2012). In general, some men feel embarrassed or uncomfortable about openly discussing sexual matters in front of or with their female partners (Withers et al., 2015).

2.3. The rationale for male involvement programmes

Although men's participation in maternity care is currently low in many parts of the world, including Sub-Saharan Africa, there is increasing recognition that engagement with families and communities is necessary in order to end preventable maternal and perinatal mortality (Chou et al., 2015). The HIV/AIDS pandemic first drew attention to the need to go beyond the traditional emphasis on women in the area of reproductive health care (Campbell, 1995). This was born of

the realisation that HIV is a family problem, with cascading effects on the health of all members (Betancourt et al., 2010). Similarly, programmers are gradually realising that the notion that FP is a women-only issue is outdated, and perpetuates low contraceptive use (Hardee et al., 2017).

The continued exclusion of men may also perpetuate inequitable gender roles. Targeting safe motherhood messages only at women may reinforce the idea that mothers alone are responsible for the everyday care of babies and children. Indeed, the exclusion/exoneration of men from these responsibilities can itself be considered to be one of the foundations of a patriarchal society (Family Included). There is also a risk that programmes that ignore men because they consider them uninformed, promiscuous and irresponsible, may inadvertently reinforce those behaviours (Greene, 2002).

There is evidence that such assumptions about men are often misplaced, and that many are in fact increasingly willing to engage positively with issues related to MNH. In traditional West African societies, spouses used to be constrained by their allegiances to the respective families of origin, which in some cases, coupled with a strong separation in gender roles, led to limited solidarity within couple relationships (Fapohunda and Todaro, 1988). However, these dynamics are now changing, and many men have caring attitudes towards their families (Mbekenga et al., 2011). Especially among young, educated urban couples, there is a trend towards a higher convergence in interests and aspirations between spouses (Locoh, 2002, Andro and Hertrich, 2002) and to increases in women's participation in household decision-making (Thiombiano, 2014). Several couples now aspire to the ideal of an engaged and supportive partner, thus disrupting traditional, patriarchal masculinities (Påfs et al., 2016).

While in many societies men and women have traditionally held discordant fertility desires (Ezeh et al., 1996, Bankole and Singh, 1998), there is evidence that these differences were usually exacerbated by a lack of communication on issues related to sexual and reproductive health (Becker, 1999, Mason and Smith, 2000), which has been documented in numerous studies (Bhushan, 1997, Berhane et al., 2011, Ijadunola et al., 2010). A connection can be drawn between the ease and frequency with which spouses discuss RH issues together and their level of agreement and sharing of decision-making on these topics (Hartmann et al., 2012). Several studies show that spousal communication is linked to positive RMNH outcomes, such as ANC attendance and SBA (Furuta and Salway, 2006). A cross-sectional survey in Burkina Faso found that communication with the male partner was associated with participation in HIV testing among pregnant women (Sarker et al., 2007). Good communication also increases spouses' accurate perception of each other's opinion on FP, and is strongly predictive of FP use (Bawah, 2002, Lasee and Becker, 1997, Sileo, 2014, Yalew et al., 2015, Yue et al., 2010). This suggests that engaging men in a way that encourages couple communication could make a significant contribution to improving reproductive health.

In general, many men have positive attitudes on a range of RH issues. Several are in favour of SBA (Kwambai et al., 2013), and a link has been found between the baby father's involvement in the woman's life and earlier initiation and adequate frequency of ANC attendance (Muhwava et al., 2016). Positive changes in men's attitudes towards FP have been documented in recent years, with wealth, urban residence and education associated with more favourable opinions (MacQuarrie et al., 2015, Abraham et al., 2010, Kaida et al., 2005). Observational studies have also shown beneficial effects of male engagement with services. These show that among couples in which the man participated in ANC there are higher levels of facility births, PNC attendance (Kashitala et al., 2015, Mangeni et al., 2013) and better PMTCT outcomes (Kalembo et al., 2013, Aluisio et al., 2011).

In addition, there is evidence from high and middle-income settings suggesting that in children, father involvement is associated with "better physical and mental health, higher educational achievement and lower criminality and substance misuse" (McAllister et al., 2012). Men who are more involved during pregnancy are more likely to be involved in infant caretaking (Burgess, 2008). The involvement of both parents is associated with higher levels of father engagement with children, improved couple relationship quality, and fewer problem behaviours among children (Cowan et al., 2009). Importantly, the involvement and support of male partners is associated with lower levels of perinatal mental illness in mothers (Fisher et al., 2012). Being involved as fathers also benefits men's own physical and mental health (Dykstra and Keizer, 2009), and enables them to develop deeper connections with their children and partners (McAllister et al., 2012).

2.4. Institutional endorsement and definitions

In 1979, the Convention on the Elimination of all forms of Discrimination Against Women (CEDAW) (United Nations, 1979) first emphasised the responsibility of both men and women in raising children. This convention embodies classic conceptualisations of male involvement from the paternal involvement literature of the time, which stressed the emotional investment and social and financial support given by fathers. For example, in 1985 Lamb defined paternal involvement as consisting of three dimensions: 1) direct father-child interaction, 2) physical and psychological accessibility and 3) responsibility and providing financial resources (Lamb et al., 1985). At the time, however, RMNH services were still very much focused on women, and including men was not considered a priority (see Table 3).

The idea that engaging men in sexual and reproductive health promotion might be a useful strategy was first given official recognition in 1994, at the International Conference on Population and Development (ICPD) in Cairo. The ICPD Programme of Action urged that: "… *special efforts should be made to emphasize men's shared responsibility and promote their active involvement in responsible parenthood, sexual and reproductive behaviour including*

family planning; prenatal, maternal child health; prevention of sexually transmitted diseases, including HIV; prevention of unwanted and high-risk pregnancies; shared control and contribution to family income, children's education, health and nutrition; recognition and promotion of the equal value of children of both sexes" (paragraph 4.27) (United Nations Population Fund, 1995). This signalled a shift in programming from an exclusive focus on RH service delivery to women, to an attention to broader contextual factors (social, economic and cultural) which influence health outcomes (Greene et al., 2006). The increasing attention given to the role of male partners around the time of pregnancy and birth was a prominent part of this shift.

However, the rationale and models for male involvement have continued to evolve (Table 3). After Cairo, an initial response was to focus on men's own sexual and reproductive health (SRH) needs as clients in their own right, through their inclusion in existing services or the creation of *ad hoc* male clinics. This can be seen as a remedial reaction to men's traditional exclusion from programmes. The second approach focused on men as partners, seeing them as primary gatekeepers and decision-makers for MNH and reflecting "the view that men can improve – and impede – women's contraceptive use and reproductive health" (Greene et al., 2006). While the latter approach makes important contributions to women's RH, neither of these interrogates men and women's social positions and reproductive roles. Instead, the third approach focuses on men as agents of positive change, and offers men "the opportunity to examine and question the gender norms that harm their health and that of their sexual partners" (Greene et al., 2006). This approach aims to challenge gender inequities in the delivery of services and at the broader community level. It therefore has the potential to exert a substantial impact on RMNH that can be sustained over time (World Health Organization, 2007a).

Table 3: Approaches to Involving Men in Sexual and Reproductive Health. Adapted from Greene, 2006

APPROACH	PURPOSE & ASSUMPTIONS	PROGRAMMATIC IMPLICATIONS
TRADITIONAL MNH AND FP SERVICES FOR WOMEN	Increase maternal and newborn survival	Women-focused maternity care
	Increase contraceptive prevalence; reduce fertility	Contraceptive delivery to women
	Inclusion of men is not necessary from an efficiency standpoint	
1994 Cairo International Conference on Population and Development		
MEN AS CLIENTS	Address men's reproductive health needs	Extend same range of reproductive health services to men as to women
		Employ male health workers
MEN AS PARTNERS	Men have central role to play in supporting women's health	Recruit men to support women's health, e.g., teach husbands about danger signs in labour, how to develop transportation plans, the benefits of family planning for women's health
MEN AS AGENTS OF POSITIVE CHANGE	Promote gender equity as a means of improving men's and women's health and as an end in itself	Paradigm shift in how programs are structured and services are delivered, whatever they are
	Addressing inequity requires full participation and cooperation of men	Broader range of activities, working with men as sexual partners, fathers, and community members

The approach which sees men as agents of positive change is the one currently supported by standards and guidelines on male involvement, developed at the international level. In 2015, the WHO included male involvement as one of eight recommended interventions for health promotion in MNH (World Health Organization, 2015c). Interventions to promote the involvement of men in pregnancy, childbirth and postpartum were "strongly recommended", because of their potential beneficial impact on self-care and improved home care practices for women and newborns, improved use of skilled care around the time of childbirth, and access to services in case of complications. However, the document states that male involvement should be implemented in a way that "promotes and facilitates women's choices and their autonomy in decision-making and supports women in taking care of themselves and their newborns" (World Health Organization, 2015c).

In practice, this approach has yet to become the norm. In a review of policy documents from 12 African countries, the authors found that few include a comprehensive plan to address men as partners in maternal health in a way that prioritises women's rights and autonomy (Jansson, 2014). With one exception from the DRC, policies endorsing male involvement often do so "by encouraging men to act as leaders of their families instead of acting as supportive partners" (Jansson, 2014). In Burkina Faso, the Ministry of Health endorsed male involvement in its safe motherhood strategy published in 2006 (Ministère de la Santé, 2006a). This recommended the reinforcement of community participation in order to increase awareness of pregnancy danger signs and of the importance of SBA. The document suggests that these efforts should integrate men in order to increase women's access to services, given that they are the ones "who have power within families" (Ministère de la Santé, 2006a). While acknowledging what may be the status quo, these documents fail to acknowledge that male engagement should form part of a broader effort to transform inequitable gender relations.

Another important consideration is that the lack of a universal definition makes it difficult to measure and compare levels of male involvement in maternity care. Recent observational studies from the RMNH field have developed their own operational definitions based on key behaviours. For example, for a survey conducted in Myanmar, Ampt elaborated a composite score combining men's accompaniment of their pregnant partner to at least one ANC consultation, presence at the birth, discussion of the pregnancy/birth with a health provider, and shared decision-making on the antenatal and delivery care provider and on FP (Ampt et al., 2015). In some cases, definitions include elements of birth preparedness in the male partner (August et al., 2016), and in others they encompass the provision of social-economic support (Mukobi, 2012). However, in many articles focused on RMNH outcomes, male involvement is in effect synonymous with the participation of men in specific aspects of maternal health care, such as accompanying women to ANC check-ups (Byamugisha et al., 2011, Kashitala et al., 2015) or being present at the birth of the baby (Olayemi et al., 2009).

2.5. Gender issues

The degree to which men engage in issues related to RMNH and the role that they play are influenced by deeply rooted social norms regarding gender roles. Gender norms are socially constructed rather than biologically driven, and shape individual expectations and experiences related to reproduction and parenting (World Health Organization, 2007a, McAllister et al., 2012). In many societies, the subordination of women to men is maintained and legitimised through a range of established ideas, cultural values and private life arrangements that reward women's compliance (Connell and Messerschmidt, 2005). In South Africa, for example, this means that men are expected to have priority in SRH decision-making (Jewkes and Morrell,

2010). In addition, violence may be used against women to reinforce social norms (Barker et al., 2011).

Incorporating a gender perspective into reflections on male involvement shows that there are specific situations in which involving men in RH care may not be in the best interest of women. For example, in contexts with high lifetime prevalence of intimate partner violence (IPV), HIV-status disclosure to male partners entails justifiable fears of a partner's violent reaction (Visser et al., 2008). Women who have experienced or been threatened with violence also understandably fear partner involvement during pregnancy and the postpartum period (Maman et al., 2011). More generally, however, there is a risk that involving men can entail a shift in the locus of control from women to men in domains that were previously women's territory (Frye Helzner, 2006). Although male engagement can be beneficial, "involving men without acknowledging and addressing gender biases may result in interventions that inadvertently consolidate male power over reproductive and sexual decision-making" (Greene et al., 2006).

Instead, the integration of gender and health goals can result in positive synergies. Promoting women's empowerment and gender equity can itself contribute to achieving RH goals. There is evidence that dimensions of women's autonomy are associated with the use of health services, such as the use of ANC and SBA in Nepal (Haque et al., 2012). In Burkina Faso, women's participation in decision-making within the household is associated with the uptake of postnatal care (Fort et al., 2006). An association has been shown between women's financial autonomy's and longer breastfeeding in India (Shroff et al., 2011), and gender-equity in decision-making is linked to lower fertility in Nigeria (Fadeyi, 2010). Women's empowerment and men's engagement, however, are not mutually exclusive, and male involvement programmes should not replace efforts to empower girls and women. On the contrary, if interventions are designed to transform, rather than reinforce, inequitable gender norms, this will also make their health objectives more achievable (Yinger et al., 2002). At the same time, there is evidence that the effect of women's empowerment programmes, such as microcredit initiatives, can be enhanced by the addition of components that engage with male partners (Edstrom et al., 2015).

In order to draw attention to the importance of incorporating a gender perspective into RH promotion and HIV prevention activities, the Interagency Gender Working Group (IGWG) has developed a framework for evaluating programmes based on the way in which they engage with gender equity issues (see Figure 1) (Interagency Gender Working Group (USAID)). This illustrates how programmes can either ignore gender inequalities (*gender blind*), or engage with them (*gender aware*).

It is possible for gender-aware programmes to engage with gender norms in an exploitative way (*gender exploitative*) by taking advantage of inequalities or even reinforcing them. One example involved a campaign, launched in Virginia (USA) in 2012, to increase the number of men tested

for sexually transmitted infections (STIs). The messaging was based on the reinforcement of aggressive masculinity notions such as "hitting it" (Fleming and Lee 2014). Another example would be a hypothetical PMTCT programme that includes messaging such as "what kind of mother would give HIV to her baby?", thus reinforcing harmful norms that increase women's vulnerability (Kraft et al., 2014).

Other programmes may work around existing gender differences, without seeking to challenge them (*gender accommodating*). Programmes that engage with "men as partners", rather than as "agents of positive change" (Greene et al., 2006), may fall into this category. An example is a randomised controlled trial (RCT) conducted in Ethiopia, involving a home-based couple-counselling programme on contraception (Terefe and Larson, 1993). While the experimental condition involved providing health education to the woman and her husband together, there was no discussion of men's role or emphasis on improving gender relations. While these programmes can improve health outcomes in the short run, they too may risk reinforcing gender inequities, albeit inadvertently. The classic example is a nationwide social marketing campaign conducted in Zimbabwe in the early '90s, which used messages and images derived from competitive sports in order to appeal to men and encourage their involvement in FP. However, one effect was that men exposed to the campaign were more likely to consider themselves the primary decision makers on family planning and parity (Piotrow et al., 1992).

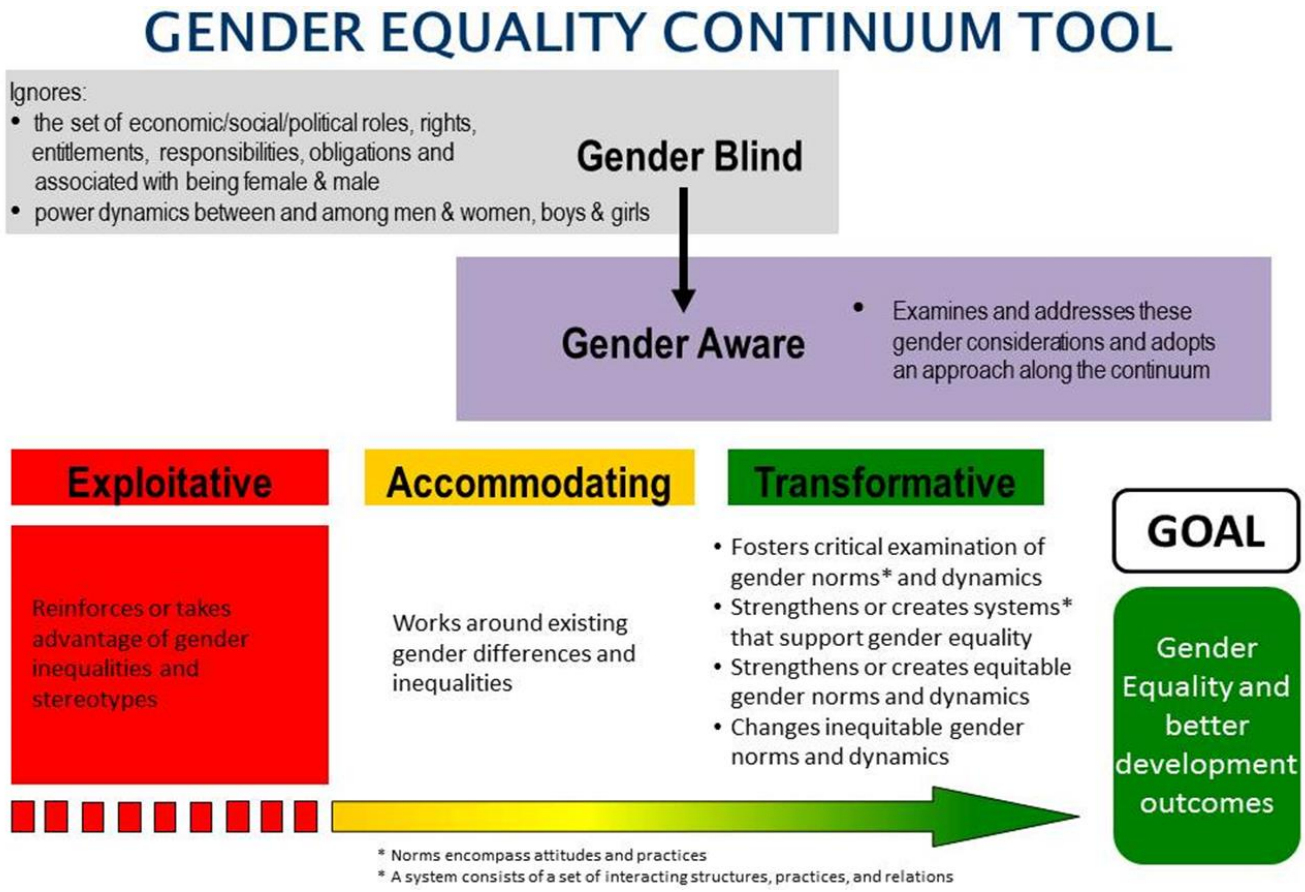
Finally, programmes may engage critically with inequitable gender norms and actively seek to change them and promote greater equality *(gender transformative*). Strategies focused on "men as agents of positive change" fall under this category (Greene et al., 2006). One successful example is the Male Motivator intervention in Malawi, which used peer educators to talk to men about FP, but also to challenge rigid gender norms such as the notion that a large family is a sign of virility (Shattuck et al., 2011).

It is clear from these examples that male involvement strategies that take an instrumental approach towards inequitable gender norms may replicate the same structures that perpetuate women's subordination and ill health (Comrie-Thomson et al., 2015b). However, there is also evidence that they are less effective in achieving RH goals. A review of interventions to engage men and boys to improve RH, conducted by the WHO, classified these based on their level of engagement with gender issues (World Health Organization, 2007a). Based on ranking criteria including evaluation design and level of impact, the authors concluded that gender-transformative programmes were more effective, compared to gender-sensitive or accommodating interventions, in increasing condom and contraceptive use, promoting spousal communication, and decreasing gender-based violence (GBV). Similarly, in a review of 23 reproductive, maternal, newborn and child health (RMNCH) behaviour change interventions

from low- or middle-income countries, Kraft found that the evidence of effect was more compelling for the gender-transformative interventions (Kraft et al., 2014).

In order to develop male involvement interventions that incorporate a gender perspective and include, among their objectives, the transformation of inequitable gender dynamics, attention to proper design is therefore essential. One basic principle is the inclusion of mechanisms to ensure "women's permission, consent and perspective on male involvement before inviting men to be involved" (World Health Organization, 2015c). In terms of content, it is important to address egalitarian decision-making within couples and "to avoid reinforcing gendered stereotypes of men as the decision-makers" (World Health Organization, 2015c). Therefore, organization-wide training on gender equality needs to be included in order to equip health workers or facilitators with these skills (Jansson, 2014). There is also a need to ensure that programme evaluations routinely include measures to assess the intervention's impact on gender norms or empowerment (Sternberg and Hubley, 2004).

Figure 1: Gender Equality Continuum Tool - Interagency Gender Working Group (IGWG)



2.6. Conclusion

Women's peer and family networks, and in particular their male partners, exert considerable influence on their decisions related to reproductive health, and may thus facilitate or hinder their adherence to recommended practices such as attending postnatal care, exclusively breastfeeding, or using family planning. However, in many parts of Sub-Saharan Africa, including Burkina Faso, it is rare for men to participate in facility-based maternity care because of a variety of institutional and socio-cultural barriers.

In the last couple of decades, strategies to increase male involvement in maternity services have received considerable international attention, because they provide opportunities to enhance men's role as supportive and informed partners to women, with an equal interest in family health. However, male involvement programmes must avoid engaging with men's dominant social role in an instrumental way, in order to achieve specific health goals. On the contrary, they should work together with men and explicitly involve them in challenging inequitable gender norms, while at the same time seeking greater empowerment of women. Such gender-transformative interventions have the potential to achieve greater and more sustainable health gains.

3. REVIEW OF INTERVENTION STUDIES

This Chapter will provide an overview of the literature on male involvement intervention studies focused on maternal and newborn health and postpartum family planning (Subchapter 3.1). Based on my identification of the most relevant intervention studies, I will summarise existing evidence on the impact of male involvement interventions on maternal and newborn health care-seeking outcomes, recommended infant feeding practices, the uptake of postpartum family planning, and the establishment of equitable gender relations (3.2). Finally, I will critically assess the main formats and approaches used by male involvement programmes and summarise lessons learnt for the development of future interventions (3.3). I will summarise the main points in the Conclusion (3.4).

3.1. State of the literature and existing reviews

Since the International Conference on Population and Development (ICPD) in 1994, a large body of grey and peer-reviewed literature has been produced describing male involvement initiatives aimed at improving reproductive health in a broad sense. Throughout the early to mid-2000s, international organisations attempted to summarise lessons learnt from these initiatives, in order to develop programmatic guidance and frameworks (Population Council, 2000, IGWG, 2004, World Health Organization, 2002, UNFPA, 2000, Greene et al., 2006). Most of these programmes were implemented by non-governmental organizations (NGOs), and focused on SRH outcomes, gender roles, and domestic violence. However, they displayed a high degree of heterogeneity, and few were systematically evaluated (Sternberg and Hubley, 2004).

A number of more recent reviews of the male involvement literature have been published. Table 4 lists five reviews that summarise interventions aimed at improving the MNH and PPFP outcomes relevant to this study, published in the last five years.

Of these, the four systematic reviews published in 2015 retrieved a limited number of studies (4-14) (Yargawa and Leonardi-Bee, 2015, Aguiar and Jennings, 2015, Ayebare et al., 2015, World Health Organization, 2015c). The last review summarised in Table 4 is in fact unpublished in its complete form, but its results are summarised in a WHO programmatic document which strongly endorses male involvement initiatives (World Health Organization, 2015c). However, in commenting on the available literature, the authors conclude that the quality of the evidence on male involvement initiatives for MNH and FP outcomes is "very-low to low" (World Health Organization, 2015c). Not all studies included in the systematic reviews are in fact intervention studies. In particular, the results of Yargawa and Leonardi-Bee's meta-analyses are largely based on non-repeat cross-sectional studies, thus shedding doubt on the direction of causality (Yargawa and Leonardi-Bee, 2015).

An additional non-systematic but comprehensive review of male involvement intervention studies was published by the Burnet Institute in 2012 (Davis et al., 2012). These five reviews, combined, suggest that male involvement initiatives may improve a range of RH outcomes, including SBA, PNC utilisation, contraceptive use, couple communication and joint decision-making. However, only three found evidence that male involvement might have an impact on birth preparedness and ANC attendance (Ayebare et al., 2015, Davis et al., 2012, World Health Organization, 2015c).

In sum, although these reviews suggest that male involvement interventions have the potential improve MNH and PPFP outcomes, they found limited or low-quality evidence, and were largely unable to reach conclusive findings. They also indicate that there is still a dearth of true experiments in this field.

Several other literature reviews exist, which do not specifically focus on the MNH or PPFP outcomes central to this study, but provide information about other interventions focused on men or families. As they provide some insights on intervention design and programmatic aspects, I have drawn on some of them in the Subchapter reviewing lessons learnt (3.3). A non-systematic summary of interventions focused on engaging men and boys to achieve a range of SRH outcomes was conducted on behalf of the WHO in 2007 (World Health Organization, 2007a). Other useful sources include two reviews of behaviour change interventions from low and/or middle-income countries (LMIC) addressing gender dynamics (Kraft et al., 2014, Muralidharan et al., 2015); two reviews of parenting interventions focused on the role of fathers (McAllister et al., 2012, Panter-Brick et al., 2014); and reviews of family-centred interventions on child nutrition (Alive & Thrive, 2012, Aubel, 2012, Chung et al., 2008, World Health Organization, 2003), PMTCT (Betancourt et al., 2010, Brusamento et al., 2012, Ambia and Mandala, 2016), and domestic violence (Rothman et al., 2003). Most recently, a review of 47 initiatives focused on FP services for men has also been published (Hardee et al., 2017).

Table 4: Recent literature reviews focused on MNH/PPFP outcomes

Review	Interventions	No of studies – timeframe	Main findings	Strengths & limitations
Davis et al, 2012	Low-middle income countries. Interventions engaging men focused on increasing the use of FP within long-term relationships or improving MNH	78 (12 intervention studies or systematic reviews) – Jan 2000 to Apr 2012	Evidence of benefits relating to the use of contraception in long-term couples, maternal workload during pregnancy, birth preparedness, PNC attendance, couple communication and emotional support for women during pregnancy	Not systematic Broad range of study designs
Yargawa and Leonardi-Bee, 2015	Low-middle income countries. Comparisons focused on husband's attendance at facilities or provision of support during pregnancy, delivery or postpartum; financial support during this time; or shared decision-making.	14 - up to May 2013	Meta-analysis results: Based on cross-sectional and cohort studies: reduced odds of postpartum depression. Based on one RCT (Mullany et al, 2007) and one cross-sectional study: higher rates of SBA and PNC. Based on observational and one quasi-experiment: no effect on the risk of childbirth complications	Systematic Inclusion of comparative observational studies may entail reverse causality
Aguiar and Jennings, 2015	Low-middle income countries. Comparisons focused on male partner accompaniment to ANC	7 – Jan 2003 to Dec 2013	Positive effects on maternal knowledge of danger signs, SBA, and early PNC utilization. Limited evidence or no effect on subsequent ANC attendance, birth preparedness, and newborn survival	Systematic Inclusion of comparative observational studies may entail reverse causality
Ayebare et al., 2015	Interventions involving facility-based couple health education (Kunene 2004, Varkey 2004, Mullany 2007) and workplace-based health education (Sahip and Turan, 2007)	4 – not specified	Improvements in birth preparedness, joint decision-making, ANC attendance, early initiation of BF, and subsequent male partner attendance at routine care	Systematic Selection criteria not very clear, potential for studies to have been missed
WHO, 2015c (review by Tokhi, forthcoming)	Interventions including mass media campaigns, community-based outreach and education for men only or for men and women together, home visits, facility-based counselling for couples or for groups or for men only and workplace-based education	13 – detail not available	Very low to low quality evidence of impact on SBA/facility birth, skilled or facility care in case of complications/illness in women and newborns, ANC use, breastfeeding, and PNC visits for women.	Systematic, though methodological detail not available Broad range of study designs

3.2. Evidence of the impact of male involvement interventions

As the existing reviews were unable to reach conclusive findings on the impact of male involvement interventions on the outcomes relevant to this study, I decided to take a closer look at the existing intervention studies, and summarise their findings by type of RH outcome.

For this purpose, I retrieved the primary sources included in the reviews and found further papers describing relevant interventions by searching electronic databases including MEDLINE and POPLINE, using combinations of search terms such as *men, man, male* or *husband*; *involvement, participation, attendance, role,* or *engagement*; *maternal health, family planning, contraception, reproductive and sexual health, antenatal care, postnatal care, postpartum care, delivery, newborn health, maternity care, birth,* or *breastfeeding*. In addition, I used Internet search engines such as Google to identify grey literature.

I identified 37 studies which evaluate interventions focusing on male partners/fathers, and which measure their effect on:

- MNH outcomes, or on
- Key behaviours that influence MNH, including: attendance at ANC or PNC; skilled birth attendance or facility delivery; recommended breastfeeding practices in infants below 6 months of age; knowledge, intention to use, or use of PPFP; and gender-equitable attitudes and behaviours.

I did not include intervention studies exclusively focused on:

- PMTCT outcomes or related behaviours.
- Knowledge, intention to use, or use of FP among non-pregnant or postpartum populations.
- Gender-equitable attitudes and behaviours among non-pregnant or postpartum populations.
- Child health, development or parenting outcomes related to children over one year of age.

Details of the included studies can be found in Table 5 to Table 9 by type of outcome. Studies in Table 5 report on a range of different outcomes including any combination of MNH, BF and PPFP outcomes. Studies in Table 6 report on MNH outcomes only. Studies in Table 7 report on BF outcomes only. Studies in Table 8 report on PPFP outcomes only. Finally, studies in Table 9 report on gender outcomes only, for pregnant/postpartum populations.

The following Subchapter summaries include studies which employ a variety of evaluation methods. The summaries prioritise trials and other robust designs, however, evidence from less rigorous studies is brought in to complement these where necessary or useful. Another important consideration is that I have chosen to adopt a broad approach and to include interventions of varying degrees of complexity. In some of these, male involvement may only be one component and may not be evaluated distinctly from others. In cases where it is

particularly unclear whether the changes seen can be attributed to male involvement *per se*, I have commented on this. The same applies to interventions, such as media campaigns, which target men alongside other family or community members.

Table 5: Male involvement intervention studies reporting on any combination of MNH, BF and PPFP outcomes

Study	Methods	Participants	Intervention	Findings	Risk of bias
1) Kunene et al., 2004	Matched cluster-randomised trial	12 urban and rural clinics, South Africa. 2082 pregnant women and 584 male partners interviewed at baseline	3 mixed group counselling sessions for couples, 2 antenatal and one 6 weeks postpartum. Information booklet provided. Invitation through letters for male partners. Additional service strengthening initiatives.	At 6 months postpartum (PP), compared to controls, no effect on PPFP uptake, knowledge of pregnancy danger signs among men or women, immunization or BF practices, or partner assistance around delivery. Higher communication on STIs, sexual relations, immunisation and BF, and women's knowledge of condoms for dual protection.	Low rates of follow-up (68% for women and 80% for men). Only a quarter of men attended. Concerns about intervention quality decline over time
2) Midhet and Becker, 2010	3-arm CRCT	Rural Pakistan. 16 intervention village clusters (8 women education, 8 women and men), 16 control. Surveys of married women in 900 households, baseline and 3 years later	Group meetings for women of reproductive age (6 sessions 1-2 hours each) facilitated by trained volunteers, during which safe motherhood info was given through pictorial booklets and audiocassettes. In 8 clusters, husbands also received specially designed educational materials on safe motherhood and FP. TBA training, and setting up of emergency transport systems.	Several indicators improved in both the women-only and the husband areas, including ANC attendance.	Potential dilution of effects between the 2 intervention arms because husband could read woman's materials.
3) Mullany et al., 2007 and 2009	3-arm RCT	Maternity hospital, Nepal. 442 pregnant women whose husband was present at the facility	3 arms involved women receiving education alone (female facilitator), with male partners (male and female facilitators), or no education (control). Two 35-min individual sessions (woman or couple), 4-6 weeks apart. Flyer given	Compared to the other arms, couple arm more likely to attend a PNC consultation within 2 weeks of birth, and woman's knowledge higher on pregnancy complications and FP. No difference compared to women alone arm in making >3 birth preparations. No evidence of effect on ANC, facility birth, or SBA in either intervention arm.	Randomization method could have been prone to bias (random list of six assignments generated for each clinic day)

4) Nasreen et al, 2012	Cross-sectional comparative study	6 districts, Bangladesh. Programme ran for 2 years in 1 district, for 6 months in 3, not introduced in the rest (control). 5547 men.	Awareness-raising meetings focused on birth planning, involving pregnant women, men, and other family (location not specified). Also, quality of care improvements in facilities and community leader mobilisation.	Transitional areas excluded from comparison. In 2-year implementation areas compared to control, men's knowledge was higher on birth preparation, newborn care, and neonatal danger signs. Higher levels of joint decision-making on FP.	77% response rate
5) Salim Al Rabadi, 2015	Pre-post comparison, no control	37 communities in Palestine. 1556 pregnant women and mothers identified by CHWs	National evaluation of World Vision's Time and Targeted Counseling (ttC) approach, implemented in 22 countries. 11 home visits by CHWs over a year, both pre and postnatal, to engage and counsel mothers and key family decision makers, especially male partners. Emphasis on the role of men. Focus on nutrition, service access, BF, and immunization.	Increases in EBF until six months, 4+ ANC attendance and 2+ PNC attendance, use of birth spacing methods, and nutritional outcomes for infants.	
6) Sahip and Turan, 2007	Controlled post-comparison. Also focus group discussions (FGDs) with female partners.	Urban Turkey. Cohort of 80 expectant fathers who participated, and 80 controls recruited from similar workplaces and stratified to be demographically similar	6 workplace physicians trained as educators. Voluntary participation, 9-15 expectant fathers per group, 6 weekly sessions lasting 3-4 hours. Variety of topics covered, at the end certificate as "trained father".	Compared to controls, at 3 months PP, higher reports of: accompanying partner to ANC, birth preparation, BF within 1 hour, joint decision about infant feeding, EBF at 3 months. No difference in anxiety before birth, mode of birth, PP check, FP use and joint decision on FP. Higher self-reported supportive behaviours in housework, and baby care. Similar at 9 months PP.	Self-selection into the intervention (proportion of non-respondents unknown), and self-report of behavioural outcomes
7) Santhya et al, 2008	Non-equivalent group controlled pre-	48 villages, India. Half to intervention and half control. Cross-sectional surveys with young married	First Time Parents Project. Home visits by female outreach workers to young married women, improved counselling in clinic settings through service improvements, and facilitated discussions in women's groups. Information also conveyed to	Endline survey 2.5 years after start. Regression comparing exposed, non-exposed, and control. Positive effect on autonomy, social support, partner communication and SRH knowledge,	About 3/4 response rate to surveys, only half baseline respondents located for endline.

	post comparison	women, distinct samples, some overlap (2115 baseline, 4555 endline)	husbands through home visits by male outreach workers and discussions in neighbourhood meetings. Opportunities also sought to engage with mothers-in-law and other family.	attitudes towards gender roles but not domestic violence. Positive effect on FP use, ANC, birth preparedness, PNC within 6 weeks, immediate BF practices. No effect on facility birth.	Some intervention villages had NGO input previously. Self-selection into activities.
8) Turan et al., 2001	3-arm RCT	Maternity hospital, urban Turkey. 333 first-time pregnant women	Education provided to couples in one arm, women only in the second, and no education in the third (control). Four 90-min sessions during pregnancy awarding a certificate at the end. A variety of topics covered related to pregnancy, birth and postpartum. Led by an education specialist and a nurse. Information booklet mailed to woman or couple, and phone counselling service in intervention arms.	At 4 months PP, no effect on men's knowledge on any topics, except on FP, nor on shared decision-making. In both intervention arms, compared to control, higher FP use, but not significant difference for EBF or PNC.	Randomisation method not specified. Low uptake: only 26% of men in the couple group attended any sessions (some women came alone)
9) Turan et al., 2001	Pre post comparison	Urban Turkey. 33 first-time expectant fathers	Six 3-hour sessions antenatal education programme for fathers, run in a community centre, male educators. Most of their female partners were enrolled in a parallel programme.	Improved knowledge on topics related to pregnancy, birth, infant health, infant feeding and post-partum contraception. Qualitative reports from both men and women about increased communication and support to women.	
10) Varkey et al., 2004	Post comparison with non-equivalent control group (pre-post comparison for change in knowledge outcomes)	6 dispensaries, India, assigned to intervention and control (3-3) based on geographic proximity. Baseline interviews with 581 pregnant women at intervention and 486 at control sites, and 488 husbands at intervention sites	Individual or group counselling session, antenatally, for men and women separately, plus couple counselling for part of an ANC consultation. Brochures given. Additional components introduced: syphilis screening, syndromic management of men's STIs, new topics included into counselling EBF and PPFP, and new 6 week postnatal check-up.	At 6 months PP, comparison between intervention and control shows higher FP use and intention to use, higher knowledge of pregnancy danger signs in women but not men, higher male involvement in subsequent routine care, and higher communication on newborn health, BF and FP. Higher joint decisions on family health and FP. Less EBF but higher early initiation.	Difficult to disentangle effect of male involvement component. Only half of initial sample could be followed up, lost were younger and less educated.

3.2.1. Care seeking behaviours related to maternal and newborn health

A closer examination of the evidence supports the conclusion, drawn from existing reviews, that there is some, though inconclusive evidence on the effect of male involvement on ANC attendance, SBA/facility delivery, and PNC attendance.

Three 3-arm RCTs found limited benefits of male involvement on these outcomes. A CRCT in Pakistan found no differential effect on any MNH outcomes in the arm providing additional educational materials to men, compared to the arm involving women's education only (Midhet and Becker, 2010). In Nepal, an RCT by Mullany, involving hospital-based education for expectant couples, showed no effect on ANC or SBA, but a positive effect on attendance at a PNC consultation within 2 weeks postpartum (Mullany et al., 2007). Another RCT, in Turkey, involving hospital-based education for women or for couples, showed no effect on PNC attendance, although this may have been due to low uptake of the intervention (Turan et al., 2001).

Less rigorous studies found more promising results. Male participation in group educational meetings (with a parallel programme for women) had a positive impact on ANC attendance and facility delivery in a pre-post comparison in Eritrea, though it is unclear whether educating men or women had a stronger effect (Turan et al., 2011). Two community-based outreach interventions in rural India (the First Time Parents Project) and in Palestine (using the Time and Targeted Counselling approach), involving home visits and neighbourhood meetings, also reported increased ANC and PNC attendance, although the evaluations had methodological limitations (Santhya et al., 2008, Salim Al Rabadi, 2015). Increases in SBA were reported based on service data from the areas of Niger where the *Ecole des maris* project was implemented, which involved male discussion groups on maternal health (UNFPA). Finally, a pre-post comparison of a multi-media campaign in Indonesia (SUAMI Siaga – "alert husband") found higher ANC attendance among exposed women (Sood et al., 2004). However, a workplace-based educational intervention for expectant fathers in Turkey found no effect on PNC attendance (Sahip and Turan, 2007).

Positive effects on men and/or women's knowledge of danger signs and other MNH issues were shown in several studies (Adeleye and Okonkwo, 2016) (August et al., 2016) (Shefner-Rogers and Sood, 2004) (Turan et al., 2011) (Varkey et al., 2004). In a subsequent publication based on the Nepal trial, Mullany reported that women had higher knowledge in couple education arm (Mullany et al., 2009).

For this Subchapter, further detail on studies by Turan 2011, UNFPA, Shefner-Rogers, Sood, Adeleye can be found in Table 6. Further detail on all other cited studies can be found in Table 5.

Table 6: Male involvement intervention studies reporting on MNH outcomes only

Study	Methods	Participants	Intervention	Findings	Risk of bias
1) Adeleye and Okonkwo, 2016	Pre-post comparison, no control	Nigeria, 122 men	Single group education session for men (4-30 participants), combined with information materials (flyers and posters). Facilitator was a male public health physician.	3 months after the session, men had higher knowledge of pregnancy and delivery danger signs. No change in willingness to participate in making the local hospital better for maternal health.	
2) August et al, 2016	Controlled pre-post comparison	Tanzania, one control and one intervention district. 1426 men at baseline and 1311 at endline, not necessarily the same participants.	4 educational visits to each family during pregnancy by CHW to provide Home Based Life Saving Skills training.	Difference in difference analysis: increases in men's knowledge of 3 or more danger signs during each maternity phase (pregnancy, birth and postpartum), and in male accompaniment of spouses to ANC and for birth. No difference in facility birth increase.	
3) Comrie-Thomson 2015	Qualitative evaluation: FGDs, key informant and in-depth interviews	Bangladesh, Tanzania and Zimbabwe	MNCH programmes with male engagement components run by Plan Canada, including peer education and outreach, home visits, edutainment, and facility-based activities.	Beneficiaries and key informants reported increases in male engagement and MNCH outcomes, improved couple communication and relationships, reduced maternal workload, improved nutrition and rest for pregnant women.	
4) Sinha, 2008	Pre-post comparison using repeat cross-sectional surveys. No control	One district in rural India. Postpartum women (319 at baseline and 501 at endline, 18 months later)	Home visits to mobilise husbands and mothers in law, and group meetings for husbands held at least every 2 months. Discussions focused on how husbands could support their wives by doing housework, ensuring food, and preparing for birth. They were also informed about services, transport plans, domestic violence and alcoholism.	Comparisons were between baseline and endline surveys for women with one child. For women with more than one, additional comparison drawn between most recent and previous birth. Increases seen in own attendance to services, and in husband's accompaniment to ANC, participation in housework, and emotional support.	Less than half of husbands attended the groups 70-75% response rate in endline survey

5) Shefner-Rogers and Sood, 2004b	1999: Post-intervention cross-sectional survey of men 2001-2004: Pre-post comparison	Indonesia. 1999: household survey of 1507 men and 606 women. 2001-2004: baseline survey (2269 postpartum women and 741 men) and endline survey (1782 postpartum women and 583 men) in 6 districts, including control villages	Suami SIAGA= alert husband programme ran 1999-2000. Multi-media campaign, targeting husbands with messages about birth preparedness. Included radio drama, TV miniseries, brochures, stickers, T-shirts, hats, etc. Also, training of midwives and community leaders on safe motherhood and interpersonal communication skills for talking to couples about birth preparedness. Mini-=grants also given to villages to develop transport systems.	1999: Controlling for background characteristics, 50% of men were exposed. 44% of all men said the campaign had brought new knowledge on birth preparedness and health in pregnancy. 30% reported taking action e.g. helping a woman experiencing complications, participating in community activities, or encouraging peers. 2001-2004: Exposed women and those in intervention villages had higher knowledge at endline. Exposed more likely to attend 4+ ANC and have SBA. No difference in knowledge of danger signs.	
6) Turan et al, 2011	Non-equivalent group controlled pre-post comparison	2 rural communities in Eritrea, one as control. Cross-sectional surveys, distinct samples of postpartum women, 466 at baseline and 378 at endline	Participatory group antenatal programme on safe motherhood for women (especially pregnant, but open to all), and separate groups for men. Weekly meetings led by trained male and female volunteers. Training on interpersonal skills for local nurses.	2 years after implementation, in the intervention area, higher women's knowledge of birth danger signs, attendance at 4 or more ANC visits, and facility delivery. No change in the control area.	Adjustments made for differences in socio-demographic characteristics between areas Only 25% of husbands participated
7) UNFPA	Interrupted time series with service data	Niger	11 "Husbands' schools/*Eccles des maris*" for married men. They meet twice monthly to discuss cases of maternal health problems and look for solutions. They can bring in a skilled professional for more information.	Service data showed doubling of facility deliveries. Anecdotal reported improvements in husbands' caring for their family's health and better dialogue within couples	Detail lacking [summary programme report only]

3.2.2. Breastfeeding practices

Overall, intervention studies on the effect of male involvement on recommended breastfeeding practices appear to show mixed results on initiation, timing of initiation, and continuation of breastfeeding (any, full or exclusive).

A small RCT, conducted in the US, found that expectant fathers' participation in a BF class during pregnancy increased BF initiation (Wolfberg et al., 2004). In Nigeria, an RCT of male partner involvement as birth support companion found that the intervention led to earlier breastfeeding initiation (Morhason-Bello et al., 2009), possibly because companions were able to provide assistance to new mothers and compensate for staff shortages. Increased reported early initiation of BF was also found in Sahip & Turan's post comparison of a workplace education initiative for expectant fathers in Turkey, as well as in Varkey's post comparison in India, which tested a facility-based antenatal education intervention for couples (Sahip and Turan, 2007, Varkey et al., 2004).

However, these studies found contrasting effects on breastfeeding continuation. Whereas Sahip and Turan found higher EBF levels at 3 months postpartum, Varkey actually found lower levels at 6 months in the intervention group (Sahip and Turan, 2007, Varkey et al., 2004). Two more quasi-experiments from middle-income countries also reached opposite conclusions. In a controlled post comparison of a community mobilisation in Vietnam, focused on expectant fathers, Bich found that in intervention areas more mothers were practicing EBF at 4 and 6 months (Bich et al., 2014), men had higher knowledge and improved attitudes towards BF (Bich and Cuong, 2016), and prelacteal feeding was lower (Bich et al., 2016). However, a 3-arm controlled trial in Brazil of a hospital-based postpartum education session involving women or couples reached somewhat controversial conclusions (Susin and Giugliani, 2008). At 6 months, any BF was higher in the mothers-only arm, whereas EBF was higher in the couples group. The authors attribute the result to culturally inappropriate messages which over-emphasised the man's caring role and may have been counterproductive.

Evidence from developed country trials also shows mixed effects of male involvement on BF continuation. In a controlled trial of a 40-minute individual educational session for new fathers, Pisacane found higher levels of any and full BF at 6 months PP (Pisacane et al., 2005). Other studies had more modest effects. An RCT, conducted in Australia, found that antenatal education sessions and postpartum support resources for men increased any BF at 6 weeks, but had no impact on full BF (Maycock et al., 2013). In Canada, another RCT found that a co-parenting postpartum educational intervention, had a positive effect on any BF at 3 months, but not on EBF (Abbass-Dick et al., 2014).

In Zimbabwe and Malawi, less rigorously-evaluated community-based interventions involving road theatre and group discussions reported positive effects on EBF (Jenkins et al., 2012) (Satzinger et al., 2009). Male involvement in community group meetings to support recommended infant feeding practices, as part of more complex interventions led by Alive&Thrive, was associated with increases in EBF in Vietnam and Ethiopia (Nguyen et al., 2014, Alive & Thrive, 2014).

For this Subchapter, further detail on studies by Sahip and Turan and Varkey can be found in Table 5. Further detail on all other cited studies can be found in Table 7.

Table 7: Male involvement intervention studies reporting on breastfeeding outcomes only

Study	Methods	Participants	Intervention	Findings	Risk of bias
1) Abbass-Dick et al., 2014	RCT	Teaching hospital, Canada. 214 first-time expectant couples	PP discussion in hospital for 15 mins with lactation specialist to discuss BF and video on co-parenting to achieve BF goals. Take-home booklet including activities for couples, access to an information website, follow-up emails and phone call. Control group routine care only.	At 12 weeks PP, any BF was higher in the intervention group, no difference for EBF, higher BF self-efficacy scores in fathers and more women reported support by partners.	
2) Alive & Thrive, 2012	Information not available	Ethiopia	Home visits by Health Extension Workers and programme of 6 community meetings including one for fathers. Distribution of a child nutrition card containing list of 7 excellent feeding actions including early EBF and EBF for 6 months, directed at mothers and fathers. Also, counselling tool, and media campaign (TV and radio drama)	Reported increases in EBF, gains in complementary feeding, higher levels of male engagement.	Detail lacking [programme summary report only]
3) Bich et al., 2014, 2016a and 2016b	Post comparison with control	2 non-adjacent rural districts, Vietnam. 251 pregnant couples in the intervention area and 241 in the control area.	Male partners received BF education materials, monthly counselling services for fathers at health centres during ANC and vaccination clinics, household visits by village health workers. Fathers' role reinforcement and community mobilisation through a public event involving a competition for fathers. Media campaign through radio, posters and pamphlets.	Post-surveys comparing intervention and control areas show higher rates of early BF initiation, no pre-lacteal feeding, higher EBF at 4 and 6 months postpartum, better BF knowledge and attitudes among fathers, and more self-reported involvement in supporting women practice EBF.	
4) Jenkins et al, 2012	Cross-sectional survey	Rural district, Zimbabwe. 468 respondents, about half women and half men	Campaign combining promotional materials e.g. pamphlets and t-shirts, with road show edutainment to reach men and other community members. Also, cascade training of different local health cadres including CHW.	Exposure to road show associated with EBF knowledge, greater perceived benefits of condom use, more positive EBF social norms, beliefs and attitudes. Strongest associations for men, suggesting closure of knowledge gap	

				.	
5) Maycock et al., 2013	RCT	8 maternity hospitals, Australia. 699 expectant couples	2-hour antenatal education session on BF for men with male facilitator, postnatal support for fathers including printed materials and weekly email. Resources suggested strategies to reduce anxiety and increase problem-solving. Control did not have class or materials.	At 6 weeks PP, higher levels of any BF but no difference in full BF.	
6) Morhason-Bello et al, 2009a and 2009b	RCT	University hospital, Nigeria, low-risk pregnant women, 293 in intervention arm and 292 in control	Women enrolled at 30-32 weeks were randomised to inviting husband or another companion of their choice, who received a written brochure stating their responsibilities as support person. Two thirds of companions were husbands. Routinely companion not allowed.	Shorter median time to breastfeeding initiation in women with companions. The latter also had fewer C-sections, shorter active phase of labour, lower pain scores, and more satisfying labour experience.	Analysis not according to Intention-to-Treat: 7 women excluded because didn't bring birth companion.
7) Nguyen 2014, for Alive& Thrive	CRCT	Vietnam, 40 communes assigned to intervention or control. Repeat cross-sectional surveys: about 2000 mothers at baseline and at endline.	A&T non-intensive areas (control): mass media campaign with TV spots, billboards, website and mothers forum. A&T intensive areas (intervention): as above, plus social franchise and upgrade of facilities. 15 individual/group counselling sessions from 3rd trimester till child is 2 years old. Monthly groups for pregnant women and mothers on infant feeding, bi-monthly support groups for fathers and grandmothers. CHW facilitators.	Three years post-implementation, improvements in breastfeeding knowledge, beliefs, and intentions, were greater among mothers in A&T-I areas than among those in A&T-NI areas. Improvements in EBF and decreases in bottle-feeding were significantly higher.	
8) Pisacane et al., 2005	Controlled trial with block assignment during 2 time periods	University hospital, Italy. 280 postpartum couples	Women in both arms received BF leaflet and information on the 2nd day postpartum, fathers got 40 mins individual education session. In the intervention arm, the session covered BF management.	EBF and any BF at 6 months higher in intervention arm, less perceived milk insufficiency, BF interruption because of problems, more women reported support and help in BF from partners.	Non-random assignment, though arms reported to be similar at baseline

9) Satzinger et al, 2009	Post-implementation qualitative evaluation: FGDs and semi-structured interviews.	3 rural communities, Malawi.	Agriculture and nutrition discussion groups monthly, approx. 80 participants in each, divided into 4 sub-groups: mothers, fathers, grandmothers, and grandfathers. Trained facilitators. At the end, the 4 sub-groups came together as an intergenerational group to share a meal and have a general discussion.	Respondents reported changes including dietary diversity, EBF, and increased frequency of feeding, attributing changes to the programme.	
10) Susin and Giugliani, 2008	3-arm controlled trial with block assignment during 3 time periods	586 families recruited on a postnatal ward, Brazil	Educational session about BF by a paediatrician, including a video, discussion and handout. In one arm men and women participated together, in the other the woman attended alone. The control arm had no session.	Any BF at 6 months PP lower in the father arm compared to the mother arm, EBF at 6 months higher in the father group.	Non-random assignment but adjustment made for baseline characteristics
11) Wolfberg et al., 2004	RCT	Maternity hospital, USA. 59 expectant couples	2-hour interactive class for men on infant care and breastfeeding, with male peer educator. Control had class on infant care only.	Comparison of actual attendees at classes. Higher initiation of BF in the intervention group	

3.2.3. Postpartum family planning

Several interventions have targeted PPFP knowledge and uptake. Most male involvement initiatives appear to have a positive impact, though further rigorous studies would be useful.

Two RCTs failed to find any effect of male involvement interventions on PPFP uptake. Turan's 3-arm RCT of a facility-based education programme in Turkey found an increase in men's knowledge on FP in the couple education arm, however PPFP use increased in both intervention arms, indicating no net effect of male involvement (Turan et al., 2001). In 2004, Kunene conducted a CRCT in South Africa of a facility-based antenatal and postnatal education programme for couples (Kunene et al., 2004). The intervention had no effect on the use or knowledge of FP. In both these trials, the authors suggest that the lack of effect may have been due to low levels of male attendance at the education sessions. Similarly, in Egypt, a controlled post comparison of a 3-arm intervention involving community-based awareness-raising activities for men found that contraceptive use at 10-11 months postpartum was no higher in the male involvement arm (Abdel-Tawab et al., 2008). This may have been due to baseline differences between the arms.

However, in Nigeria, an RCT of men's presence as support persons in labour found that the intervention significantly increased the use of contraception at 6 weeks and 3 months postpartum (Ojengbede et al., 2009). Two studies conducted in India also found a positive effect on PPFP use. Varkey's post comparison of an antenatal education programme in Delhi found significantly higher use of PPFP in the intervention group at 6-9 months post-delivery compared to control areas (Varkey et al., 2004). Men and women's knowledge of certain of PPFP topics was also higher in the intervention group. In rural India, a randomised pre and post comparison of a complex community-based education campaign, including work with men, found higher FP use in the intervention group at 4 and 9 months postpartum (Sebastian et al., 2012). In both these studies, the increase was largely due to condom use (Varkey et al., 2004). In Sebastian's paper, information on the content of the male involvement component is very limited, suggesting that it may have played a relatively minor part in explaining the intervention effect.

Three further intervention studies reported positive findings, however their interpretation is somewhat problematic. In Egypt, an RCT of facility-based antenatal PPFP counselling for women/couples found higher knowledge and use of FP at 3 months postpartum (Soliman, 1999). Participation of the husband added effectiveness to the intervention, however husband attendance was spontaneous (in half of couples), rather than randomly assigned. A controlled trial in Pakistan also found positive effects on PPFP use at 8-12 weeks postpartum as a result of the introduction of contraceptive counselling onto the postnatal ward, involving the husband (Saeed et al., 2008). More effective methods were also chosen. Finally, following the introduction of PPFP counselling involving the husband in five hospitals in Kabul, Afghanistan,

service data showed an increase in the proportion of women leaving the hospital with a method, over the implementation period (Tawfik et al., 2014). In all three of these evaluations, it is difficult to disentangle the effect of involving men from that of offering PPFP counselling to women.

For this Subchapter, further detail on studies by Turan, Kunene, and Varkey can be found in Table 5. Further detail on all other cited studies can be found in Table 8.

Table 8: Male involvement intervention studies reporting on PPFP outcomes only

Study	Methods	Participants	Intervention	Findings	Risk of bias
1) Abdel-Tawab et al, 2008	Post-test comparison with non-equivalent control group. Also, time series of service statistics and qualitative evaluation.	6 health districts in Egypt, assigned randomly to control, Model I, and Model II interventions (2-2-2). Cohort of 1416 pregnant women	Model I (health services model): birth spacing messages communicated through services by health workers to women during prenatal and postpartum periods. Model II (community awareness model): as above, plus awareness-raising component targeting men through community influentials. This included 5-6 seminars in each village (1-1.5 h long), one-on-one meetings, informal gatherings, and handing out of information. Control sites: standard care only.	Increase in birth spacing knowledge and PP contraceptive use at 10-11 months postpartum in both models, though rates slightly lower in husband group. This may be explained by women in Model I communities being better educated and service better implemented.	Men's attendance to community component reported to be low (qualitative assessment). Baseline differences between districts.
2) Ojengbede et al, 2009	RCT similar to Morhason (Breastfeeding Table), 2 years later	Urban Nigeria. Numbers of participants n/a	Apparently identical to Morhason, but all companions were male partners	No difference in intention to use FP expressed at delivery, but in the intervention arm higher use of PPFP at 6 weeks and 3 months postpartum. Husband more likely to initiate FP use in the intervention arm.	Detail lacking [conference presentation retrieved only]
3) Saeed et al., 2008	Controlled trial with block assignment (4 randomisation charts)	Maternity hospital, Pakistan. 600 postpartum women	20-min contraceptive counselling on postnatal ward and provision of leaflets, preferably in the presence of husband or another close relative. Control had no formal FP advice.	At 8-12 weeks PP, higher use of FP and use of more effective methods, especially the pill.	Non-random assignment, but matching done for age, parity and socio-economic status

4) Sebastian et al, 2012	Randomised experimental pre- and post-comparison	48 villages randomly assigned to intervention or control. 959 pregnant women aged 15-24	Educational campaign using leaflets, posters, wall paintings and booklets. CHWs educated all pregnant women and their mother-in-law or oldest female family member on HTSP, PNC, LAM and PPFP. Also, focused educational campaign for husbands and men in the community on safe motherhood and PPFP, with emphasis on the husband's role. Control: standard care only.	In intervention group, higher use of modern FP at 4 and 9 months postpartum, most common method condom. Compared with control group, higher knowledge of FP, no difference in discussion of the timing of next child with husband, but higher discussion of methods for spacing. Fewer women pregnant again at 9 months.	Very limited detail provided on male involvement component
5) Soliman, 1999	RCT	Maternity hospital, Egypt. 200 pregnant women, of which 100 were accompanied by spouse.	Random assignment of 100 women with 50 spouses to intervention or control. Three 1-hour long individual educational sessions on PPFP. Control received routine care only.	At 3 months PP, higher use of FP in the intervention arm. Husband participation increased use, though this was not random. Pre-post comparisons show increases in FP knowledge for men and women in intervention arm, and in shared decision-making on FP. No change in the control group.	Randomisation method not specified.
6) Tawfik et al., 2014	Interrupted time series based on service data (no control), and cohort comparison of exposed vs non-exposed	5 maternity hospitals, Afghanistan. Two cohorts of 643 women who received intervention and 681 who didn't (from 2 hospitals)	Integration of FP into PP care through: creation of a private counselling space allowing for men's participation, training on PPFP and job aids to staff, and provision of PP counselling prior to discharge which involved husbands or mothers-in-law in person or via mobile phone (if unable to attend in person).	After 10 months of the intervention, service data showed an increase in proportion of women counselled on PPFP, of which 90% were counselled with husband, and an increase in immediate adoption (to 95%). Comparison between exposed and non-exposed cohorts found lower rates of pregnancy among exposed in the first 18 months PP.	Lack of control in interrupted time series. Cohort study: non-random assignment, no adjustment for confounding, methodological details unclear (longitudinal?).

3.2.4. Communication, joint decisions and gender roles

Several male involvement studies focused on MNH and PPFP also report on outcomes related to couple communication, joint decision-making and equitable gender roles. The evidence is overall positive, though several evaluations are of low methodological quality.

Some studies suggest that male involvement programmes may increase communication and encourage joint decision-making between spouses on issues related to MNH and PPFP.

For example, Kunene's CRCT of facility-based education groups for expecting couples in South Africa led to significantly higher levels of discussion of immunization and breastfeeding in intervention clusters, but did not improve discussion of FP (Kunene et al., 2004). Varkey's controlled post comparison of facility-based antenatal counselling for couples in India found higher levels of spousal communication on the baby's health and on breastfeeding, and increased joint decision-making on FP (Varkey et al., 2004). In Turkey, a controlled post comparison of workplace-based educational intervention for fathers led to increased joint decision-making on infant feeding and family health, though not on FP (Sahip and Turan, 2007). In Tanzania, a controlled pre-post comparison of a home visitation programme found significant improvements in shared decision-making about where to give birth (August et al., 2016). Increased discussion and joint decision-making on FP were reported in Soliman's RCT of antenatal FP counselling in Egypt (Soliman, 1999), as well as in evaluations of community-based awareness-raising programmes involving a male involvement component (Sebastian et al., 2012, Nasreen et al., 2012)

Other evaluations suggest that male involvement interventions may contribute to more equitable gender roles in a broader sense, for example by increasing men's share of domestic work. Reduced household chores for women are reported as a result of Midhet's CRCT in Pakistan, in the arm involving the distribution of educational material to husbands (Midhet and Becker, 2010). Sinha's pre-post comparison testing a community-based intervention in rural India, which involved group meetings for husbands, found similar results (Sinha, 2008).

Evaluations of lower methodological quality support these findings. The evaluation of the First Time Parents Project in rural India, despite methodological limitations linked to sampling, found increases in partner communication, as well as women's autonomy, social support, and equitable gender attitudes in the intervention areas (Santhya et al., 2008). In Nicaragua, focus group discussion (FGD) participants evaluating an intervention involving male behaviour change agents reported increases in joint decisions about saving money for delivery and seeking care for sick children (USAID, 2014). Women also reported that men had started to help with housework and newborn care. In a qualitative evaluation of 3 MNCH programs with male engagement components in Bangladesh, Tanzania and Zimbabwe, there were reports of a

decrease in women's workload and increased couple communication (Comrie-Thomson et al., 2015a). A qualitative evaluation from a community-based antenatal education programme in Turkey also reported improvements in communication and closer and more sharing relationships (Hartmann et al., 2012, Turan et al., 2001).

Finally, I identified a small number of interventions that were specifically focused on gender-related outcomes for expectant or new parents, without a health component. Programmes based on the MenCare+ approach, implemented in South Africa and Rwanda, involved a group education programme for expectant fathers or men with young children (MOSAIC et al., 2016, Doyle et al., 2014). Qualitative and quantitative reports suggest that the programme led to improvements in couple communication, equitable decision-making, and increased male involvement in childcare and domestic chores.

For this Subchapter, further detail on Soliman's study can be found in Table 8, further details on Sinha and Comrie-Thomson's studies can be found in Table 6, and studies by USAID, MOSAIC, and Doyle can be found in Table 9. Further detail on all other cited studies can be found in Table 5.

Table 9: Male involvement intervention studies reporting on gender outcomes only

Study	Methods	Participants	Intervention	Findings	Risk of bias
1) Doyle, 2014	Qualitative evaluation: FGDs and public testimonies of facilitators or participants. [RCT underway, results not yet available]	Rwanda	MenCare+, gender transformative programme active in 25+ countries. Includes groups for pregnant women, or mothers of young children, and their partners. Recruitment via volunteer CHWs. 15 sessions of which women participate in 6.	Men report increased involvement in childcare and chores, including taking children to health facilities. Men more willing to be present at birth of child, and report greater communication and equitable decision-making including on family finances. Men identified financial and personal rewards of working together.	Self-reported behaviour changes
2) MenCare+	Qualitative evaluation: FGDs and stakeholder interviews. Pre-post comparison with no control.	South Africa. 54 young men beneficiaries participated in FGDs, of which 21 from the parenting groups.	MenCare+ similar to above, 11 fathers and partners sessions	Quantitative and qualitative findings suggest increase in gender equitable norms, positive attitudes towards contraception, condom use, man's ANC attendance and participation at birth	Self-reported behaviour changes
3) USAID 2014	Controlled pre-post comparison	20 intervention and 20 control communities, Nicaragua. Baseline and endline surveys involving 97 women and 97 men in intervention areas. Same numbers in control areas. FGDs.	Male peer behaviour change agents BCA selected by communities, working with 10 families each. They met husbands of pregnant women (face-to-face counselling) to discuss and negotiate adoption of: joint decision-making on seeking timely delivery care, ANC, and newborn, sharing household chores, and participation in ANC and delivery. Awards provided (t-shirts, certificates) and promotion of key messages at local sports and religious events.	Compared to control areas, higher increase in intervention areas in men's involvement in ANC, newborn care, and delivery. FGDs revealed behaviour changes including saving money and shared decisions about careseeking. Women said men were helping with housework and newborn care. However, some persistence of gender stereotypes.	

3.3. Lessons learnt for intervention design

My review of existing intervention studies shows that a range of different formats have been used for engaging with men or couples, including group education, home visits, facility-based counselling, involving religious or community leaders, and multi-media or public entertainment. Specific educational formats are often combined with other components into more complex interventions. Although, this makes it more difficult to distinguish the effect of single components, the combination may well increase the overall effectiveness of the intervention (World Health Organization, 2007a).

In this Subchapter, I will provide an overview of strategies and lessons learnt from successful male involvement programmes, which can inform the design of future interventions. This will include a discussion of issues that are applicable across different formats, such as messaging content, facilitation, and invitation strategies. I will prioritise lessons learnt from the studies that provide evidence on MNH/PPFP outcomes, which I reviewed in the previous Subchapter. However, where useful or relevant, these will be complemented by referring to other intervention studies drawn from the broader male involvement literature (described in Subchapter 3.1).

3.3.1. Formats and styles for education and counselling

In educational or counselling interventions focused on men or couples, the number of sessions offered will depend on programme resources and time constraints. Although there are examples of single-session interventions that achieved at least some of their objectives (Adeleye and Okonkwo, 2016, Pisacane et al., 2005), multiple sessions at regular intervals may be more effective than single sessions in having a sustained impact on behaviours (Salim Al Rabadi, 2015, Sinha, 2008). This appears to be particularly important in order to achieve changes in attitudes related to gender norms (MOSAIC et al., 2016, USAID, 2014). Appropriate intervals between sessions are also needed in order to allow participants the time to think or apply the lessons learnt (World Health Organization, 2007a).

Different formats may have advantages and disadvantages. For example, evidence has shown that group sessions may be more appropriate than individual sessions for unconventional educational approaches or for addressing topics that may put individuals ill-at-ease. In Varkey's study in India, women did not appreciate being shown a condom demonstration in individual meetings, but preferred to be instructed in a group setting (Varkey et al., 2004). At the same time, group activities may provide a safe space for critical reflection on social and cultural norms, such as those surrounding gender and masculinity (World Health Organization, 2007a). In group settings, social cognitive theory suggests that interactions with others may also reinforce learning (Maibach and Murphy, 1995).

The teaching style for group education may also be important. The integration of interactive activities, such as role plays, can facilitate dialogue and provide space for participants to rehearse and internalise new behaviours (Promundo et al., 2013). An Australian study has shown that formal lecture-like styles of group education are less appreciated by expectant parents, who prefer instead more interactive formats, where participants have a chance to get to know each other over several weeks, socialise, and relax (Svensson et al., 2008). Sessions in which participants can "see and hear the real experience", such as first-hand testimonies from parents, or practicing certain skills using models and role-plays, are also appreciated. There are several examples of the effectiveness of interactive or participatory programmes (Maycock et al., 2013, Doyle et al., 2014). Education and counselling may focus on a particular issue, or cover a range of topics, and there is no strong indication of which might be more effective. However, it is important that themes and discussions remain connected to real life, and that a focus on attitudes, skills and behaviours is maintained, rather than on the accumulation of knowledge (World Health Organization, 2007a).

In comparison to group education, the advantage of individual sessions for men or couples is that they afford the privacy to address sensitive topics and provide sufficient time for the discussion of individual needs and circumstances (Comrie-Thomson et al., 2015a). For example, in high income countries, home visitation programmes have successfully reached vulnerable or socially isolated pregnant women and their partners, who are less likely to access formal care and often require extra support (Olds et al., 1986, Barnes et al., 2008).

Some programmes educate or counsel women and men together, while others hold separate sessions for each. In some settings, men and women may not feel comfortable being counselled together, especially in the presence of an age difference (Abdel-Tawab et al., 1999, Mullick et al., 2005). A project focused on home visits for young women in Burkina Faso found that counselling in the presence of a large age gap between spouses made it difficult for young mothers to express themselves, and made older men feel uncomfortable (Pathfinder International, 2015). The authors concluded that couples who are close in age respond well to couple counselling, whereas it is better to speak to older husbands and young wives separately. Furthermore, couple counselling is clearly not appropriate in all situations, and may indeed be counter-productive, in the case of multiple partners, covert contraceptive use, and relationship disharmony or intimate partner violence (World Health Organization, 2002).

3.3.2. Messaging content and the use of multimedia

As pointed out in Subchapter 2.5, it is extremely important that male involvement interventions challenge existing norms and behaviours which perpetuate gender inequality. At the same time, messages need to be intelligible and acceptable. For example, suggesting that men should share chores such as washing nappies was considered unacceptable in Zimbabwe, and therefore was

not taken up (Comrie-Thomson et al., 2015a). As mentioned, a similar problem occurred as part of a facility-based education programme in Brazil (Susin and Giugliani, 2008). Formative research involving FGDs with potential beneficiaries or participatory workshops with stakeholders is therefore important in order to understand the complexities of local culture and to guide the development of campaign messages (USAID, 2014, Blake and Babalola, 2002, Exner et al., 2009).

It has also been suggested that male involvement programmes may benefit from including messages that may particularly appeal to men, such as considerations on the financial savings that can be gained from contraceptive utilization or other preventative interventions (Shattuck et al., 2011). It may also be useful to put forth positive role models that men can identify with, such as that of the responsible and caring man who discusses family planning with his female partner (Toure, 1996).

Face-to-face education or counselling may be complemented by public entertainment or media campaigns, or these may be the main or only component of the intervention. For example, radio-based interventions aimed at men or families can be surprisingly effective at reaching wide audiences. Survey evaluations focusing have shown levels of exposure to programmes of up to 50% to 70% (Sharan and Valente, 2002, Shefner-Rogers and Sood, 2004, Jah et al., 2014). Community members may form listening groups so that they can discuss the programme's message, or listen together with their spouses, which can encourage communication (Sharan and Valente, 2002). Interpersonal communication is one of the main ways in which campaign messages can spread across broader sections of the community (Shefner-Rogers and Sood, 2004). Multi-media campaigns have shown promise in changing attitudes and increasing awareness in related fields including on HIV/AIDS (Keating et al., 2006, Bertrand et al., 2006) and gender-based violence (GBV) (Heise, 2011, Usdin et al., 2005).

3.3.3. The educator/facilitator

Educators or facilitators for face-to-face activities may be facility-based health workers, education specialists, CHWs who are health service employees, or specially-trained volunteers, often selected by the community. In some cases, community-based groups are essentially self-managing (UNFPA, Sloand et al., 2010). Male involvement interventions have used all of these approaches successfully, so the choice may depend on the local context and programme objectives.

Several interventions have chosen to employ CHWs or trained peer educators who are men in order to carry out education or counselling with men (Adeleye and Okonkwo, 2016, Sahip and Turan, 2007, Maycock et al., 2013). When education is provided to both men and women, both a male and a female facilitator are often employed (Mullany et al., 2007, Schuler et al., 2012,

Ashfaq and Sadiq, 2015, MOSAIC et al., 2016). Undoubtedly, researchers and programmers designing interventions have felt that to be counselled by a person of the same gender would be more culturally acceptable in certain settings, and make participants feel more at ease (Comrie-Thomson et al., 2015a). However, it has also been argued that the gender of the session facilitator is not the most important element. Good training on how to work with men is necessary, especially for health providers who are used to working only with women. Activities that help future facilitators gain a strong awareness of gender dynamics must also form a part of their training (World Health Organization, 2007a).

Several programmes have included the mobilisation of community/religious leaders in the intervention, usually alongside other components such as group education or home visits. There are examples of these figures being employed as behaviour change agents, working on a one-to-one basis with target audiences (USAID, 2014), or in other programmes they have been asked to communicate campaign messages publicly, for example through Friday sermons (Blake and Babalola, 2002, Ashfaq and Sadiq, 2015). The main advantage of involving these individuals is that it can increase the weight and influence of the campaign. The messages are likely to be "reinforced by the authority and acceptability of this existing mechanism for disseminating information or normative guidance about how community members should behave" (Comrie-Thomson et al., 2015a). Men are especially likely to pay attention to messages conveyed by these figures, as in many settings they are the ones attending public events and religious ceremonies.

3.3.4. The setting

Interventions may take place in health facilities, in community settings, or at home.

As discussed above (Subchapter 2.2), men may be reluctant to attend health facilities for a range of reasons including lack of time, the idea that health facilities are "women's spaces", unfriendly reception by health workers, lack of space to accommodate them, and a concern about their own reputation. Reaching men or couples in the community may therefore prove successful where men are not used to attending facilities, or in remote areas (August et al., 2016, Sebastian et al., 2012). For example, there is evidence that the male partners of pregnant women may be more willing to attend VCT when it is offered in community settings such as bars, compared to health facilities (Ditekemena et al., 2011).

Home visits are one strategy to reach men and couples in the community. However, a home visitation programme in Burkina Faso found that few men were available during the visits, as they were usually at work during the day (Pathfinder International, 2015). An effort was therefore made to visit homes before or after men went to work. Other programmes have overcome this difficulty by reaching men in public places where they usually gather, such as tea

stalls in Bangladesh and drinking places and sports events in Tanzania (Comrie-Thomson et al., 2015a).

When interventions take place in the community or at home, potential participants are usually contacted thanks to local CHWs' knowledge of the area they serve (Sebastian et al., 2012, Terefe and Larson, 1993) or through ad hoc trained peer workers who come from the community itself (Pathfinder International, 2015, USAID, 2014). In other cases, educational events may be advertised through public announcements (Population Council, 2009) or through the involvement of religious leaders (Abdel-Tawab et al., 2008).

As for facility-based interventions, these have achieved levels of coverage of 80% or above in urban settings in South Asia, where it is not uncommon for men to accompany their wives to ANC (Varkey et al., 2004, Mullany et al., 2007). Similarly, in middle to high income settings where men are usually present at the birth of their child, inviting them to attend postpartum education sessions prior to discharge is generally straightforward (Pisacane et al., 2005, Abbass-Dick et al., 2014, Susin and Giugliani, 2008).

However, in other parts of the world, any educational intervention taking place in facilities involves inviting members of the community into a potentially unfamiliar setting. It is worthy of note that, for Sub-Saharan Africa, I only identified a very small number interventions focused on MNH/PPFP outcomes (and not HIV) that were facility-based (Kunene et al., 2004, Morhason-Bello et al., 2009, Ojengbede et al., 2009). This may be because male attendance at facilities has historically been considered too difficult to achieve, and interventions risk achieving low uptake (Kunene et al., 2004). The literature on male partner involvement in PMTCT confirms that male partner attendance at facilities during pregnancy can be hard to achieve in this region. Two cohort studies conducted in Kenya reported levels of male attendance at ANC of 31% (Aluisio et al., 2011) and 15% (Farquhar et al., 2004).

3.3.5. Inviting and welcoming men into facilities

Nevertheless, HIV/AIDS prevention programmes have been trying to encourage the male partners of pregnant women to attend facilities for VCT for several years. Such efforts are underway in several parts of Sub-Saharan Africa (Kululanga et al., 2011, Mukobi, 2012), prompted by the publication of studies showing that testing both expectant parents increases adherence to preventative interventions and reduces MTCT (Farquhar et al., 2004, Aluisio et al., 2011). Lessons can be drawn from this field for the development of facility-based male involvement interventions.

One strategy to increase men's attendance at facilities is to provide written invitations, given to the woman by the health worker and passed on to her male partner. If women have low negotiating power, men may take their request more seriously when corroborated by a formal

invitation from health workers (Falnes et al., 2011, Comrie-Thomson et al., 2015a). A non-controlled study in Tanzania showed that written invitations resulted in 31% attendance in an urban area but a surprisingly high 76% in a rural area (Jefferys et al., 2015). However, trials of different invitation approaches have generally shown low response levels. A general written invitation for the partner to attend, compared to no invitation, resulted in 33% attendance in an RCT conducted in Tanzania (Becker et al., 2010). An RCT conducted in Uganda showed no difference in attendance (14-16%) in a comparison between two types of written invitation (Byamugisha et al., 2011).

Overall, the evidence suggests that with written invitations men's attendance is still generally below 50%, although it is higher than with verbal invitations only (Nyondo et al., 2015, Byamugisha et al., 2011). Public endorsement of CVCT and the distribution of invitations by influential people may also be helpful (Wall et al., 2012).

It is unclear whether the exclusive focus on VCT in many of these initiatives may itself be counterproductive. As discussed, fears of status disclosure may reduce women's willingness to invite their male partner (Visser et al., 2008), and concerns about being pressurised into testing may put men off (Nanjala and Wamalwa, 2012). On the one hand, there is a need for support interventions for women to facilitate disclosure, aimed at improving couple dynamics and communication (Villar-Loubet et al., 2013). On the other, broadening the focus of ANC away from HIV/AIDS testing may also encourage male partners to get involved. Antenatal couple counselling could thus be promoted as an opportunity to discuss birth preparedness and present health information on a variety of topics (Holmes 2001). However, there is also some evidence suggesting that general invitations may actually be less successful than VCT-targeted ones. In South Africa, written invitation to VCT resulted in higher attendance (35%) compared to written invitation to a pregnancy information session (26%) (Mohlala et al., 2011).

It is important that where interventions take place in facilities, efforts are made to make facilities ready to welcome couples and to integrate the presence of men (Population Council, 2000). This is also essential when community-based initiatives are being used to encourage men to participate in routine facility-based care (August et al., 2016, Sinha, 2008). Facility-based health workers are likely to require training in order to improve their attitudes and increase their comfort and competency in working with men (Mehta, 2002). Structural adjustments may have to be made at the facility level, to include male- or couple-friendly waiting rooms and toilets for men (Mohlala et al., 2012). An appointment system might help certain men carve out the time they need to take off from work in order to attend, while flexible opening times or offering couple counselling in the evenings or at weekends may also encourage attendance (Fapohunda and Rutenberg, 1999, Abdel-Tawab et al., 2008). Interestingly, in order to monitor the accessibility of services to women's male partners, one programme has developed a resource

which includes detailed guidance and checklists to ensure that fathers are welcomed and appropriately catered for by health workers (Promundo et al., 2013).

3.4. Conclusion

While a vast number of interventions have sought to involve men in RH and maternity care in the last few decades, few have been rigorously evaluated. Relevant literature reviews have largely failed to reach firm conclusions about the effect of male involvement interventions on specific outcomes, and the WHO has recently described the quality of the evidence as very low (World Health Organization, 2015c). In this Chapter, I have provided a comprehensive summary of intervention studies seeking to improve the outcomes of interest to this study. I reviewed the evidence emerging from a heterogeneous group of initiatives targeting men, couples, families and communities. Overall, one can conclude that male involvement interventions have achieved mixed results, but show promise in achieving a range of RH outcomes such as key behaviours that impact on MNH including attendance at routine PNC, exclusive breastfeeding, and PPFP uptake. However, it is important to bear in mind that publication bias may have skewed the evidence, which may therefore appear overly positive.

I have also provided an overview of the main formats and strategies that have been used by educational/counselling programmes focused on involving men, pointing out their main advantages and disadvantages. These have included group education in communities or facilities, home visits, facility-based counselling for individuals or couples, the involvement of community/religious leaders, multi-media campaigns and public entertainment. Further issues to be considered in the design of interventions include messaging content, the gender of the educator/facilitator, invitation strategies, and making facilities welcoming to men or couples. I conclude that, although lessons can be learnt from past initiatives, there is no evidence of a "special formula" for male involvement interventions. Programmers must therefore make informed choices based on the local context and main goals of the intervention (World Health Organization, 2002).

This review of the evidence shows that there is an urgent need for further evidence on the effectiveness of male involvement programmes and on what strategies work best for engaging with men. More rigorous evaluations are required, especially from Sub-Saharan Africa.

4. STUDY RATIONALE, AIMS AND OBJECTIVES

In this Chapter, I will draw on the arguments and main points made during the previous Chapters to outline my rationale for developing and conducting a new intervention study on male involvement in maternity care (Subchapter 4.1). I will lay out the aims and objectives of this study (4.2), and present the conceptual framework underpinning it (4.3).

4.1. Study rationale

In Chapter 1, I illustrated how the postnatal/postpartum period is the most neglected for the provision of quality care to mothers and newborns, despite it being a critical phase in their lives (World Health Organization, 2014). The benefits of preventative interventions and recommended practices for mothers and newborns are well-known. However, in Burkina Faso and several other low-resource countries, there is a low level of attendance at routine PNC, limited uptake of PPFP, and the practice of EBF is uncommon. There is a need to test new solutions to promote care-seeking after birth, and to generate new evidence on effective strategies to increase adherence to these key behaviours.

In the summer of 2013, I carried out a formative study in Burkina Faso aimed at identifying the principal barriers to the provision and uptake of postpartum contraception (Daniele, 2014). This project was funded by the STEP UP Consortium and submitted in fulfilment of the requirements for completion of the MSc in Reproductive and Sexual Health Research at LSHTM. I used a combination of three methods to identify barriers at the supply, access, demand and policy levels: a review of relevant literature, policy and clinical guidelines; observations of client-provider interactions in government-run primary health care centres in and around the city of Bobo-Dioulasso; and semi-structured interviews with stakeholders and key informants, including service providers and users.

Among other identified barriers, I found that several men have negative views of family planning and that male partner opposition may prevent women from using contraceptive methods in the postpartum period. At the same time, I found that men usually don't participate in maternity care and may have limited exposure to reliable sources of health information, in contrast to women. In Chapter 2, I have shown that some of these problems are common across other areas of Sub-Saharan Africa. However, drawing on my qualitative findings, as well as on other evidence from Burkina Faso (Drabo et al., 2015, Rossier and Hellen, 2014, Somé et al., 2013), I realised that it there was a need to increase men's knowledge and awareness not only on PPFP, but about a broad range of topics related to reproductive health. It was also necessary to encourage men to start questioning traditional gender roles, and to promote more equitable couple relationships. I hypothesised that increasing men's involvement in maternity care might achieve these objectives, and in turn benefit women and newborns.

As illustrated in Chapter 2, male involvement has received considerable attention in recent years, despite the lack of standard definitions and the coexistence of multiple approaches, some of which have been problematic from a gender perspective (Greene et al., 2006). NGO-led initiatives to increase the participation of men in various dimensions of health care have multiplied (Comrie-Thomson et al., 2015a). However, as shown in Chapter 3, few rigorously designed studies have assessed the impact of male involvement interventions on outcomes related to maternal and newborn health, including on PNC, EBF and PPFP. There is especially little relevant research from Sub-Saharan Africa. Most intervention studies from this region describe community-based strategies, and only one facility-based trial of an educational/counselling intervention has been conducted that was not exclusively focused on PMTCT outcomes (Kunene et al., 2004). This is despite the fact that health facilities are increasingly accessible, especially to the growing urban population in the region.

Based on these premises and to fill this knowledge gap, for my PhD project I designed an intervention study, set in urban Burkina Faso, focused on involving men in facility-based maternity care, and aiming to assess the intervention's impact on RMNH outcomes related to the postpartum period.

4.2. Study aim and objectives

4.2.1. Aim

The aim of this study was to assess whether male partner involvement in maternity care can contribute to improving healthy behaviours and care-seeking in the postpartum period, in an urban West-African setting.

4.2.2. Objectives

Objective 1: To develop a contextualised intervention to promote the involvement in maternity care of the male partners of pregnant women attending primary health care facilities in the city of Bobo-Dioulasso, based on formative research and participatory consultations with stakeholders.

Objective 2: To conduct a randomized controlled trial of this intervention, in comparison to standard care, in order to assess its effect on postnatal care attendance, exclusive breastfeeding at three months postpartum, use of effective contraception at eight months postpartum, and on secondary outcomes including communication and cooperative decision-making processes within the couple.

Objective 3: To reflect on the factors that may have determined the success, or lack thereof, of the intervention by analysing process data on adherence, and by using qualitative methods to

explore the attitudes, concerns and personal experience of the women, men and health workers who were involved.

Objective 4: To assess the policy implications of the study findings and, if appropriate, to develop a strategy for their dissemination among policymakers and other stakeholders.

4.3. Conceptual framework and hypotheses

The Conceptual Framework for this intervention study is summarised and presented in Figure 2.

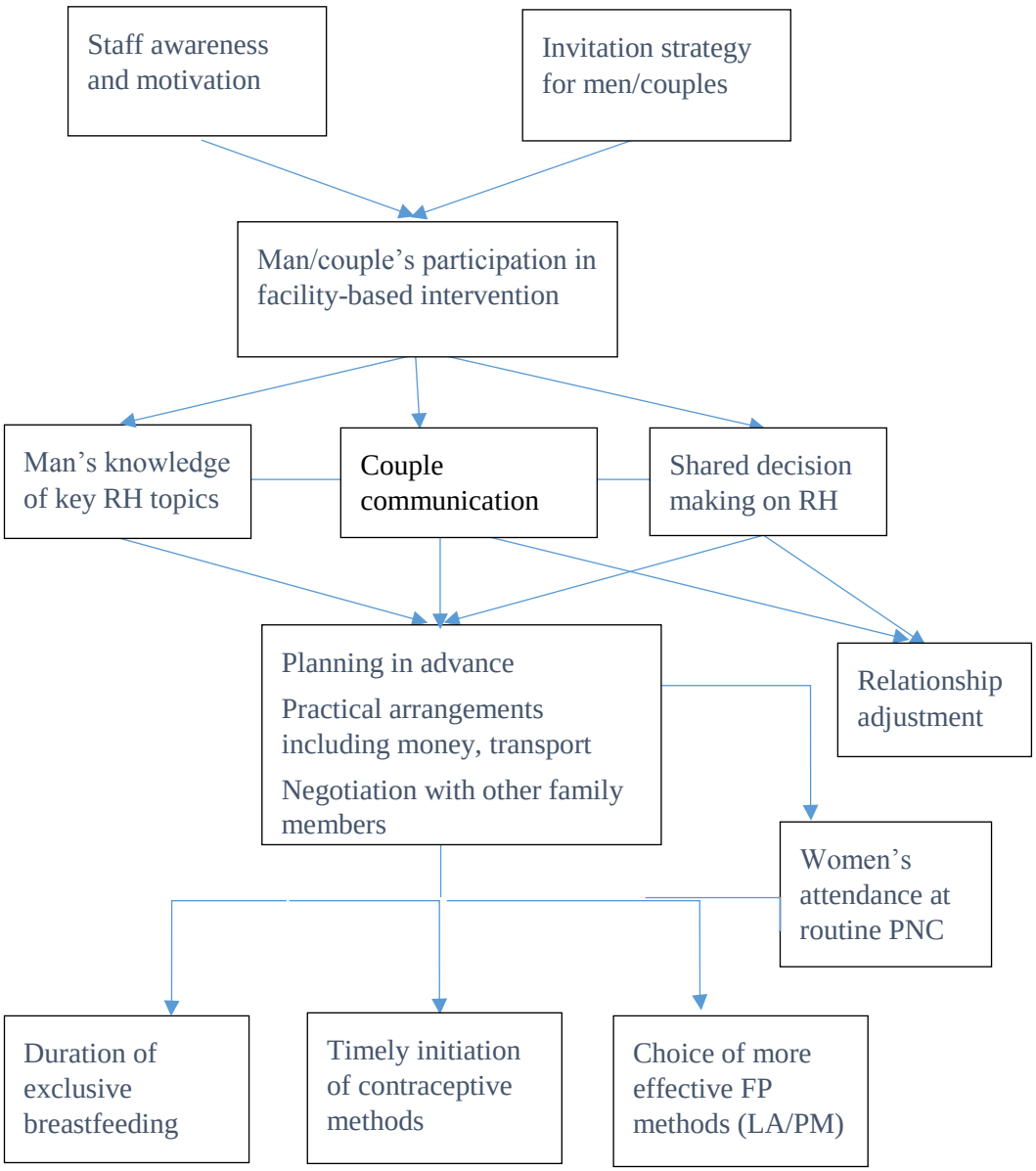
In standard care in this setting, it is usually only women who receive health information during pregnancy and after childbirth, through direct contact with health workers. This intervention consists of a contextualised strategy to involve men in maternity care. I hypothesised that men's participation in the intervention, delivered in health facilities, could be achieved thanks to an effective invitation strategy and to sufficient staff awareness and motivation. By participating, each man would have access to the same health information and achieve comparable levels of knowledge as his pregnant partner on key topics related to reproductive health, such as the importance of PNC attendance, PPFP, and EBF. The provision of accurate health information would dispel myths and motivate participants to modify their behaviours.

I also hypothesised that the intervention would encourage spouses to communicate and to make decisions together on issues relevant to RH. Reaching a shared understanding through increased communication would, on the one hand, have a positive impact on the quality of the relationship (relationship adjustment). On the other, increased cooperation would translate into higher levels of adherence to health advice by women/couples. Higher levels of cooperation would enable spouses to make practical arrangements and advance plans to support the fulfilment of their choices, for example through mobilising financial resources or organising transport to a facility. This might also involve negotiating with other influential family members, such as mothers-in-law, especially where health advice deviates from traditional practices (e.g. for infant feeding).

I hypothesised that, as a result, in the intervention group we would observe an increase in the number of women returning for postnatal check-ups and in the proportion continuing to exclusively breastfeed for the recommended period. We would also see an increase in the uptake of family planning methods in the weeks and months after birth, the choice of more effective methods, and more timely initiation. This would partly be facilitated by the establishment of a PPFP plan by both partners, during pregnancy or after birth. Couples would be more likely to choose long-acting or permanent methods (LA/PM), which are more expensive, and may require reflection and saving. These choices would themselves be reinforced by increased attendance at PNC consultations, where health messages are re-iterated and further advice and support can be given.

I hypothesised that ultimately, the intervention would have positive effects on the health of women and newborns, and couples and families would benefit from more cooperative relationships and more equitable decision-making processes.

Figure 2: Conceptual Framework



5. METHODS

In this Chapter, the design and data collection methods used in this intervention study will be described. I will first provide an overview of the study design, describe the research setting, and outline the roles of the various contributors and staff (Subchapter 5.1). I will then provide a detailed description of the methods used for the formative phase of the study – *Phase 1* (5.2), for the intervention trial – *Phase 2* (5.3), and for the qualitative process evaluation – *Phase 3* (5.4). For the quantitative methods, this will include a description of the trial outcome measures, sample size, recruitment and randomisation procedures, and data collection schedule and procedures, including the collection of process data. Finally, I will present the approaches used for data analysis (5.5), the main project management issues (5.6), and the ethical considerations relevant to the study (5.7).

5.1. Study design, setting and staffing

5.1.1. Overview of study design

This was an intervention study that used mixed methods. It was designed and conducted in three successive phases in order to achieve the stated aim and objectives (Subchapter 4.2):

Phase 1 - Intervention development:

In this phase, formative qualitative methods were used to achieve Objective 1 (development of the intervention). These methods consisted of focus group discussions with men and participatory consultations with stakeholders.

Phase 2 - Intervention trial:

In this phase, a randomised controlled trial (RCT) was conducted to achieve Objective 2 (testing the effect of the intervention on health and behavioural outcomes). Adherence to the intervention was also measured, thus contributing to achieving Objective 3 (assessing factors contributing to intervention success).

Phase 3 - Qualitative process evaluation:

In this phase, semi-structured interviews were conducted with women, men and staff in order to achieve Objective 3 (assessing factors contributing to intervention success).

The methods used in each part phase of the study will be described in detail in the rest of this Chapter. Study Objective 4 (assessing policy implications and dissemination) will be addressed in the General Discussion (Chapter 11).

5.1.2. Context and study sites

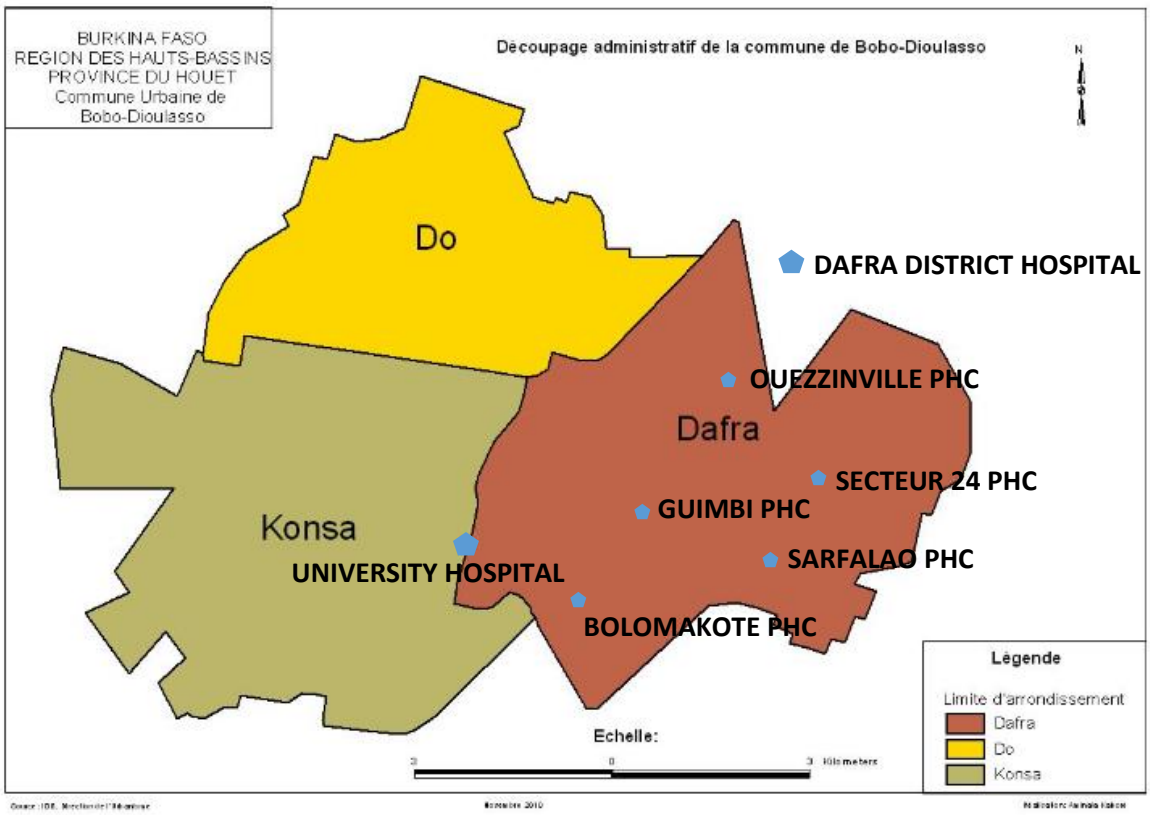
The study was set in Bobo-Dioulasso, the second largest city in Burkina Faso, with a population of 813 610 (INSD, 2015). The city, which is capital of the Hauts Bassins region and of the Houet province, is situated on a strategic transport route connecting the Ivory Coast and the South West of the country to the capital Ouagadougou by road and rail (see map, Figure 3). It is an important commercial node and hosts much of the country's industrial infrastructure.

The city comprises three health districts (Dafra, Do and Konsa). The study was conducted in the District of Dafra. This District was chosen because of AfricSanté's connection with a retired senior midwife (Mrs Diane Ouedraogo) who had worked there and introduced us to the District medical director. The District extends beyond the city boundaries to include a portion of countryside. It comprises one District Hospital (CMA), 7 urban and 9 rural PHCs. We planned to conduct the study in primary health care settings in urban Bobo-Dioulasso. A multisite design was necessary in order to recruit a sufficiently large sample for the RCT in the available time. The five largest PHCs in the urban part of the District were therefore chosen: Bolomakote, Guimbi, Sarfalao, Secteur 24 and Ouezzinville (see map, Figure 4). The two smaller urban PHCs were excluded (Tounouma and Secteur 25), because they served fewer pregnant women. The selected PHCs are geographically close and therefore it was reasonable to assume that the populations served would be similar. Being part of the same health district, there is also overlap in service support systems and management culture, and staff know each other from having participated in district-level training courses and other events. Although this reduces the likelihood of observing strong site effects, one theoretical downside of this homogeneity could be a decrease in the generalisability of our results.

All five included PHCs offer antenatal, labour and birth, postnatal and family planning services, and serve the majority of the local population (Ministère de la Santé, 2015b). In 2014, an average of 66 births per month took place in each of the study facilities (Ministère de la Santé, 2015b). Women with obstetric complications are referred to the District Hospital of Dafra (CMA) or the University Hospital of Bobo-Dioulasso (CHU). There are also a number of private maternity clinics, and some family planning NGOs are active in the area (ABBEF, MSI). These serve a smaller clientele, compared to the PHCs.

Figure 3: Map of Burkina Faso with major cities

Figure 4: Bobo-Dioulasso health Districts and study PHCs



5.1.3. Staffing and roles

A number of people contributed to carrying out this study. Permanent employees of AfricSanté research centre in Bobo-Dioulasso contributed varying proportions of their time to this study, and other people were employed by AfricSanté specifically to work on this study, paid for by the project funds.

A summary of each individual's role and contribution is provided in (Table 10) for reference.

Table 10: Staffing and roles

PERSON	INSTITUTION	ROLE
Ms Marina DANIELE	LSHTM	PhD Candidate: Study ideation and protocol development. Fieldwork coordination, including: plan of activities, development of materials and data collection instruments, training of staff, data management, implementation supervision, quality monitoring. Data analysis and reporting of results.
Prof Veronique FILIPPI	LSHTM	PhD Supervision
Dr R. GANABA Prof Simon COUSENS Dr Clementine ROSSIER Dr Sophie SARASSAT	AfricSanté LSHTM Univ. of Geneva LSHTM	PhD Advisors – academic support
Ms Djeneba OUEDRAOGO	AfricSanté	Field supervisor: assisted in training quantitative research assistants (RAs), field-testing, coordination and supervision of quantitative data collection (*Phase 2*). Qualitative interviewer: conducted semi-structured interviews with women (*Phase 3*)
Ms Chantal MILLOGO Ms Fatoumata DRABO Ms Adjaratou SOULAMA Ms Antoinette SANOU Ms Fatoumata TRAORE	AfricSanté	Research assistants (RAs): completed recruitment of RCT participants and conducted quantitative interviews at baseline and follow-up (*Phase 2*).
Mr Seydou DRABO	Independent consultant/ University of Oslo	Focus group discussion (FGD) facilitator: conducted FGDs with men (*Phase 1*)
Mr Blahima KONATE Mr Issiaka BAMBA Mr Achille SOULAMA	Centre Muraz	Qualitative interviewers: conducted semi-structured interviews with men and providers (*Phase 3*).
7 Health workers	5 PHCs – District of Dafra	Staff contact persons: liaison with research team, coordination of study activities in their PHC, further training and supervision of colleagues. (*Phase 2*)
Approximately 100 health workers (20 per PHC)	5 PHCs – District of Dafra	Participated in the RCT recruitment process. Implemented the intervention in the PHCs: invited participants, facilitated men's groups and delivered couple counselling sessions. Collected process data. (*Phase 2*)
Ms Diane OUEDRAOGO	AfricSanté	Clinical supervisor: assisted in the quality monitoring of the educational sessions provided as part of the intervention (*Phase 2*)
Mr Henri SOME	AfricSanté	Data manager: developed data entry forms, supervised data entry staff, monitored quality (*Phase 2*)
Ms Sylvia MARINOVA Mr Edgar DIBOULO Ms Nana ABGA Ms Denise-Emma BATIONO Mr Hamadou SIRIBIE	LSHTM AfricSanté AfricSanté AfricSanté AfricSanté	Accounting and administrative support
Ms Ruffine KANDO Ms Natacha PODA Ms Chantal MILLOGO	AfricSanté	Data entry clerks: carried out data entry for the RCT (*Phase 2*)

5.2. Methods for *Phase 1* – Intervention development

The formative qualitative phase (*Phase 1*) served two main purposes. Firstly, we wished to assess current levels of male participation in women's reproductive health services, and to understand how men view their own role in relation to the health of their female partners and children. Secondly, we wished to assess men's level of interest in becoming more involved with these services, and to seek specific suggestions in order to help develop and refine an intervention focused on male involvement.

In order to gain an insight into men's views on these topics, we conducted two focus group discussions (FGDs) with men in December 2014.

FGD participants were selected among the population served by one of the five participating health centres (Sarfalao). This centre was chosen because the study field supervisor (Ms Djeneba Ouedraogo) knew the Director and introduced me to him. During one week, health workers asked women attending for antenatal or postnatal care to provide their male partners' contact numbers so that the men could be invited to participate in a research project. The field supervisor phoned all the men whose contact numbers had been provided, to invite them to participate. The FGDs took place the following Saturday morning in an open-air meeting space within the health centre compound. They were facilitated by an experienced local male social scientist (Mr Seydou Drabo) and were audio-recorded. The interview guide and consent form used can be found in Appendix 3 and Appendix 10, respectively.

Specific formative research was not carried out with women, because of the availability of information about women's perspectives from the preceding qualitative study on conducted in 2013 (described in Subchapter 4.1) and from the PopDev project (*internal communications and* (Daniele, 2014, Drabo et al., 2015).

We also held consultations with local health workers in order to present, discuss and finalise the draft intervention. First, we held a meeting at the AfricSanté premises with the managers of the five health centres, followed by open staff consultations at each participating health centre. We invited all maternity staff to meet us and contribute their ideas. We encouraged the participants to debate the proposed intervention and we elicited their feedback to ensure acceptability and feasibility. We did not audio-record these meetings, however, I took notes during the sessions on emerging suggestions for the adaptation of the intervention. The process of integration into the intervention design of the feedback and suggestions that emerged from this research phase is described in Chapter 6.

5.3. Methods for *Phase 2* – Intervention trial

Once the intervention had been finalised and piloted, it was implemented and tested through a multisite individually-randomised controlled trial (RCT) (*Phase 2*). Eligible pregnant women served by the five study PHCs were invited to take part in the study. Women were randomly assigned to the intervention or control arms. Those in the intervention group and their male partners were invited to participate in the intervention, which was delivered in addition to routine maternity care at the facility.

The intervention consisted of three components:

- A: a group discussion with the male partners of pregnant women,
- B: a couple-counselling session during pregnancy, and
- C: male partner participation in the first postnatal consultation, prior to discharge from the health centre (6^{th} hour postpartum).

The finalised intervention, the educational materials used, and the training of health providers are described in detail in Chapter 6. Women assigned to the control group received routine maternity care only, in which their male partners do not usually participate. Baseline interviews were conducted at enrolment with all women. Health and behaviour outcomes related to the postpartum period were collected from all participants through community-based follow-up interviews at 3 and 8 months postpartum. Process data to assess compliance with the assignment to intervention or control and levels of adherence to the intervention were also collected throughout the trial.

The RCT was conducted and is reported in adherence to the CONSORT 2010 Statement (Schulz et al., 2010). The trial was registered on ClinicalTrials.gov (Identifier NCT02309489).

5.3.1. RCT Outcome measures

Primary, secondary and process outcome measures for the RCT are described in this section and summarized in Table 11.

Table 11: RCT outcome measures

STUDY OUTCOMES	
Primary outcomes	a. Attendance at scheduled postnatal care (at least 2 consultations)
	b. Exclusive breastfeeding at 3 months postpartum
	c. Use of effective modern contraception at 8 months postpartum
Secondary outcomes	a. Use of long acting or permanent (LA/PM) methods of contraception at 8 months postpartum
	b. (1) Any contraceptive use at 3 months postpartum (2) Any contraceptive use at 8 months postpartum
	c. Timely initiation of effective modern contraception
	d. Unmet need for contraception at 8 months postpartum
	e. High relationship adjustment at 8 months postpartum
	f. Complete satisfaction with routine care
Process outcomes	a. High adherence to the intervention

Primary outcomes:

a. Attendance at scheduled postnatal care (at least 2 consultations)

Based on the minimum number of outpatient postnatal check-ups recommended by the national protocol (Ministère de la Santé, 2010a), a woman was classed as having attended scheduled postnatal care if she had attended at least two consultations in the first six weeks after birth. These usually include one consultation at six days and one at six weeks (42 days) postpartum (see Subchapter 1.3.4).

Data for this outcome were collected through 3-month postpartum follow-up interviews, supplemented by health facility records in cases of loss to follow-up.

b. Exclusive breastfeeding at 3 months postpartum

Although exclusive breastfeeding is recommended for the first 6 months postpartum, 3 months was chosen as the reference period because by that point only 25% of infants are still exclusively breastfed in Burkina Faso (see Subchapter 1.3.4) (INSD, 2012). We estimated that an increase in the duration of EBF to this time point would provide a meaningful and achievable public health gain in this context. Data were therefore collected during the 3-month follow-up interview, for infants who were alive at that time.

The definition of exclusive breastfeeding was based on the WHO criteria: “the infant has received only breastmilk from his/her mother or a wet nurse, or expressed breastmilk, and no other liquids or solids with the exception of drops or syrups consisting of vitamins, mineral

supplements or medicines" (World Health Organization, 1991). During the interview, the mother was asked whether the baby had ever had one of a list of food/drink items, apart from breast milk. These included other milk, water, herbal infusions, juice, and others. Items were read out and discussed one at a time (see interview). If any additional item had ever been given to the baby, the interviewer enquired about the frequency with which the baby was having it. Breastfeeding was considered to be exclusive if the infant had never had any other food/drink item other than breast milk, or had had another type of food/drink only once or twice.

c. Use of effective modern contraception at 8 months postpartum

Effective modern methods were defined as those having a rate of unintended pregnancy per 100 women of 10% or less per year, as commonly used (World Health Organization and Center for Communication Programs, 2011). Based on local availability, these methods are: implants, IUDs, injectables, oral contraceptives, and permanent methods.

For this outcome and for secondary outcomes related to contraception, each woman was considered a "user" or "non-user" for each method. She was considered a user of the implant if she had an implant in place at the time of interview; of the IUD if she had an IUD sited; of injectables if she had received an injection in the three months prior to the interview; of oral contraception if she took a pill within the 24 hours prior to the interview or according to instructions; of permanent methods if she or her husband had undergone sterilization or vasectomy. This outcome was calculated as a proportion out of all women followed up. Based on the national protocol, progestin-only pills are the only oral contraceptive provided in the first 6 months postpartum (Ministère de la Santé, 2010b).

Data for this outcome, as well as for contraception-related secondary outcomes, were collected through the 8-month postpartum follow-up interviews.

Secondary outcomes:

a. Use of long acting or permanent (LA/PM) methods of contraception at 8 months postpartum

This was defined as the proportion of women (out of all women followed up) using IUDs, implants, female sterilization or male sterilization at 8 months postpartum.

b. Any contraceptive use at 3 and 8 months postpartum

This was defined as the use of all contraceptive methods, according to self-report, at 3 and 8 months postpartum (calculated among all women followed up in each round). This broader definition of contraception was included in order to account for the use of "natural" methods, such as withdrawal, which may be higher than reported in DHS surveys (Rossier et al., 2014). Traditional methods were also included. Data from both follow-up rounds were used.

c. Timely initiation of effective modern contraception

For postpartum women, the likelihood of conception increases over time since the index birth. Timeliness of initiation of effective modern contraception was defined as the initiation having taken place within a specific timeframe during which a repeat conception was reasonably unlikely. The criteria used to establish whether contraception initiation was timely or not, as a dichotomous variable, and are spelled out in Table 12. They are based on the duration and conditions during which lactational amenorrhea provides 98% protection against unwanted pregnancy, which are also the principles that characterise women as intentional or default LAM users (Labbok et al., 1997).

If the woman initiated contraception within 6 months AND had been exclusively breastfeeding at 3 months, the initiation was considered to have been timely as long as she had not previously resumed intercourse in the presence of menses. This is because lactational amenorrhea, while it lasted, provided reasonable protection until the time she started the method. However, if a woman had initiated the method later than 6 months postpartum, OR if she initiated it earlier but had not been exclusively breastfeeding, initiation of contraception had to precede the resumption of intercourse in order for it to be considered timely, regardless of the presence of menses. This is because the likelihood of ovulating prior to the return of menses is higher after 6 months or in the absence of exclusive breastfeeding.

This outcome was assessed with users of effective modern contraception at 8 months as the denominator. Data were drawn from the 3- and 8-month postpartum interviews.

Table 12: Timeliness of initiation of contraception

At the time of initiation:	Initiation within 6 months PP **AND** EBF at 3 months		Initiation after 6 months PP **OR** not EBF at 3 months	
	Timely	Not timely	Timely	Not timely
Amenorrhea + abstinence	X		X	
Amenorrhea + sexually active	X			X
Menses returned + abstinence	X		X	
Menses returned + sexually active		X		X

d. Unmet need for contraception at 8 months postpartum

Several definitions of unmet need for contraception have been proposed. The Revised definition of unmet need published by the DHS Program in 2012 was chosen (Bradley et al., 2012).

In accordance with this definition, women who were in union at 8 months postpartum and who were not using a contraceptive method were divided into two groups. In the first group were women whose menses had returned, and in the other were women who were still postpartum amenorrheic or were pregnant again. Women whose menses had returned (first group) were classified in the following way:

- Women who wanted another child within two years = no need for contraception

- Women who wanted no more children = need for limiting
- Women who wanted a child in two or more years, who wanted a child and were undecided about timing, or who were undecided about having another child = need for spacing
- If the data on the wantedness of future children were missing, need status was classed as missing.

Women who were still postpartum amenorrheic or were pregnant again (second group) were classified in the following way:

- Women who wanted the last birth or the current pregnancy at that time = no need for contraception
- Women who did not want the last birth or the current pregnancy at all = need for limiting
- Women who wanted the last birth or current pregnancy later = need for spacing
- If the data on the wantedness of the last birth or current pregnancy were missing, need status was classed as missing.

Women in either group who had a need for contraception (spacing or limiting) were classified as having an unmet need if they were not using a family planning method at 8 months postpartum.

Data were drawn from the 8-month postpartum interviews. In addition, for amenorrheic, non-pregnant women, baseline data on the wantedness of the last birth were used. For women pregnant at 8 months, data on the wantedness of the current pregnancy were extracted from the fertility intentions expressed during the 3-month follow-up.

e. High relationship adjustment at 8 months postpartum

Relationship adjustment was defined as the woman's satisfaction with the relationship and the degree of communication, shared decision-making and agreement within the couple on key issues related to reproductive health. Data were drawn from the 8-month postpartum interviews and based on women's self-report. I developed a tool for measuring this outcome by adapting existing questionnaires, including Spanier's Dyadic Adjustment Scale and the Locke-Wallace Marital Adjustment Test (LWMAT) (Spanier, 1976, Locke and Wallace, 1959). Questions from these instruments that were not relevant to the context were modified or eliminated, and others were added to capture agreement and shared decision-making relative to reproductive health and care-seeking.

The final tool contained 18 questions, concerning:

- overall relationship satisfaction,
- the frequency of communication within the couple on the following issues: the number of children to have in the future, health care seeking for children, how children should be fed, contraception, and the amount of time to wait before having another baby,
- the level of agreement on those same issues,

- who in the household makes decisions on the following issues: infant feeding, routine and emergency health care for children and for the woman herself, the use of contraception, and when to resume sex after birth.

The response to each question was assigned a score of 0 to 3 points. The highest the levels of relationship satisfaction, communication and agreement on key issues, and the ability to refuse sex, the more points were scored. For the questions on decision-making, the most points were scored when the couple decided together on an issue, and the lowest points were scored when the woman was not involved in the decision. Because we also aimed to capture the level of interest that the man took in the health of his family, the score was intermediate if the woman decided alone. The total score was calculated for each woman by summing the number of points scored for each question. Though it would have been possible to analyse this outcome as a continuous variable, I decided to recode it as a binary variable for simplicity and to make it easier to compare the effect with that of the other outcome indicators. The median score of 16 was chosen as a cut-off point for the constitution of a high-adjustment group and a low-adjustment group.

g. Complete satisfaction with routine care

Data on satisfaction with care were collected during the 3-month follow-up interview. The aim of measuring satisfaction was to check that women's experience of routine care throughout the period of pregnancy, birth and postpartum did not differ between the two study arms. The questions did not specifically refer to the care received as part of the intervention sessions, in order to ensure comparability between the two arms.

A measurement tool for satisfaction was developed by adapting questions from the K4 Health's Respectful Maternity Care toolkit, and from the UK's Care Quality Commission (CQC)'s 2013 Maternity Services Survey (USAID & MCHIP, 2013, Care Quality Commission (CQC), 2013).

The tool comprised 8 questions, which covered the following issues:

- the clarity of language used by staff,
- the opportunity to ask questions,
- the receipt of satisfactory response to questions asked,
- staff's respect for personal wishes or preferences in relation to care or treatment options,
- staff's respect of intimacy/privacy,
- the correct treatment of confidential personal information,
- experiences of impatient or angry behaviour on the part of staff,
- staff's respect for the woman's wish to have, or not to have, a companion present.

Each question contributed either zero or one point, so that the maximum score was 8. Though it would have been possible to analyse this outcome as a continuous variable, I decided to recode it as a binary variable for simplicity and to make it easier to compare the effect with that of the

other outcome indicators. A score of 8 was interpreted as complete satisfaction with care, and any score below that corresponded to less than complete satisfaction (dichotomous outcome).

Process outcomes:

a. High adherence to the intervention

Participation in each component of the intervention was recorded (A, B & C), and the woman/couple were considered highly protocol-adherent if they attended at least two intervention components. Data on the participation to each session were collected from study documentation forms, compiled by health workers throughout the implementation period (see Subchapter 5.3.8).

5.3.2. Sample size calculation

Sample size for the RCT was calculated for primary outcomes a, b and c using the *power* command in STATA 14. All calculations assumed 95% confidence levels and 80% power, and took the potential for a 20% loss to follow-up into account.

Approximately 60% of women in the Bobo-Dioulasso area attend outpatient PNC, of which an estimated half attend both recommended appointments (Drabo et al., 2015, Daniele, 2014). A sample size of 1115 was deemed necessary in order to detect a statistically significant increase (for alpha=0.05) in the percentage of women attending the recommended number of consultations from 30% to 39%.

At the national level, the proportion of women still exclusively breastfeeding at 3 months postpartum is 25% (INSD, 2012), and it was estimated that with 1115 participants, detection of a significant increase to 34% would be possible.

At the time of writing the study protocol, we used data from a study conducted in the Bobo-Dioulasso area in 2005 in order to calculate power for the use of effective modern contraception (Ganaba et al., 2010). This study suggests that about 40% of women with an uncomplicated delivery are using contraception at 8 months postpartum, of which half are using effective modern contraceptive methods. These proportions are similar to the PPFP figures reported from more recent research (PopDev study, *internal communication*). We estimated that a significant increase from 20% to 28% could be detected with a sample of 1115.

Finally, we calculated the difference between the two arms that the study would be powered to detect for the use of effective modern contraception in a subgroup of women who are sexually active. This subgroup analysis was pre-specified in the protocol (see Subchapter 5.5.1). With 1115 participants (of which 535 sexually active, after loss to follow-up) the study would have been powered to detect a 12 percentage point difference (20% to 32%) in the use of effective modern contraception between intervention and control in the sexually active subgroup.

5.3.3. Inclusion and exclusion criteria

Participants were recruited among the attendants at routine ANC consultations taking place in the five participating PHCs. Eligible participants were aged 15 or above. Because I anticipated that it would be practically difficult to obtain consent to participation from the parent/guardian of women below the age of 18, only those who were married were eligible to participate. This was because they could be considered emancipated (free from parental/guardian control) and therefore able to give consent autonomously. Marriage was defined by the woman herself, and in this context includes both traditional and official unions. We included this group because many women marry and 13% have a child or are pregnant before the age of 18 in urban areas (INSD, 2012).

For all women, they were eligible if they were in a cohabiting relationship with their husband or a male partner, which was assessed by asking whether they lived with their husband or were living with a man as if they were married, at the time of enrolment. Eligible women lived in Bobo-Dioulasso and were not planning to move away (to maximise the chances of successful follow-up). They were pregnant at an estimated gestational age of 20-36 weeks. Women in the second half of pregnancy were chosen because it was assumed that health advice relative to future fertility and other postpartum issues would be more relevant to them and their partners. We also thought that the information would be more likely to be retained for a sufficient length of time to be put into practice.

In order to be eligible for participation, another requirement was for women to be considered fit to give birth in the PHC itself rather than in a referral hospital, based on health workers' assessment of their obstetric risk at the time of enrolment. This was because in hospital, women would not be able to receive one of the intervention sessions, which took place after birth (Component C) (see Subchapter 6.3.3). We excluded women who were advised to give birth in hospital only because we did not have the resources to train the hospital staff to provide Component C, however, in theory this intervention would be applicable to all women regardless of clinical risk during pregnancy. Participants who developed complications and were advised to deliver in hospital later on, including those who were transferred in labour, were retained in the study.

5.3.4. Participant recruitment and randomization procedures

Each weekday during the recruitment period, health workers providing ANC identified potentially eligible women who were interested in participating. They carried out an initial screen during individual antenatal appointments, using a standardised checklist which listed the eligibility criteria (Appendix 17). There were five non-clinical research assistants (RAs) employed to work on the study, each deployed to a different PHC during recruitment.

Throughout this period, the five rotated on a fortnightly basis, in order to avoid a permanent association between one RA and one PHC. This would have made it impossible to separate health centre effect from a hypothetical RA effect. The RAs were stationed in the waiting area outside the antenatal clinic. They met each pre-selected woman after she exited the consultation room and double-checked eligibility for the socio-demographic criteria. As they were not health professionals, they did not have the training necessary to check the gestational age and the existence of risk factors such that delivery in a referral hospital was recommended. Before the woman left, RAs provided further information on the study, obtained preliminary verbal consent and took her contact details, including precise instructions on how to reach her home. They completed recruitment later by visiting her at home, usually on the same day. If the location of the woman's home was hard to describe and the RA did not have other women to see imminently, she sometimes followed the woman home.

Recruitment was completed at home for three main reasons. Firstly, the ANC clinic flow was very fast at times, and there wasn't time to complete recruitment with one woman before the next arrived. Secondly, this enabled RAs to learn where the woman lived. This was important in anticipation of follow-up, given that many women in this setting live in informal settlements and the route is often difficult to describe verbally. Finding out accurately where women lived was essential, especially for reaching women who did not have their own mobile phone. Finally, during the pilot phase (see Subchapter 6.5), it emerged that, due to social stigma against pregnancy out of wedlock, many unmarried women who were living with their own families initially declared themselves to be married. This was not discovered until the RA visited the house to learn where they lived. In order to prevent the recruitment of ineligible women, we established that recruitment should be completed at home for all participants.

Prior to the start of the recruitment period, I generated a list of unique study IDs which were then used to identify individual women throughout the study. Straight after generating them, I assigned each ID to one of the study arms by using a scientific calculator to generate a random number. If the number was odd I would assign that ID to the intervention arm, and if it was even I'd assign it to the control arm. Based on the pre-determined arm assignments, I subsequently pre-prepared sealed opaque envelopes in the AfricSanté office, assisted by the field supervisor, Ms Djeneba Ouedraogo (see Subchapter 5.1.3). Each envelope contained a slip of paper with the unique ID, and either a blank page for the control group, or an invitation letter for the intervention group. The envelopes containing intervention and control group assignments were mixed evenly and given to RAs in batches of 30, several times over the recruitment period, depending on the amount used. Once the RA had only 5 envelopes left she was given a new batch. I kept a count of the envelopes used and IDs assigned.

In the woman's home, the RA obtained full written informed consent, administered the baseline interview, and, at the end, invited the woman to pick an envelope out of a bag containing at least 5. If the letter was present, the RA asked the woman to pass it on to her male partner to invite him to attend the first intervention component (A). An example letter from one of the PHCs can be found in Appendix 16. The RA copied the study ID onto the baseline interview form. The RA also applied a small pink or yellow mark, using a highlighter, on the inside of the front cover of the woman's pregnancy health booklet. Pink designated the intervention arm, and yellow the control arm. This was in order to facilitate the collection of process data (see Subchapter 5.3.8). The pink mark also enabled health workers to recognise intervention group women at the time of birth (see Subchapter 6.3.3).

5.3.5. Interview schedule and data collection procedures

Baseline data were collected at the time of enrolment, and outcome data were collected principally through follow-up interviews conducted with women at 3 and 8 months postpartum. Additional data were also collected from facility registers in the health centres.

As mentioned above, the baseline interview was carried out in the woman's home, after informed consent, and prior to randomisation. The questionnaire collected information on demographic and socio-economic characteristics, including age, parity, ethnicity, religion, occupation, educational level, and characteristics of the male partner.

Data from facility registers in the five participating PHC were collected throughout the duration of the study. As mentioned above, women participating in the study had a small mark inside of their hand-held health booklets, pink for the intervention group, and yellow for the control group. Health workers were asked to report this mark alongside any entries that were made for these woman in any facility registers. The aim of this process was to enable us to track participant women's care throughout the antenatal, intrapartum and postpartum period. This would not have been possible otherwise, due to the high patient volume, the high prevalence of namesakes, and the non-consistent collection of other identifiers across the 5 PHCs. Data collected from registers included delivery dates, and postnatal care and postpartum family planning consultations attended. Data were collected by myself and the field supervisor through standardised extraction forms, and entered into an Excel database by myself.

The colour recording system was successful in its primary purpose, which was to enable us to know when the majority of women had delivered, in order to plan for follow-up. However, this was not possible in the case of women who didn't deliver in one of the study PHCs (about a third in both arms). It also became clear that in some cases health workers missed the colour, or forgot to report it in the register. For each woman, I calculated an estimated delivery date based on the gestation (approximate) reported in the baseline interview. When that date had passed

since one month and no record of her giving birth had been found in the registers, she was added to a list of women who were to be phoned. Every month during the period when women were giving birth, each of the five RAs was given a list of an average 10-15 women to phone. It turned out that most of these had delivered elsewhere, but the calls confirmed that about 10% of study PHC births had been missed in the registers.

The main purpose of the data extraction for PNC and FP consultations was as a back-up in the case there was considerable loss to follow-up. However, follow-up rates ended up being high, so I did not use the data for this purpose (see Chapter 7). Furthermore, the data quality was not necessarily better than women's self-report. In particular, the FP consultation data were almost certainly incomplete, possibly because a system of FP cards exists and we found out that not all postpartum women attending for a FP consultation brought their pregnancy health booklet with them. For this reason, I did not carry out validation on women's self-reported PNC attendance using these data, and register data were not included in the validation analysis carried out for self-reported FP use (see Subchapter 9.4.16).

Follow-up questionnaires were administered in the woman's home or at another preferred location at 3 months and 8 months postpartum, and the data collected concerned the study primary and secondary outcomes.

The baseline questionnaire and the two follow-up questionnaires were developed in French. Translation into Dioula and Moore, the most widely spoken local languages, was done collectively through group workshops involving the field supervisor and the five RAs. Because these languages are seldom formally written, the translations were worked out verbally and RAs made note of the key words and phrases that were agreed by the group, to ensure standardisation. RAs did substantial amounts of supervised and peer-supported practice, both in the workshop setting and during field testing.

All questionnaires were field-tested over several days on women attending the study PHCs who were not part of the study. Corrections and improvements were integrated into new successive versions through an iterative process. The final versions of the three questionnaires can be found in

Appendix 4, Appendix 5 and Appendix 6.

5.3.6. Blinding

Due to the nature of the intervention, it was not possible to blind participants themselves, nor the health workers providing the intervention. RAs carrying out recruitment collected baseline data before carrying out randomisation, and therefore can be considered to have been blinded for this phase. Data entry staff for follow-up interviews were also blinded to allocation. However, it was not feasible to blind myself (the data analyst) because I was involved in a lot of the data cleaning.

RAs conducting follow-up interviews, during which outcome data were collected, may or may not have been aware of the allocation of the women they were interviewing. There were no questions in the follow-up interviews which would have directly revealed the study assignment to the RA.

However, RAs were aware of the study design and were not explicitly prevented from asking about study assignment. As part of the interview, they were asked to check some data in the women's health booklets, in which they could have seen the pink or yellow mark inside the front cover. This would have revealed the woman's allocation. Furthermore, in most cases they were interviewing women that they themselves had recruited a few months earlier, so it is possible that they would have remembered the allocation.

5.3.7. Control group

All women participating in the trial, regardless of their treatment allocation, were due to receive the standard care package as per current national protocols. The protocols state that all pregnant and postpartum women should receive counselling on birth and postpartum preparedness, care of mother and baby, danger signs, EBF, subsequent visits schedule, and PPFP (Ministère de la Santé, 2010b, Ministère de la Santé, 2010c). According to the protocol, any postpartum woman who is not already using reliable contraception should be counselled on healthy spacing and timing of pregnancies (HTSP) and PPFP. If the woman accepts a method, this can be provided immediately, or a referral should be made for the appropriate time/place where to obtain the chosen method.

The majority of women attending ANC and PNC at government PHCs are exposed to the brief group education sessions (*causeries educatives*), which cover a variety of relevant topics and are held before morning clinics begin. Intervention and control group women were equally likely to take part in these.

Women in the control group and their male partners were not invited to take part in the intervention sessions. The lack of involvement of partners is standard practice at present.

However, any control group women actively requesting their husbands' participation in their care were not refused this.

5.3.8. Process data collection

Process data on adherence to the intervention were collected throughout the study period through forms specially designed by myself for this purpose, which health workers filled in to document the activities they carried out. In each PHC, there was a contact person who was responsible for coordinating the study activities (see Subchapter 5.1.3). Contact persons managed a study folder in which all documentation was kept. In this folder, each intervention group woman/couple was denoted by a unique serial number, which had to be reported at every entry into registers and on every form concerning them.

As mentioned above, the intervention consisted of three Components, which will be described in detail in Chapter 6. Information on all aspects of intervention delivery was documented in these forms: the male partners who had been phoned to take part in the group discussion (Component A), those who had accepted to come, those who actually came, those who brought the invitation letter, and the appointment details for those who were invited to return for couple counselling (Component B). For each session carried out (A, B and C), the documentation form contained the woman/couple's serial number and names, the names of the health workers present, and the health topics covered. There was also space for feedback and comments on the session. The forms for Components B and C also required health workers to document whether the couple had made a contraceptive plan, or whether they had already started a contraceptive method (in the case of Component C). All forms are available in the Appendices.

Great attention was paid to the accuracy of these records. I reviewed these forms reviewed on a weekly basis, collated the data and entered them into an Excel spreadsheet.

5.4. Methods for *Phase 3* – Qualitative process evaluation

For the qualitative process evaluation (*Phase 3*), a total of 40 semi-structured interviews were carried out with a sample of individuals who had been involved in the study in different capacities. 10 health workers, 15 men and 15 women were interviewed.

We asked health workers about their experience of providing the intervention. Their views were sought on the training workshop, intervention format, educational materials to be used with couples, teamwork among colleagues, management support, relationship with the research team and manageability of the workload. We asked what aspects of providing the intervention components they had enjoyed and what was difficult, as well their perception of the reactions of participants in the sessions. We attempted to identify technical or logistical challenges and sought suggestions on how these could have been overcome.

Two health workers were interviewed from each participating PHC. In each centre, we interviewed the study contact person. In some PHCs there were two contact persons, in which case they chose among themselves who would be interviewed.

For the selection of the second member of staff, I proceeded as follows for each PHC. First, I compiled a list of all individuals who had conducted at least two out of the three intervention components. This amounted to approximately 2/3 of the total number of staff working in each the maternity department. Then I went to the PHC unannounced one day, without knowing their rota, and asked who was on duty that day out of the people on my list. I then made small bits of paper with the names of the people who were on duty, put them into an envelope, and pulled one out at random. I then went to speak to this member of staff in private, explained the purpose of the semi-structured interview and how it would be conducted, and asked whether they would be willing to participate. In one case I had a refusal and therefore picked another name. I did not tell any of the person's colleagues, nor the contact person, that they had been selected, and told the chosen person so. The aim of this precaution was to ensure that this member of staff would feel comfortable to talk freely about their workplace and colleagues, without fear of any repercussions.

It was not practically possible for me, as the analyst, to be blinded to the identity of the health workers who were interviewed, given that I was the person who had the documentation required to carry out the selection and I was the only person available to approach the health workers and obtain their consent. I recognise this as a limitation, given that being able to reassure interviewees that I didn't know who was being interviewed might have made them feel freer to criticise the study. However, three researchers from the local research institute Centre Muraz, who had not been involved in the study up to that point, were recruited specifically to carry out the interviews with staff (see Subchapter 5.1.3). Therefore, the people who arranged the meetings and conducted the interviews were not known to interviewees and had not been involved in the study up to that point. This may have minimised bias and encouraged staff to talk more freely.

Interviews with men were also conducted by the three (male) researchers from Centre Muraz, whereas those with women were conducted by Ms Djeneba Ouedraogo (who was also the study field coordinator). Men and women were asked about their experience participating in the intervention. Topics covered included how they/their partner received the invitation to participate, how they were treated at the health centre, whether the format of the components was acceptable to them, and whether the content of the sessions was interesting or useful to them. We attempted to understand in what way participation in the intervention did or did not make sense to them in the light of their own values and their relationship and family dynamics,

and whether and in what way it had been beneficial to them. If respondents/their partners had attended none or only some of the components, an effort was made to understand why.

The women and men who were interviewed were all part of the intervention group. Men and women were not each other's partners, but represented 30 distinct couples. This choice was made in order to capture the broadest possible range of experiences of the intervention. I selected participants randomly in January and February 2016 among the couples in which the woman had already completed the 8-month follow-up interview. Waiting so long introduced the risk that some people might not remember the details of their experience of the intervention. However, this choice was made in order to avoid introducing any bias prior to the completion of the quantitative follow-up. The 15 men were randomly chosen in a pre-defined proportion according to their level of adherence to the intervention and the 15 women were chosen in a similar proportion, based on the number of sessions attended by their male partner. I also attempted to choose participants in equal proportions from the five PHCs.

I made the selection from the list of women who had completed the 8-month follow-up interview, ordered chronologically based on the interview date. I screened each subsequent record, representing a woman/couple, until the required number of women and men had been chosen, based on the desired stratification by adherence level and PHC.

The interview guides are available in Appendix 7, Appendix 8, and Appendix 9.

5.5. Data analysis

5.5.1. Quantitative data analysis

I used Stata/IC 14 for all quantitative analyses (StataCorp 2015. Stata Statistical Software: Release 14. College Station, TX: StataCorp LP).

Analysis of trial participation

I completed the CONSORT flow diagram (see Chapter 6.1) and carried out descriptive analyses of the number of eligible women approached, recruited, and successfully followed up in the 3-month and 8-month postpartum rounds. I compared follow-up rates between trial arms.

Analysis of baseline data

I analysed the baseline data in order to describe the characteristics of participants and assess the effectiveness of randomization. I performed tabulations by study arm for socio-demographic characteristics, male partner information, and reproductive history. I used visual inspection to assess whether there were any major differences between the intervention and control groups in relation to baseline characteristics. The results are summarised in Chapter 6.2.

Analysis of primary and secondary outcomes

I analysed the data collected during the 3 and 8-month follow-up rounds to assess whether there was any significant difference between the two study arms in relation to primary and secondary outcomes. A null hypothesis of no effect was tested. Analysis was by "intention-to-treat".

I coded all primary and secondary study outcomes as binary variables and used generalised linear models (GLM) with the Bernoulli/binomial family and identity link function to calculate the effect of the intervention on each outcome. The effects are reported as risk differences (RD) between intervention and control, with p-values and 95% confidence intervals.

Due to the multisite study design, we anticipated that the trial outcomes might vary between the 5 participating health centres. Any variation seen could be due to differences between the populations attending each centre (linked to geographical location within the city, reputation, etc.), or to differences between the health centres themselves (linked to staffing levels, training, attitudes, equipment, local practice, management style, etc.). We deemed a fixed-effect model appropriate in order to adjust for health centre effects, because of the small number of health centres (5) (Kahan, 2014). I thus included health centre of recruitment as a covariate in the GLM model, and all reported RDs are adjusted for this variable. For each primary and secondary outcome, I also explored the results stratified by health centre and carried out Likelihood Ratio Tests to see whether there was any evidence of interaction.

RCT outcome results are presented in Chapter 9.

Analysis of other outcome data

Data related to other MNH and PPFP outcomes were also collected during the two follow-up rounds, for which the study was not powered. I analysed these through tabulations by study arm, adjusting for health centre of recruitment, and presented them by thematic area, alongside the results of the pre-specified primary and secondary outcomes, in Chapter 9. I also investigated the preferences for postpartum contraception expressed during Components B and C, collected through the consultation documentation forms compiled by health workers (see Subchapter 5.3.8). I did not conduct tests of statistical significance for any outcomes other than the pre-specified primary and secondary outcomes.

Analysis of adherence to the intervention

For the intervention group, I investigated levels of adherence to the intervention using the process data collected. I used tabulations to calculate the number of sessions attended, and attendance at each of the three components (A, B & C). High adherence to the protocol was defined as attendance at at least two out of three intervention components. I also explored levels of high adherence by recruitment PHC.

In addition, I carried out an exploratory analysis to see whether any socio-demographic or other characteristics were associated with high adherence, using logistic regression. For each characteristic, I first computed ORs adjusted for recruitment PHC and conducted Likelihood Ratio Tests in order to assess the strength of the evidence of an association with high adherence to the protocol. Out of all the variables, I then chose those for which the L. R. Test showed a level of significance of p=0.15 or less and included them into a multivariable model. Finally, I conducted L. R. Tests for each of the variables included in the multivariable model.

Adherence analyses are presented in Chapter 8.

Investigation of validity for self-reported use of contraception

Self-reporting of method use is a standard outcome measure in the literature on contraception. Nevertheless, in the case of methods for which a more objective measure was available, I conducted a validity assessment by comparing participant reports with confirmation of use by an arguably more objective method.

This analysis was done for the pill, the injectable, the implant, and the IUD. In the case of the pill, confirmation of use was achieved through visualisation by the interviewer of the packet and of pills inside. For the implant, the insertion site was visualised. For the IUD and permanent methods, documentary evidence of prescription was sought in health booklets, hand-held contraceptive cards and PHC registers. Permanent methods were excluded because they are not available at study PHCs, and therefore the research team would not have been able to access the required documentation.

A preliminary assessment was carried out for the first 100 reported users followed up from each group, and subsequently the complete data were analysed after the end of follow-up. 10% or less of misreporting in both arms was considered negligible.

Results are presented in Chapter 9.

Sub-group analyses

A study conducted in 2005 suggested that up to 39% of Burkinabe women may still be abstinent at 6 months after an uncomplicated delivery and 26% may still be abstinent at 12 months (Ganaba et al., 2010). Given that abstinence may be a reason for not using contraception, I conducted a pre-specified subgroup analysis defined by sexual intercourse resumption at 8 months, in order to explore whether the effect of the intervention on primary outcome c. (use of effective modern contraception) differed by abstinence status.

Based on a suggestion which emerged during a discussion of the preliminary findings with my advisory board, an exploratory analysis was also performed for primary outcome c. based on

whether the child born from the index pregnancy was still alive at the time of the 8-month follow-up interview.

Sub-group analysis results are presented in Chapter 9.

Sensitivity analyses

Due to unforeseen issues with follow-up data collection, described in the next two paragraphs, I performed two sensitivity analyses.

For secondary outcome c. (timely initiation of effective modern contraception), I performed a sensitivity analysis due to concerns related to the quality of the data on the timing of menses return, by dropping the data from women with implausibly early dates for menses return. I then compared the results for the whole sample with the results of the analysis in which these women were excluded.

Although follow-up interviews were supposed to be carried out at 3 months postpartum for the first round, and at 8 months postpartum for the second round, in practice there was a certain level of variation in the timing of these interviews. For all outcomes, I therefore also carried out a sensitivity analysis excluding women who had been followed up very late or very early. For the outcomes measured at 3 months I excluded women who had been followed-up during the 5th and 6th months (none were followed up very early), and for the outcomes measured at 8 months I excluded those followed-up during the 7th, 10th and 11th months postpartum. I then compared the results from the primary analyses, including the whole sample, with those from this sensitivity analysis.

Results are presented in Chapter 9.

5.5.2. Qualitative data analysis

As mentioned, the FGDs and semi-structured interviews were conducted at different times and played different roles in the study. Whereas the FGDs preceded the intervention study and served a formative purpose, the semi-structured interviews chronologically followed the intervention and served an evaluative function. Although these data were therefore collected and analysed separately, I managed and analysed them using a similar methodological approach.

As mentioned above, one limitation was that it was not possible for me to be blinded as to the identity of the 10 health workers who took part in semi-structured interviews. I knew the names of the other participants in qualitative data collection but I did not meet them in person.

All qualitative data were audio-recorded and transcribed into Word documents by the researchers who collected the data. As much of the content was in local languages, researchers

translated as they transcribed. They sent me the transcripts and I entered them into N-Vivo 11 for analysis.

I used a pragmatic approach to analyse this data. I followed the principles of applied thematic analysis described by Guest and associates, and drew additional methodological guidance from Ritchie and Lewis's thematic framework approach (Ritchie and Lewis, 2003, Guest et al., 2012). I carried out a content-driven, inductive exploration of the data, rather than testing pre-defined hypotheses. The analytical approach was more positivist than interpretive, and was not focused on building theoretical models. On the contrary, the aim was to produce results from which practical lessons could be drawn to shape future interventions and policy.

I analysed each set of data separately (men's FGDs, provider interviews, women interviews and men interviews) through the following process. First, I read each transcript multiple times in order to become familiar with the data and understand its diversity. Subsequently, I identified recurring themes and generated codes/analytic categories, including both implicit and explicit ideas and concepts. I developed a codebook for each set of data by grouping codes together and identifying hierarchies. I then applied the codes to the data by reading through each transcript, highlighting relevant sections, and labelling or applying the codes. During this process, the codebook itself was iteratively re-shaped and refined.

Through the N-Vivo programme I electronically sorted the data based on the coding. I then read the data identified through each code several times. I compared, contrasted, and synthesised the data, to allow patterns and plausible associations to emerge. I drew up preliminary summaries in Word with minimum interpretation, by letting the data speak and by corroborating each assertion with quotes. Gradually, I achieved higher levels of synthesis, but constantly referred back to the data to ensure that all interpretations and emergent explanations were supported.

Findings from the FGDs are presented in Chapter 6. Findings from the semi-structured interviews with women, men and health workers were combined and summarised, and are presented in Chapter 10.

5.6. Project management

5.6.1. Data quality assurance

The research team responsible for carrying out the study was based partly in London and partly at the AfricSanté research centre in Bobo-Dioulasso, which served as host institution. I consulted my PhD supervisor (Prof. Veronique Filippi) and the advisory committee (see Subchapter 5.1.3) regularly on all aspects of the research project development and implementation, including whenever any challenges and difficulties emerged. In Bobo-Dioulasso, senior epidemiologist Dr Rasmane Ganaba oversaw the activities. I spent

approximately 8 months in Bobo-Dioulasso (from December 2014 to July 2015). I was based there for the duration of the intervention development and implementation, the recruitment period and the first few weeks of follow-up interviews. Prof V. Filippi came to visit me during this time. I was closely assisted by the field supervisor in all tasks relating to training data collectors and quality monitoring.

With the assistance of the field supervisor, I organised and conducted the training of the quantitative and qualitative data collectors for each part of the study. We conducted a workshop lasting several days to train the five RAs who recruited and randomised participants and carried out baseline interviews. Prior to the start of each follow-up round, we also organised similar workshops to train them on the two relevant questionnaires. We provided general instructions on how to carry out interviews, practiced interpersonal skills and discussed confidentiality. We field-tested each questionnaire, and the work of each RA was assessed by myself, the field supervisor and her peers, to ensure that she was ready to begin collecting data that would be used in the trial. More and less-experienced RAs were paired for the first few study interviews, to ensure that all RAs were equally competent and confident. All efforts were made to create a collaborative and supportive working environment for the RAs, within which they would feel motivated to work rigorously and follow procedures, and also to report any difficulties and accept constructive feedback.

Each month during the data collection period there was a meeting with the field supervisor and the RAs in which any problems were identified and solutions sought. While I was in Burkina Faso, I participated in these meetings, and when I was in London I received an update from the field supervisor. The field supervisor, who speaks local languages, spent most of her time supervising the RAs during the first few weeks of data collection in each phase, often accompanied by myself. Thereafter, she carried out regular surprise supervision. Between the two of us, we checked all questionnaires for completion and consistency. Where there were uncertainties or mistakes, the RA who had completed the form was consulted, and in some cases was asked to go back to the field to complete or correct the entries. Each month, the field supervisor chose a few questionnaires and called or visited the interviewed women, to check validity.

As far as the semi-structured interviews are concerned, data collectors emailed me the transcript after every interview. We had a Skype call or email exchange to discuss each one, to ensure that all relevant topics had been addressed and identify areas where more probing might be required, or where attention had to be paid to avoid leading questions. This iterative process then informed subsequent interviews. I also insisted upon and monitored other dimensions of quality such as interviewer attitude, appropriate setting, and confidentiality assurance to participants.

5.6.2. Data management

Data were managed by myself with the support of a senior data manager (Mr Henri Somé) based at AfricSanté in Bobo-Dioulasso (see Subchapter 5.1.3).

Quantitative data were collected on paper questionnaires. Experienced data entry clerks carried out double entry into EpiData software at AfricSanté. They were supervised by the data manager. The data entry forms included several interactive checks in order to ensure quality. At the time of merging, any inconsistencies were solved by checking the original form, or if necessary by consulting the RA who had carried out the interview or by going back to the field. The data manager emailed me the data and I exported it into STATA in London, in preparation for analysis.

Process data on intervention uptake were entered into an Excel spreadsheet by myself, and then exported into STATA.

Qualitative data were audio-recorded, transcribed and translated into French by the researchers who carried out the data collection. Transcripts were emailed to me as Word documents and I then entered them into N-Vivo for analysis.

As recommended by the ESRC, which funded my studies at LSHTM, and as required by STEP-UP, which funded the study, we plan to make an anonymised copy of the data publicly available through the LSHTM data sharing platform, once publications have been accepted.

5.6.3. Health worker compensation

In the five participating PHCs, health workers were not paid for carrying out their normal duties which were within the scope of their job description. However, the study introduced a certain amount of additional work, which was often carried out outside usual working hours. Therefore, health workers were compensated for this extra work with a sum of 500 CFA ($ 0.85) for each woman recruited into the study and for each man who attended Component A. They received 1000 CFA ($ 1.70) for each Component B and C consultation carried out.

Payment for this work was made at health facility level in two instalments, half way through the implementation period (June 2015), and at the end (November 2015). Prior to the payment of each instalment, a draft document was given to each PHC which included a breakdown of all activities carried out and summary calculations of the compensation due, including the exact amounts theoretically due to each member of staff. This was circulated and shared during staff meetings, and any problems were discussed with the research team prior to finalisation. Staff in each facility decided independently on the method of distribution of their financial rewards, without any input from the research team. Some PHCs opted for equal distribution among all staff, while others honoured individual entitlements.

5.7. Ethical considerations

5.7.1. Informed consent and review board approvals

Participants in all components of this study participated voluntarily and gave informed, written consent. An information sheet was attached to the consent form, describing the study, its purpose and methods, and what exactly participating would imply for the eligible candidate. Tailored versions of the information sheet and consent form were developed for each part of the study. The information sheets contained a full explanation of the voluntary nature of participation. Eligible candidates were told that to participate or not would not influence the quality of care they received at the health centre, and that they could withdraw from the study at any point. They were also informed about the confidential treatment of personal information.

The information sheets and consent forms were developed with a wording suitable both for adults and for emancipated women aged 15-18, and sought to avoid technical jargon and present information in a clear and accessible way. Dr R. Ganaba's contact number and mine were on the form. In the case of illiterate participants, the recruiter read out the content of the information sheet, and the participant gave consent verbally and by fingerprint. In all cases the recruiter checked that the participant had fully understood, offered to answer any questions, and pointed out the contact numbers on the form.

No incentives for participation in the study were given to any participants. However, as is common practice in this setting, after all quantitative interviews, women were given a bar of soap to thank them for participation. Men and women participating in semi-structured interviews received CFA 1000 ($ 1.70) at the end of the interview as a contribution for expenses. Participants were not told in advance to expect any gift.

Information sheets and the consent form can be found in Appendix 11, Appendix 12, Appendix 13, Appendix 14, and Appendix 15.

Ethical approval for this study was obtained from the Observational/Interventions Research Ethics Committee of the London School of Hygiene & Tropical Medicine, on 19th December 2014, LSHTM Ethics Ref 8787, and from the Institutional Review Board of the Population Council on September 10th 2014, Protocol number 662. Local ethical approval was granted from the Ethics Committee for Health Research of the Ministry of Health and the Ministry for Scientific Research and Innovation in Burkina Faso, on 14th January 2015, with deliberation number 2015-01-004.

The FGDs with men were covered by the ethical approvals obtained for the study on "Productivity, Family Planning & Reproductive Health: an inter-disciplinary study in Burkina Faso" (PopDev study). This was approved by the Observational/Interventions Research Ethics Committee of the London School of Hygiene & Tropical Medicine, on 14th May 2013, LSHTM

Ethics Ref 6401, and by the Ethics Committee of the Centre Muraz in Bobo-Dioulasso, on behalf of the Ministry of Health in Burkina Faso, on 20th June 2013, reference number A16-2013/CE-CM.

The trial was registered on ClinicalTrials.gov (Identifier NCT02309489).

5.7.2. Confidentiality

All interviews were conducted in places where participants felt safe, and where they could disclose information confidentially. Assurance was given to all participants that personal information would be kept confidential and would not be communicated to peers, family members, or health workers.

All paperwork containing personal identification information was kept securely under lock and key in AfricSanté office premises. Databases were stored securely and protected by passwords. Personal identification information and contact details were collected only for the purpose of making follow-up possible. Databases used for analysis did not contain personal identification information.

In this thesis, in public presentations and in future publications based on this study, all information pertaining to individuals has been anonymised, and names of participants, where they appear, have been changed.

5.7.3. General ethical considerations

We did not anticipate that participation in this study would involve any risk to the physical or mental health of participants or their dependents. This was a behaviour-change/educational intervention and did not *per se* involve the use of medical technology or pharmacological products, with the potential for side-effects or adverse outcomes. Nevertheless, the remote possibility that certain specific problems might occur was taken seriously. The following precautionary measures were taken and monitoring plans were put in place.

While they were being trained on how to identify eligible candidates and deliver the intervention, we reminded health workers that a woman's refusal to participate in the study should not result in any change in the quality of care she received. Crucially, they were also made aware of the need to always protect a woman's right to make independent decisions. The preferences of women in the intervention group were to be respected in relation to their willingness to involve their partners in their health care at any point in time. Health workers were told that if at any point a woman chose not to involve her partner this should not affect the quality of care they provided. Furthermore, regardless of the presence and opinion of male partners, it was also essential that women's own preferences relative to health choices, such as the use of postpartum contraception, were always respected.

When couples turned up to attend couple counselling sessions (Component B), health workers were instructed to invite the woman in alone for a few minutes before the male partner joined, to ensure she consented to involving him and to ask if she had any particular concerns or health issues she did not want to be disclosed in his presence. A similar procedure was also followed for pre-discharge consultations (Component C). These instructions were given to health workers during their training sessions, and clinical supervision was in place throughout the study to ensure that these measures and principles were adhered to.

Alongside putting these preventative measures in place, we also decided to collect data on outcomes that might have revealed whether women had faced undue pressure or had other negative experiences as a result of their participation in the study. Specifically, we anticipated that relationship adjustment would capture any adverse effects on couple dynamics, and satisfaction with routine care would reveal whether women's experience of care was less satisfactory in the intervention arm (see Subchapter 5.3.1). Semi-structured interviews with women also included exploratory and probing questions on these issues (see Appendix 7).

In general, RAs were told to report to the senior research team in case, while carrying out their duties, they found that a participant or her dependents were in need of urgent medical attention or were at risk of harm. Referrals to secondary care and other measures of support were provided in a few cases throughout the study. These cases did not appear to be the result of discriminatory treatment by staff, nor to be due to the male partner's participation in the woman's health care.

6. *PHASE 1*: INTERVENTION DEVELOPMENT AND IMPLEMENTATION

I will begin this Chapter by presenting the results of the formative phase of the study (*Phase 1*), which involved focus group discussions with men and consultations with service managers and health workers (Subchapter 6.1). I will then outline the process of development and refinement of the intervention (6.2) and describe it in detail in its finalised form, covering also the education/counselling materials used (6.3). This will be followed by a presentation of project implementation details related to health worker training (6.4), the pilot study (6.5) and leadership and supervision (6.6). I will end the Chapter with a Discussion (6.7).

6.1. Men's attitudes, experience and knowledge

6.1.1. Characteristics of focus group discussion participants

In this section, I present the characteristics of participants in the FGDs. About 50% of men who were contacted by phone actually took part in the groups. 10 men participated in the first group, and 7 in the second. The profession, age and educational level of participants are shown in Table 13. Men were between the ages of 26 and 50. All names have been changed, however the distribution of Muslim and Christian names was retained, showing that approximately 60% of participants were probably Muslim and 40% Christian. Only about 20% had attended secondary school, and 30% had not received any formal education. The majority were skilled manual workers or salesmen, whereas only two or three participants' occupations could be classed as middle-class professions (e.g. teaching and public administration). These data suggest that the sample achieved was broadly reflective of the social and demographic composition of the population using the PHCs in the Dafra District (see the trial baseline data, Chapter 7).

Table 13: FGD participant characteristics

FIRST NAME	PROFESSION	AGE	EDUCATION LEVEL
	GROUP 1		
Michel	Car mechanic	37	Completed primary
Dramane	Builder	27	None
Bachirou	Salesman 2nd hand clothes	50	Coranic school
Paul	*Left before the end of the FGD – info not collected*		
Sebastien	Itinerant salesman	30	None
Issouf	Primary school teacher	38	Secondary
Abdramane	Soldier	28	Completed primary
Alidou	Farm produce trader	35	Secondary
Philippe	Salesman	30	Completed primary
Amidou	Shopkeeper	29	None
	GROUP 2		
Fabien	Tailor	41	None
Ousmane	Carpenter	26	None
Francois	Livestock salesman	46	Completed primary
Ousseni	Sheet metal worker	40	Primary
Richard	Town hall officer	38	Secondary
Mohamed	Mechanic	42	Primary
Tahirou	Transport worker	30	Secondary

6.1.2. Men's knowledge of reproductive health topics

The FGDs revealed that participants were supportive of their female partners attending ANC and delivering in health facilities. They believed PNC is important, but they also reported that when women feel well, they tend not to attend. A variety of postpartum seclusion practices were also described, based on which it is expected for mothers and babies to remain at home for a certain number of days (from 7 to 40). All men believed that breastfeeding is important. They were used to seeing babies being given water and other foods, but were not aware of when these should be introduced. Birth spacing was generally approved of, but several men reported a preference for abstinence and/or for collaboration between spouses to identify non-fertile periods, over the use of modern contraceptive methods. Men were concerned about the side effects of modern methods:

> *People use these methods to give the woman a break. But this has side effects. I had a difficult experience to have a child…, my second child is 9 years old, but you can't imagine how much we worked hard in order for my wife to conceive that child. We spent a lot of money. Some people tell me that it was so hard because she had previously been using contraception.*

I think the point of it is to hurt our women because it can result in adverse effects afterwards… Whatever stays in the body, don't you think that must have bad effects on health? Eventually, it can even give you cancer.

6.1.3. Men's involvement in women's reproductive health services

FGD participants' level of personal involvement with their female partners' RH care was low. It was not usual for them to accompany them to routine consultations. Some had accompanied their wives to the first antenatal appointment only, others had attended only in the case of particular health concerns. In any case, it was not usual for men to enter the consultation room:

I might take her if she has a health problem or if her baby is not well. But if she is well, she can go by herself.

I have never taken my wife to her appointment, let alone going into the consultation with her.

At the time of birth, men reported that it is often other women, such as neighbours or the co-wife, who accompanied their partner to the health centre. Those who had had the experience of going to the health centre for previous births said that they had waited outside in case they were needed to pay for medicines, food, or clinic fees. However, other men felt that they would only be called to the health centre in case something was wrong.

No men reported attending the health centre outside the maternity period, for example in order to get family planning advice.

6.1.4. Reasons for men's lack of involvement

Time constraints and work commitments were cited as reasons for not being more involved in women's reproductive health services. Other factors mentioned fell into two categories. First, men felt uncomfortable in what they perceived to be a women's environment:

She is my wife, that is true, but if you are the only man wandering about in a woman's environment like that; it is a bit complicated, so you keep to one side and wait…

If you ask me, I don't see any point in men being inside, watching. I stand aside and wait; if I am needed, I'll go in.

Second, they reported that health workers were not welcoming towards them:

Health workers are not easy-going people. The slightest thing, and you will be made to feel ashamed; it is better for you to wait outside.

It is up to the nurses to invite us. Actually, often men do want to participate and watch. But knowing the health workers' mood… men prefer to stand outside and wait to be called.

Some men were suspicious of the exclusive relationship between women and health workers, and felt that this showed a lack of respect for their own authority within the household:

Talking to our wives behind our backs, this is not good. If you speak in front of us, it is okay; we can discuss, and agree.

As long as health workers want to speak with our wives without consulting the men, that is not going to work out. It is as if you are making decisions in your own home, and they go against this. It looks like they are trying to get our wives to rebel.

Men were particularly unhappy to be excluded from consultations during which family planning is discussed, and felt that they should be involved when decisions about contraception are made:

As the name indicates, FP is about the family, so why do they only talk to the woman? … Even if she has the money, it is the man that marries her … it is the man who is in charge of their expenses. So if the woman comes alone, she should not be given this information!

Personally, I am against it; in such cases you should invite both the husband and his wife, and they will discuss together. You have to invite them both. Why should my wife make a decision without me agreeing to it? […] They should invite the wife and the husband and discuss.

6.1.5. Men's interest and willingness to engage in the project

Participants in the FGDs believed that the responsibility for the family's health was shared between them and their female partners, and thus they expressed the wish to have equal access to health information:

It is a shared responsibility; from the moment the other does not do it, you have to do it, to minimise the chance of both of you forgetting about it.

The suggestion of trying out an intervention to involve men in reproductive health care was positively received by men:

It will encourage people to take good care of their wives. It is really important.

It is very pertinent, it will allow couples to have access to the same information regarding family health.

However, men also emphasised the importance of the voluntary nature of their own participation:

For example they could call the husband, if you want you can come in! This is an invitation. Now, if the person wants to, he can go in. On the contrary, if he knows that he will not be able to cope with seeing certain things, he will say no, I will wait in the hall.

6.2. Finalisation of the intervention

Prior to the formative phase, I had developed a preliminary intervention design in collaboration with the advisory board, focused on inviting the partners of pregnant women to participate in three educational sessions, to be held both in the antenatal and postnatal periods. In this section, I describe the process through which we finalised the intervention, based on feedback from the FGDs and the consultations with managers and health workers.

Firstly, it became clear from the FGC that if men were to attend the facility for appointments, time-keeping would be essential, because they would want to return to their daily activities. Participants illustrated this point using the focus group itself as an example:

> *We were told over the phone 30 to 40 minutes; but now, it's been more than an hour. Since the discussion is interesting, we are here, there is no problem. But do not push it! No more than an hour.*

PHC staff also confirmed that it would not be feasible to invite men to participate in routine ANC, which is delivered on a first-come first-served basis, and therefore entails long waiting times.

Thus, we established that the two antenatal intervention sessions would need to be provided in addition to routine ANC. Health workers decided to hold the group session (Component A) on Saturday mornings, as there were no routine appointments, and they would therefore be free to receive the men. The second component, a couple counselling session in pregnancy (B), was planned in such a way as to take into account FGD participants' preference for appointment times that were pre-arranged to suit each man's schedule:

> *If they give him a number and tell him to call whichever day of the week he has time and say when he is available, and then they receive him; in that case, the man will see that he has been respected!*

On the other hand, because there is no waiting time involved, we conceived the third component (C) as an adaptation of an existing routine consultation, the pre-discharge postpartum check-up, which usually takes place around the 6th hour postpartum (see Subchapter 1.3.4). The adaptation simply entailed inviting the woman's male partner to participate in this consultation.

Another important lesson learnt from the FGDs was that some men hold patriarchal and authoritarian views of their own role within the household. Therefore, alongside providing much needed information on essential health topics, it became clear that the intervention should prioritise addressing the unequal balance of power within couples. We thus designed Component A as a group discussion, based on three scenarios, entirely focused on how men could be supportive and respectful of their pregnant companions. The promotion of communication within the couple was integrated into all three components, and collaborative decision-making was encouraged.

Participants' own response to taking part in the FGD suggested that the group might be a suitable format for inviting men to reflect on their own couple and relationship dynamics:

> *Maybe some things that can't get solved at home can be discussed here in groups. Everyone will hide his negative side and maybe the other side will come out. And maybe, when you get home, you can fix what was wrong.*

In addition, we made other amendments to the preliminary intervention design, based on staff feedback. For example, it was established that the group discussion (A) should constitute the first of the three components rather than the second, as initially thought, because it would be less-intimidating for men to meet health providers for the first time in a group setting. Contrary to the initial idea of holding the groups elsewhere, after visiting the selected facilities we

established that there was adequate space to host them within the compound, and that the logistics would be simpler. Another necessary adaptation was the gender of the group facilitators. Originally, we had thought it would be more acceptable to have male facilitators, however it turned out that men were employed in only two out of five PHC maternity departments. Therefore, most sessions were conducted by female health workers.

Finally, we dropped the idea of involving community health workers to distribute invitations to men to attend the sessions because of logistical and budgetary constraints. Instead, we adopted FGD participants' own suggestions on how the invitation could be best delivered to their peers. Firstly, they emphasised the importance of giving the woman a written invitation to pass on to the man:

> *If the man lives in Bobo, you need to give a paper to the woman to give him. You put your number on it, and we will come for sure. But if it is just an oral invitation, you can't be sure that the man will come, as he will not take it seriously. He will not think that it's important.*

Secondly, they proposed that men should be called on their mobile phones on the morning itself of the appointment, as a reminder:

> *First of all, you need an invitation. This invitation should be well prepared and given to the woman. For example, what you did this morning. If you know that you will have appointments on Monday, you call to remind people on Sunday, because men are often difficult!*

6.3. Description of the intervention and educational materials

The intervention was thus adapted, based on the results of the formative phase. The final version comprised three Components, in addition to routine maternity care:

- A: a group discussion with the male partners of pregnant women,
- B: a couple-counselling session during pregnancy, and
- C: male partner participation in the first postnatal consultation, prior to discharge from the health centre (6^{th} hour postpartum).

I will present each Component in detail in this Subchapter, also describing the educational materials used and the strategy used to invite men/couples to take part.

6.3.1. Component A – group discussion for men

Component A was the first intervention session in logical and chronological order. Men were invited to take part in this component through an invitation letter and a phone call. As described in Subchapter 5.3.4, each woman recruited during ANC was visited at home by a research assistant (RA) who completed recruitment, obtained informed consent, conducted the baseline interview and carried out randomisation. If a woman picked an envelope that contained an invitation letter, she was randomised to the intervention group. The letter was addressed to the woman's male partner and invited him to attend a group discussion for men at the PHC. The

letter stated that information and advice on issues related to the health of women and newborns would be given during the session. The RA completed the letter manually with the man's name, the date and time of the next group, and her own contact number in case of need. The RA asked the woman to give the letter to her partner at the earliest opportunity, and told her that health centre staff would re-iterate the invitation by phone. An example letter from one of the health centres can be found in Appendix 16).

A register of all women/couples assigned to the intervention group, with their contact details, was kept in the PHC in a folder dedicated to the study documentation. Every week, the RA assigned to that facility added the details of most recent intervention group recruits and their partners. Sequential serial numbers were thus assigned, based on the order of entry into the register, and were also reported on the woman's health booklet together with the pink or yellow mark. This system was set up in order to help health workers to identify each woman/couple whenever she attended, and, if necessary, to easily find the husband's contact number in the register in order to call him for the 6th hour consultation. ID numbers, because they were random, could not have served this function. Another aim was to facilitate our identification of participants in all study documentation held in the PHC, and in facility registers (see Subchapter 5.3.5). Providers were asked to report the serial number next to every entry they made for that woman. Every week, health workers used this register to phone the new men and invite them to Component A on the following Saturday.

The group discussions were conducted every Saturday at 8am in each PHC by health workers from the maternity department. Sessions were identical and each participant was expected to attend once. Between 2 and 5 health workers usually conducted the session. Sometimes, one of them would translate into another language, depending on the needs of those present. The groups normally met in an open-air meeting space where several benches were laid out. Between 3 and 13 men attended each session. Health workers checked their names upon arrival against the list of men who had been invited, and asked to see the invitation letter. Having brought the invitation letter was not a pre-requisite, but the man's name had to be on the list. This was in order to prevent contamination that could have occurred if other members of the community had attended the session. Meetings were expected to last 30-40 minutes, though in practice they often overran.

During the group sessions, the facilitators read out the stories of three fictional couples having a baby. These were used to stimulate the discussion. In the examples, adverse events happened when men and women lacked adequate health information, and especially when there was no communication and collaboration between them. When adequate information, communication and collaboration were all present, there was a positive ending. Although this was not the main focus of the scenarios, the health issues touched upon in each of them were postnatal care,

exclusive breastfeeding, and postpartum family planning. The session ended with a summing up debate in which the key messages emerging from the stories were reinforced. Men were encouraged to take an interest in their partner's health and to communicate constructively with them to reach joint decisions, or to respectfully support her choices. I drew up the guide for conducting the group session, with entirely original content. It can be found in Appendix 19.

At the end of the meeting, facilitators asked each participant whether he would be willing to return in the near future for a couple counselling session with his female partner, in order to be receive more information about specific health topics relevant to maternal and infant wellbeing (Component B). If he agreed, he could choose his desired appointment date and time, ideally the following week. Health workers noted all the appointment times on a dedicated calendar sheet. Men were also forewarned that they would be invited for a third meeting after their baby was born (Component C). At the end of the session, participants were given CFA 1000 ($ 1.70) as a one-off contribution for travel expenses.

The documentation sheet for Component A, where the details of expected and actual participants in the group were recorded, as well as the calendar sheet for scheduling Component B appointments, can be found in Appendix 18.

6.3.2. Component B – couple-counselling during pregnancy

The purpose of both couple counselling sessions (Component B and C) was to provide information and advice to both partners on a range of topics related to pregnancy, birth, and the postpartum period. Counselling was provided in a private consultation room, with a desk, usually by one or two health workers. The sessions were interactive, and both partners were encouraged to ask questions. Sessions lasted approximately an hour.

Topics covered during Component B included: the importance of ANC and lifestyle adaptations in pregnancy, pregnancy danger signs, birth preparedness and signs of labour, the importance of PNC and the schedule, danger signs for mother and newborn, exclusive breastfeeding, healthy timing and spacing of pregnancies, return to fertility and resumption of intercourse, and postpartum contraception, including the range of methods available. Many women would already have been exposed to this information during the current or previous pregnancies through one-to-one or group education sessions at the health centre (see Subchapter 1.3.4), however, for many men this was likely to be the first time they received full counselling.

For this component, health workers used a counselling flipchart. This contained, for each topic, an illustration on the side facing the participant, and related text on the side facing the health worker. At first, participants were asked to describe what they saw in the picture. Health workers would then clarify and provide additional information based on the notes on the other side. I adapted the flipchart from two existing counselling tools (World Health Organization,

2012a, Ministere de la Sante et de la Prevention du Senegal, 2010). It can be found in Appendix 20.

When the conversation moved to family planning, the focus was on each couple's particular situation and reproductive intentions. Samples of contraceptive methods were made available for the couple to see and touch. If they felt ready, couples were given the opportunity to express their choice of contraceptive method for the postpartum period, and a non-binding plan for initiation was drawn up and documented in the woman's health booklet for future reference. The plan included information on what method had been chosen, and at what time, and where it would be obtained/commenced.

A specific documentation form was filled out for Component B, which included health workers' and participants' details and information about the postpartum contraception plan. This can be found in Appendix 18.

6.3.3. Component C – men's participation in the 6th hour postpartum consultation

Intervention group women who gave birth in the PHC were identified thanks to the pink mark on the inside front cover of their health booklet (see Subchapter 5.3.4). If the woman's male partner was not in the facility, the woman or health workers phoned him, so that around six hours postpartum the pre-discharge consultation could be conducted with both partners. Usually, the couple were received together after the woman had had a physical examination alone. This third educational component constituted a further opportunity to provide health information and counselling on the topics mentioned for Component B relative to the postpartum period, and in particular on postnatal care attendance, postpartum family planning, and exclusive breastfeeding. Health workers are supposed to discuss these topics with women on this occasion, according to the national guidelines (see Subchapter 1.3.4). If the couple had not yet made a decision about contraception, they might do so during this session, with the option of immediate initiation of certain methods prior to discharge.

The same flipchart was used as for Component B, and contraceptive samples were used where appropriate. A similar documentation form as for Component B was filled out, and can be found in Appendix 18. This form also included documentation of any immediate postpartum FP method started.

6.4. Health worker training

Maternity staff from the 5 PHCs were responsible for delivering the intervention to the assigned group of study participants and their male partners. Each PHC had approximately 20 members of staff working in the maternity department, mostly assistant midwives (*accoucheuses auxiliaires* and a few *accoucheuses brevetées*) plus a small number of midwives (*sage-*

femmes/maieuticiens) (2-4 per PHC). The cooperation of these professionals, their understanding of the study aims and their adherence to established procedures were essential to the successful implementation of the study. Specifically, the delivery of the intervention to the right people (and not to others), the adherence to quality standards in selecting participants and delivering the three components, and the correct documentation of all activities carried out were largely dependent on their collaboration and motivation.

Hence, we attempted to involve health workers as from the start of the project, by consulting them on the intervention design and incorporating their feedback (see Subchapter 6.2). Once the intervention was finalised, each PHC selected eight health workers to take part in a one-day training workshop. For logistical and budgetary reasons, we were not able to formally train a higher number of staff, however it became evident in the planning stages that these eight people would not be able to carry out all the study activities alone. Therefore, we agreed upon a cascade-training model, based on which those who had been formally trained would in turn train their colleagues.

I planned and conducted the formal training workshops myself with the assistance of the clinical supervisor (see Subchapter 5.1.3) and field supervisor. In total we ran four workshops, with 10 participants each day. During the workshops, participants received a thorough introduction to all aspects of the study in which they would be involved. This included a discussion of the rationale and principles of male partner involvement, and interactive sessions on how to provide counselling to couples. We provided participants with specific instructions on the use of educational materials and documentation, and practiced using these through role-plays. The importance of providing the intervention to all couples assigned to receiving it, and not to any others, was emphasised. We also told participants that the focus on men was not intended to reinforce gender stereotypes and encourage men to take decisions in the place of women, but rather aimed to increase men's awareness and sensitivity towards their wives' needs and their ability to respond. We emphasised the importance of gaining the woman's consent on every occasion, before involving her partner. Providers were also reminded that all women should still be strongly encouraged to attend their regular ANC appointments.

6.5. Pilot study

Once the training of health workers and data collectors was complete, we carried out a week-long pilot study in one of the five health centres (Bolomakote) prior to initiation of activities in the others. The aim of this phase was to test selection and recruitment procedures, documentation compilation, the invitation strategy for men, and the delivery of the first group session (Component A). Thanks to lessons learnt during the pilot, we made minor but important adaptations. One example was the decision to complete the recruitment process in the woman's home, rather than in the health centre (see Subchapter 5.3.4), thanks to our better understanding

of the antenatal clinic patient flow. The pilot study enabled both ourselves and health workers to better estimate the amount of time and effort that was required to conduct specific activities, such as making the invitation calls. This enabled PHC staff to better plan their schedules and organise their work as a team, including drawing up dedicated rotas for the following weeks.

The other health centres started the project activities in a stepwise fashion, so that within a month since the start of the pilot, all of them were recruiting and delivering the intervention. We provided intensive support to each of them in the first couple of weeks.

6.6. Implementation leadership and supervision

As mentioned above, we asked each PHC to select one or two contact persons who would be responsible for overseeing study activities in their workplace, and for liaising with us (see Subchapter 5.1.3). In some PHCs this person was the professional in charge of the maternity department (a midwife), whereas in others another member of staff was chosen. In some cases, two people were chosen. We provided a mobile phone for each PHC and recharged credit regularly so that health workers could make the calls to invite participants to sessions, and communicate with us as needed. In some PHCs the phone was kept by the contact person at all times, while in others it was kept in turn by the health workers who were on duty on the labour ward.

We set up a system of supervision throughout the implementation period. An experienced retired midwife (Mme Diane Ouedraogo), who had worked in one of the referral hospitals, was hired as clinical supervisor. Her main role was to conduct spot visits to the five PHCs and conduct structured observations to monitor the quality of the various intervention sessions and ensure adherence to standards. These structured observations were carried out using dedicated forms, which included items such as whether sessions started on time, whether key messages were delivered, attitude and delivery style of the health worker(s), completeness and accuracy of health information given, appropriate use of props and educational materials, etc.

In three out of five PHCs, the contact persons were also formally charged with carrying out internal supervision of their colleagues. This meant that, in addition to their coordination role in which they planned the team's work and decided who would conduct which sessions, they actually sat through the sessions done by their colleagues, and conducted structured observations using almost identical reporting forms to those used in the external supervision. In the remaining two health centres, the contact persons were not available to carry out this work in a formal way. I regularly collected and reviewed completed forms. Based on these forms, as well as on informal discussions with supervisors and with health workers themselves, we took relevant actions to ensure quality, as necessary.

During implementation, in a few cases we participated in meetings with the whole staff held at the health centres. These were usually called by contact persons or PHC/maternity department heads in agreement with us, in order to share messages or communicate feedback. I also participated several times in the staff's own weekly meetings that were held in each maternity department, based on the staff's invitation or in order to communicate specific messages. During the whole implementation period, either myself, the clinical supervisor or the field supervisor visited each health centre at least once a week, to speak to contact persons and other members of staff, as well as to collect process data from the registers.

In our communications with health workers in PHCs, we placed substantial emphasis on the documentation of all intervention activities carried out. Several forms documenting the delivery of the various intervention components to study participants had to be filled in by health workers and were kept in a folder that was maintained by the contact person (see Subchapter 5.3.8). On a weekly basis, I collected and screened all the intervention documentation, and gave regular feedback to staff based on the completed forms. We used a sample of forms to call study participants to confirm that they had attended sessions.

6.7. Discussion

6.7.1. Knowledge and attitudes of focus group participants

The FGDs conducted as part of the formative research for this study revealed that participants' attitudes resemble those described in other studies involving men in Burkina Faso (Drabo et al., 2015, Rossier and Hellen, 2014). It is not surprising that men have favourable attitudes towards skilled antenatal and delivery care, given that ANC attendance and facility delivery are high in Bobo-Dioulasso (Ministère de la Santé, 2015b). However, fears of the potential side-effects of contraception, such as infertility, persist even in this urban area, confirming the findings of the PopDev study (Drabo et al., 2015). In addition, that study also showed that some men oppose contraception because they believe that it may cause infidelity.

It has been suggested that religious and other cultural factors may play a role in explaining the low uptake of PNC in Sub-Saharan Africa (Warren, 2006). Participants in our FGDs mentioned the tradition based on which in Muslim families, mother and baby are expected to remain at home until the child's naming ceremony, on the 7th day postpartum (Taverne, 2000). However, it is uncertain to what extent this tradition is still observed, and its impact would only be felt on the 6th day visit, but not on the 6th week visit. Rather, the most important finding seems to be that postnatal visits are not considered important when the woman feels well, and does not wish to start contraception, confirming existing evidence (Rossier and Hellen, 2014). As mentioned in Subchapter 1.2.1, postnatal home visits could be a solution to low uptake (World Health

Organization and UNICEF, 2009), but are far from widespread in Sub-Saharan Africa. In the meantime, raising awareness about the importance of PNC must remain the focus.

Some FGD participants expressed the view that RH care focuses on "women's issues", and therefore does not concern them, an opinion described in studies from other parts of Sub-Saharan Africa (Nkuoh et al., 2010, Ganle and Dery, 2015). However, the most strongly-voiced reason reported for low participation was that health workers were not welcoming to men. As mentioned above (see Subchapter 2.2), this problem has also been identified in the regional literature. Problems reported have included negative health worker attitudes, and of unit infrastructure not being welcoming to men or couples (Kaye et al., 2014, Kwambai et al., 2013, Nanjala and Wamalwa, 2012, Tadesse et al., 2004). Even in hospitals where men have been allowed to participate, tension with health workers has been reported (Kululanga et al., 2012a). This points to the need to educate health workers on how to interact with men and couples, which is an important component of our intervention. Overall, however, the most promising finding was that FGD participants displayed a willingness to become more involved in maternity care. This is worthy of note, despite the fact that attendees were a self-selected group who had responded to our invitation. Male partners' interest in participating in maternity care has also been reported in other countries, such as Malawi (Aarnio et al., 2013) and Tanzania (Mbekenga et al., 2013).

However, the findings also suggest that some men still hold patriarchal views of their own authority within their families, referring to themselves as head of the household, and appearing concerned about maintaining control over their female partners. In the Popdev study, some men seemed to interpret taking an interest in women's health as checking that their wives took prescribed medication correctly (PopDev, *internal communication*). These controlling behaviours are a source of concern for male involvement programmes, as without appropriate mechanisms to tackle them there is a risk of reinforcing them. For this reason, we have included the promotion of communication and shared decision-making as a key component of this intervention.

6.7.2. The finalisation and implementation of the intervention

The FGDs and staff consultations constituted essential formative research, which was needed in order to ensure that the format, timing, location and other practical aspects of the finalised intervention were acceptable to men and couples. This iterative, collaborative process sought to ensure that the content of the sessions would be culturally acceptable and compelling (Panter-Brick et al., 2014). As far as possible, we also attempted to incorporate lessons learnt from past programmes and to avoid introducing men's participation in ways that might not be acceptable in the local context (Susin and Giugliani, 2008, Comrie-Thomson et al., 2015a). For example, we did not incorporate male attendance at birth into the intervention because this would have

been an almost entirely new practice in this context, and because of practical reasons, in particular the lack of space and privacy in PHC delivery rooms. We also decided not to focus on HIV/AIDS testing, because PMTCT is already abundantly discussed in health centres, and specific promotion initiatives exist. Furthermore, this is a very sensitive topic, and counselling couples on VCT and PMTCT requires a high degree of skill and tact. Providing this level of specialist training was beyond the scope of our study. However, it may be useful to include this topic in future male involvement interventions.

The first distinctive feature of this intervention is that it is facility-based. Out of the 37 male involvement intervention studies identified in Chapter 3 which focused on MNH or PPFP outcomes, only 15 included facility-based activities, and the rest were entirely community-based. Out of this subgroup, only Kunene's study was set in Sub-Saharan Africa (Kunene et al., 2004). The inclusion of three sessions was fairly typical of other programmes, however only one other facility-based intervention offered a combination of group education and couple counselling sessions (Varkey et al., 2004). The other facility-based studies were almost equally split between those offering group education and those offering individual or couple counselling, apart from the two studies of men as birth companions (Morhason-Bello et al., 2009, Ojengbede et al., 2009). Because it was necessary to avoid contamination between the study arms, certain formats described in the literature were not considered for inclusion in this intervention, such as multi-media and public entertainment, religious/community leader mobilisation, and home visits (see Subchapter 3.3).

Among the other studies involving facility-based group education, three provided this for men only, similarly to ours (Maycock et al., 2013, Wolfberg et al., 2004, Bich et al., 2014). All but one other study involving individual counselling received men and women together, like ours (Pisacane et al., 2005). Our study was similar to a few others in that it addressed a range of health topics during the sessions, including birth preparedness, danger signs, breastfeeding, PPFP and the role of the male partner (Varkey et al., 2004, Kunene et al., 2004, Turan et al., 2001). The other facility-based studies had a narrower focus on birth preparedness, PPFP or breastfeeding. Unlike several others, we did not give out written information in the form of leaflets, booklets or brochures as part of this intervention, partly because of the low level of literacy in the population, and partly out of the concern to avoid contamination between study arms. Our study used invitation letters for men, as done by Kunene (Kunene et al., 2004) and in the PMTCT literature (see Subchapter 3.3.5). In our case, additional phone calls were included. As most of the other facility-based studies took place in contexts where men take part in maternity care or at least accompany their female partners to facilities, men/couples could be easily be recruited during ANC or on the postnatal ward.

The session facilitators in our study were health workers, as was the case in most other facility-based studies. They received a day's training on how to use the study materials and on the essential principles of couple counselling, plus on the job support. In some other studies the training period was longer, and also included technical updates on key topics (Kunene et al., 2004, Varkey et al., 2004). We did not provide these for a variety of reasons. Firstly, our budget was limited; secondly, staff in the study health centre already receive regular technical updates; and thirdly, they were already used to educating women on all the key topics addressed during the intervention. However, we did put supervisory measures in place in order to avoid problems such as a deterioration over time in the depth and range with which counselling topics were covered, which occurred in Kunene's study (Kunene et al., 2004).

From a gender lens, I believe that this intervention includes both gender-accommodating and gender-transformative elements (Interagency Gender Working Group (USAID)). On the one hand, it certainly acknowledges that men are usually the gatekeepers and decision-makers in this setting, and seeks to harness their authority and use it in order to achieve beneficial outcomes for women and newborns. On the other hand, however, it also interrogates men explicitly about gender roles, and seeks to challenge prevailing attitudes and modify normative behaviour around communication and decision-making within couples. Furthermore, this intervention involves bringing men into what is perceived to be a women's environment and involving them in conversations to which they are not usually exposed. By doing so, it also encourages all involved to critically re-examine the traditional notion of separate social roles and domains that are exclusive to men or to women (McAllister et al., 2012).

7. *PHASE 2*: RCT PARTICIPATION AND BASELINE CHARACTERISTICS

In this Chapter, I will present an overview of the number of participants recruited and followed up during the intervention trial (*Phase 2*), based on the CONSORT standards for the reporting of RCTs (Subchapter 7.1). I will then describe the characteristics of the trial participants as measured at baseline (7.2). I will end the Chapter with a Discussion (7.3).

7.1. Number of participants recruited and followed up

The selection and recruitment of trial participants, their receipt of the intervention, and their participation in follow-up interviews are described in the CONSORT diagram shown in Figure 5. Recruitment began on the 16th February 2015 and was completed on the 12th June 2015 in the five selected PHCs in Bobo-Dioulasso. A total of 1495 women were assessed for eligibility. Out of these, 288 were excluded because they did not meet the inclusion criteria, 29 because they declined to participate, and 34 because, although they expressed an interest in participating, they could not be contacted again to complete recruitment. 1144 pregnant women were successfully enrolled in the trial and randomly allocated to the intervention or control group in a proportion of 1:1. 583 women were allocated to the intervention group, and 561 to control.

Levels of adherence to the intervention are described in Chapter 8. There were two documented cases of non-compliance with arm assignment by men in the control group, due to errors made in one case by an interviewer, and in one case by a health worker. These resulted in two men from the control group attending Component A only. The outcomes were nevertheless analysed according to intention to treat.

Table 14 shows the number and proportion of women followed up at each round of interviews (at 3 and 8 months postpartum). For both study arms and in both rounds, follow-up rates were above 96%. For both arms, 17 women were followed up at 3 months but not at 8, 31 were followed up at 8 months but not at 3, and 12 women were not followed up in either round.

Table 14: Follow-up of participants by study arm

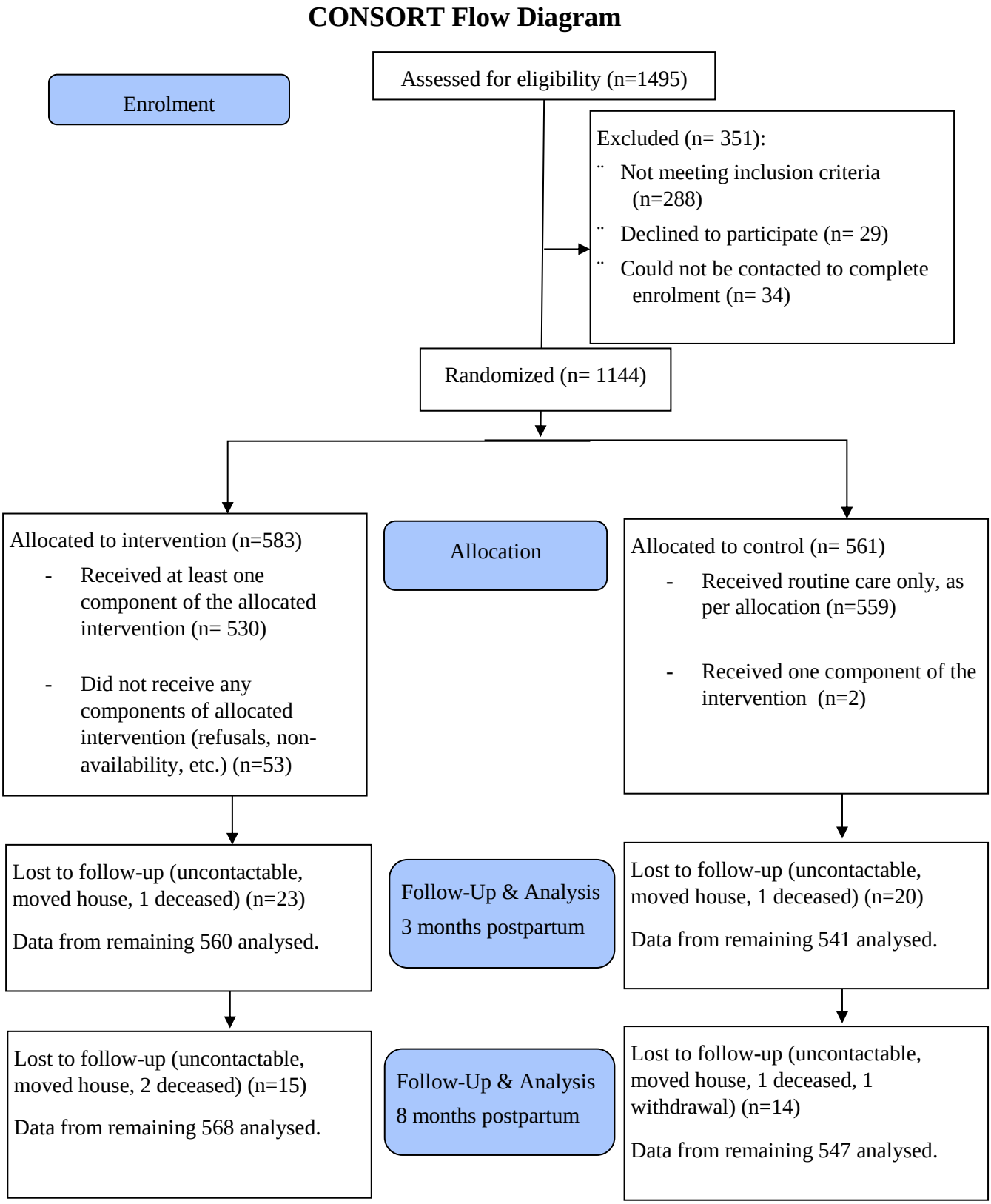
	Total	Follow up 3 months postpartum	Follow up 8 months postpartum
All women	1144	1101 [96.2%]	1115 [97.5%]
Intervention	583	560 [96.1%]	568 [97.4%]
Control	561	541 [96.4%]	547 [97.5%]

The reasons for loss to follow-up varied. One woman from the control group withdrew from the study after the 3rd month follow-up, quoting the loss of her baby as the reason. Three women passed away, two from the intervention group and one from the control group. Only one of them

was followed up at 3 months, and none of them at 8 months. The other women not followed up at either or both rounds had moved house and were uncontactable.

Out of those followed up at 3-months (included in the proportion followed up shown in Table 14), for 15 women (7 from the intervention group and 8 from the control group) the interview was conducted late, close in time to the 8-month interview. Therefore, information on infant feeding, fertility intentions and family planning were not collected, as questions on these topics were asked again in the 8-month questionnaire.

Figure 5: Consort Flow Diagram



7.2. Baseline characteristics by study arm

Baseline socio-demographic data were collected from all enrolled participants and is shown in Table 15, Table 16, and Table 17. Overall, no large differences were seen in relation to baseline characteristics between participants assigned to the two study arms.

As shown in Table 15, in both study arms, the largest proportion of participants was enrolled at Ouezzinville (28% in the intervention group and 29% in the control group), and the fewest were enrolled at Bolomakote (15% in both groups). Recruitment from the other PHCs was also similar between the two groups, however in Sarfalao the number of women randomized to the intervention group was 119 (20%), compared to 92 (16%) in the control group. This difference can probably be traced to an isolated incident in which a non-mixed batch of randomisation letters was given out, in error, to one of the RAs, who began to use it for allocation. As soon as the fieldworker noticed that the batch only contained intervention group letters, she reported the error and the batch was immediately replaced. Because of the randomisation method, it is impossible to trace which participants were "incorrectly" assigned. However, this small imbalance in numbers assigned to the two groups is unlikely to have biased our results, as the allocation of all individuals to intervention or control was still a result of chance rather than intentional selection. Participants from Sarfalao do not differ from the rest in terms of age, parity and educational level.

For women, the mean age in both arms was 26.3, and the most represented age groups in the sample are 20-24 (30% in the intervention arm and 29% in the control) followed by 25-29 (28% in both arms). 13% were adolescents (15-19), and only 2% were above 40, in both groups. Women reported a total of 29 different ethnicities. For simplicity, these were grouped based on socio-anthropological similarity. Ethnicities accounting for less than 4% of the total were grouped together in the category "other". 14 women overall reported not an ethnicity but a different nationality. They came from Guinea, Ivory Coast, Mali, Niger and Togo. They too were classed under "other". In both arms, the most common ethnic group was Mossi and similar, accounting for nearly half of participants, followed by Bobo/Bwa accounting for almost 20% and Dioula and similar, accounting for about 15%. All other groupings accounted for 10% or less of the total.

The majority religion among women was Islam (72% in the intervention group and 73% in the control group), followed by Christianity (27% and 26%, respectively).Seven participants were animists or had no religion. Slightly more women in the intervention group had no education (53% versus 49% in the control group), and slightly fewer had attended primary school (25% versus 30%). The proportion with any secondary education was roughly equal (22% versus 21%). Similar proportions in both groups were doing only domestic work (40% in the intervention group and 38% in the control group), and were engaged in petty trade (42% and

44%, respectively). Far smaller but roughly balanced proportions (maximum 9% in any group) were working in the crafts sector, in shops or hairdressers' salons, or had other occupations.

Women were asked about certain characteristics of their male partner, shown in Table 16. The mean age of men, in both groups, was 40. Men were 8 and 7 median years older than their female partners in the intervention and control groups respectively. Approximately half of men were in the 30-39 age group (52% in the intervention arm and 49% in the control arm), followed by those in the 20-29 group (24% versus 27%, respectively), and in the 40-49 group (20% in both arms). Only 5% and 4%, respectively, were over 50. There were more uneducated men (42% in the intervention group and 44% in the control group) than there were men who had attended primary school (23% and 22% respectively), or secondary school (22% and 24%). Almost all men were employed, and in both groups the highest proportion worked as a skilled manual labourer (41% in the intervention group and 39% in the control group). The next most frequent occupations were petty trade (21% and 20%, respectively) and shop keeping/commerce (17% and 21%). Smaller proportions worked in agriculture or in the public sector.

The vast majority of women were in monogamous relationships (87% in the intervention group and 85% in the control group), but some were in polygamous unions (13% and 15%, respectively). Women reported that in the majority of households their male partner was responsible for decisions on major household expenses (84% in the intervention group and 86% in the control). In both study arms, in 8% of households a third person (such as the father-in-law, or brother-in-law) was responsible, and only in 6% the couple decided together. In terms of making the decision to seek care for the woman's own health, an even higher proportion reported that their male partner was responsible (90% in the intervention arm and 89% in the control arm), and only 7% reported that the couple decided together. In a small proportion of cases (3% and 2%, respectively), a third person decided.

As for women's reproductive health history, shown in Table 17, the majority of women already had children, whereas about a quarter were expecting their first (22% in the intervention arm and 26% in the control arm). In both arms, nearly a third of women already had 3 children or more. Similar proportions had had at least one miscarriage or abortion (16% in the intervention arm and 19% in the control arm), at least one stillbirth (5% and 4%, respectively), and had lost at least one child who was born alive (17% and 19%). Three-quarters of women reported that their current pregnancy had been wanted (75% in the intervention group and 76% in the control group), most of the rest reported that the pregnancy had been mistimed (22.8%) and only 2% said that it had not been wanted at all.

The majority of women (67% in the intervention arm and 65% in the control arm) had used some form of contraceptive method in the past, the most common being the pill (32% and 44%, respectively), followed by the injectable (29% and 26%), the implant (18% and 17%), and the

male condom (12% and 11%). About a third of women (33% in the intervention group, and 35% in the control group) had never used a contraceptive method before. Among previous users, a minority (15% and 17%, respectively) had used a method without their male partner's knowledge.

Table 15: Baseline data:health centre of recruitment and socio-demographic characteristics

	Intervention (n=583)	Control (n=561)
Health centre of recruitment: n [%]		
Bolomakote	89 [15.3]	86 [15.3]
Guimbi	101 [17.3]	109 [19.4]
Ouezzinville	163 [28.0]	165 [29.4]
Sarfalao	119 [20.4]	92 [16.4]
Secteur 24	111 [19.0]	109 [19.4]
Age: mean $\pm$ SD	26.3 $\pm$ 6.0	26.3 $\pm$ 5.9
Age distribution: n [%]		
15-19	73 [12.5]	76 [13.4]
20-24	179 [30.7]	164 [29.2]
25-29	163 [28.0]	158 [28.2]
30-34	109 [18.7]	99 [17.7]
35-39	46 [7.9]	56 [10.0]
40-45	13 [2.2]	9 [1.6]
Ethnic group: n [%]		
Bobo, Bwa	109 [18.5]	110 [19.6]
Dagara, Lobi, Birifor, Djan, & similar	61 [10.5]	45 [8.0]
Dioula, Dafing, Samo, & similar	93 [16.0]	85 [15.2]
Gourounsi, Ko, Nounouma	24 [4.1]	24 [4.3]
Mossi, Gourmanche, Bissa, & similar	260 [44.6]	263 [46.9]
Peulh	16 [2.7]	19 [3.4]
Other	21 [3.6]	15 [2.7]
Religion: n [%] [1]		
Muslim	420 [72.0]	407 [72.6]
Christian	158 [27.1]	144 [25.7]
Traditional/animist	1 [0.2]	5 [0.9]
No religion	1 [0.2]	0 [0.0]
Education: n [%] [1]		
No education	311 [53.34]	278 [49.6]
At most primary completed	145 [24.87]	168 [30.0]
Above primary	126 [21.61]	115 [20.5]
Occupation: n [%] [1, 2]		
No work outside the home	232 [39.8]	213 [38.0]
Petty trade	246 [42.3]	254 [44.0]
Crafts	52 [8.9]	35 [6.2]
Shopkeeper	39 [6.7]	41 [7.3]
Other	22 [4.0]	26 [4.6]

[1] Data missing for one woman from the intervention group.

[2] Percentages add up to more than 100%, as more than one occupation was allowed.

Table 16: Baseline data: characteristics of male partner as reported by women

	Intervention (n=583)	Control (n=561)
Age of male partner: mean ± SD [1]	40.1 ± 18.8	40.6 ± 20.3
Age distribution for male partner: n [%] [1]		
20-29	126 [23.6]	138 [27.4]
30-39	275 [51.6]	246 [48.8]
40-49	105 [19.7]	101 [20.0]
Above 50	27 [5.1]	19 [3.8]
Median age difference between man and woman: n. of years	+8	+7
Partners' level of education: n [%] [2]		
No education	247 [42.4]	244 [43.5]
At most primary completed	134 [23.0]	125 [22.3]
Above primary	129 [22.1]	136 [24.2]
Partner's occupation: n [%] [3]		
Agriculture	44 [7.6]	58 [10.3]
Petty trade	124 [21.3]	110 [19.6]
Skilled manual labour	238 [40.8]	217 [38.7]
Shopkeeper/commerce	100 [17.2]	115 [20.5]
Public sector	41 [7.0]	41 [7.3]
Other	80 [13.7]	68 [12.1]
Type of marriage: n [%] [4]		
Monogamous	504 [86.5]	476 [84.9]
Polygamous	78 [13.4]	85 [15.2]
Person responsible for decisions on household expenses: n [%] [5]		
Woman	1 [0.2]	0 [0.0]
Partner	491 [84.2]	474 [84.5]
Couple together	32 [5.5]	36 [6.4]
Third person	49 [8.4]	44 [7.8]
It depends/not sure	10 [1.7]	6 [1.0]
Person responsible for the decision to seek health care: n [%] [5]		
Woman	2 [0.3]	3 [0.5]
Partner	523 [89.7]	500 [89.1]
Couple together	38 [6.5]	39 [7.0]
Third person	19 [3.3]	13 [2.3]
It depends/not sure	1 [0.2]	[0.9]

[1] Data missing for 50 women in the intervention arm and 57 in the control arm.
[2] Data missing for 73 women in the intervention arm and 56 in the control arm.
[3] Percentages add up to more than 100%, as more than one method could be mentioned.
[4] Data missing for 1 woman in the intervention arm.
[5] Data missing for 1 woman in the control arm.

Table 17: Baseline data: obstetric history and use of contraception

	Intervention (n=583)	Control (n=561)
Parity: n [%]		
No children	127 [21.8]	144 [25.7]
1	159 [27.3]	132 [23.5]
2	119 [20.4]	93 [16.6]
3 or more	178 [30.5]	192 [34.2]
Had at least 1 miscarriage/abortion: n [%]	91 [15.6]	107 [19.1]
Had at least 1 stillbirth: n [%]	29 [5.0]	22 [3.9]
Lost at least 1 child (born alive): n [%]	96 [16.5]	106 [18.9]
Current pregnancy: n [%]		
Wanted	437 [75.0]	424 [75.6]
Mistimed	133 [22.8]	128 [22.8]
Not wanted	13 [2.2]	9 [1.6]
Contraceptive methods ever used: n [%] [1]		
None used	191 [32.8]	197 [35.1]
Male condom [2]	69 [11.8]	64 [11.4]
Pill [2]	188 [32.3]	189 [33.7]
Injectable [2]	171 [29.3]	145 [25.8]
Implant [2]	103 [17.7]	95 [16.9]
Other methods [2]	35 [6.0]	35 [6.2]
Contraceptive users who ever used a method without informing partner: n [%] [2, 3]	58 [14.8] *(n=389)*	63 [17.3] *(n=360)*

[1] Percentages add up to more than 100%, as more than one method could be mentioned.

[2] Data missing for one woman from the intervention arm and one from the control arm.

[3] Denominator corresponds to women who ever used contraception.

7.3. Discussion

The target sample size was met and very good levels of follow-up were achieved. The differences in numbers of women recruited from the 5 participating PHCs correspond to the difference in volume of ANC attendants at each facility (Ministère de la Santé, 2015b).

In terms of baseline characteristics, the educational level of men and women is similar to that reported from urban areas in the latest DHS survey, as are the responses about who is responsible for household decisions (INSD, 2012). The age difference between men and women corresponds to the difference between the median age at first union for women (18) and for men (26) reported in the DHS, and the proportion in polygamous unions is also similar (INSD, 2012). The distribution by religion corresponds to the data available for the Bobo-Dioulasso area from the PopDev study (*PopDev, internal communication*). The proportion of Muslims is about 10 percentage points higher than that reported at the national level in the last census,

conducted in 2006, but data on Bobo-Dioulasso specifically is not available (INSD, 2008). Another difference is that hardly any of our sample identify as animists, whereas 15% did in the census.

In terms of reproductive history, it is striking, given the urban setting with relatively high service accessibility, that about one in six women reports ever having lost a child. Given that half of the sample already have at least two children and many have more, however, this appears to be consistent with the under-5 mortality at country level (89 per 1000 live births) (UNICEF, 2015). The data on prior contraceptive use suggests a fairly high level of familiarity with contraception in this setting. It also indicates that women's use of methods without the male partner's knowledge is fairly common, confirming qualitative reports (Daniele, 2014, Rossier and Hellen, 2014).

8. *PHASE 2*: ADHERENCE TO THE INTERVENTION

In this Chapter, I will present the results of the analysis of quantitative process data from the intervention trial or RCT (*Phase 2*) on adherence to the intervention (or number of intervention sessions attended). I will first show the data on adherence for the whole intervention arm and by health centre of recruitment (Subchapter 8.1). I will then present the results of an exploratory analysis of the participant characteristics associated with high levels of adherence (8.2). Finally, I will present data on the preferences for postpartum contraception expressed by participants in the intervention sessions (8.3). I will conclude the Chapter with a Discussion of the findings (8.4).

8.1. Levels of adherence to the intervention

As described in Chapter 6, the intervention comprised three Components, in addition to routine maternity care:

- A: a group discussion with the male partners of pregnant women,
- B: a couple-counselling session during pregnancy, and
- C: male partner participation in the first postnatal consultation, prior to discharge from the health centre (6^{th} hour postpartum).

We defined high protocol adherence as attendance at at least two sessions out of three.

Components A and B were delivered between February and July 2015. Component C was delivered from when the first participant in the intervention group gave birth, in March 2015, to when the last gave birth in November of the same year.

Figure 6 illustrates the details of which Components/sessions were attended by study participants assigned to the intervention arm. Out of 583 men/couples in the intervention group, 216 (37%) attended all three components, 216 (37%) attended any two, 98 (17%) attended any one, and 53 (9%) attended none. In other words, 74% attended at least two sessions, and can therefore be regarded as highly protocol-adherent.

Overall, component A was attended by 447 male partners (corresponding to 82% of the intervention group), B was attended by 373 couples (64%), and C by 328 (56%). This means that component A was followed by a certain level of drop-out, including by some who didn't attend any further sessions (9% of couples in the intervention group). A further 12% attended A, did not attend B, but after birth attended C.

Component A was designed to be the starting point of the intervention, both chronologically and in terms of content. However, some people attended other components, but not A. For example, 3% of couples in the intervention group attended B without having attended A. These were

couples in which the man was unavailable for the group session, and, following negotiation of an appointment, the couple were received directly for component B.

In addition, there were also a certain number of men/couples (6% of the total) who had not attended any prior sessions, but in the end attended C. This can be explained by the fact that these men were present in the health centre around the time of birth, or attended when called, as this is a time when men may be available to pay for fees or medication (see Subchapter 6.1.3). The inclusion of component C in the intervention therefore provided a unique opportunity to involve men who had been unable or reluctant to attend during pregnancy.

Figure 6: Intervention components attended

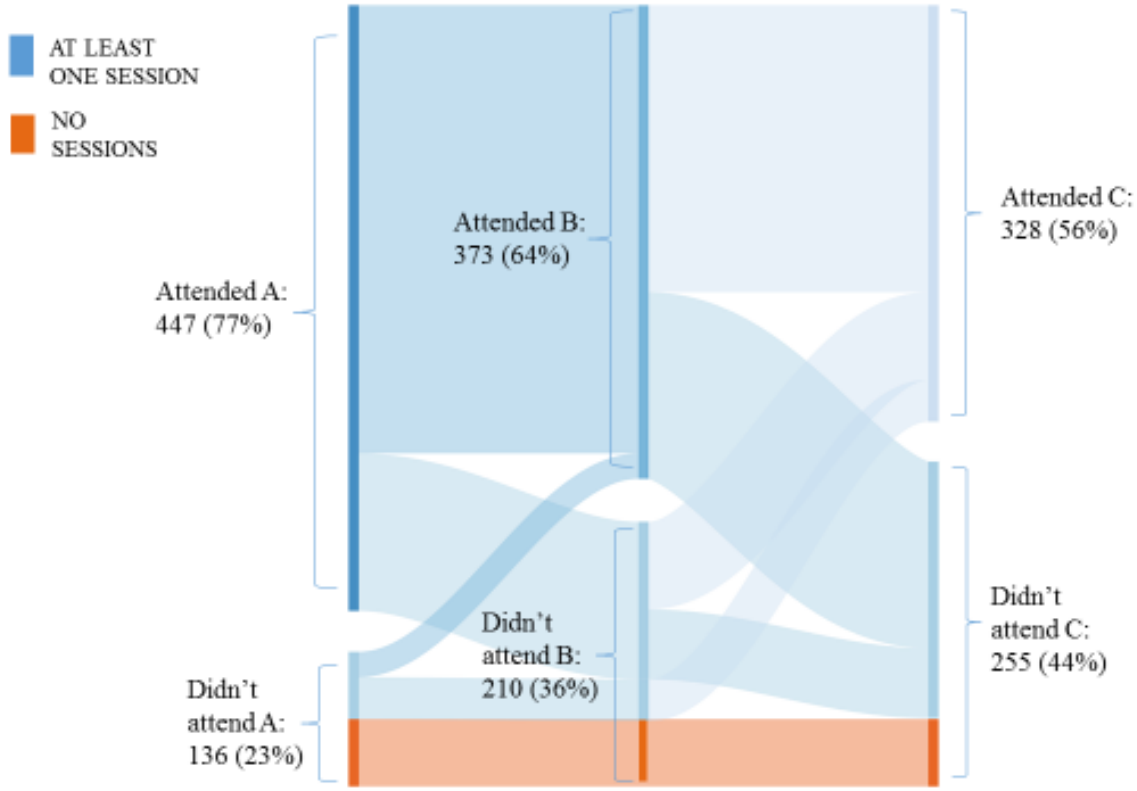


Figure produced using www.sankeymatic.com

Although more than half of the group attended C, it was the least-attended component. The most likely reason for this can be found by comparing attendance with follow-up data on place of delivery, which is available for 96% of intervention-group study participants. Among these women, 379 (68%) delivered in one of the 5 participating facilities, and 181 (32%) delivered in elsewhere (mostly in referral hospitals, see Subchapter 9.1). As already mentioned, Component C was not offered in other facilities, but only in the 5 PHCs participating in the study.

As can be seen from Table 18, there was a stark difference in attendance at Component C by place of delivery: 78% of those who gave birth in a study facility received this component, versus 14% who gave birth elsewhere. This also means that overall those who gave birth

elsewhere were less likely to attend at least two sessions or be highly protocol-adherent (61% versus 81%), and very few attended all three (8%).

Table 18: Intervention components attended by place of birth

Components attended:	Birth in a study PHC: n [%]	Birth elsewhere: n [%]
A	314 [82.9]	145 [80.1]
B	249 [65.7]	112 [61.9]
C	294 [77.6]	25 [13.8]
At least 2	306 [80.7]	111 [61.3]
All three	194 [91.9]	17 [8.1]
TOTAL	379 [100]	181 [100]

The reason why 14% of those who gave birth elsewhere nevertheless received Component C is that in these cases particularly zealous health workers asked the couple to return for Component C once they were discharged from the hospital. In other cases, they provided the counselling session to the couple at the time of the 6th day PNC appointment. Although they were probably counselled later than 6 hours after birth, I classified these couples as having received Component C.

Among those who did give birth in a study facility and did not receive Component C, this was probably due to the lack of availability of the male partner, or the staff's failure to provide the consultation (see qualitative evaluation results in Subchapter 10.2.1).

8.1.1. High adherence by recruitment PHC

There was considerable variation in the levels of high adherence to the intervention depending on the health centre where women were first recruited into the study. As shown in Table 19, the proportions attending at least 2 sessions varied from a maximum of 87% for Guimbi, to a minimum of 64% for Ouezzinville (p=0.001, Chi square).

Table 19: High adherence to the intervention by recruitment PHC

	Bolomakote	Guimbi	O'ville	Sarfalao	Sect 24
Attended 0-1 session: n [%]	21 [23.6]	13 [12.9]	58 [35.6]	25 [21.0]	34 [30.6]
Attended at least 2 sessions: n [%]	68 [76.4]	88 [87.1]	105 [64.4]	94 [79.0]	77 [69.4]
TOTAL	89 [100]	101 [100]	163 [100]	119 [100]	111 [100]

This difference could be explained by a combination of factors, but place of delivery appears to play a major part. As discussed, the likelihood that participants would attend the 3rd intervention component (C) differed by place of delivery. As shown in Table 20, the proportion of women who delivered in a study facility varied substantially depending on recruitment PHC,

from a maximum of 83% of women from Sarfalao, to 53% of those from Ouezzinville (p<0.001, Chi square). Although the Table presents data on the intervention arm only, almost identical proportions were observed in the control arm.

The variation in place of delivery by recruitment PHC could be due to population-based factors, or to factors related to the PHC itself. We believe that the geographical location of the health centres played an important role, as can be seen from the map of Bobo-Dioulasso in Subchapter 5.1.2). The proportion of births taking place elsewhere was highest for women recruited at the PHCs that were geographically closest to the referral hospitals (Ouezzinville, and to a lesser extent Guimbi and Bolomakote).

Table 20: Birth in a study PHC in the intervention arm

	Bolomakote	Guimbi	O'ville	Sarfalao	Secteur 24
Birth in a study PHC: n [%]	60 [67.6]	61 [64.2]	81 [52.9]	95 [82.6]	82 [75.9]
Birth elsewhere: n [%]	29 [32.6]	34 [35.8]	72 [47.1]	20 [17.4]	26 [24.1]
TOTAL	89 [100]	95 [100]	153 [100]	115 [100]	108 [100]

8.2. Exploratory analysis of predictors of high adherence

Bivariable and multivariable logistic regression was used to identify socio-demographic characteristics that were predictive of high adherence to the protocol in the intervention group. As mentioned, this was defined as attendance to at least two intervention components, which could be A&B, B&C, A&C, or all three.

The results of this analysis are presented in Table 21. Given the variation in levels of high adherence between recruitment PHCs, described above, I computed ORs adjusted for recruitment PHC. For each characteristic, I then conducted a Likelihood Ratio Test in order to assess the strength of the evidence of an association with high adherence. Out of all the variables, I chose those for which the L. R. Test showed a level of significance of p=0.15 or less and included them into a multivariable model. The final model included recruitment PHC, birth in a study PHC, religion, age of woman, polygamous marriage, woman involvement in household expenses and in health expenses, and prior use of contraception. Finally, I conducted L. R. Tests for each of the included variables.

The results of the multivariable analysis suggest that enrolment PHC, birth in a study PHC, monogamous marriage and prior use of contraception are predictors of high adherence. Confirming the differences seen in the unadjusted analyses shown above, women/couples enrolled at Bolomakote (OR 1.5, 95% C.I. 0.7-2.9), Sarfalao (OR 1.5, C.I. 0.8-2.9) or Guimbi (OR 3.3, C.I. 1.5-6.9) were more likely to attend at least two components compared with those enrolled at Secteur 24 (p=0.012). This analysis also confirmed that birth in a study PHC was associated with 2.7 times the odds of high adherence, compared with birth elsewhere (C.I. 1.7-

4.1, p<0.001). In addition, women/couples in polygamous marriages had half the odds of attending at least two sessions, compared with monogamous couples (OR o.5, C.I. 0.3-1.0, p=0.045), and women/couples who had used contraception in the past had almost double the odds of high adherence compared with those who hadn't (OR 1.9, C.I. 1.2-2.9, p=0.004).

Table 21: Analysis of predictors of high adherence

Explanatory variables		**No. of participants**	**% High Adherence**	**PHC-adjusted analysis**				**Multivariable analysis**			
				OR	95% C.I.		LRT p-value	OR	95% C.I.		LRT p-value
Recruitment PHC	Secteur 24	111	69.4	1.0			---	1.0			0.012
	Ouezzinville	163	64.4	0.8	0.5	6.1		1.1	0.6	1.9	
	Bolomakote	89	76.4	1.4	0.8	2.7		1.5	0.7	2.9	
	Sarfalao	119	79.0	1.7	0.9	3.0		1.5	0.8	2.9	
	Guimbi	101	87.1	3.0	1.5	6.1		3.3	1.5	6.9	
Birth in a study PHC	No	181	61.3	1.0			<0.001	1.0			<0.001
	Yes	379	80.7	2.6	1.7	4.0		2.7	1.7	4.1	
Religion	Muslim	420	71.7	1.0			0.035	1.0			0.292
	Christian*	162	80.3	1.6	1.0	2.5		1.3	0.8	2.1	
Ethnicity	Mossi+sim.	260	70.8	1.0			0.412				
	Bobo+Bwa	108	75.9	1.4	0.8	2.4					
	Lobi+sim.	61	80.3	1.8	0.9	3.6					
	Dioula+sim.	93	74.2	1.2	0.7	2.1					
	Other	61	78.7	1.6	0.8	3.1					
Age of woman	15-24	252	68.7	1.0			0.026	1.0			0.367
	25-29	163	77.9	1.7	1.0	2.6		1.3	0.8	2.2	
	30+	168	78.6	1.7	1.1	2.8		1.4	0.8	2.4	
Age of man	20-29	126	69.8	1.0			0.252				
	30-39	275	76.4	1.4	0.9	2.3					
	40+	132	78.0	1.6	0.9	2.8					
Woman works outside home	No	232	72.0	1.0			0.358				
	Yes	350	75.4	1.2	0.8	1.8					
Woman went to school	No	311	73.0	1.0			0.898				
	Yes	271	75.3	1.0	0.7	1.5					
Man went to school	No	247	72.5	1.0			0.636				
	Yes	334	75.8	1.1	0.8	1.6					
Polygamous marriage	No	504	75.8	1.0			0.075	1.0			0.045
	Yes	78	64.1	0.6	0.4	1.0		0.5	0.3	1.0	
Household expenses: woman involved	No	550	73.3	1.0			0.105	1.0			0.871
	Yes	33	87.9	2.3	0.8	6.6		0.9	0.2	3.9	
Health expenses: woman involved	No	543	73.3	1.0			0.123	1.0			0.309
	Yes	40	85.0	1.9	0.8	4.8		1.9	0.5	6.5	
Parity	Nullipara	127	74.0	1.0			0.451				
	1 or 2	278	72.7	0.9	0.6	1.5					
	3+	178	76.4	1.2	0.7	2.1					
Pregnancy intention	Mistimed/ unwanted	146	73.3	1.0			0.717				
	Wanted	437	74.4	1.1	0.7	1.7					
Ever used contraception	No	191	64.9	1.0			0.001	1.0			0.004
	Yes	392	78.6	1.9	1.3	2.8		1.9	1.2	2.9	

*Includes 4 women who were animists or had no religion.

8.3. Contraceptive preferences expressed during Components B & C

A total of 475 couples from the intervention group attended either or both of intervention Components B and C. During the counselling session, they were asked whether they had a non-binding preference for a specific contraceptive method that they wished to adopt after birth. The majority expressed a preference for a particular method. This was recorded in their hand-held health booklets for future reference. Whether or not they expressed a preference, and if so for which method, was also reported on the study documentation form compiled by health workers for each session they conducted.

The breakdown of preference by method is illustrated in Table 22. The first line shows the preferred method for the 376 couples who attended Component B, showing that about two thirds chose a method, the most popular being by far the implant (34%), with less than 10% choosing the injectable, the pill, the IUD or another method (in decreasing order of preference). The second line illustrates the preferred method for the 329 couples who attended component C. The proportion who chose a method was higher, at nearly 80%, and the order of preference of methods chosen was the same.

Given that many couples attended both sessions, and some attended one but not the other, I compiled a summary indicator of contraceptive choice made during both or either session for all 475. If the couple had attended Component C (whether or not they had attended B), the choice made at this time was retained, given that it was made closest to the time when the method would be commenced. If they had not attended C, the choice made during B was retained. Overall, just over a quarter did not express any contraceptive preference at either session. The order of preference for methods chosen remained the same in the summary indicator. I used this indicator to compare the preference expressed during the intervention sessions with contraceptive use at 8 months (see Subchapter 9.4.17).

Among the 226 couples who attended both Components, most responded in the same way on both occasions, but there was a change for 82 (36%) of them. Among those who changed their mind between the two sessions, the majority (65%) changed from having not expressed a preference during B, to specifying a preferred method during C.

Table 22: Contraceptive method preference expressed during Components B & C

	Preferred contraceptive method: n [%]						
	Implant	Injectable	Pill	IUD	Other	Preference not expressed	TOTAL
Comp. B	127 [33.8]	36 [9.6]	33 [8.8]	29 [7.7]	12 [3.2]	137 [37.1]	376 [100]
Comp. C	124 [37.7]	63 [19.2]	41 [12.5]	27 [8.2]	8 [2.4]	66 [20.1]	329 [100]
Summary preference	170 [35.8]	75 [15.8]	55 [11.6]	37 [7.8]	15 [3.2]	123 [25.9]	475 [100]

8.4. Discussion

8.4.1. Overall adherence levels

As discussed in the Subchapter 733.3.4, men's participation in facility-based activities is usually easy to achieve in high income settings, whether these be offered during pregnancy (Maycock et al., 2013, Wolfberg et al., 2004) or after birth (Abbass-Dick et al., 2014, Pisacane et al., 2005). Similarly, in middle-income settings where it is usual for male partners to accompany their wives to ANC, educational interventions during pregnancy have achieved over 80% coverage (Mullany et al., 2007, Varkey et al., 2004). However, only a quarter of men participated in the sessions offered in the main other facility-based study conducted in Sub Saharan Africa which focused exclusively on MNH/PPFP (Kunene et al., 2004). The literature on male partner involvement in PMTCT confirms that male partner attendance at facilities during pregnancy can be hard to achieve in this region. Trials of different invitation approaches have generally shown response levels below 50% (Ditekemena et al., 2011, Nyondo et al., 2015).

There are several features which may have enabled us to achieve an unusually high level of adherence for an urban, Sub-Saharan African context. On the one hand, I tried to incorporate and closely adhere to the results of the formative research at the design stage, thus producing an intervention that was acceptable. On the other hand, we mobilised a certain amount of financial resources and staff time for the purpose of maximising attendance. This included the double invitation strategy of telephone calls as well as written letters. Importantly, health workers were compensated for the extra work that the study entailed, based on the number of men and couples attending. This may have motivated them to put more effort into the invitation process. It is not clear from some of the other studies whether staff were compensated, and if so, in which way compensation was calculated. It is also possible that giving men a small financial contribution for travel expenses at the end of the first session (A) may have encouraged them to return again for the second (B). It is also not clear whether the lack of focus on HIV/AIDS both in our invitation and in the content of our sessions may have had an impact on attendance (see Subchapter 3.3.5).

Co-habitation was a pre-requisite for enrolment in this study, which may have meant that couples had a closer and more committed relationship, in which the man might have been more willingly become involved in the woman's health care. In comparison, most participants in Kunene's study didn't co-habit but had a "regular visiting relationship" (Kunene et al., 2004). Adherence may also have been high because our study took place in an urban area, in which health centres are easily accessible to most families. On the other hand, I was told by health workers that because the study was running between March and June, several men were busy planting in the fields (on family plots within the city) and were therefore not available to attend.

Attendance may have been even higher had the intervention been implemented at another time of year.

8.4.2. Attendance at individual components and predictors of adherence

As for the difference in attendance between components A, B and C, it may be somewhat surprising that there was a drop between A and B, given that there was a greater degree of flexibility for negotiating the couple counselling appointment, including during evenings and weekends, whereas the timing of the group session could not be altered to suit individual needs. The failure of some A participants to return for B might be explained by fatigue, unwillingness to return a second time, dissatisfaction with A, or difficulty for both spouses to arrange to go together. It is possible that both the format and the order in which these components were offered influenced uptake. Another factor to consider is that whereas the invitation for A was in effect delivered through the combined effort of the RA (giving the letter) and the health worker (making the phone call), the invitation to B and C entirely depended on the health workers' personal motivation to follow the established procedures, and on the organisation of work within the PHC.

Component C was the least well attended, given the level of referral hospital deliveries despite the fact that women were considered fit for PHC delivery at the time of enrolment. The study did not have the resources to train health workers at the referral hospitals. Had this been possible a higher attendance at C might have been seen, and all women could have been included, regardless of obstetric risk. As mentioned, the difference between health centres in the proportion giving birth at referral facilities was probably due to geography, however reputation could also have played a role. A minor contribution to the drop in attendance between A and C could also be due to the fact that the majority of deliveries happened during the rainy season, when men who were farmers (8-10%) would have been particularly busy working in the fields.

I explored baseline factors and other characteristics that were potentially associated with high adherence. The PHC where the woman was recruited was confirmed as a significant factor affecting attendance, even when adjusting for place of birth. This suggests that internal differences between the PHCs may have influenced levels of uptake, including organisational structure, leadership, and commitment to the project (see qualitative evaluation findings, Subchapter 10.5). In polygamous marriages, men may have felt less invested in the health care of each wife, or held more traditional attitudes, leading to a reluctance to participate. On the other hand, couples who had used contraception in the past might have had prior contact with the health system and more familiarity with services, or been more open-minded towards biomedical advice, leading to a higher willingness to engage in the project.

It is interesting to observe the lack of association of certain plausible factors, such as education, with adherence. For certain potential predictors, it is possible that I may not have been able to detect the effect due to the small numbers in some categories, for example in the case of the woman's participation in decision-making. At the same time, it is possible that other unobserved differences between study participants, which may or may not have been clustered at PHC level, affected levels of receptivity or interest in participating.

8.4.3. Contraceptive choices

The contraceptive preferences expressed by participants in Components B and C reflect the methods which are locally available in the city of Bobo-Dioulasso (Daniele, 2014), however there are some differences between the proportions choosing each method in this sample, compared to the distribution of contraceptives actually used by women in Burkina Faso cities, according to DHS data (INSD, 2012). Specifically, implants are the most chosen method here, whereas injectables and the pill were more commonly used than implants in the last DHS. This is supported by reports of a sharp increase in interest in implants in recent years in Sub-Saharan Africa (Duvall et al., 2014). Furthermore, the IUD is more likely to be chosen than condoms in this sample, whereas in the DHS condoms are more used. It is important to note that women's expressed preference may not correspond to the methods they actually end up using, because of other factors such as availability. However, these data may point to an encouraging increase in the popularity of these long-term and highly effective methods. It is not clear whether the presence of the male partner at the time of the choice, in this study, influenced the type of methods chosen.

9. *PHASE 2*: RCT OUTCOME RESULTS

In this Chapter, I will present the main results of the intervention trial or RCT (Phase 2), which show the effect of the intervention on the health and behaviour outcomes of interest. I will present the RCT results by thematic area, beginning with birth and MNH outcomes (Subchapter 9.1), and followed by postnatal care (9.2), infant feeding (9.3), postpartum family planning (9.4), relationship adjustment (9.5), and satisfaction with routine care (9.6). For each area, I will first focus on any relevant primary and secondary outcomes, and then show any additional, more detailed results, which in some cases based on validity analyses, sensitivity analyses, or pre-specified subgroup analyses. Finally, I will present the results of a sensitivity analysis for all outcomes based on the timing of follow-up (9.7), and conclude the Chapter with a Discussion of the findings (9.8).

9.1. Birth outcomes and maternal and newborn health

The data presented in Table 23 correspond to the 1101 women (and their babies) who were successfully followed up at 3 months postpartum (560 from the intervention group and 541 from the control group). Data for an additional 31 women and their babies, who were followed up at 8 months but not at 3 months (16 from the intervention arm and 15 from the control arm), was available on twin births, newborn deaths and deaths of women. This data were therefore added to the denominator for these outcomes.

There was no predefined primary or secondary outcome related to this thematic area.

The data show that the number of ANC consultations attended was similar in both arms of the trial, with approximately 75% of women attending 3 or 4 consultations. The majority of participants gave birth in a study PHC, slightly more in the intervention group (68%) compared to the control group (63%). By far the second most common location of birth were referral hospitals, where about a quarter gave birth in both arms. Vaginal birth was almost universal, with only 3% giving birth by Caesarean in either arm. No women reported having an operative vaginal birth. Twin births occurred for 2% of women in both groups. The sex ratio at birth was almost equally split between male and female infants in both arms. Just over half of women were discharged from the health facility the day after birth (55%) in both arms, whereas about 40% were discharged on the day of birth itself.

Approximately 3% of newborns were stillborn or died within a week of birth in both arms, with 7 babies dying later in the control arm, versus one in the intervention arm. Data on prematurity is not presented here, because of imprecise gestational age assessment combined with a lack of reporting. We were also unable to ascertain whether the stillbirths occurred antepartum or intrapartum.

Three deaths occurred among women who were participants in the study, two from the intervention arm and one from the control arm. Despite our attempts to find out further details from the interviewers who spoke to their families, the circumstances of their deaths remain unclear. The deaths occurred postnatally. Two women died prior to the 3-month follow-up, whereas the third died after having been interviewed at 3 months but before the 8-month follow-up.

Table 23: Birth outcomes and maternal and newborn health

	Intervention (n=560)	Control (n=541)
Number of ANC consultations attended: n [%]		
1	4 [0.7]	6 [1.1]
2	37 [6.6]	43 [8.0]
3	183 [32.7]	170 [31.4]
4	244 [43.6]	249 [46.0]
5 or more	92 [16.4]	73 [13.5]
Location of birth: n [%]		
Study PHC	379 [67.7]	339 [62.7]
Other public PHC	17 [3.0]	27 [5.0]
Referral hospital	139 [24.8]	145 [26.8]
Private clinic	13 [2.3]	12 [2.2]
Home or other non-facility	12 [2.1]	18 [3.3]
Mode of birth: n [%]		
Vaginal	543 [97.0]	524 [96.9]
Caesarean section	17 [3.0]	17 [3.1]
Twin births: n [%] [1]	12 [2.1] *(n=576)*	13 [2.3] *(n=556)*
Sex of baby: n [%] [2] [3]		
Female	274 [50.1]	278 [52.0]
Male	273 [49.9]	257 [48.0]
Discharge day after birth: n [%] [4]		
Same day	220 [40.2]	201 [38.4]
Next day	303 [55.3]	290 [55.5]
2 days later or more	25 [4.6]	32 [6.1]
Newborn deaths: n [%] [1] [3]		
Perinatal deaths (incl. stillbirths)	20 [3.5] *(n=576)*	18 [3.2] *(n=556)*
Late neonatal deaths (8-27 days pp)	0 [0.0] *(n=576)*	4 [0.7] *(n=556)*
Infant deaths (>=28 days pp)	1 [0.2] *(n=576)*	3 [0.5] *(n=556)*
Deaths of women: n [%] [1]	2 [0.4] *(n=576)*	1 [0.18] *(n=556)*

[1] Combined denominator including all women followed up at at least one of the two follow-up rounds
[2] Missing for 19 women (13 from the intervention arm and 6 from the control arm), all of whom had a stillbirth.

[3] Data presented applies only to first twins, in the case of twin births.
[4] Women who had non-facility births (12 from the intervention arm and 18 from control) excluded

9.2. Postnatal care

The results presented in this Subchapter are based on data from the 1101 women who were successfully followed up at 3 months postpartum (560 from the intervention group and 541 from the control group).

9.2.1. PRIMARY OUTCOME A.: Attendance at scheduled PNC (at least 2 consultations)

As described in the Subchapter 5.3.1, Primary outcome a. was defined as the proportion of women attending the scheduled outpatient PNC consultations (at least 2, normally at 6 days and at 6 weeks postpartum).

Table 24 shows that, for the whole sample, the proportion of women attending at least two PNC consultations was higher, at 61%, in the intervention arm, compared to 49% in the control arm. A binomial regression, adjusting by recruitment PHC, found a Risk Difference (RD) of 11.7 percentage points between the two arms, with strong evidence for this effect (95% C.I. 6.0-17.5, p<0.001). This suggests that the intervention increased the uptake of outpatient PNC consultations.

A stratified analysis by recruitment PHC was also run, using binomial regression. This shows that the direction of effect was positive in all health centres, although there was strong evidence of an effect only in Sarfalao, some evidence in Bolomakote, and low or no evidence in the other PHCs. The Likelihood Ratio Test produced no evidence of effect modification by recruitment PHC for this outcome (p=0.734).

Table 24: Summary and stratified result estimates for Primary outcome a.

Attendance at scheduled PNC (at least 2 consultations)						
	Intervention: n [%]	Control: n [%]	RD adjusted by PHC: [%]	95% C.I. - upper bound:	95% C.I. - lower bound:	P-value
Summary estimates (whole sample):						
	342 [61.1]	265 [49.0]	11.7	6.0	17.5	<0.001
Estimates stratified by recruitment PHC:						
Bolomakote	48 [53.9]	33 [38.8]	15.1	0.5	29.8	0.043
Guimbi	65 [68.4]	66 [62.9]	5.6	-7.6	18.7	0.407
Ouezzinville	81 [52.9]	68 [43.3]	9.6	-1.5	20.7	0.088
Sarfalao	87 [75.7]	51 [58.0]	17.7	4.7	30.7	0.007
Secteur 24	61 [56.5]	47 [44.3]	12.1	-1.2	25.4	0.074
Likelihood Ratio Test for interaction:			p=0.734			

9.2.2. PNC – further detail

As shown in Table 25, a slightly larger majority of women had a postpartum check-up prior to being discharged in the intervention group (60%) compared to the control group (55%). A more detailed breakdown of the number of outpatient PNC consultations attended is provided here. Reflecting the results shown above, there were noticeable differences between the two arms, including, in the intervention arm, fewer women not attending PNC at all (15% versus 23%), and more attending two consultations (61% versus 49%). The timing of PNC attendance in our sample is highly clustered around the two recommended times for PNC check-ups at 6 days and 42 days postpartum (data not shown).

Women who had attended PNC were asked what prompted them to go. Among attendants at the either PNC appointment, almost all reported that they had attended for a check-up. Very few women said they attended because they had a particular problem. Finally, up to 1 in 5 women attending the 2nd PNC visit said that they attended in order to get a contraceptive method. This proportion was higher than for the 1st visit, and for both appointments it was higher in the intervention group, compared to the control group. The study PHCs were overall the most popular location for PNC. Even among women who had given birth in a private clinic or referral centre, half of those who attended PNC attended their first appointment at a study PHC. Among these women, this proportion rises to over 90% for the 2nd appointment. There were no substantial differences between the two arms in this regard (Table 25).

Table 25: Postnatal care

	Intervention (n=560)			Control (n=541)		
Had postpartum check-up prior to discharge (6th hour): n [%] [1]	329	[60.0]		289	[55.3]	
Number of outpatient PNC consultations attended: n [%]						
None	83	[14.8]		124	[22.9]	
1	135	[24.1]		152	[28.1]	
2	341	[60.9]		263	[48.6]	
3 or more	1	[0.4]		2	[0.4]	
Reason for attending PNC (1st cons.) : n [%] [2, 3]						
Check-up	477	[100]	*(n=477)*	416	[99.8]	*(n=417)*
Problem with mother or baby	0	[0.0]	*(n=477)*	2	[0.5]	*(n=417)*
To obtain FP method	18	[3.8]	*(n=477)*	11	[2.6]	*(n=417)*
Place where attended PNC (1st cons.): n [%] [3]						
Study PHC	411	[86.2]	*(n=477)*	348	[83.5]	*(n=417)*
Other facility	66	[13.8]	*(n=477)*	68	[16.3]	*(n=417)*
Other (midwife's house)	0	[0.0]	*(n=477)*	1	[0.24]	*(n=417)*
Reason for attending PNC (2nd cons.): n [%] [2,4]						
Check-up	340	[99.4]	*(n=342)*	264	[99.6]	*(n=265)*
Problem with mother or baby	1	[0.3]	*(n=342)*	0	[0.0]	*(n=265)*
To obtain FP method	69	[20.2]	*(n=342)*	45	[17.0]	*(n=265)*
Place where attended PNC (2nd cons.): n [%][4]						
Study PHC	320	[93.6]	*(n=342)*	240	[90.6]	*(n=265)*
Other facility	22	[6.4]	*(n=342)*	25	[9.4]	*(n=265)*

[1] Women who had non-facility births (12 from the intervention arm and 18 from control) excluded.
[2] More than one response was possible.
[3] Denominator corresponds to women who attended at least one consultation.
[4] Denominator corresponds to women who attended at least two consultations.

9.3. Infant feeding

The results presented in this Subchapter are based on data from 1046 out of the 1101 women who completed the 3-month follow-up (535 from the intervention group and 511 from the control group). The data is missing for 41 women who lost their baby/babies, as well as for a further 15 women who did not complete the breastfeeding (and family planning) sections of the 3-month questionnaire because they were followed up very late (see Subchapter 7.1). Data shown relate to the first twin only. All second twins who were alive at the time of the interview (9 in the intervention group and 10 in the control group) were being fed in the same way as the first twin.

9.3.1. PRIMARY OUTCOME b.: Exclusive breastfeeding at 3 months postpartum

As described in Subchapter 5.3.1, Primary outcome b. was defined as the proportion of women exclusively breastfeeding their baby at 3 months postpartum. Breastfeeding was considered exclusive if the baby had not had any other liquid or food since birth, or had had another liquid or food only once or twice.

Table 26 shows that for the whole sample the proportion of women exclusively breastfeeding was higher, at 43%, in the intervention arm, compared to 32% in the control arm. A binomial regression, adjusting by recruitment PHC, found a Risk Difference (RD) of 11.4 percentage points between the two arms, with strong evidence for this effect (95% C.I. 5.6-17.2, p<0.001). This suggests that the intervention increased the practice of exclusive breastfeeding at 3 months postpartum.

The results stratified by recruitment PHC show some differences in the level of EBF in the control group between the PHCs, with Bolomakote having the lowest level (24%) and Sarfalao the highest (45%). A stratified analysis by PHC was run, using binomial regression. This shows that the direction of effect was positive in all health centres, with some evidence of effect in three PHC (Guimbi, Ouezzinville and Secteur 24) and no evidence in the other two (the ones with the highest and lowest level of control/baseline EBF). The Likelihood Ratio Test produced no evidence of effect modification by recruitment PHC for this outcome (p=0.825).

Table 26: Summary and stratified result estimates for Primary outcome b.

Exclusive breastfeeding at 3 months postpartum								
	Intervention: n [%]		Control: n [%]		RD adjusted by PHC: [%]	95% C.I. - upper bound:	95% C.I. - lower bound:	P-value
Summary estimates (whole sample):								
	232	[43.4]	161	[31.5]	11.4	5.6	17.2	<0.001
Estimates stratified by recruitment PHC:								
Bolomakote	28	[33.3]	19	[23.8]	9.6	-4.2	23.3	0.171
Guimbi	42	[48.3]	31	[30.7]	17.6	3.8	31.4	0.013
Ouezzinville	56	[37.8]	40	[27.4]	10.4	-0.2	21.1	0.055
Sarfalao	57	[51.4]	38	[45.2]	6.1	-9.0	20.3	0.397
Secteur 24	49	[46.7]	33	[33.0]	13.7	0.4	26.9	0.043
Likelihood Ratio Test for interaction:					p=0.825			

9.3.2. Infant feeding: Further detail

As shown in Table 27, while almost all babies were being breastfed in both study arms (at least 99%), somewhat higher proportions had received additional foods and liquids by the time of the interview in the control group, compared to the intervention group. For example, 56% had been

given herbal infusions in the control group, compared to 48% in the intervention group, and 17% had received sugar water or juice, compared to 11% of intervention group infants.

Table 27: Infant feeding at 3 months postpartum

	Intervention (n=535)	Control (n=511)
Liquids or solids given to the baby since birth (more than one answer possible): n [%]		
Breast milk	534 [99.4]	506 [99.0]
Other milk, including formula	17 [3.2]	20 [3.9]
Water	173 [32.3]	209 [40.9]
Herbal infusions	258 [48.2]	286 [56.0]
Salt water/Koranic water	32 [6.0]	40 [7.8]
Sugar water, juice, sweet tea/coffee	61 [11.4]	89 [17.4]
Other liquid or soft food	6 [1.1]	8 [1.6]

9.4. Postpartum family planning

9.4.1. PRIMARY OUTCOME c.: Use of effective modern contraception at 8 months postpartum

The results presented in this Subchapter are based on data from 1087 of the 1115 women who completed the 8-month follow-up interview (554 from the intervention group and 533 from the control group). Data were not collected for 16 women who were no longer in union at 8 months postpartum (8 per arm), and 12 who were pregnant (6 per arm).

As specified in the Subchapter 5.3.1, users of permanent methods, the implant, the IUD, the injectable or the pill at 8 months postpartum were classed as using an effective modern contraceptive method. However, there were in fact no users of permanent methods in our sample (see Table 35).

Table 28 shows that, for the whole sample, the proportion of women using an effective method was higher, at 60%, in the intervention arm, compared to 53% in the control arm. A binomial regression, adjusting by recruitment PHC, found a Risk Difference (RD) of 6.4 percentage points between the two arms, with some evidence for this effect (95% C.I. 0.5-12.3, p=0.033). This suggests that the intervention increased the use of effective modern contraception at 8 months postpartum.

A stratified analysis by recruitment PHC was also run, using binomial regression. This shows that the direction of effect was positive in three health centres (Bolomakote, Guimbi and Sarfalao), but that there was close to no effect in the others. The evidence of effect was strong in one PHC only (Bolomakote), with very weak or no evidence in the others. This PHC had a considerably lower rate of effective method use in the control arm (39%) compared to the other PHCs, where rates ranged from 54% to 69%. Similarly, the PHC with the second lowest

control/baseline estimate showed the second strongest effect (Sarfalao). The Likelihood Ratio Test produced some evidence of effect modification by recruitment PHC for this outcome (p=0.028).

Table 28: Summary and stratified results estimates for Primary outcome c.

Use of effective modern contraception at 8 months postpartum							
	Intervention: n [%]	Control: n [%]	RD adjusted by PHC: [%]	95% C.I. - upper bound:	95% C.I. - lower bound:	P-value	
Summary estimates (whole sample):							
	330 [59.6]	283 [53.1]	6.4	0.5	12.3	0.033	
Estimates stratified by recruitment PHC:							
Bolomakote	57 [65.5]	31 [38.8]	26.8	12.2	41.4	<0.001	
Guimbi	60 [62.5]	64 [69.4]	2.1	-11.3	15.6	0.757	
Ouezzinville	82 [53.6]	85 [54.1]	-0.6	-11.6	10.6	0.923	
Sarfalao	74 [66.1]	46 [53.5]	12.6	-1.1	26.3	0.072	
Secteur 24	57 [53.8]	57 [54.8]	-1.0	-14.5	12.4	0.880	
Likelihood Ratio Test for interaction:			P=0.028				

9.4.2. Postpartum return to fertility

The results presented in this Subchapter are based on data from the 1115 women who completed the 8-month follow-up interview (568 in the intervention group and 547 in the control group). Women's periods had returned in just over half of women (54% in the intervention group and 59% in the control group). The median number of days since birth after which menses returned was calculated for those whose menses had returned. Half of women, in both arms, whose menses had returned reported (at 8 months) that this had happened less than 3 months postpartum. This raised concerns regarding data quality (discussed further in Subchapter 9.8.4).

About 4 women in 5 had resumed sexual intercourse by 8 months postpartum, slightly more in the intervention group (84%) compared to the control group (81%). The median number of days since birth after which they resumed intercourse was 84 in the intervention group and 89 in the control group. A total of 12 women were pregnant again at the time of the second follow up, 6 in the intervention group and 6 in the control group. Almost all (10 out of 12) of these women had lost the baby from the index pregnancy.

Among non-pregnant women, 17-18% desired no more children in the future, 44% wanted 1 or 2 more, 28% wanted 3 or more, and 11% were unsure or said the number would depend on God. Among those who wanted another child, the vast majority (80%) wanted to wait 2-5 years before conceiving. Only 2% wanted to get pregnant in less than 2 years, and the majority of these had lost the baby from the index pregnancy (12 out of 17). There were hardly any differences in regard to the indicators on future desired fertility between the study arms.

Table 29: Postpartum return to fertility

	Intervention (n=568)	Control (n=547)
Menses have returned by 8 months postpartum: n [%]	304 [53.5]	325 [59.4]
Timing of menses return (days since birth): median [1]	73	88
Resumed intercourse by 8 months postpartum: n [%] [2]	470 [83.9]	435 [80.7]
Timing of intercourse resumption (days since birth): median [2 3]	84	89
New pregnancies at 8 months postpartum: n [%] [2]	6 [1.1]	5 [1.1]
Desired number of additional children: n [%] [2 4]		
No more	95 [17.2]	96 [18.0]
1-2 more	243 [43.9]	232 [43.5]
3+ more	157 [28.3]	148 [27.8]
Depends on God/Don't know	59 [10.7]	57 [10.7]
Desired timing of next pregnancy: n [%] [2 4 5]		
In 0-1 year	10 [2.2] *(n=459)*	7 [1.6] *(n=437)*
In 2-5 years	367 [80.0] *(n=459)*	349 [79.9] *(n=437)*
In more than 5 years	61 [13.3] *(n=459)*	54 [12.6] *(n=437)*
Depends on husband/God/Don't know	21 [4.6] *(n=459)*	26 [6.0] *(n=437)*

[1] Data missing for 4 women from the intervention group and 4 from the control group.
[2] Data not collected for women no longer in union (8 in the intervention group and 8 in control).
[3] Data missing for 5 women from the intervention group and 3 from the control group.
[4] Data not collected for women currently pregnant (6 in the intervention group and 6 in control).
[5] Denominator corresponds to women wanting another child in the future.

9.4.3. Pre-specified exploratory subgroup analyses on Primary outcome c.

As specified in the study protocol (see Subchapter 5.5.1), exploratory subgroup analyses were conducted on Primary outcome c. (effective modern contraception at 8 months) based on the resumption of sexual intercourse at 8 months postpartum, and on whether the baby was alive at 8 months. Binomial regression models were run to estimate the effect of the intervention in the subgroups.

At 8 months postpartum 16% of women were abstinent in the intervention group, and 19% in the control group (Table 29). The subgroup analysis by sex resumption at 8 months showed a Risk Difference (RD) of 5.3 and 5.4 percentage points between the two arms, in the subgroup that had resumed intercourse and in the subgroup that was abstinent, respectively (Table 30). This was slightly smaller than the RD for the whole sample (6.4). However, there was no evidence of effect in either subgroup (95% C.I. -1.1 – 11.6 and p=0.102 in the non-abstinent

group, and C.I. -7.2 – 17.9 and p=0.401 in the abstinent group). It appears that the intervention affects women who have resumed or not resumed intercourse in a similar way, though the numbers do not enable us to draw definitive conclusions.

In the intervention group, 20 (3.5%) women had lost their baby (or both babies in the case of twins), and 23 (4.1%) had lost their baby in the control group. The subgroup analysis by status of the baby showed a RD of 6.2 and 14.4 percentage points between the two arms, in the subgroup with a live baby and in the subgroup where the baby had died, respectively. There was some evidence of effect in the group with the live baby (C.I. 0.2 – 12.2 and p=0.042), suggesting a similar effect to that for the whole sample. However, there is no evidence of effect in the group where the baby had died (C.I. -24.2 – 53.0, p=0.464). Because of the very small numbers involved, it is not possible to draw any conclusions about the effect of the intervention among women who lost their baby.

Table 30: Subgroup analyses for effective modern contraceptive use at 8 months postpartum (Primary outcome c.)

Use of effective modern contraception at 8 months postpartum						
	Intervention: n [%]	Control: n [%]	RD adjusted by PHC: [%]	95% C.I. - upper bound:	95% C.I. - lower bound:	P-value
Estimates for subgroups defined by the resumption of sexual intercourse at 8 months postpartum:						
Resumed	303 [65.3]	257 [59.9]	5.3	-1.1	11.6	0.102
Not yet resumed	27 [30.0]	26 [25.0]	5.4	-7.2	17.9	0.401
Estimates for subgroups defined by the status of the baby (babies):						
At least one baby alive	321 [59.4]	275 [53.2]	6.2	0.2	12.2	0.042
Baby (babies) deceased	9 [64.3]	8 [50.0]	14.4	-24.2	53.0	0.464

9.4.4. SECONDARY OUTCOME a.: Use of long-acting or permanent (LA/PM) methods of contraception at 8 months postpartum

The results presented in this Subchapter are based on data from 1087 of the 1115 women who completed the 8-month follow-up interview (554 from the intervention group and 533 from the control group). Data were not collected for 16 women who were no longer in union at 8 months postpartum (8 per arm), and 12 who were pregnant (6 per arm). As described in Subchapter 5.3.1, users of permanent methods, IUDs and implants were classed as using LA/PM methods. However, there were in fact no users of permanent methods in our sample (see Table 35).

For the whole sample, the proportion of women using a long-acting method was higher, at 31%, in the intervention arm, compared to 23% in the control arm (Table 31). A binomial regression, adjusting by recruitment PHC, found a Risk Difference (RD) of 8.1 percentage points between the two arms, with strong evidence for this effect (95% C.I. 2.9-13.4, p=0.002). This suggests

that the intervention increased the use of long-acting contraceptive methods at 8 months postpartum.

A stratified analysis by recruitment PHC was also run, using binomial regression. This shows that the direction of effect was positive in all health centres, with strong evidence of effect in one PHC only (Bolomakote) and no evidence in the others. This PHC had the lowest rate of long-acting reversible contraception (LARC) use in the control/baseline group (12.5%). The Likelihood Ratio Test produced no evidence of effect modification by recruitment PHC for this outcome (p=0.304).

Table 31: Summary and stratified results estimates for Secondary outcome a.

Use of long-acting or permanent (LA/PM) methods of contraception at 8 months postpartum								
	Intervention: n [%]		Control: n [%]		RD adjusted by PHC: [%]	95% C.I. - upper bound:	95% C.I. - lower bound:	P-value
Summary estimates (whole sample):								
	170	[30.7]	122	[22.9]	8.1	2.9	13.4	0.002
Estimates stratified by recruitment PHC:								
Bolomakote	27	[31.0]	10	[12.5]	18.5	6.4	30.7	0.003
Guimbi	26	[27.1]	25	[23.6]	3.5	-8.5	15.5	0.568
Ouezzinville	48	[31.4]	46	[29.3]	2.01	-8.2	12.3	0.691
Sarfalao	39	[34.8]	21	[24.4]	10.4	-2.3	23.1	0.107
Secteur 24	30	[28.3]	20	[19.2]	9.1	-2.4	20.5	0.120
Likelihood Ratio Test for interaction:					p=0.304			

9.4.5. SECONDARY OUTCOME b. (1): Use of any contraceptive method at 3 months postpartum

The results presented in this Subchapter are based on data from 1085 out of the 1101 women who completed the 3-month follow-up (553 from the intervention group and 532 from the control group). The data were not collected for one woman who was pregnant, and is missing for 15 women who did not complete the breastfeeding and family planning sections of the 3-month questionnaire because they were followed up very late (see Subchapter 7.1).

As described in Subchapter 5.3.1, if women reported using any contraceptive method at 3 months postpartum, including traditional methods, they were classed as users of any contraceptive method.

For the whole sample, the proportion of women using any contraceptive method was higher, at 57%, in the intervention arm, compared to 49% in the control arm (Table 32). A binomial regression, adjusting by recruitment PHC, found a Risk Difference (RD) of 7.7 percentage points between the two arms, with some evidence for this effect (95% C.I. 1.2-13.6, p=0.011).

This suggests that the intervention increased the use of any contraceptive method at 3 months postpartum.

A stratified analysis by recruitment PHC was also run, using binomial regression. This shows that the direction of effect was positive in all health centres, except for one, where it was close to zero (Ouzzinville). However, there was strong evidence of effect in one PHC only (Bolomakote) and no evidence in the others. This PHC had a lower level of use in the control/baseline group, compared to the others (40%). The Likelihood Ratio Test produced some evidence of effect modification by recruitment PHC for this outcome (p=0.026).

Table 32: Summary and stratified results estimates for Secondary outcome b. (1)

Any contraceptive use at 3 months postpartum						
	Intervention: n [%]	Control: n [%]	RD adjusted by PHC: [%]	95% C.I. - upper bound:	95% C.I. - lower bound:	P-value
Summary estimates (whole sample):						
	315 [57.0]	262 [49.3]	7.7	1.2	13.6	0.011
Estimates stratified by recruitment PHC:						
Bolomakote	61 [69.3]	33 [39.8]	29.6	15.3	43.9	<0.001
Guimbi	51 [54.8]	54 [51.9]	2.9	-11.0	16.7	0.682
Ouezzinville	79 [52.0]	82 [52.6]	-0.6	-11.8	10.6	0.917
Sarfalao	65 [57.5]	43 [50.0]	7.5	-6.4	21.5	0.291
Secteur 24	59 [55.1]	50 [48.5]	6.7	-6.9	20.1	0.338
Likelihood Ratio Test for interaction:			P=0.026			

9.4.6. Use of any contraceptive method at 3 months postpartum: Further detail

The breakdown of methods used at 3 months postpartum is described here for the 315 women using a method in the intervention group and the 262 using a method in the control group.

The most popular method in the intervention group was the implant, used by 39%, whereas in the control group this method was used only by 29%, and injectable use was slightly higher at 30% (Table 33). The same proportion used the injectable in the intervention group, making implant and injectable the most popular methods overall. Among the somewhat less popular methods, the pill was used more in the control group (23%) compared to the intervention group (18%), and the same applies to the male condom (15% in the control group versus 9% in the intervention group). Only 4% had an IUD inserted in both groups, and 2% used another method. Those using another method were using either the rhythm method or the Standard Days Method (using a CycleBeads necklace), except two who were using a traditional method (in one case a potion and in another a special cord worn around the waist). There were no users of permanent methods, the Lactational Amenorrhea Method (LAM), withdrawal, or female condoms.

In total, 9 women were using more than one method, the second being the male condom, in addition to a more effective method (a LARC method, the injectable or the pill). Three of these women were from the intervention group (1%), and 6 from the control group (2%).

Table 33: Use of contraception at 3 months postpartum

	Intervention (n=315)	Control (n=262)
FP methods among users at 3 months pp: n [%] [1]		
IUD	13 [4.1]	10 [3.8]
Implant	122 [38.7]	75 [28.6]
Injectable	95 [30.2]	78 [29.8]
Pill	55 [17.5]	61 [23.3]
Male condom	27 [8.6]	39 [14.9]
Other methods	6 [1.9]	5 [1.9]

[1] Total is more than 100% as multiple options were possible.

9.4.7. SECONDARY OUTCOME b. (2): Use of any contraceptive method at 8 months postpartum

The results presented in this Subchapter are based on data from 1087 of the 1115 women who completed the 8-month follow-up interview (554 from the intervention group and 533 from the control group). Data were not collected for 16 women who were no longer in union at 8 months postpartum (8 per arm), and 12 who were pregnant (6 per arm).

As described in Subchapter 5.3.1, if women reported using any contraceptive method at 8 months postpartum, including traditional methods, they were classed as users of any contraceptive method.

For the whole sample, the proportion of women using any contraceptive method was higher, at 71%, in the intervention arm, compared to 64% in the control arm (Table 34). A binomial regression, adjusting by recruitment PHC, found a Risk Difference (RD) of 6.5 percentage points between the two arms, with some evidence for this effect (95% C.I. 1.0-12.1, p=0.021). This suggests that the intervention increased the use of any contraceptive method at 8 months postpartum.

A stratified analysis by recruitment PHC was also run, using binomial regression. This shows that the direction of effect was positive in all health centres, except for one, where it was close to zero but negative (Ouzzinville). There was some evidence of effect in two PHCs (Bolomakote and Sarfalao) and no evidence in the others. For these two PHCs, there was a slightly lower rate of use in the control/baseline group, compared to the other PHCs (58% in both). The Likelihood Ratio Test produced weak evidence of effect modification by recruitment PHC for this outcome (p=0.082).

Table 34: Summary and stratified results estimates for Secondary outcome b. (1)

Any contraceptive use at 8 months postpartum						
	Intervention: n [%]	Control: n [%]	RD adjusted by PHC: [%]	95% C.I. - upper bound:	95% C.I. - lower bound:	P-value
Summary estimates (whole sample):						
	391 [70.6]	343 [64.4]	6.5	1.0	12.1	0.021
Estimates stratified by recruitment PHC:						
Bolomakote	66 [75.9]	46 [57.5]	18.4	4.3	32.4	0.011
Guimbi	75 [78.1]	75 [70.8]	7.4	-4.6	19.3	0.228
Ouezzinville	100 [65.4]	104 [66.2]	-0.9	-11.4	9.7	0.870
Sarfalao	83 [74.1]	50 [58.1]	16.0	2.8	29.2	0.018
Secteur 24	67 [63.2]	68 [65.4]	-2.2	-15.1	10.8	0.742
Likelihood Ratio Test for interaction:			P=0.082			

9.4.8. Use of any contraceptive method at 8 months postpartum: Further detail

The breakdown of methods used at 8 months postpartum is described here for the 391 women using a method in the intervention group and the 343 using a method in the control group.

The most popular method was the implant, used by 39% in the intervention group and 32% in the control group. The second most popular method was the injectable, used by about a quarter of women in both groups. The pill and the male condom were used by 16% and 15% respectively in the intervention group, and by 20% and 16% respectively in the control group. The IUD was used by 4-5% and other methods by 3-4% in both groups. Those using other methods were using rhythm, withdrawal, and the Standard Days Method using CycleBeads. Three women were using the traditional cord around the waist. There were no users of permanent methods, the Lactational Amenorrhea Method (LAM) or female condoms (Table 35).

In total, 14 women were using more than one method, the second being either the male condom or the rhythm method, in addition to a more effective method (a LARC method, the injectable or the pill). Six of these women were from the intervention group and 8 from the control group (2% of each).

The overall distribution of methods is not very different at 8 months compared to 3 months postpartum. Implant use increased by 3% in the control group, reducing the difference between the two arms. There appears to have been a small reduction in the use of the injectable, down 5% in the intervention group and 3% in the control group, and in the use of the pill, down 2% in the intervention group and 3% in the control group. There was a 6% increase in male condom use in the intervention group, versus a 1% rise in the control group.

Table 35: Use of contraception at 8 months postpartum

	Intervention (n=391)	Control (n=343)
FP methods among users at 8 months pp: n [%] [1]		
IUD	18 [4.6]	13 [3.8]
Implant	152 [38.9]	109 [31.8]
Injectable	99 [25.3]	93 [27.1]
Pill	61 [15.6]	68 [19.8]
Male condom	57 [14.6]	55 [16.0]
Other methods	10 [2.6]	13 [3.8] *)*

[1] Total is more than 100% as multiple options were possible.

9.4.9. Continuation of contraception between 3 and 8 months and method switching

The results presented in this Subchapter are based on data from 565 women out of the 577 who were using family planning at 3 months postpartum (311 from the intervention group and 254 from the control group) and who had available data on FP use at 8 months. Data is missing for 3 women who were lost to follow-up at 8 months, for 3 who were no longer in union, and for 6 who were pregnant.

Among FP users of any methods at 3 months postpartum, over 90% were still using one at 8 months. Continuation was higher among LARC users (over 96%), compared to users of other methods (86-88%), with no substantial differences between the two arms. The reasons for not using FP at 8 months were similar between those who had never commenced a method and those who had discontinued. Infrequent sex seems somewhat more common as a reason among discontinuers, and the lack of menses seems less common. However, numbers of discontinuers are too small to draw any definitive conclusions.

Among those who discontinued a LARC method after 3 months postpartum, at 8 months in the control group one was using the injectable and one the male condom, and in the intervention group 4 were using the injectable and one was using no method (reason for discontinuation unclear). A small number of FP users of other methods at 3 months switched to LARC by 8 months, 10 in the intervention group and 17 in the control group (Table 36).

Table 36: Continuation of contraceptive use and method switching

	Intervention (n=311)	Control (n=254)
Continuation of any FP use at 8 months (among users at 3 months) : n [%]	288 [92.6]	230 [90.6]
Among LARC users	129 [96.3] *(n=134)*	82 [97.6] *(n=84)*
Among users of other methods	155 [87.6] *(n=177)*	146 [85.9] *(n=170)*
Users of other methods at 3 months who switched to LARC by 8 months: n [%]	10 [5.7] *(n=177)*	17 [10.0] *(n=170)*

9.4.10. Place and timing of FP method uptake

The results presented in this Subchapter are based on data from 734 women who were using contraception at 8 months postpartum (391 from the intervention group and 343 from the control group). Although the small number of women using a second method were asked where and when they had started it, the data shown here relate only to the first method reported (the most effective one). Similar data were collected for method use at 3 months, but is not shown as the results were almost identical.

The data shows that the majority of women obtained their contraceptive method from a public PHC, which in most cases was one of the study centres. This proportion was slightly higher (78%) in the intervention group compared to the control group (72%), possibly related to higher PNC attendance during which some women obtained a method. For 14-16% of women in both arms, almost all male condom users, the husband brought the method. The referral hospital was the source of the method for 2-4%, and small numbers of women obtained the method from an NGO clinic, a pharmacy, or another source (including private clinics, itinerant sellers, through a relative, or through a traditional practitioner). There was little difference in these proportions between the study arms.

Among FP users at 8 months, the median number of days since the birth at which they started using their method was slightly lower (50) in the intervention group, compared to the control group (63) (Table 37).

Table 37: Place and timing of FP method uptake

	Intervention (n=391)	Control (n=343)
Place FP method obtained: n [%]		
Public PHC	305 [78.0]	247 [72.0]
Referral hospital	8 [2.1]	13 [3.8]
IPPF/MSI clinic	7 [1.8]	9 [2.6]
Pharmacy	5 [1.3]	5 [1.5]
Through husband	53 [13.6]	53 [15.5]
Other	13 [3.3]	16 [4.7]
Timing of FP resumption (days since birth): median	50	63

9.4.11. Reasons for not using contraception

The results presented in this Subchapter are based on data from 331 women out of 353 who were not using a FP method at 8 months postpartum (152 from the intervention group, and 179 from the control group). Data were not collected for 7 women who said they wanted a baby soon. Data is missing for 11 women who were classed as pill users during completion of the questionnaire, but were removed from the number of users during the analysis because they

were not taking the pills according to instructions. Data is missing for a further 4 women for whom it was erroneously not collected.

The most frequent reason quoted by women for not using a family planning method, despite not wanting another child soon, was the fact that their menses had not returned. This was reported by 34% of women in both groups. The second most frequent reason was lack of or infrequent sex, cited by about 26-28%. There was a slightly lower proportion of women reporting that their husband (or another family member) was opposed to contraception in the intervention group (11%), compared to the control group (13%), which may be due to the intervention. A further 11-12% of women in both arms reported cost/access problems, and 8-9% reported health problems or experiencing side-effects. Small proportions reported personal opposition (3%) and concerns about infertility (2-3%) (Table 38).

Table 38: Reasons for not using contraception

	Intervention (n=152)		Control (n=179)	
Reasons for not using FP at 8 months pp: n [%] [1]				
Not having sex	33	[21.7]	36	[20.1]
Infrequent sex	12	[7.9]	10	[5.6]
Menses not returned	51	[33.6]	60	[33.5]
Personal opposition/ God's will	5	[3.3]	5	[2.8]
Opposition of husband or other person	17	[11.2]	24	[13.4]
Concerns about infertility	3	[2.0]	6	[3.4]
Side effects/ health problems	13	[8.6]	15	[8.4]
Cost/access problems	17	[11.2]	21	[11.7]
Other	1	[0.7]	2	[1.1]

[1] Total is more than 100% as multiple options were possible.

9.4.12. SECONDARY OUTCOME c.: Timely initiation of effective modern contraception

As explained in detail in Subchapter 5.3.1, timely initiation of effective modern contraception is a binary outcome calculated from data concerning the timing of the return of menses, of the resumption of intercourse, of effective family planning method initiation, and data on exclusive breastfeeding at 3 months postpartum.

The results presented in this Subchapter are based on data from 610 of the 613 women who were using an effective modern contraceptive method at 8-months postpartum (329 from the intervention group and 281 from the control group). Data is missing from 3 women for whom data were missing either on the timing of menses resumption or on the timing of intercourse resumption, making it impossible to calculate timeliness of initiation.

For the whole sample, the proportion of women using an effective contraceptive method who started using it in a timely fashion was higher, at 76%, in the intervention arm, compared to 67% in the control arm (Table 39). A binomial regression, adjusting by recruitment PHC, found a Risk Difference (RD) of 7.6 percentage points between the two arms, with some evidence for this effect (95% C.I. 0.2-15.0, p=0.044). This can be interpreted as meaning that women in the intervention group were more likely to begin using an effective modern method in good time, prior to running any substantial risk of becoming pregnant again. It suggests that the intervention increased the timeliness of the initiation of effective methods.

A stratified analysis by recruitment PHC was also run, using binomial regression. This shows that the direction of effect was positive in all health centres, except for one, where it was negative (Bolomakote). In this PHC, the rate of timely initiation was higher in the control/baseline group (87%), compared to the other PHCs (where it ranged from 60% to 72%). There was strong evidence of a positive effect in one PHC (Secteur 24), some evidence in another (Guimbi), and no evidence in the other three. The Likelihood Ratio Test produced some evidence of effect modification by recruitment PHC for this outcome (p=0.052).

Table 39: Summary and stratified results estimates for Secondary outcome c.

Timely initiation of effective modern contraception							
	Intervention: n [%]	Control: n [%]	RD adjusted by PHC: [%]	95% C.I. - upper bound:	95% C.I. - lower bound:	P-value	
Summary estimates (whole sample):							
	249 [75.7]	188 [66.9]	7.6	0.2	15.0	0.044	
Estimates stratified by recruitment PHC:							
Bolomakote	44 [77.2]	27 [87.1]	-9.9	-26.0	6.2	0.227	
Guimbi	46 [76.7]	38 [60.3]	16.4	0.2	32.5	0.047	
Ouezzinville	56 [69.1]	56 [65.9]	3.3	-11.0	17.5	0.654	
Sarfalao	55 [74.3]	33 [71.7]	2.6	-13.8	19.0	0.757	
Secteur 24	48 [84.2]	34 [60.7]	23.5	7.6	39.4	0.004	
Likelihood Ratio Test for interaction:			p=0.052				

9.4.13. Sensitivity analysis for Secondary outcome c. (timely initiation) based on the timing of menses return

Due to my concerns related to the quality of the data on the timing of the return of menses (see Subchapter 9.4.2), I performed a sensitivity analysis, dropping from the analysis of timely initiation the data from women with implausibly early dates for the return of menses. The data were therefore dropped for 196 women who had at least one live baby and were breastfeeding at 3 months postpartum, but reported that their menses returned less than 2 months (61 days) postpartum.

Among those excluded, 96 (49.0%) were from the intervention group and 100 (51.0%) from the control group. No substantial differences were found between the women excluded and the rest of the sample as far as recruitment PHC is concerned. The same applies for education, ethnicity, and religion. These women were somewhat more likely to be aged 15-24 (52% versus 43% in the whole sample) and slightly more likely to have just had their first baby (27% versus 21%). These factors may explain why some of them may have been less knowledgeable about when to expect the return of menses after childbirth. Fewer of these women were working outside the home at the time of enrolment in the study (51% versus 61%). A higher proportion of those excluded were using FP at 8 months postpartum, compared to the whole sample (90% versus 68%). However, these differences should be interpreted with caution, given the small numbers involved.

The results presented in the right-hand column of Table 40 are therefore based on data for 460 women who were using effective modern contraception, out of the 610 with complete data for the timely initiation calculation (233 from the intervention group and 181 from the control group).

There appears to be very little difference in the estimate of effect between the result of the primary analysis (RD 7.6%) and the sensitivity analysis (RD 7.3%). However, probably because of the loss of power due to a reduced sample size, there is only weak evidence for an effect of the intervention in the sensitivity analysis (p=0.090).

Table 40: Sensitivity analysis for Secondary outcome c.

Timely initiation of effective modern contraception	Primary analysis (RD adjusted by PHC)	Sensitivity analysis (RD adjusted by PHC)
	7.6% (95% C.I. 0.2 – 15.0, p=0.044)	7.3% (95% C.I. -1.2 – 15.8, p=0.090)

9.4.14. SECONDARY OUTCOME d.: Unmet need for contraception at 8 months postpartum

The results presented in this Subchapter are based on data from 1099 women out of the 1115 followed up at 8 months postpartum (560 from the intervention group and 539 from the control group). This includes 12 women who were pregnant at 8 months postpartum, 4 of whom were classed as having a need for FP based on the wantedness of their current pregnancy. I excluded 16 women who were no longer married or no longer had a male partner (8 per arm).

As described in Subchapter 5.3.1, I used the DHS definition of unmet need, which was used includes pregnant women in the denominator, but applies only to married women (Bradley et al., 2012).

For the whole sample, the proportion of women with an unmet need for contraception at 8 months postpartum was lower, at 14%, in the intervention arm, compared to 19% in the control

arm (Table 41). A binomial regression, adjusting by recruitment PHC, found a Risk Difference (RD) of -4.8 percentage points between the two arms, with some evidence for this effect (95% C.I. -9.2 - -0.5, p=0.030). This suggests that the intervention reduced unmet need for contraception.

A stratified analysis by recruitment PHC was also run, using binomial regression. This shows that the direction of effect was negative in all health centres, except for one, where it was positive (Secteur 24). However, there was some evidence of a negative effect in one PHC (Bolomakote), weak evidence in another (Sarfalao), and no evidence in the other three. The PHC showing the negative effect had the highest level of unmet need in the control/baseline group (26%). The Likelihood Ratio Test produced no evidence of effect modification by recruitment PHC for this outcome (p=0.125).

Table 41: Summary and stratified results estimates for Secondary outcome d.

Unmet need for contraception at 8 months postpartum								
	Intervention: n [%]		Control: n [%]		RD adjusted by PHC: [%]	95% C.I. - upper bound:	95% C.I. - lower bound:	P-value
Summary estimates (whole sample):								
	79	[14.2]	101	[18.7]	-4.8	-9.2	-0.5	0.030
Estimates stratified by recruitment PHC:								
Bolomakote	10	[11.3]	21	[25.9]	-14.7	-26.3	-3.1	0.013
Guimbi	9	[9.4]	17	[16.0]	-6.7	-15.8	2.4	0.151
Ouezzinville	26	[16.8]	28	[17.5]	-0.7	-9.1	7.6	0.864
Sarfalao	14	[12.4]	19	[21.8]	-9.5	-20.1	1.2	0.080
Secteur 24	20	[18.7]	16	[15.2]	3.5	-6.5	13.5	0.502
Likelihood Ratio Test for interaction:					p=0.125			

9.4.15. Unmet need for contraception at 8 months postpartum: Further detail

The breakdown of the need for FP by type of need (for limiting or for spacing), and by whether the need is met, is provided here.

The data show that the total need for FP was slightly higher in the control group (68%) compared to the intervention group (65%). Just over half of all women in the sample (53-54%) had a need for spacing, whereas a smaller proportion, 11% in the intervention group and 14% in the control group, had a need for limiting. About three quarters of the need for spacing were met in both groups, a slightly higher proportion in the intervention group (79% versus 76%). As for the need for limiting, 77% was met in the intervention group, versus 59% in the intervention group. However, the number of women with an unmet need was fairly small in both arms, meaning that this difference should be interpreted with caution (Table 42).

Table 42: Need for contraception at 8 months postpartum

	Intervention (n=560)	Control (n=539)
Total need for FP: n [%]	361 [64.5]	365 [67.7]
Need for spacing: n [%]	297 [53.0]	292 [54.2]
Of which met	233 [78.5] *(n=297)*	221 [75.7] *(n=292)*
Of which unmet	64 [21.6] *(n=297)*	71 [24.3] *(n=292)*
Need for limiting: n [%]	64 [11.4]	73 [13.5]
Of which met	49 [76.6] *(n=64)*	43 [58.9] *(n=73)*
Of which unmet	15 [23.4] *(n=64)*	30 [41.1] *(n=73)*

9.4.16. Validity of self-reported contraceptive use

As mentioned in Subchapter 5.5.1, an investigation of the validity of self-reported contraceptive use was carried out for four methods for which an external and easily accessible source of confirmation of prescription or use existed. The results presented in Table 43 are based on data from the women using the pill, injectable, implant or IUD at 3 months postpartum (509 in total, 285 in the intervention group and 224 in the control group), and at 8 months postpartum (613 in total, 330 in the intervention group and 283 in the control group).

Table 43: Validity of self-reported contraceptive use

	Reported users in intervention arm: n	Validity in intervention arm: %	Reported users in control arm: n	Validity in control arm: %
From 3 month data:				
Pill	55	87.3	61	91.8
Injectable	95	76.8	78	68.0
Implant	122	97.5	75	98.7
IUD	13	84.6	10	70.0
All 4 methods	285	88.1	224	84.8
From 8 month data:				
Pill	61	90.2	68	83.8
Injectable	99	73.7	93	75.3
Implant	152	98.7	109	96.3
IUD	18	83.3	13	61.5
All 4 methods	330	88.8	283	84.8

For the total reported users of these four methods, validity of self-report of method use was 88-89% in the intervention group and 85% in the control group, in both follow-up rounds. Hardly any variation was observed between the two follow-up rounds in terms of validity levels.

Validity was lowest for methods which relied on documentation for confirmation, such as the injectable (68-77%) or IUD (62-85%). This could be because women had lost their health booklet or family planning card, or couldn't find it at the time of the interview. Validity was higher for the pill (84-92%), which could be confirmed through visualisation of the packet and pills. These might have been more readily available during the interview as they are used daily. The highest level was seen for the implant, for which the woman carried a physical sign that could be visualised on her own body, wherever the interview took place. Overall, the ready availability and ease of the confirmation method seem to explain the levels of validity seen, and the almost complete validity of implant self-report would suggest that self-report of contraceptive use is made in good faith and is a reliable source of information on use of methods.

There was limited variation between the arms in terms of the validity for individual methods, except for IUDs (12-14% higher in the intervention group in the two rounds), although very few women used this method, so the significance of this finding is uncertain. For the sum of all four methods, the small difference seen between the arms is probably due to the higher share of implant use (the method with the highest validity) among the intervention group (39% versus 32% of contraceptive use at 8 months).

The levels of validity observed during a preliminary assessment that was carried out for the first 100 reported users (mentioned in the protocol, see Subchapter 5.5.1) were reassuring and did not warrant any particular remedial course of action to improve data quality.

9.4.17. Comparison between the contraceptive preference expressed during Components B and C and method use at 8 months postpartum

The preferences expressed by couples participating in intervention components B and C regarding postpartum contraceptive methods have been described in Subchapter 8.3.

Among the 475 women who had attended either B or C (or both), 455 were followed up at 8 months postpartum. Of these, the majority (72.5%) were using a FP method at 8 months postpartum. Women who had originally chosen the implant had the highest level of FP use (79.8%), whereas those who had chosen the pill were least likely to be using FP (64.8%). However, no more than half of those who had expressed a specific preference during the intervention counselling sessions were in fact using the method they had originally chosen. This ranged from 50.3% of those who had chosen the implant, to 25.9% of those who had chosen the pill. Among those who had not expressed a preference for a specific method, 68.1% were using a method by 8 months postpartum (Table 44).

Table 44: Original contraceptive preference and method use at 8 months postpartum

Method preference expressed during Components B & C: n [%]		Using FP at 8 months pp: n [%]	Using method originally chosen: n [%]
Implant	170 [35.8]	130 [79.8] [1]	82 [50.3] [1]
Injectable	75 [15.8]	53 [72.6] [2]	28 [38.4] [2]
Pill	55 [11.6]	35 [64.8] [3]	14 [25.9] [3]
IUD	37 [7.8]	23 [67.7] [4]	10 [29.4] [4]
Other	15 [3.2]	10 [66.7]	-
Preference not expressed	123 [25.9]	79 [68.1] [1]	-
Total attenders at both or either session	475 [100]	330 [72.5] [5]	-

[1] Missing for 7 women. [2] Missing for 2 women. [3] Missing for 1 woman. [4] Missing for 3 women. [5] Missing for 20 women.

9.5. Relationship adjustment

The results presented in this Subchapter are based on data from all 1115 women followed up at 8 months postpartum (568 in the intervention group and 457 in the control group).

9.5.1. SECONDARY OUTCOME e.: High relationship adjustment at 8 months postpartum

As described in detail Subchapter 5.3.1, relationship adjustment was defined as a binary outcome (high or low) based on a composite score taking into account relationship satisfaction, and couple communication and joint decision-making on a variety of issues related to RH.

For the whole sample, the proportion of women with high relationship adjustment at 8 months postpartum was higher, at 58%, in the intervention arm, compared to 49% in the control arm (Table 45). A binomial regression, adjusting by recruitment PHC, found a Risk Difference (RD) of 8.7 percentage points between the two arms, with strong evidence for this effect (95% C.I. 2.9-14.6, p=0.004). This suggests that the intervention increased relationship adjustment.

A stratified analysis by recruitment PHC was also run, using binomial regression. This shows that the direction of effect was positive in all health centres, with strong evidence of effect in one PHC (Ouezzinville) and no evidence in the others. The Likelihood Ratio Test produced no evidence of effect modification by recruitment PHC for this outcome (p=0.594).

Table 45: Summary and stratified results estimates for Secondary outcome e.

High relationship adjustment at 8 months postpartum						
	Intervention: n [%]	Control: n [%]	RD adjusted by PHC: [%]	95% C.I. - upper bound:	95% C.I. - lower bound:	P-value
Summary estimates (whole sample):						
	323 [57.7]	263 [48.8]	8.7	2.9	14.6	0.004
Estimates stratified by recruitment PHC:						
Bolomakote	51 [57.3]	44 [54.3]	3.0	-12.0	17.9	0.696
Guimbi	56 [58.3]	51 [48.1]	10.2	-3.5	23.9	0.144
Ouezzinville	94 [60.7]	72 [45.0]	15.7	4.8	26.5	0.005
Sarfalao	65 [57.5]	47 [54.0]	3.5	-10.4	17.4	0.621
Secteur 24	57 [53.3]	49 [46.7]	6.6	-6.8	20.0	0.335
Likelihood Ratio Test for interaction:			p=0.594			

9.5.2. Relationship adjustment: Further detail

The data show that 8 women (1-2%) in each arm were no longer in union with a male partner at 8 months postpartum. Among the rest, a minority had temporarily lived away from her male partner after birth, 6-7% with their in-laws and 8-9% with their own families. This may be linked to the traditions of postpartum spousal separation that persist among some families, or to

the wish to seek help with baby care. About half of these women were primiparae, compared to a fifth in the whole sample. 17 women were still in postpartum separation at time of 8-month interview. There were no substantial differences on this issue between the study arms (Table 46).

Table 46: Relationship adjustment at 8 months postpartum

	Intervention (n=568)	Control (n=547)
Woman does not have a husband/ male partner at 8 months pp: n [%]	8 [1.4]	8 [1.5]
Woman temporarily lived away from husband/male partner after birth: n [%] [1]		
With in-laws	35 [6.3]	36 [6.7]
With own family	45 [8.0]	46 [8.5]

[1] Data not collected for women no longer in union (8 in the intervention group and 8 in control).

9.6. Satisfaction with routine care

The data presented in Table 47 corresponds to all 1101 women followed up at 3 months postpartum (560 from the intervention group and 541 from the control group).

9.6.1. SECONDARY OUTCOME f.: Complete satisfaction with routine care

As described in detail in Subchapter 5.3.1, satisfaction with routine care during pregnancy, birth and the postpartum period was defined as a binary outcome (completely or not completely satisfied) based on a composite score taking into account issues such as confidentiality, respectful care, and the availability of staff to answer questions. We deliberately avoided questions directly related to the intervention, in order to ensure comparability between the two arms.

For the whole sample, the proportion of women with complete satisfaction with routine care was no different, at 74%, in the intervention arm, compared to 73% in the control arm (Table 47). A binomial regression, adjusting by recruitment PHC, found a Risk Difference (RD) of 0.4 percentage points between the two arms, with no evidence for this effect (95% C.I. -4.8 – 5.6, p=0.870). This suggests that the intervention had no effect on satisfaction with routine care.

A stratified analysis by recruitment PHC was also run, using binomial regression. This shows that there was a positive effect in one health centre (Bolomakote) and close to no effect in all others, with no evidence of effect in any PHC. The Likelihood Ratio Test produced no evidence of effect modification by recruitment PHC for this outcome (p=0.927).

Table 47: Summary and stratified results estimates for Secondary outcome f.

Complete satisfaction with routine care						
	Intervention: n [%]	Control: n [%]	RD adjusted by PHC: [%]	95% C.I. - upper bound:	95% C.I. - lower bound:	P-value
Summary estimates (whole sample):						
	413 [73.8]	395 [73.0]	0.4	-4.8	5.6	0.870
Estimates stratified by recruitment PHC:						
Bolomakote	59 [66.3]	52 [61.2]	5.1	-9.2	19.4	0.482
Guimbi	72 [75.8]	80 [76.2]	-0.4	-12.3	11.5	0.947
Ouezzinville	111 [72.6]	112 [71.3]	1.2	-8.8	11.2	0.812
Sarfalao	90 [78.3]	68 [77.3]	1.0	-10.6	12.5	0.867
Secteur 24	81 [75.0]	83 [78.3]	-3.3	-14.6	8.0	0.568
Likelihood Ratio Test for interaction:			p=0.927			

9.7. Sensitivity analyses based on follow-up timing

According to the protocol, women were supposed to be followed up at 3 months postpartum for the first round, and at 8 months postpartum for the second round. In order to follow-up as many women as possible, interviewers were instructed to interview them as close to the 3-month mark as possible, but also to make repeated attempts to contact them and to conduct the interviews later, rather than not at all. As a result, there is some variation in the timing with which the interviews actually took place.

Timing of the first follow-up interview

The number of completed months of life of the child at the time of administration of the first follow-up questionnaire, also expressed in terms of the month underway since birth, is shown in Table 48 by study arm.

The table shows that the majority of women in both arms were followed up within one month earlier or later of the date when 3 months exactly had passed since the birth. Approximately 10-12% of women were followed up later (during the 5th and 6th months since birth). There are no noteworthy differences in this respect between the two study arms.

Table 48: Timing of first follow-up interview

Completed months of life of the child (month underway since birth)	2 completed months (3rd month)	3 completed months (4th month)	4 completed months (5th month)	5 completed months (6th month)
Intervention: N [%] followed up	179 [32.0]	323 [57.7]	38 [6.8]	20 [3.6]
Control: N [%] followed up	147 [27.2]	325 [60.1]	44 [8.1]	25 [4.6]

Timing of the second follow-up interview

The number of completed months of life of the child at the time of administration of the second follow-up questionnaire, also expressed in terms of the month underway since birth, is shown in Table 49 by study arm.

The table shows that the majority of women in both arms were followed up within one month earlier or later of the date when 8 months exactly had passed since the birth. Only 6 women were followed up during the 7th month, and approximately 7% of women were followed up later (during the 10th and 11th months since birth). There are no noteworthy differences in this respect between the two arms.

Table 49: Timing of second follow-up interview

	Completed months of life of the child (month underway since birth) N [%] followed up				
	6 (7th)	7 (8th)	8 (9th)	9 (10th)	10 (11th)
Intervention	3 [0.5]	195 [34.3]	330 [58.1]	29 [5.1]	11 [1.9]
Control	3 [0.6]	173 [31.6]	330 [60.3]	29 [5.3]	12 [2.2]

Sensitivity analyses

For all outcomes, we included all women at each round in our primary analysis, regardless of the timing of follow-up. However, we performed sensitivity analyses for the first round of follow-up by excluding women followed up during the 5th and 6th months, and for the second round of follow up by excluding women followed up during the 7th, 10th and 11th months postpartum.

With respect to EBF, this decision was driven by the fact that EBF has been shown to decrease substantially from the 5th and 6th month after birth (INSD, 2012) and therefore our concern was to measure this outcome during the best window of time, when women are most likely to follow this recommendation, thus maximising our chance to observe an effect.

Table 50 compares the risk differences calculated through the primary analyses and those resulting from the sensitivity analyses.

Comparison between primary and sensitivity analyses for outcomes measured at 3 months postpartum

The sensitivity analysis for outcomes measured at 3 months involved the elimination of the data from 127 women. Among those excluded, 58 (45.7%) were from the intervention group and 69 (54.3%) from the control group. No substantial differences were found between the women excluded and the rest of the sample as far as recruitment PHC is concerned. The same applies for age, education, ethnicity, religion, parity and occupation.

As shown in Table 50, for postnatal care and exclusive breastfeeding, the exclusion of these women made little difference. For exclusive breastfeeding, the slightly lower magnitude of the effect seen in the sensitivity analysis can be explained by the fact that there was a larger difference between the study arms in terms of exclusive breastfeeding among the women excluded (34.7% versus 12.3%), compared to the sample as a whole (43.4% versus 31.5%). This suggests that the intervention is still effective, or possibly most effective, after 3 months postpartum, and that women in the intervention group may further delay the supplementation of breastfeeding with other liquids and foods. The sensitivity analysis does not produce different results for Secondary outcomes b.(1) (any family planning at 3 months postpartum), or f. (satisfaction with care).

Comparison between primary and sensitivity analyses for outcomes measured at 8 months postpartum

The exclusion involved 87 women, 6 of whom were followed up in the 7th month, and 81 in the 10th and 11th months since birth. 43 (49.4%) of the excluded women were from the intervention group, and 44 (50.6%) from the control group. No substantial differences were found between these women and the rest of the sample in terms of age, education, religion, parity, and occupation. Slightly more women were recruited at the Bolomakote health centre (20.7% versus 15.3%) and fewer from Secteur 24 (12.6% versus 19.2%). Slightly more were from the Bobo ethnic group (24.1% versus 19.1%) and fewer from the Mossi ethnic group (39.1% versus 45.7%). However, because of small numbers, these differences should be interpreted with caution.

The exclusion of these 87 women appears to somewhat reduce the magnitude of the effect of the intervention on the outcomes related to contraception measured at 8 months postpartum, and in particular on Primary outcome c. and Secondary outcomes a., b.(2), and d. The effects on the use of effective modern contraception, any contraceptive method and unmet need at 8 months are not statistically significant in the sensitivity analysis. This can be explained by the fact although the excluded women were overall less likely to be using contraception at 8 months postpartum compared to the overall sample (57.7% versus 67.5%), the proportion using contraception was substantially higher in the intervention women than in the control women (74.4% versus 40.5%), a starker difference compared to the whole sample (70.6% versus 64.4%). This appears to suggest that the intervention is still effective, or possibly most effective, on women who are more than 9 months postpartum (Table 50).

The sensitivity analysis does not produce different results for Secondary outcomes c. (timeliness of initiation of effective modern contraception) and e. (high relationship adjustment).

Table 50: Results of sensitivity analyses based on follow-up timing

	Primary analysis (RD adjusted by PHC, %)	Sensitivity analysis (RD adjusted by PHC, %)
Primary outcomes:		
Attendance at scheduled postnatal care (at least 2 consultations)	11.7 (95% C.I. 6.0 – 17.5, p<0.001)	10.3 (95% C.I. 4.2 – 16.4, p=0.001)
Exclusive breastfeeding at 3 months postpartum	11.4 (95% C.I. 5.6 – 17.2, p<0.001)	9.9 (95% C.I. 3.8 – 16.1, p=0.002)
Use of effective modern contraception at 8 months postpartum	6.4 (95% C.I. 0.5 – 12.3, p=0.033)	4.0 (95% C.I. -2.1 – 10.1, p=0.202)
Secondary outcomes:		
Use of long acting or permanent (LA/PM) methods of contraception at 8 months postpartum	8.1 (95% C.I. 2.9 – 13.4, p=0.002)	6.8 (95% C.I. 1.4 – 12.3, p=0.014)
(1) Any contraceptive use at 3 months postpartum (2) Any contraceptive use at 8 months postpartum	7.7 (95% C.I. 1.2 – 13.6, p=0.011) 6.5 (95% C.I. 1.0 – 12.1, p=0.021)	7.4 (95% C.I. 1.1 – 13.7, p=0.021) 4.3 (95% C.I. -1.4 – 10.1, p=0.142)
Timely initiation of effective modern contraception	7.6 (95% C.I. 0.2 – 15.1, p=0.044)	7.7 (95% C.I. 0.1 – 15.3, p=0.048)
Unmet need for contraception at 8 months postpartum	-4.8 (95% C.I. -9.2 – -0.5, p=0.030)	-2.7 (95% C.I. -7.2 – 1.8, p=0.239)
High relationship adjustment at 8 months postpartum	8.7 (95% C.I. 2.9 – 14.6, p=0.004)	9.0 (95% C.I. 2.9 – 15.1, p=0.004)
Complete satisfaction with routine care	0.4 (95% C.I. -4.8 – 5.6, p=0.870)	0.1 (95% C.I. -5.5 – 5.6, p=0.983)

9.8. Discussion

The Discussion will begin with general considerations, followed by sub-sections that focus on the results for the main outcome areas.

9.8.1. General considerations

The intervention has a positive effect on all indicators, except for satisfaction with care, for which no effect was expected. The size of the effects was reported as Risk Differences and ranged from about 5 to 12 percentage points. There are several potential reasons why we did not observe an even higher effect. First of all, despite high adherence there were still a substantial number of intervention group couples who did not attend all sessions. This is a risk inherent in all trials of behavioural-educational interventions that rely to a large degree on participant motivation. Low uptake essentially counts as cross-over from the intervention to the control group. In analysis by intention-to-treat, this inevitably leads to substantial dilution towards the null of effect estimates. Higher coverage than we were able to achieve might have led to larger effects.

Another consideration is that, because of time constraints, we commenced data collection almost immediately after health workers had been trained, after only a short pilot period. Several health workers, especially those who did not participate in our formal training workshops, were still learning on the job how the intervention sessions should be provided. Based on the information collected during monitoring and supervision, the smooth running of the study activities in each PHC definitely improved over the course of the implementation period. Had we been able to allow for a longer adaptation period, habit and practice might have improved performance and therefore resulted in higher intervention effects. This might be the case in a real life scenario in which such an intervention were implemented over a longer period of time. Of course, there are also reasons why effectiveness might be lower in real-life situations, not least the absence of additional resources and less supervision and support. For further discussion of these issues see Subchapter 11.5.

Due to the nature of the intervention and the limited opportunities for blinding, there was also a small but real risk of contamination inherent in the choice of an individually-randomised study design. This would have essentially counted as treatment switching from the control to the intervention group, and may have played a role in limiting the size of the effects observed. In the case of certain indicators, our results showed a considerably different picture, both for the intervention and for the control arms, from the baseline levels that we identified based on the latest DHS and other studies. It is likely that there have been some increases in PNC attendance and FP uptake since the previous studies from which we extracted baseline levels (our findings do not suggest substantial contextual improvements in EBF). However, it is also possible that

contamination between the study arms may have led to higher levels of PNC and FP use in the control group, compared to the general population.

Effective monitoring procedures were in place to reduce non-compliance with the assigned treatment and these were almost entirely successful in preventing the attendance of control-group participants in the intervention sessions. Therefore, any contamination is likely to have occurred during informal contact in the community between women and men from the two arms. It is possible that couples from different groups might have lived close to each other or come into contact under other circumstances which might have led to them discussing the study. The focus on men may have increased the likelihood of this happening, given that men spend more time out of their homes and may have wider social networks. In general, it would be useful for future studies to collect good quality observational data from the population in Bobo Dioulasso, in order to assess baseline levels for the most important MNH and FP outcomes, and to provide a benchmark for future intervention studies.

Another issue to reflect upon is the presence of interaction. Our results suggest that the effect on certain outcomes differed substantially by recruitment PHC. In particular, there was evidence of interaction for the use of effective modern contraception (primary outcome c.), any contraceptive use at 3 and 8 months (secondary outcome b.) and timely initiation of effective modern contraception (secondary outcome c.). It is interesting to consider why we observed evidence of effect modification for these outcomes and not for others. In particular, we found no evidence of effect modification for the use of LARC methods (secondary outcome a.). The available data seems to indicate that the intervention increased the uptake of long-acting methods in all PHCs, whereas the effect varied for other FP methods. However, it is useful to bear in mind the low power of the Likelihood Ratio Test for interaction, which suggests that there might have been interaction for other outcomes but insufficient evidence to show it.

In order to explore the reasons for the presence of interaction, I looked at whether there were any differences in baseline characteristics between the two study arms in each recruitment PHC, and identified some differences for six factors (type of marriage, ethnicity, school, work, parity, and prior use of contraception). These were identified through visual inspection, with no statistical testing due to the small numbers in many of the categories. For reference, the relevant Table can be found in Appendix 1. I then ran the stratified analysis for each primary and secondary outcome with the addition into the model of these six baseline characteristics. However, this additional adjustment did not change my findings with respect to interaction by recruitment PHC, suggesting that these differences do not explain the interaction seen. Therefore, the results presented in this chapter are from the simpler model. We therefore must assume that the presence of interaction is either due to unmeasured population-level differences, or to differences inherent in the PHCs themselves (size, supplies, management structure, work

ethic), or in the way they implemented the intervention (emphasis on certain health messages rather than others, leadership). The qualitative process evaluation explored some of these factors (see Chapter 10).

In relation to the validity of the data collected, it is important to point out that for certain secondary outcomes, namely relationship adjustment, timely initiation of contraception and satisfaction with routine care, the measures of effect used were not validated, and therefore the findings, will positive, must be interpreted with caution and considered exploratory. It is also important to consider the role of biases such as recall bias and social desirability/courtesy bias. It is possible that recall bias may have come into play in relation to events that occurred in the past, for example in the 8-month data concerning the timing of resumption of intercourse. However, it is unlikely that this bias would have had a differential effect by study arm. On the other hand, courtesy bias may have substantially affected responses related to satisfaction, and intervention group women may have been more likely to report desired breastfeeding practices in order to please the interviewer. This might have been compounded by the impossibility of blinding participants and data collectors to treatment allocation, a limitation which was inherent in the nature of the intervention. In the interviews, we don't know in what way knowledge of arm assignment may have influenced participant responses, or interviewer interpretation of their responses.

As far as BF is concerned, however, these factors are unlikely to have substantially biased the results, given that the focus on BF was not exclusive, several health topics were covered during the intervention sessions, and the interviewers enquired about a wide range of health behaviours. Social desirability bias is unlikely to differ by study arm for this outcome, given that most women, including those in the control group, would have received BF advice before or after birth and therefore been aware of recommended practices. In addition, we observed high levels of validity in both arms in relation to reported FP use (see Subchapter 9.4.16), and it is possible that the same applies to BF and other outcomes. As described, efforts were made to reduce these biases by field testing questionnaires and training interviewers in interpersonal communication skills.

9.8.2. Maternal and neonatal health outcomes and postnatal care

The number of ANC visits attended and the level of facility births correspond to our knowledge about the setting (see Subchapter 1.3.4). One unexpected finding was the high proportion of referral facility births, which is almost certainly due to the woman's choice for the most part, rather than to referral from PHCs. That these were mostly low-risk births is corroborated by the very low overall C-section rate. The fact that over a third of women are discharged on the day of birth is contrary to international recommendations for women and newborns to stay in the facility for 24 hours (World Health Organization, 2014), and is especially concerning given that

nearly half reported not having a postpartum check-up prior to discharge. Despite this being an urban sample, unfortunately the numbers of maternal and neonatal deaths observed rates don't appear to be lower than national estimates (see Subchapter 1.3.4). Early neonatal mortality did not differ between the two arms, however it is interesting to see that, although the study was not powered for these outcomes, we observed a small improvement in the survival of older newborns and infants in the intervention group, which could be due to improved breastfeeding practices or more postnatal check-ups.

Our results show that about half of all women attend two PNC appointments in the control group, which is considerably higher than our baseline estimate of 30% (Daniele). The fact that most women reported attending for a check-up, rather than for a specific problem, would suggest that many women are aware of the importance of attending even if feeling well, in contrast with what was found in Ouagadougou (Rossier and Hellen, 2014). These considerations may suggest the existence of positive trends over time, however there could also have been some contamination between the two study arms. Some misreporting of the 2-month infant vaccination appointment as PNC may have occurred (Ministère de la Santé, 2010d). However, this seems unlikely to have played a major role, given that the question on PNC specifically enquired about whether women had attended a health check-up during which they were examined to see whether they had recovered after giving birth (see Appendix 5). It is also worthy of note that PNC is mostly provided at primary care level, despite the fact that one third of study participants gave birth in hospitals. This can be considered a positive factor in preventing the overload of referral facilities, at least as far as routine check-ups are concerned.

The results suggest that the intervention has a positive effect on PNC. The magnitude of the effect seen on PNC attendance is similar to that observed in Mullany's 3-arm RCT in Nepal (61% vs 47%), which also involved men in facility-based educational sessions, though the outcome was defined as attending one PNC session (Mullany et al., 2007). Only two other studies of male involvement interventionsshowed a positive impact on this outcome (Salim Al Rabadi, 2015, Santhya et al., 2008). An observational study in Zambia also found that male participation in ANC had a positive effect of similar magnitude on PNC attendance (Kashitala et al., 2015). The paucity of evidence on the effect of male involvement on PNC attendance makes our result particularly valuable.

However, there is room for further improvement, as about a fifth of women did not attend PNC at all, and PNC coverage still lags behind ANC and facility delivery. The reasons for this may include lower awareness about PNC and its importance, the failure of health workers to recommend attendance, family-imposed restrictions on women's movement, ill-health or weakness after birth which make it difficult to attend (Rossier and Hellen, 2014, Daniele, 2014). While the involvement of men in facilities is promising, it might be necessary to introduce

additional demand-stimulating activities at the community level involving men, families and communities. On the service-delivery side, it would be important to adapt the existing policy to incorporate the recent recommendations issued by WHO on the timing of PN contacts and the introduction of home visits (World Health Organization, 2014).

9.8.3. Infant feeding

Exclusive breastfeeding at 3 months was somewhat higher in the control group compared to our baseline estimate of 25% (INSD, 2012), however our definition was slightly different from that used in the DHS survey. The magnitude of effect of our study on this outcome is comparable, and in some cases larger, than that seen in similar facility-based studies that found a positive effect on continuation. In Pisacane's trial of a postnatal educational session for men, 25% were fully breastfeeding at 6 months, compared to 15% in the control group (Pisacane et al., 2005). Other hospital-based studies showed smaller yet significant effects on any BF, but not EBF. Maycock's hospital-based father support programme in Australia increased any BF at 6 weeks to 85% compared to 75% (Maycock et al., 2013), whereas Abbas-Dick's co-parenting intervention in Canada increased any BF at 12 weeks from 88% to 96% (Abbass-Dick et al., 2014).

The results suggest that the intervention has a positive effect on the continuation of EBF. The intervention may have worked through several mechanisms of action, including the male partner's increased awareness of the importance of EBF and his direct influence on feeding practices through communication with the mother, or his indirect influence through persuading his own mother or other family members. This type of mechanism was documented in a study conducted in Turkey, in which women reported that husbands had joined them in resisting family pressure, enabling them to adhere to the recommended breastfeeding practices (Sahip and Turan, 2007). As mentioned in the description of the Conceptual Framework (Subchapter 4.3), there could also have been an indirect pathway for our intervention to have an effect through increased postnatal contact with health workers, during which the woman/couple received additional information and support on infant feeding.

Regardless of our positive result, it is clear that more work is needed to increase the practice of EBF in this context, given that even in our intervention group, less than half of women were practicing EBF at 3 months postpartum, about half were giving herbal infusions and nearly a third were giving water. Aside from male involvement, this could include direct work with mothers in law (Aubel et al., 2004) or other community-based promotional activities which could involve community health workers (Bhandari et al., 2003) or peer counsellors (Penfold et al., 2014, Tylleskar et al., 2011). Quality of care initiatives, such as improving the quality of infant feeding counselling, could also be useful (Fadnes et al., 2010). As mentioned, increasing ANC and PNC attendance may also have a positive impact on EBF rates.

9.8.4. Postpartum family planning

As for contraception, over half of women were using effective modern contraception at 8 months postpartum in both arms of our study, a large contrast with our baseline estimate of 20% (Ganaba et al., 2010). Even in the more recent PopDev study, less than 30% were using a modern method at 8 months (PopDev, *internal communication*). The exclusively urban location of our study may have somewhat contributed to our higher estimates, though contamination is another possible explanation. The latter may also explain the modest, albeit significant, effect of the intervention on this outcome. Interestingly, only 11-14% in our study reported not using contraception because of the husband's opposition, whereas in the PopDev study 35% of those not using a method reported this reason (PopDev, *internal communication*). This too might be due to higher baseline levels of education and awareness among husbands in our urban setting. Although contamination may have played some role, it is unlikely to be a sufficient explanation, given the magnitude of the difference between our results and baseline estimates.

The results suggest that the intervention has a positive effect on the use of effective FP methods, that women are more likely to start using them in a timely fashion, and less likely to be in a condition of unmet need at 8 months postpartum. However, I would argue that the most important finding related to contraception is the fact that a higher proportion of women in the intervention arm were using LARC methods, which are far less prone to user-related failure (World Health Organization, 2015a). It would have been interesting to see whether, in the long run, this might result in longer birth intervals in the intervention group. Beyond the scope of this study, this is an important finding because although increasing numbers of women in Sub-Saharan Africa wish to limit future births (United Nations DoEaSA, 2015), the majority are using short-acting methods (Van Lith et al., 2013).

There are several possible reasons why we see a higher use of LARC in our intervention arm. This could be because these methods are more expensive, and the man's agreement might make this choice more likely as he may be able to pay for them up front. The implant insertion site is visible, so women may be more willing to choose this method if their partner agrees. Furthermore, the development of PPFP plans prior to or soon after delivery may have somewhat anticipated the initiation of contraceptive use in the intervention group. In the case of LARC, this would have enabled couples to reflect on choosing a more effective method and perhaps to put aside the necessary money. However, as shown in Subchapter 9.4.17, having expressed a method preference or not during the intervention sessions did not seem to affect the use of any method at 8 months, and the choice of a specific method appears to have been an unreliable predictor of actually using that method.

Implants surpass injectables as the most popular method both in the intervention and in the control arm. This is interesting because injectables have driven most of the recent rise in

contraceptive prevalence in the region (Sutherland et al., 2011). The popularity of the implant in our sample could be due to the fact that health workers in participating PHCs may have recently had technical updates and training on implant insertion. It could also be due to shifts in demand linked to this being a new and effective method. The intervention materials were not particularly focused on this method. On the other hand, the IUD continues to be little used, corresponding to country-level estimates (INSD, 2012). It is possible that lack of provider knowledge, experience, and skill in providing PPIUD can explain the low level of use (Rupley et al., 2015). Efforts are underway to train providers and expand access to this method in Burkina Faso (USAID et al., 2014). Overall, a change in regulation to ensure that *accoucheuses auxiliaires* can provide LARC would also be needed, in order to ensure a higher uptake of these methods at country level (World Health Organization, 2012b).

Among studies of hospital-based male involvement interventions that had a positive effect on PPFP, Varkey's of antenatal counselling for men and women in India found a higher level of contraceptive use in the intervention group (45% compared to 55% among multiparae) at 6-9 months postpartum (Varkey et al., 2004). The level of effect is comparable to that achieved in our study, however, in Varkey's case the increase was largely due to higher condom use. A study in Pakistan showed a far higher magnitude of effect on use at 2-3 months (57% versus 6%), however it seems likely that this effect was more due to the provision of FP counselling (versus no information), rather than to the husband's presence (Saeed et al., 2008). The same difficulties in interpretation apply to another study conducted in Egypt (Soliman, 1999). As discussed in Subchapter 3.2.3, Kunene's CRCT in South Africa showed no effect on PPFP (Kunene et al., 2004). In this area too, therefore, our study provides valuable new evidence.

In terms of postpartum return to fertility, the slightly lower level of return of menses by 8 months in our intervention arm might be due to the higher use of implants, which can suppress monthly bleeding, or to the higher prevalence of EBF. However, in both arms, the median timing of menses return appears to be unrealistically early for women who are breastfeeding frequently and for many months (Zhang et al., 2002, Lewis et al., 1991). According to the DHS, the median duration of amenorrhea is 9 months in urban areas (INSD, 2012). I discussed the issue with the field coordinator, who said that some women may have misunderstood the end of their postpartum bleeding for the return of their periods. There was no notable difference in the distribution of women with implausibly early menses by RA conducting the interview, compared with the overall sample. However, the sensitivity analysis for the secondary outcome that was partly based on these data, timely initiation of effective contraception, did not produce different results from the primary analysis.

Although unlikely to differ by study arm, recall bias may also have been a problem with the data on menses return, as well as with the data concerning the timing of intercourse resumption

and FP initiation. In regard to the resumption of intercourse, the duration of sexual abstinence was shorter than anticipated based on our baseline estimates (see Subchapter 5.5.1). This resulted in the Subgroup analysis being conducted on a smaller sample of abstinent women, reducing our power to reach an answer on the differential effect of the intervention based on sex resumption. Desired future children and timing of the next pregnancy correspond to available data from the DHS regarding ideal family size and wish for spacing in this context (INSD, 2012).

9.8.5. Relationship adjustment

In this study, relationship adjustment was defined as the level of communication and shared decision-making within couples on reproductive health issues. The difference seen in the level of relationship adjustment between the intervention and control arms provides support for our theory of change and for the conceptual framework underpinning the study. We hypothesised that the intervention would increase communication and shared decision-making between spouses, and that this in turn would enable and encourage women to adhere to health workers' advice, such as returning for PNC, and to adopt recommended behaviours, such as EBF. It is likely that the couple counselling sessions provided opportunities for couples to initiate conversations on issues that they were not used to discussing openly together.

The increase in relationship adjustment seen in our study adds to the body of evidence suggesting that gender-aware and specifically gender-transformative male involvement programmes can increase men's sensitivity and respect for women's needs, and even begin to challenge beliefs and behaviours that are rooted in patriarchal gender roles. Increased levels of communication between spouses have been reported both in qualitative (Turan et al., 2001, Hartmann et al., 2012) and in quantitative evaluations (Tilahun et al., 2015, Varkey et al., 2004). Some studies have even found an effect on gender roles, symbolised by the participation of men in housework (Comrie-Thomson et al., 2015a). The impact of our intervention on relationship adjustment is positive, however more intensive interventions, involving more sessions, are likely to be able to achieve more substantial and longer-lasting shifts in gender norms (World Health Organization, 2007a). Overall, the relationship adjustment result contributes to our understanding of the impact that the intervention had on the couple relationship and reassures us that this was overall positive.

It is important to note that our measure of relationship adjustment, while drawing from existing tools, was not validated, nor was it possible to do so in the course of this study. The implication is that the findings related to this outcome should be regarded as exploratory, and further research is warranted. Another limitation is that we did not measure men's knowledge, the other important aspect of the Conceptual Framework (Subchapter 4.3). However, it is likely that

relationship adjustment, in combination with increases in men's knowledge, contributed to the effect seen on the other indicators.

10. *PHASE 3*: QUALITATIVE PROCESS EVALUATION RESULTS

In this Chapter I will present the results of the qualitative process evaluation (*Phase 3*), which involved semi-structured interviews with health workers, men and women. I will begin with a description of the characteristics of interviewees (Subchapter 10.1). I will then present the results based on the main themes emerging from the data, thus covering the influences on adherence to the intervention (10.2), participant experience and appreciation of the quality of sessions (10.3), the plausible pathways from participation to behaviour change (10.4) and the management and implementation challenges faced by PHC health workers (10.5). I will end the Chapter with a Discussion of the findings (10.6).

10.1. Characteristics of semi-structured interview participants

As described in the Subchapter 5.4, a total of 40 semi-structured interviews were carried out with a sample of individuals who had been involved in the study in different capacities. 10 health workers, 15 men and 15 women were interviewed.

Two health workers were interviewed from each participating PHC, one of whom was a contact person. Three were midwives, and the rest *accoucheuses*. Two had not participated in the formal training organised at AfricSanté. All interviewees had experience of conducting all three of the intervention components (A – group discussion, B – couple counselling in pregnancy, C – 6th hour PP consultation with male partner). However, only four had also taken part in the initial recruitment of study participants. All but two health workers who were initially approached accepted to take part. Those who refused were *accoucheuses* from Bolomakote and Ouezzinville, their reasons being general unwillingness and lack of time. Substitutes with the same characteristics were found for them (Table 51).

Table 51: Health workers participating in semi-structured interviews

PHC	Gender	Profession	Formal training	Contact person	Conducted recruitment	Components provided:		
						A	B	C
Sect 24	F	*Accoucheuse*	N	N	Y	Y	Y	Y
Sect 24	F	Midwife	N	Y	N	Y	Y	Y
O'ville	F	*Accoucheuse*	Y	N	N	Y	Y	Y
O'ville	F	Midwife	Y	Y	N	Y	Y	Y
Guimbi	F	*Accoucheuse*	Y	N	Y	Y	Y	Y
Guimbi	M	Midwife	Y	Y	Y	Y	Y	Y
Sarfalao	F	*Accoucheuse (1)*	Y	N	N	Y	Y	Y
Sarfalao	F	*Accoucheuse (2)*	Y	Y	Y	Y	Y	Y
Bolomakote	F	*Accoucheuse (1)*	Y	N	Y	Y	Y	Y
Bolomakote	F	*Accoucheuse (2)*	Y	Y	Y	Y	Y	Y

The women and men who were interviewed were all part of the intervention group. Men and women were not each other's partners, but represented 30 distinct couples. Men were randomly chosen in a pre-established proportion depending on their level of adherence to the intervention: 3 had attended all 3 intervention components, 5 had attended 2, 4 had attended 1 and 3 had attended none. Women were chosen in a similar proportion based on their/their partners' attendance (4,4,4 and 3, respectively). The characteristics of the 15 men and 15 women are summarised in Table 52 and Table 53, sorted by the number of sessions attended, in descending order. Factors found to be associated with high adherence in the multivariable analysis are included in these Tables (recruitment PHC, past use of FP, monogamy, and birth in a study PHC) (see Subchapter 8.2). Participants were roughly equally drawn from the five PHCs. All names have been changed, however the distribution of Muslim and Christian names was retained.

Among men, the distribution of names suggests that only one or two men were probably Christian, and the rest Muslim. Their ages varied from 29 to 59, and the majority were skilled manual workers, farmers or salesmen. Five men, the oldest, were in polygamous relationships, and for one the index pregnancy had ended in a stillbirth. For two thirds of men, their partners had used FP before, and two thirds had given birth in a study facility. The association of high adherence with monogamy and with past use of FP is not evident from this small sample. Nine men did not attend Component C, even though four their partners gave birth in a study facility.

Among the men initially approached for interview, seven refused and one was out of town. Among those who refused, one had participated in Components A&B (from Guimbi), three had participated in A only (from Secteur 24 and Ouezzinville), and three hadn't participated in any sessions (from Sarfalao and Ouezzinville). Based on the interviewers' reports, it seems these men were not interested or were too busy. They were therefore substituted with others with similar characteristics.

Table 52: Men participating in semi-structured interviews

Name	Recruitment PHC	Age	Profession	FP-Past use	Other details	Components attended:				Study PHC birth
						No.	A	B	C	
Malik	Sarfalao	29	Mobile repairs	N		3	Y	Y	Y	Y
Mamadou	Sect 24	46	Salesman	Y	Polygamy		Y	Y	Y	Y
Soumaila	O'ville	56	Farmer – now not working	Y	Polygamy		Y	Y	Y	Y
Issouf	Guimbi	38	Antiquarian	Y		2	Y	Y	N	N
Alidou	Guimbi	33	Welder	Y			Y	Y	N	N
Boubacar	Bolomakote	30	Electrician	Y	Baby stillborn		Y	Y	N	Y
Pascal	Bolomakote	31	Hotel employee	N			Y	Y	N	N
Boukary	Sarfalao	32	Breeder	N			Y	N	Y	Y
Mohammed	Sect24	52	Farmer	Y	Polygamy	1	Y	N	N	N
Ousseni	Sarfalao	38	Salesman	Y			Y	N	N	Y
Dramane	Guimbi	31	Mechanic	N			N	N	Y	Y
Abdou	Sect 24	52	Salesman - kiosk	Y	Polygamy		N	N	Y	Y
Ibrahim	Sarfalao	37	Salesman	Y		0	N	N	N	Y
Oumar	Bolomakote	34	Farmer	N			N	N	N	Y
Sie	O'ville	59	Rail employee	Y	Polygamy		N	N	N	N

Among women, the distribution of names suggests that four were probably Christian, and the rest Muslim. Their ages varied from 19 to 36, and the majority worked in the informal sales sector or were housewives. Two women were in polygamous relationships, and for one the index pregnancy had ended in a stillbirth. Almost all women had used FP in the past, except for two. In this small sample, polygamous women and those who have never used FP had participated in only one session, or none. Seven women didn't receive Component C, even though in four cases they gave birth in a study PHC. In the case of one woman (Christine), she gave birth at the District Hospital and the PHC health workers came there to deliver Component C.

Among the women initially approached for interview, two refused. They/their husbands had attended one and three sessions, and they were recruited from Secteur 24 and Guimbi respectively. In the first case, the reason was the husband's refusal for the woman to take part in any more interviews, and in the other the woman said she was not available. They were therefore substituted with others with similar characteristics.

Overall, these data suggest that the samples achieved for men and women were broadly reflective of the social and demographic composition of the whole trial sample (see baseline data, Subchapter 7.2).

Table 53: Women participating in semi-structured interviews

Name	Recruitment PHC	Age	Profession	Past FP use	Other details	Components attended:				Study PHC birth
						No.	A	B	C	
Christine	O'ville	29	Informal sales	Y		3	Y	Y	Y	N
Marie	Guimbi	27	Saleswoman - kiosk	Y			Y	Y	Y	Y
Ramatou	Sarfalao	26	Informal sales	Y			Y	Y	Y	Y
Setou	Bolomakote	32	Housewife	Y			Y	Y	Y	Y
Therese	O'ville	36	Hairdresser	Y		2	Y	Y	N	Y
Adjara	Guimbi	36	Housewife	Y			Y	N	Y	Y
Djeneba	Sect 24	30	Housewife	Y			Y	N	Y	Y
Helene	Sarfalao	31	Informal sales	Y			N	Y	Y	Y
Abibata	O'ville	25	Housewife	Y	Polygamy	1	Y	N	N	N
Aisha	Sarfalao	27	Housewife	Y			Y	N	N	Y
Awa	Bolomakote	24	Informal sales	Y			N	Y	N	Y
Bintou	Sect 24	30	Informal sales	Y			N	N	Y	Y
Fatoumata	O'ville	22	Informal sales	N	Polygamy	0	N	N	N	N
Kadidja	Bolomakote	19	Informal sales	N			N	N	N	Y
Rakieta	Guimbi	32	Informal sales	Y	Baby stillborn		N	N	N	N

10.2. Influences on men/couples' attendance at the intervention sessions

10.2.1. The invitation process

In order to invite men/couples to participate in the intervention components, the first step was the recruitment of women into the study during ANC. The success of this step largely depended on the health workers' willingness and ability to carry out the enrolment procedures correctly. It was necessary to explain to the assembled women in the waiting area that when some women exited the consultation room with a sheet of paper (the enrolment checklist, Form A – see Appendix 17), this was part of the enrolment process to a study and had nothing to do with HIV/AIDS. One problem encountered was the initial reluctance of certain women to agree to take part without their husband's prior agreement. Patience and encouragement enabled health workers to explain what participation would involve:

> *There were some women who were a bit hesitant, they wanted to get their husband's opinion before accepting enrolment. By explaining things fully, we managed to convince them to take part. Accoucheuse*, Guimbi

The next step for health workers was calling men to invite them to the group session (Component A). Several reported difficulties in convincing certain men to attend over the

phone. More than one member of staff described rude responses. Other men would initially agree to come, but then cancel or not turn up, making it necessary to reschedule them. In several cases, men's attendance seemed to be highly dependent on the persistence, patience and negotiating skills of individual health workers:

> *There were times when I'd call people who'd just cut me off. But I didn't lose heart. I'd wait a little, and then call the person back. If he wants to cut me off again, I say "listen to me". Gently, by explaining, I managed to get them to come. Accoucheuse(2),* Bolomakote

In several cases, men/couples took part in the sessions thanks to the flexibility of health workers and their willingness to accommodate the men's wishes. For example, in cases where the man was never available at the time of the group session, health workers sometimes invited him to come alone, even out of hours:

> *There was a guy who was only available at night. He was a lorry driver, therefore I came to receive him alone at night.* Midwife, Guimbi

However, there were a few cases of missed opportunities. Men and women reported several instances in which health workers should have offered the sessions but failed to do so. One man reported attending the group session, and said he would have attended the couple counselling session (Component B), but was not told about it. Three men and two women reported that, although the man was in the facility at the time of delivery or came to pick up the woman, he was not called in or they were not counselled together (Component C).

10.2.2. Men and women's general response

Responding to the invitation probably depended to some degree on individuals' personal inclination, interest, and curiosity. Although these testimonies may have been subject to courtesy bias, there was unanimous recognition by all interviewed men, including those who did not attend, that participating would have been a good learning opportunity:

> *I decided to go of my own accord. Because when they give us advice, they give us ideas to better manage our families. You never stop learning*. Soumaila, age 56, 3 sessions

All interviewed women expressed favourable opinions of the programme's effort to involve men:

> *Some men couldn't care less when their wives are pregnant. If you involve them, if you talk with them about this kind of topics, that will really help with making sure that [women] receive good care!* Helene, age 31, 2 sessions

Several women reported that they gave their partners the invitation letter and actively encouraged them to attend the first session:

> *The day I gave him the letter, I told him to do all he could to go to the PHC on the day of the meeting, because you don't know why they are inviting you there. I think the appointment was on a Saturday, at 8 o'clock. He put the envelope down on the table, and then the night*

before, I reminded him and he said he remembered and to give him a missed call with my phone just before it is time to go, and he'll come back from his shop to go there. Ramatou, age 26, 3 sessions

However, in some cases, men attended of their own initiative:

I think he was interested because he has a shop and for every appointment, he remembered by himself and went! If he hadn't been interested, I don't think he would have gone spontaneously. Ramatou, age 26, 3 sessions

The women whose husbands did not attend all reported wishing that they had:

Husbands will learn a lot if they are included in this type of project. It's certainly going to change their habits! That's why I would have liked and it would have made me happy if he'd taken part, but he wasn't able to. Rakieta, age 32, 0 sessions

Although they did not refer to particular cases, health workers said that women known to be HIV-positive, but who had not disclosed their status to their partner, were less likely to accept his presence in the consultation room. They also mentioned a case in which a woman refused to attend for couple counselling, saying she was too busy with her work at the market.

10.2.3. Lack of time/work

Lack of time due to work or being away was the chief reason given for not attending by men who did not attend one or more sessions. As mentioned in Subchapter 5.1.2, Bobo-Dioulasso is a major commercial node, and about a fifth of the male partners of study participants worked in commerce (see baseline data, Subchapter 7.2). Among those interviewed, some were away from the city at the time of the invitation. At least four men/partners were abroad, two in Ivory Coast and two in Ghana. In all other cases where sessions were missed, men were reportedly too busy with work:

I am the one who was unable to go to the appointment. […] My wife told me two or three times. But you see, when you're only just managing to feed your family, everything else becomes optional. All that you care about is putting food on the table. Abdou, age 52, 1 session

I gave him the letter, but he never went! Every time the health workers called him to participate, but he never went because he says he doesn't have time. He is always in his vegetable garden and never at home! Fatoumata, age 22, 0 sessions

A couple of women reported that their husbands left the health centre before they were discharged, and therefore missed the 6th hour consultation. In a couple of cases, it seems men would have been available to attend sessions, either at night or at the weekend, but were not aware that this could have been accommodated. However, one respondent said that his fellow men often refuse to participate and use work as an excuse.

Men's reported lack of time was also a problem among those who turned up for the group session, because participants tended to arrive at different times. Health workers said that in

some cases, men were patient and willing to wait for those who came late. However, others who arrived early became impatient and were eager to leave. Two interviewed women said that their husbands went to the PHC an hour early, and left before the session started. Similarly, in a case described by a health worker, one man got upset and the couple left because of a delay in being seen for couple counselling. At the time, the staff were busy in the labour ward.

10.2.4. Peer/family influence

Men's social networks may have influenced their decision to respond to the invitation. Not all interviewed men spoke to family members or peers about it, but among those who did, some were encouraged to attend by their friends:

> *Around the same time, there was a guy in our group who had just become a dad. He said that he hadn't been lucky enough to be invited. And that if he'd got this letter, we could go together. I told him that perhaps his letter will come later.* Boukary, age 32, 2 sessions

Another said that he was encouraged by his grandmother:

> *She said that if I got this kind of letter, I should go and listen to what they're going to tell me.* Pascal, age 31, 2 sessions

Others were told that they were wasting their time or that attending health facilities was a women's affair:

> *There were actually some people who tried to discourage me, saying that this feminine issue that is pregnancy has nothing to do with me. I replied that it's my first time, I'm going to be brave and go there in order to understand what you need to do in this kind of situation.* Malik, age 29, 3 sessions

However, no men or women reported that peer/family influence was the reason why they or their spouses did not attend sessions.

10.2.5. Birth elsewhere

As discussed in Subchapter 8.1, some women gave birth in one of the referral hospitals, and therefore were not offered the 6th hour postpartum session (Component C). However, in some cases, couples pro-actively contacted health workers to arrange to return to the PHC for the session:

> *One couple went to give birth elsewhere because it was night time, but the guy cared about coming back because we had said to come back for the 6th hour consultation. They came back and I received them. Accoucheuse(1),* Sarfalao

In at least one case, the health worker herself went to the hospital upon the couple's request:

> *I myself went to the CMA [District Hospital] to do a 6th hour couple counselling session over there […]. The man himself requested it saying that they won't leave until we go and hold our counselling session over there.* Midwife, O'ville

10.2.6. Travel money for men

During the intervention design, it emerged that giving travel money would be a culturally appropriate way of showing our appreciation for men's participation. Men were therefore given CFA 1000 at the end of the group session (see Subchapter 6.3.1). Some health workers mentioned this and said they didn't think that it affected attendance at the sessions:

> *No, I don't think it had an effect on their participation. Because it's at the end of the group session that we gave them that. And we told them it was for their fuel. As they were not informed, that's why we gave them this for their fuel. But at the subsequent activities, they wouldn't be given anything else. Therefore they were aware. Accoucheuse,* Sect. 24

Staff said that the majority of men were satisfied with the amount received, although a few would have wanted more. A few men mentioned the contribution and said they appreciated it :

> *The other thing that I appreciated that day was this gesture, the fact of giving us the money for our fuel. We got a double bargain: the awareness-raising and the money. The amount was neither insignificant nor very significant, but personally it touched me.* Issouf, age 38, 2 sessions

10.2.7. Men's reluctance to attend facilities

Several providers, and interviewed men and women said that men may have been put off accepting the invitation because the idea of them going to health centres was so unfamiliar. A couple of women said that their partners reacted with concern upon receiving a letter from the facility, thinking there was a problem (however these men did in fact accept the invitation). Although men themselves did not mention this, a health worker mentioned that some may have been concerned that they would be required to spend money, as this is perceived as one of the main reasons for summoning them:

> *What you are doing is good but the fact is that when we come we always have to pay… So there you go. It's always about money. Accoucheuse(1),* Sarfalao

Some men (all of whom nevertheless attended sessions) mentioned the general concern that they may not be well-received by health workers. One woman said instead that her husband never responded to the invitation because he generally dislikes health workers' attitudes:

> *He says that often health workers shout at patients or spend their time chatting instead of caring for those who are sick. The fact of being there just hanging around, that'll make him nervous and that's why he refuses to go!* Fatoumata, age 22, 0 sessions

Some men suggested that a strategy to overcome this reluctance would be to visit men at home:

> *Going into peoples homes to talk to them [..] Some people think that going to the PHC is not important or interesting, who is going to leave his activities to go and chat at the PHC? […] But if you are the ones to go towards them, to show an interest in them, in the end they are going to become interested in you.* Boubacar, age 30, 2 sessions

One man who was part of a farmers' collective (and had been too busy to attend) suggested going through community associations to reach men:

You need to make the most of these associations to raise awareness among men. Once they have identified an association or group, health workers should go towards them to give information just like you've been doing. That would make a lot of things easier. Oumar, age 34, 0 sessions

10.3. Session quality and participant experience

10.3.1. Health worker abilities and skills

The successful delivery of the intervention sessions is likely to have influenced the effective communication of health information and key messages to participants. Although working with men and couples was new for them, several health workers reported that the project increased their confidence in this realm:

Even though before I didn't have the courage to talk with men, today, whatever group I come across, I can express myself correctly and without trouble. That's because I conducted the men's group several times. Accoucheuse(2), Sarfalao

They felt able to successfully engage the audience, and at times, the experience was enjoyable for them:

Now and then, there'd be some shy ones. But as soon as we'd start and they saw there was nothing to be scared of… it was shyness stopping them. Often we're tease them a bit, get them to take part. Accoucheuse(2), Bolomakote

Even on the work front, I learnt a lot. Because there were open discussions, and when you have this type of group, people were engaged. It was an exchange. What you learn, is that they too can teach you something. Midwife, O'ville

The sessions occasionally presented some challenging situations. In a few instances, men used the group discussion to express their dissatisfaction with health workers and criticise them. However, one provider felt that overall the sessions made participants feel reassured and closer to health workers.

The most difficult men to work with were those belonging to a Sunnite Muslim sect, who were opposed to the fact that women health workers led the sessions. In one case, this led to an aggressive refusal to engage:

There was one case, what do you call them? The "wahabites". The one guy, he completely refused. He said that he doesn't have time for us. He even came to throw the invitation letter at us and then left. Midwife, Sect. 24

However, one male health worker reported managing to work with some of them:

There are some who come with a lot of prejudices. My Sunnite cousins, for example… When they come, the health workers are scared. But when you actually talk with them, you can manage to persuade them and then it's done. Midwife, Guimbi

Health workers also reported cases in which they contributed to the resolution of couple and family disputes. Although this was not a focus of the study, providers also mentioned cases of successful mediation to facilitate a woman's disclosure of her HIV-positive status:

> *The case that I had, really that woman was satisfied. Because she herself was scared. How would she manage to disclose her status to her husband. And as we were there she gathered the courage to tell her husband. He understood. Because of this, we were able to give some explanations to the husband so that he would understand. Now there is harmony in that couple.* Midwife, Sect. 24

In terms of health worker skills, most professionals who had taken part in the formal training organised by the research team at the AfricSanté headquarters on how to conduct the study activities (see Subchapter 6.4) suggested that the training should have been longer. They reported being too tired to take in all the information in one day, and suggested that 2-3 days would have been better:

> *Among members of the team, there were some who hadn't understood very well […] At the beginning, people seemed not to really get it. And still, even half-way through there were still some small misunderstandings. Accoucheuse*(2), Bolomakote

10.3.2. Content and format of sessions

Satisfaction with sessions almost certainly influenced participants' receptiveness to the content, as well as their willingness to attend subsequent appointments:

> *It's because I took part in the first activity that I came to the second. If the first activity had put me off, I wouldn't have come again.* Alidou, age 33, 2 sessions

Most men we interviewed said that they felt at ease during the intervention sessions, although a few reported feeling shy. They said they were well received, that the health workers' tone was gentle and respectful, and that they experienced no delays, in contrast with some reports by staff (see Subchapter 10.2.3). Health workers said that some men appeared to be initially reluctant, but were satisfied after having attended the session. However, some men appeared uninterested or in a hurry to leave:

> *On the other hand those who were reluctant kept looking at their watches while we were talking. Those guys felt it was a waste of time. Accoucheuse* (2), Bolomakote

Several men reported enjoying the atmosphere of the group session (Component A):

> *They received me very well. There were many of us and so they had an interest in making us feel welcome. They ran the session in a way that made everyone feel equal. No differences. We introduced ourselves before the start of the discussion, which I liked because that meant that now we will always remember each other.* Boubacar, age 30, 2 sessions

Staff reported that men participated actively in the groups. Often, time went by quickly and the session lasted longer than planned because participants were engaged in active discussions and

had many questions to ask. Health workers felt that the group format enabled a variety of different voices to be heard:

> *[The man who comes alone] is not able to learn from other people's reactions. The others are not there asking questions. If you're there alone, it's just what you have in your own head. Instead, if you are a group and you don't know something, someone else might bring it up and then you'll be able to make the most of [the explanation]. Accoucheuse*, O'ville

In relation to the group discussion tool (see Appendix 19), some health workers said that the format of telling actual stories was new to them. However, they said the stories were current, and relevant to the participants:

> *In any case they were stories that can make you change your behaviour, if you listen carefully. They reflect the reality of our everyday life. Accoucheuse*(2), Bolomakote

A few interviewees remembered the stories accurately, even though the interview took place many months later. Men also said that the use of multiple languages helped participants to understand.

Some health workers felt that the couple counselling format was better suited for quieter individuals:

> *When it's just the man and woman, men express themselves better than in the larger group conversation […] The fact is in the group discussions sometimes men are afraid of making a mistake: if I say something and it's incorrect the others are going to tease me. Accoucheuse*(2), Sarfalao

However, others felt that the couple counselling sessions were less stimulating and that some men tended to dominate the conversation:

> *They'd chat a lot more in the group than when they came one by one. Because if it's their wife, [the exchange] is limited. Most of the time, if the woman is quiet, often the man can do all the talking.* Midwife, O'ville

One woman said she didn't ask any questions because she felt shy, however, several others reported that both they and their husbands asked questions.

The couple counselling tool was appreciated by many because the images were clear:

> *It was really good, because in this way even for us who haven't been to school, we can understand easily by simply looking at the pictures.* Awa, age 24, 1 session

One woman also said that the images were helpful for those who did not speak the health workers' language well. Health workers were also satisfied with the tool, and a few reported still using it even after the end of the project.

Participants' reactions to the health topics covered in the sessions varied. Health workers said that older, more conservative men, sometimes heads of polygamous households, were

embarrassed by the frank discussion of topics like contraception, whereas younger men were more open:

> *Among the men, there were some who were embarrassed in the group discussion. Especially when you start talking about contraception, when you talk about condoms […]. Some lower their heads, and can't look. Others don't want to talk. There were some men of a certain age, because they were chosen at random. If it's young people, they enjoy it. You can have a good chat.* Midwife, O'ville

10.4. From participation to behaviour change: Plausible pathways

10.4.1. Knowledge of health topics

One of the main aims of the intervention sessions was to increase participants' knowledge of specific health topics, especially among men, who have limited other opportunities of exposure to this information.

When asked what health messages they had received, and whether these were useful, all men who had participated in the sessions reported that the advice was useful and that their knowledge had increased*:*

> *Actually, I didn't know anything about how I should behave with a pregnant woman. What you need to do for her wellbeing. What is it she likes? I learnt all that during the group discussion and it really helped me.* Malik, age 29, 3 sessions

As for women, several reported making choices based on health advice given by PHC health workers. However, they often received this information in the absence of their male partner, including at the *causerie educative* (see Subchapter 1.3.4). It is therefore not clear how much new information women received during the intervention sessions. In a couple of cases women saw the IUD for the first time during the counselling session, and another woman reported learning about EBF on that occasion.

There were several reports of how the knowledge men acquired during the intervention sessions influenced their decisions and choices. For example, some men said that they and their spouses were told in advance about PNC consultations, and therefore remembered to go when the date was approaching. One man attributed his partner's smooth delivery to the advice received about avoiding heavy work.

Several men said that they and their spouses took the decision to exclusively breastfeed, and not to give the baby traditional decoctions (see Subchapter 1.3.4), because they heard about it during the counselling session. Two men and several women said that following EBF advice led to a perceived difference in the health of the youngest baby, compared to their previous children.

However, some interviewed men did not seem to be aware of the EBF advice and said that their babies had been given traditional infusions. There were also cases of incomplete information. For example, some women had absorbed the information that they should give no water till the baby was 6 months old, but had been giving decoctions. One man reported understanding that as long as it was bottled water, it could be given to the newborn.

In terms of PPFP, several men said they learnt about the importance of birth spacing, about the resumption of sexual intercourse, and about contraceptive methods that they were not aware of. Some distinctly attributed starting contraception to the fact of having participated in the sessions:

> *The project helped us to navigate a lot of situations, it's thanks to the couple counselling session that we've started the injectable. If we hadn't taken part in this project, we wouln't be using contraception. This is going to ensure that our child is going to stay healthy and it gives my wife the ability to decide when we want to have another one.* Malik, age 29, 3 sessions

A number of men and women said that the information had a stronger impact on men because they heard it directly from the health workers, rather than if women had relayed it:

> *If it were down to us women to convince them or tell them certain things, that would be very hard. They wouldn't even believe us!* Ramatou, age 26, 3 sessions

10.4.2. Satisfaction with the relationship

Couple relationships appeared to vary somewhat among interviewees. One woman complained that her husband refused to give her money to pay for health care, but all others said that their partners provided the necessary support and reported collaborative relationships:

> *Times are different, sometimes business is good, sometimes it isn't! In any case when things are tough, he tells me about it and I help him and we manage to pay the medical prescriptions for our family.* Rakieta, age 32, 0 sessions

Women and men were asked a general question about whether they felt the intervention had had any impact on their family, both positive and negative. There were no responses indicating an adverse effect. Some women reported that their husbands had become more attentive as a result of their participation in the study:

> *My husband has become more attentive and I know that it is the study's messages which have made him change. During my previous pregnancies he wasn't too interested in me and my health, but since participating he has changed a lot! For this baby he buys soap, clothes, what he can, whereas with the other children that was the last of his concerns.* Therese, age 36, 2 sessions

> *There has been a significant change since he took part! When we had the other three kids this project wasn't in place, but he's been much more attentive since this last pregnancy. He has changed a lot in a positive sense. It's remarkable for someone who knows him, you would see the difference!* Helene, age 31, 2 sessions

Similarly, some men felt that the project had contributed to improving and bringing harmony to their relationship:

> *This consultation enabled us to learn a lot of things, and especially it has encouraged us or better prepared us to plan our life as a couple.* Malik, age 29, 3 sessions

10.4.3. Couple communication

One of the other main points of the intervention sessions was to encourage couple communication on the relevant health issues.

Most men reported that they often had conversations about health issues with their female partners, even in the absence of a particular problem. Sometimes these were initiated by themselves, and sometimes by their female partners. However, several women reported limited communication, and some said their husbands were out of the house all the time:

> *Very often I have a go at him because I always says he doesn't have time to talk, I think that a man and his wife need to find the time to sit down and talk, otherwise it's no good! Yes, when he gets back from his shift he falls asleep, and when he wakes up, he leaves straight away and returns very late.* Marie, age 27, 3 sessions

Nevertheless, most women whose partner attended the first session said that upon his return he told them about what had been said. Husbands hardly ever accompanied interviewees to routine antenatal/postnatal care, however some reported telling their male partner about the content of the consultation and the advice given:

> *Every time I get back from the PHC, I tell my husband about what they said to do.* Ramatou, age 26, 3 sessions

Some men reported that participating in the intervention had increased their interest in their partner's health care and their communication about health issues:

> *[The discussion] was useful for me. It has been an additional motivation for me. It encouraged me to always ask my wife when she gets back from her appointments at the PHC: so you went there, what did they say?* Boubacar, age 30, 2 sessions

> *Thanks to the group discussion with the other men, there has been a positive change in our family. I talk often with my wife about health issues and other topics.* Mohammed, age 52, 1 session

A number of women also reported that the degree of communication with their spouses had improved:

> *With the advice that we got at the health centre, the armosphere is more relaxed at home. We talk together about things that can improve our health and strengthen our unity as a family.* Djeneba, age 30, 2 sessions

> *Now I approach him myself to chat, which I didn't use to do before my enrolment in this study.* Rakieta, age 32, 0 sessions

10.4.4. Shared decision-making

We had hypothesised that the intervention would increase the level of shared decision-making on health issues. This is supported by the reports of several men and women, who said that participation in the intervention increased shared understanding on health issues between them and their spouse, and that this generated a higher level of agreement:

> *We talk and give each other advice, and we encourage or discourage each other from doing certain things. […] We understand each other better.* Boukary, age 32, 2 sessions

> *The couple counselling was more practical. My wife was there, we learnt everything together, therefore once at home there is no need to say "do this, do that" about certain things.* Alidou, age 33, 2 sessions

> *It encourages trust within the couple, everything is clear, everything has been said in front of both of us, therefore I have nothing more to worry about.* Ramatou, age 26, 3 sessions

The following paragraphs summarise the qualitative findings related to decision-making on each of the three main study outcomes.

Postnatal care

When asked who in their household made decisions about routine appointments and care-seeking for the mother or baby, several men said that they usually decided, told or gave permission (and money) to their female partner to go to the health centre. However, at least in the case of routine care, most women said that they were the ones who informed their husbands the night before they were due for a postnatal check-up, and that their partners then agreed and gave them the money.

In a few cases, women reported that they and their husband helped each other to remember when the appointment was, having learnt the PNC schedule together during the couple counselling sessions:

> *Yes, he knew because he was there when the health worker told me to come back on the 6th day. The night before the appointment I told him "the appointment is tomorrow", and he said "OK!" […] If there's an appointment and I don't feel like going, he's the one who encourages me to go.* Helene, age 31, 2 sessions

> *After the birth, my husband and I had a talk with the health workers about the importance of PNC consultations. So since then he really understood that they are important. For the 6th day I told him before I went, but for the 40th day it was actually him who reminded me.* Djeneba, age 30, 2 sessions

Infant feeding

Some men considered this to be an area where the woman made the decisions. However, several said that they and their female partner had decided together on the adherence to EBF and on the need to avoid giving the baby traditional infusions (traditionally, these are used for bathing the baby and some is given as a drink):

It's the two of us [who decided]. My wife agreed and I also agreed that we should only bathe the baby with warm water and soap. Soumaila, age 56, 3 sessions

In some cases, the man's participation in the 6th hour consultation contributed to their agreement:

He was there the day they gave me those instructions at the health centre. He agreed that we should adopt this new practice for the child. He knew everything from the outset. Helene, age 31, 2 sessions

Even women who had decided alone to practice EBF said that they communicated their choice to the man. In these cases, the man generally agreed and said to do what the health workers had suggested.

In cases where the man was aware of the recommended practice, he sometimes was more insistent upon it than the woman herself. In a couple of cases, there was a difference of opinion, with the man preferring to continue with EBF for the recommended period. The man's opinion prevailed in one case, but not in the other:

At some point the baby was watching us drink, and was asking for some, so my wife wanted to give him some. I told her to wait till the end of the period that the health workers had advised. And once that period was over we started giving him water. Alidou, age 33, 2 sessions

Yes, we had a chat about it and he said that he doesn't want me to give the baby the herbal infusions, but I don't listen to him! I do it from time to time! Bintou, age 30, 1 session

Another role of men, mentioned by several interviewees, was to buy particular milks, bottled water or other foods for older babies.

Postpartum family planning

As far as the resumption of sexual intercourse is concerned, almost all men said that their partner/wife had decided or would decide when she felt ready, and that she had the last word on the issue. However, most women who had resumed intercourse said that it was the man who had had taken the initiative, and they had accepted. Because these questions tended to be asked without much probing, both men and women's responses on this issue may have somewhat been shaped by their perception of what is normatively correct.

Most men and women reported communicating and deciding together about the use of a PPFP method. Some women felt that having their partner's agreement on this issue was important for the couple's wellbeing:

I wanted [to start contraception], and so did my husband. You see, when you're a couple, it's good to discuss and reach an agreement on certain subjects, otherwise you can go and get FP and come back but you'll have problems later in the couple. It was at the PHC that we decided together, during the counselling sessions. Djeneba, age 30, 2 sessions

Although FP was not a frequent topic of conversation for all couples, a number of women reported that the decision was made during or following the intervention sessions:

> *In any case, whether for the decision to have the implant sited and to have it removed, I always involved my husband and he agreed. We talk and I remember that the day you asked us to come to the PHC together, already that day during the conversations we had decided together that after birth I would come back and get the implant.* Therese, age 36, 2 sessions

In a small number of cases, the man appeared to have initiated the decision to use PPFP, including in a case where the man asked his wife to start a spacing method because of his precarious financial situation. Regardless of who was most keen on commencing PPFP, however, in almost all cases the woman decided on which method to use:

> *It's the woman who should make that choice, because she's the one who has to endure the pregnancy.* Mohammed, age 52, 1 session

> *I told him that tomorrow I'm going to go and get the pills for contraception. He said to go and get whichever method I like.* Marie, age 27, 3 sessions

10.4.5. Influence of peers/family

One hypothesised pathway for the intervention to have an effect was that the man would use his authority to persuade influential family members or peers of the importance of following the health workers' advice. Correspondingly, these data contained evidence that some couples successfully resisted pressure from peers/family, and the husband's support for the recommended practices appeared to play a role in this.

Men and women reported that their entourage played an important role in influencing their health decisions in several domains. This included, in a couple of cases, elder female members influencing the choice of PHC for pregnancy and birth care, and having a say on whether infants should be taken to the PHC for health problems. On the issue of infant feeding, women's mothers-in-law appeared to be particularly influential. Several newborns were given herbal decoctions based on their advice, especially in the case of women living in their in-laws' compound. In general, families and neighbours advised the early introduction of water and decoctions. However, men and women reported that in some cases mothers-in-law had accepted EBF. One woman described withstanding external pressure with the support of her husband:

> *A lot of people used to tell us that it's not possible to wait that long before giving any water to a human being, he can't live if he only drinks his mother's milk. People regularly told me to give him a drink, every time they had the opportunity. I replied that that's what they told us to do at the health centre. My husband also used to tell me to do what the health workers had said!* Helene, age 31, 2 sessions

The influence of peers and family on PPFP choices appeared to be less strong, although some participants reported choosing their method based on what was popular among their acquaintances. In the case of one couple, the woman's mother successfully dissuaded them from

using the IUD. However, one man reported that this type of decision was taken by the couple, without external interference:

> *No, that's an issue for my wife and I, they [family members] can't decide for us. We are the ones who made the decision because we are aware of the consequences of not adequately spacing your children.* Dramane, age 31, 1 session

In another case, a young woman living in the compound of her conservative in-laws, who opposed FP, had started using a method in secret, having decided together with her husband.

10.4.6. Couples' relationship with health workers

A couple of new potential pathways emerged from the data. Firstly, the effect of the intervention may have been reinforced by men's increased familiarity with the health centre, and in some cases by the establishment of relationships with health workers that outlived the study.

More than one provider said that the intervention had provided an opportunity to create a closer bond with certain couples who had participated. At times, they would simply pass by and say hello, but at others they would also seek their assistance with particular health issues:

> *Even after the birth, up till this day there are some couples, if they have a health problem, they call me. Often they come and see me, and I accompany them to the dispensary. I introduce them. I've seen that this makes a lot of things easier. Accoucheuse*(2), Bolomakote

In some cases, the social relationships formed would continue in the community. A relationship of reciprocal personal favours developed between health workers and certain participants in the study. For example, one health worker said that one man who had taken part in the sessions had started working for him as a builder. Men appreciated these relationships too:

> *To tell the truth, what I like is that if they call us to go there and chat […] it's a good thing, because usually you don't have this type of relationship with health workers. […] Today if I bump into them, we say hi. These are good contacts.* Mamadou, age 46, 3 sessions

It is possible that repeated contact with health workers may have reinforced intervention group participants' knowledge and influenced their behaviour. It may also have facilitated their access to particular services, including FP.

10.4.7. Women's relationship with interviewers

The second new pathway emerging from the data was the potential effect of the relationship that was established, over several months, between women/couples and the study RAs. These relationships developed because it was usually the same RA who visited each woman throughout the study.

Based on the testimony of several women, it seems that they saw the home visits carried out by RAs to conduct the interviews as continuous with the facility-based intervention sessions, and that they understood all project activities to be part of a relatively coherent whole:

> *The simple chat that you have with us now and then, that wakes us up. It's like a school, we are always learning something!* Bintou, age 30, 1 session

These women said they appreciated the fact that the RA came to visit them, and mentioned that the RA had given them advice about issues such as infant feeding:

> *The porridge I buy for the baby, he doesn't like it. Auntie [the RA] says that this porridge might contain some scents that he doesn't like, such as ginger. Auntie suggested that I make the porridge myself to give to the baby*. Djeneba, age 30, 2 sessions

In one case, the RA's encouragement helped a woman to continue EBF in the face of external pressures:

> *People were encouraging me to give the baby water, especially during the hot season, but I did what the health workers told me at the time of birth. But I must admit that at some point I started to be worried, I had some doubts, but afterwards I took courage and I even asked your colleague when she came to see me at 3 months. She reassured me and encouraged me to continue to do what the health workers had said.* Aisha, age 27, 1 session

Some women reported consulting the RA about specific topics:

> *When your colleague came to see me for the interviews I made the most of this to ask her some questions about the various contraceptive methods, and this helped me a lot!* Awa, age 24, 1 session

Some women also said that their neighbours wished that they too had been selected to be part of the study, and frequently asked them about the content of the visits. Two women said they regretted the fact that their husbands had not been "spoken to" since the birth, implying that they considered the interviews as opportunities to learn about health issues, rather than simply as data collection exercises.

Similarly to the relationships with health workers, these too may have contributed to improving the outcomes seen, although this effect is less likely to have differed by study arm.

10.5. Challenges in management and team dynamics within PHCs

Health workers spoke in depth about how the project activities were organised and conducted in their workplace. This section will deal with three recurrent themes which may have had an impact on levels of adherence and effectiveness.

10.5.1. Numbers of staff formally trained

One problem brought up by most health workers was the fact that only 8 people from each PHC were formally trained at AfricSanté. At the time of organising the training workshops, we did

not realise that all staff in the maternity unit would actually be carrying out the project activities. In several health centres, this led to the creation of a perceived hierarchy, had an adverse effect on shared ownership of the project, and led to a lack of engagement of some providers who hadn't been trained:

> *There were complaints because not everyone was trained and yet they were asked to put in the same amount of work as those who were trained. Accoucheuse*(1), Bolomakote

This may have been exacerbated by the fact that those who participated in the workshops received a per diem payment. In one health centre, the organisation of a proper catch-up session seemed to compensate for this difference. During this session, those who had participated in the training in turn trained their colleagues:

> *Yes, I was satisfied. It was good. […] Because they gave us all the necessary information. They day they did the catch-up session, all the people who had taken part in the training were there. The one who presented, when she missed something, the others were there to add to what she said. Therefore we really all reached the same level. Accoucheuse*, Sect. 24

However, this was not organised in the other PHCs. In some, trained health workers simply gave general feedback from the training workshop during the weekly staff meeting, and it was expected that those who had not participated would learn on the job or from observing others. This, alone, was not perceived to be sufficient, except in the case of very motivated individuals. As described, there were one or two contact persons in each PHC, who coordinated the study activities (see Subchapter 6.6). In some centres, they established weekly rotas of mixed teams including both trained and non-trained providers. This somewhat compensated for the lack of formal training.

Overall, there was a consensus that all staff should have received the formal training:

> *What I would like is that if this is done again, that you try to train the maximum possible number of people, because this can motivate them. Accoucheuse*(2), Sarfalao

Our failure to train all staff meant that in some PHCs the activities started with some difficulty. Where contact persons or managers did not put in place adequate measures to enable non-trained staff to catch up, the resulting inefficiencies may have reduced the number of intervention sessions successfully arranged and delivered.

10.5.2. Teamwork

Health workers reported many examples of good teamwork, which undoubtedly contributed to the successful implementation of the intervention. According to several testimonies, for example, the decision about who would conduct the counselling sessions was often informal and based on the willingness of staff members to help each other out:

> *We managed by calling on each other, for example a colleague might say to me : « Oh, auntie, it's my team's turn but I'm doing night shift, would you mind stepping in for me ? » I'd say of course, no problem. Accoucheuse*(1), Sarfalao

Good levels of collaboration meant that health workers were able to support each other by stepping in to make up for individual strengths and weaknesses:

> *Often one of us might be doing the couple session, and another person would come and sit with her to assist. If she got stuck at any point, the other can step in and then all went well. Accoucheuse*, Sect. 24

Several providers describe respectful and supportive relationships with the contact person(s):

> *They didn't put any pressure on us. They asked your opinion, and if you are able to do it, they will put you on the rota. […]Now and then they would pass by to encourage us. Accoucheuse*, Sect. 24

On the other hand, contact persons themselves noticed that their colleagues' level of engagement often varied based on interest, character, or individual circumstances:

> *Of course, not everyone can be equally dedicated. Even in our everyday work, you see it. It depends on each person's good will. Accoucheuse*(2), Bolomakote

In most PHCs, the contact person's role was mainly to coordinate the team. However, in a couple of health centres, contact persons who cared deeply about the study also ended up personally conducting a vast number of the sessions. In one case, this was because they were dissatisfied with the quality of their colleagues' performance, and in another, because the others reportedly failed to engage and do their part. These individuals also had the additional responsibility of supervising their less diligent colleagues, and reported experiencing a considerable amount of pressure because of the sheer amount of work:

> *When you work as a group there is always the same problem, there are some who are not interested… […] in the end, all the work ends up being done by a few people*. […] *This was a big problem for us, because in the end you could say that there was only a small group who really took the work to heart. Accoucheuse*(2), Sarfalao

In health centres where teamwork was less effective, this may have had a negative effect on the number and quality of the intervention sessions provided. For example, contact persons noticed that their colleagues sometimes missed opportunities to provide sessions, for example by discharging women without providing the 6th hour postpartum counselling, which was confirmed by testimonies from men and women (see Subchapter 10.2.1). Furthermore, where contact persons provided many of the sessions themselves, this may have led to a quality rift between their own consultations and those of their colleagues, who had fewer opportunities to practice and improve their performance.

10.5.3. Financial compensation

As mentioned in Subchapter 5.6.3, a system was in place to compensate health workers for the additional activities they conducted as part of the study. However, we did not dictate in what way they should distribute the money among themselves.

In PHCs where there was a pre-established decision to distribute the money equally, this encouraged staff to get more involved and work their fair share:

> *In our case we have a system where we pool what we receive. Even those who haven't contributed, we pool what we got and share among everyone. I believe that this sends out a strong message to everyone. The fact of knowing that even if I don't deserve it I'm being given it anyway.* Midwife, Guimbi

However, in other health centres the money was distributed according to individual entitlements. In one PHC, this led to a rebellion by a number of staff, who said they had not been told that there would be any payment at all. They accused the contact person and a few others of keeping the information about compensation to themselves, and of prioritising the project work over their normal duties. A breakdown of the team therefore occurred, and after the first round of payments the members of staff who had been scarcely involved participated even less:

> *I noticed that people were no longer paying attention. You could see that at this point there were only a couple of people who were still interested in the work. Accoucheuse*(1), Sarfalao

Overall, financial compensation appears to have provided a boost in morale and motivated health workers to engage in the project. However, in one health centre the problems described are likely to have adversely affected the number of sessions effectively delivered.

10.6. Discussion

10.6.1. Data quality

I will begin this discussion with a few observations about the quality of the semi-structured interviews data.

As far as the data from men and women are concerned, I somewhat oversampled couples with lower participation, compared to overall adherence for the whole intervention arm, in an attempt to equally represent all levels of adherence. However, the number of interviews carried out for each level was still small. As a result, a full analysis of themes by levels of exposure to the intervention was not possible. Furthermore, certain topics were not covered in the desired depth, particularly in relation to "sensitive" topics such as the resumption of sexual intercourse. This implies that some of the data are fairly superficial and therefore subject to social desirability and courtesy biases.

Furthermore, it is necessary to keep in mind that the women who were selected for interview may have been a more representative subsample of the whole intervention arm compared to the men. This could be because women are more likely to participate in any study, or because in this case they were already used to being interviewed by RAs and were therefore less likely to refuse. The existence of a prior relationship with one of the RAs, a colleague of the person conducting the interview (Ms Djeneba Ouedraogo, the field coordinator), may however have led to higher levels of courtesy bias in their responses. On the other hand, there was more likely to be some selection bias in the men's sample, because those who responded positively to a request for interview were more likely to be interested in engaging with the study. This difference in selection bias is supported by number of refusals in men, compared to that in women. Among those who refused, most had participated in only one session or none. However, men had generally had less continuous engagement with the project, and in addition the interviewers were external consultants. Therefore, their responses may have been less subject to courtesy bias.

As for the selection of health workers, the main biases were mentioned in Subchapter 5.4, and include the lack of blinding on my part (as the analyst). From the point of view of the interviewees, although I didn't personally conduct the interviews, I did approach them initially in person to ask whether they would be available, and this may have introduced some courtesy bias. Furthermore, the fact that only two health workers were interviewed per facility means that these data are also fairly sparse and may have failed to capture certain important dimensions related to the internal functioning of PHCs.

10.6.2. Interpretation of findings

These data suggest that the smooth running of the invitation process was vital to ensuring that men/couples attended the intervention sessions, although persuading men was sometimes difficult for health workers. These findings confirm that men's reluctance to attend health centres appears to be due to a variety of factors, most of which emerged in our formative FGDs (see Subchapter 6.1.4) and have been described in the literature (see Subchapter 2.2). These include the perception of reproductive health being a woman's domain, lack of familiarity and prior engagement with services, and a concern about ridicule or mistreatment. The data suggest that peer/family networks may have played a role, in some cases encouraging, and in others discouraging men from responding to this specific invitation (Kariuki and Seruwagi, 2016). Female partners seem to have generally played an encouraging role, although a certain degree of courtesy bias seems likely in women's enthusiastic responses about the intervention. It is also necessary to consider to what extent work truly is a barrier to men's participation, and whether in some cases the true reason is lack of interest or inconvenience (Vermeulen et al., 2016). Another interesting theme that is touched upon is men's preoccupation with the mistreatment of

women in health facilities. Whereas this concern dissuaded one man from attending, a study from Rwanda found that the men's distrust of available care may in fact boost participation, in an attempt to ensure that their partners are not harmed (Påfs et al., 2015).

The distribution of characteristics found to be associated with high adherence has been described in the initial presentations of the men and women's samples (Subchapter 10.1). No specific information emerged from these qualitative data regarding the role of monogamy or of the previous use of FP in influencing uptake. It must also be noted that men and women were not asked specific questions about these factors, given that the analysis had not yet been done at the time of the interviews. However, the qualitative data support the adherence analysis findings regarding the role of place of birth, with the addition of some illustrative counter-examples in which Component C was provided to couples giving birth in referral hospitals.

Despite a training workshop that they perceived as too short, health workers reported achieving competence in conducting the intervention sessions and being able to handle difficult participants. Overall, men, women and health workers appeared to be satisfied with the intervention content and format, although courtesy bias may have played a role here too. Participants' satisfaction may have in turn affected attendance at subsequent sessions. However, the data are not sufficient to draw conclusions about whether the quality of the sessions or couples' satisfaction with the intervention differed by PHC.

Several testimonies suggest that participation in one or more sessions encouraged women/couples to adhere to the recommendations. These provide some evidence for the mechanisms through which the intervention sessions may have had an effect on behaviours, including the acquisition of new knowledge about specific health topics, especially by men, and the emphasis and stimulation of spousal communication and more collaborative decision-making. These results therefore lend general support our hypotheses laid out in the Conceptual Framework (Subchapter 4.3). In addition, these interviews also reveal other potential pathways leading to the intervention effect, such as the development of longer-term relationships with health workers, and the consultative relationship with the RAs conducting the quantitative interviews. However, as mentioned, the small number of interviews means that it is difficult to draw conclusions about dose-response based on different levels of adherence.

In terms of gender roles and decision-making, some men talked about themselves in conformity with their socially sanctioned role as primary decision-makers on issues related to care-seeking and health-related expenditure, although women's testimonies suggest that the reality may be more nuanced. In comparison, men's participation in decisions related to PPFP and infant feeding is described in more collaborative terms by both parties. Social desirability may have influenced these responses. Overall, however, it is encouraging to find no evidence to suggest that the trial's effectiveness is due to the man assuming a more dominant role in decisions.

The last section in this Chapter focused on particular issues emerging from the health worker interviews, namely internal hierarchies due to different levels of training, team collaboration, and the distribution of financial rewards. For future interventions, these results point to the importance of training all health workers, and for longer, or at least of giving precise instructions for cascade training. More effort also needs to be put into support for teamwork and for coordinators, to ensure that work is fairly distributed, and that the information on financial compensation is clear and reaches all concerned. Based on these results, we are unable to say whether a particular system for the distribution of rewards is preferable, as long as it is clearly and promptly communicated. It is tempting to conclude that any compensation arrangement introduced into a work environment with limited team spirit may exacerbate pre-existing tensions.

Overall, the reported challenges related to the internal organisation of PHCs and team functionality are likely to have had a detrimental effect on the number of sessions effectively delivered, and thus potentially limited the overall effectiveness of the intervention. I had also anticipated that these difficulties might explain the variety observed between PHCs in relation to adherence levels, as well as in relation to certain health behaviour outcomes measured during the RCT (see Chapter 9).

However, in practice it is not straightforward to draw a parallel between the PHCs reporting these problems and the levels of adherence and intervention effectiveness actually observed. The health centre with the lowest level of adherence reported a good cascade training system and good team collaboration (Secteur 24), whereas the ones achieving the highest adherence reported teamwork and organisational difficulties, including, in one, a serious problem related to the distribution of the financial compensation (Sarfalao and Guimbi). No major problems were reported in Ouezzinville, a health centre with relatively low adherence and for which the stratified results for most trial outcomes showed a non-significant effect, despite having the largest number of recruits (and therefore the highest statistical power). The data also do not explain the exceptional performance of Bolomakote in relation to the PNC and contraception outcomes, which were mostly significant in the stratified analysis despite this PHC having the lowest number of recruits.

One reason why the qualitative data do not actually explain observed differences in performance between PHCs may be related to the fact that the fact that the data are limited. The two health workers from each facility may or may not have reported certain issues, based on their personal inclination and subjective experience. In addition, the relative quality of the leadership by study contact persons in different PHCs did not emerge very strongly as an issue. In my view, although there is limited data to support this, the lack of strong cohesive leadership and good coordination of activities largely explains the low levels of adherence and limited effectiveness

observed in Ouezzinville. On the other hand, I believe that the PHCs that reported problems had particularly dedicated leaders who were both more likely to talk about the difficulties they encountered, and to put in place compensatory mechanisms, for example by working extremely hard themselves to make up for teamwork difficulties (Sarfalao and Guimbi).

11. GENERAL DISCUSSION

In this Chapter, I will begin by summarising the main findings of this study and their interpretation (Subchapter 11.1), and by reflecting on the study's strengths (11.2) and limitations (11.3). I will describe the dissemination activities that I carried out together with colleagues in order to share our findings, and the present the feedback received (11.4). I will then discuss the implications of the study findings for policy and future research (11.5), and reflect on the gender-related considerations that would need to be taken into account if this or similar interventions were to be scaled up (11.6). I will summarise the main points discussed in the Conclusion (11.7).

11.1. Summary of main findings and interpretation

In this study, I developed an intervention to involve men in maternity care, based on formative research (2 FGDs with men), consultations with stakeholders, and contextual knowledge from prior studies conducted in Burkina Faso (*Phase 1*). The intervention was developed through an iterative, consultative process. The final intervention consisted of three components (A, B and C), two of which were delivered during the antenatal period, and the third postnatally. The intervention was delivered by trained health providers working in five PHCs in urban Bobo-Dioulasso.

I conducted an individually-randomised RCT to test the effect of this intervention on RMNH outcomes and behaviours related to the postpartum period (*Phase 2*). The trial recruited 1144 women during routine ANC (583 assigned to intervention and 561 to control). Approximately two thirds of men/couples were highly protocol adherent, defined as having attended at least two out of three intervention components. This level of adherence was high compared to similar studies conducted in Sub-Saharan Africa, despite lower adherence to the postnatal component (due to the fact that many women did not deliver in the study PHCs). In an exploratory multivariable analysis, I found that high adherence was associated with having been recruited in certain study PHCs, giving birth in a study PHC, being in a monogamous union and having used contraception in the past.

The main trial analyses were conducted according to intention to treat and were adjusted by recruitment PHC. As summarised in Table 54, they showed that the intervention increased attendance at scheduled PNC (at least 2 consultations), increased exclusive breastfeeding at 3 months PP, and increased the use of effective modern contraception at 8 months PP. The intervention had a significant positive effect on the use of long-acting contraceptive methods at 8 months PP, on the use of any contraceptive method at 3 and 8 months PP, on the timely initiation of effective modern contraception, and reduced unmet need for contraception at 8 months PP. It also had a positive impact on relationship adjustment at 8 months PP. As

expected, there was no effect on satisfaction with routine care. There was some evidence that the effect of the intervention varied across recruitment PHCs for effective modern contraception (primary outcome c.), any contraceptive use at 3 and 8 months (secondary outcome b.) and timely initiation of effective modern contraception (secondary outcome c.). Measured differences in baseline characteristics between study arms within certain PHCs did not explain this.

Table 54: Summary of RCT outcome results

OUTCOME INDICATORS	Intervention [%]	Control [%]	RD adjusted by PHC [%]	95% Confidence interval [%]		P-value
Primary outcomes						
a. Attendance at scheduled postnatal care (at least 2 consultations)	61.1	49.0	11.7	6.0	17.5	<0.001
b. Exclusive breastfeeding at 3 months postpartum	43.4	31.5	11.4	5.8	17.2	<0.001
c. Use of effective modern contraception at 8 months postpartum	59.6	53.1	6.4	0.5	12.3	0.033
Secondary outcomes						
a. Use of long acting or permanent (LA/PM) methods of contraception at 8 months postpartum	30.7	22.9	8.1	2.9	13.4	0.002
b. (1) Any contraceptive use at 3 months postpartum	57.0	49.3	7.7	1.2	13.6	0.011
b. (2) Any contraceptive use at 8 months postpartum	70.6	64.4	6.5	1.0	12.1	0.021
c. Timely initiation of effective modern contraception	75.7	66.9	7.6	0.2	15.1	0.044
d. Unmet need for contraception at 8 months postpartum	14.2	18.7	-4.8	-9.2	0.5	0.030
e. High relationship adjustment at 8 months postpartum	57.7	48.8	8.7	2.9	14.6	0.004
f. Complete satisfaction with routine care	73.8	73.0	0.4	-4.8	-5.6	0.870

I also conducted a qualitative process evaluation (*Phase 3*) involving semi-structured interviews with 10 health workers who had provided the sessions, and with 15 men and 15 women from the intervention arm, representing distinct couples.

In addition to the predictors identified in the multivariable analysis of adherence, these results suggest that men/couples' adherence to the intervention may also have depended factors such as work commitments, the receipt of persuasive telephone invitations by health workers, personal motivation and reservations about going into facilities, and the opinion of family/peers. Women appear to have encouraged their partners to attend and had a positive view of male involvement. During the sessions, health workers were able to successfully engage groups of men and couples, and participants' responses to the content and format were generally positive.

The findings confirmed the plausibility of the main effect pathways hypothesised in the study's Conceptual Framework, namely that the sessions increased men's knowledge of health topics, led to more collaborative relationships and increased spousal communication, and promoted shared decision-making on PNC attendance, EBF and PPFP. In addition, the establishment of long-term relationships between couples and health workers, and between women and RAs may have mediated the intervention effect.

Finally, interviewed health workers reported specific challenges related to the implementation and management of study activities in PHCs, including uneven levels of training, dysfunctional teams, and problems related to the distribution of the financial compensation. These problems may have reduced the number of sessions successfully organised and delivered, therefore affecting the overall effectiveness of the intervention. These difficulties were not reported in all PHCs, and it is therefore theoretically plausible that they could explain some of the variation observed in levels of adherence between PHCs, as well the presence of effect modification by PHC for certain RCT outcome results. However, in practice it was not possible to establish clear parallels between adherence and effectiveness in individual PHCs and reported implementation problems. This may be due to the subjective or partial nature of the qualitative data. The observed variations may therefore be explained by other contextual factors, or by unmeasured baseline differences between the populations using each PHC.

Overall, I conclude that the intervention had a positive effect on all indicators of interest, suggesting that involving men in maternity care is an effective strategy for achieving a range of reproductive health goals. Given the size of the effects seen, the implication of our findings is that male involvement programmes are useful in improving key postpartum behaviours, but are not the single solution to the problem of how to improve RMNH. These programmes have their place as part of the array of available demand-generating strategies that increase the likelihood of populations engaging appropriately with health services and adhering to recommended behaviours. Other interventions focused on demand generation are needed, alongside supply-side improvements to ensure that high quality RMNH services are available and accessible to families and communities.

11.2. Study strengths

This was one of the first intervention studies focused on involving men in maternity care in Sub-Saharan Africa that was not focused on PMTCT outcomes. I believe that my findings are particularly valuable because they show an effect on outcomes related to the postpartum period, for which the evidence on successful improvement approaches is limited. I focused on a range of key behaviours which are particularly relevant at this crucial time in the life of women and newborns, because they may serve as gateways towards achieving further health gains. For instance, PNC attendance and the practice of EBF may reduce neonatal illness and deaths, and PPFP use and the promotion of more equitable couple relationships may have similar beneficial effects on the health and wellbeing of mothers and infants (World Health Organization, 2014).

It is also one of the most rigorously-designed evaluations in the field of male involvement in reproductive health, and will therefore be a valuable addition to the evidence base. Despite being implemented in a short timeframe, the trial showed positive results. The approach used should therefore be considered for integration into programmes aimed at increasing PNC attendance, EBF and PPFP. It also provides evidence on the potential for male involvement programmes to improve gender relations and contribute to achieving gender equity.

11.3. Study limitations

11.3.1. Conceptual aspects

As far as family planning is concerned, one potential criticism of our intervention could be that rather than testing the effect of male involvement, we are testing the antenatal provision of contraceptive counselling. This is based on the fact that, although the national protocols state that IEC on FP should be provided starting in pregnancy (Ministère de la Santé, 2010a), it is unusual for women in routine care to receive full contraceptive counselling prior to their return for outpatient PNC at 6 days or 6 weeks PP (Daniele, 2014, Rossier and Hellen, 2014). However, women are likely to be exposed to contraceptive information at some point of their pregnancy through the *causeries educatives*. Our purpose was to involve men whenever feasible during the continuum of care, and we realised that a combination of antenatal and immediate postnatal contacts was the most realistic option. For an exact comparison, we would have had to invite men to routine PNC, which many women don't attend, or to additional PN sessions, probably requiring a more complex invitation strategy.

The rationale for the intervention was that women's baseline knowledge of contraception is greater than men's because of the higher level of exposure to health information through contact with services. In the DHS, a higher proportion of women were familiar with the modern methods available in PHCs (pill, injectables, implants and IUD), compared to men (INSD, 2012), and two thirds of study participants had already used a modern method in the past. It is

therefore likely that the exact timing of the provision of FP counselling was less relevant to our results than the fact that men participated at all. The effect of the intervention on any contraceptive use was higher at 3 months postpartum compared to 8 months, which could in part be due to the earlier counselling. However, we chose 8 months as our primary outcome precisely because we considered it more programmatically relevant to focus on the medium-term effect of the intervention on FP, regardless of exactly when counselling was given.

Another, related criticism might be that we carried out an intervention for couples rather than for men, or that we are in effect testing an intervention counselling couples, compared to no counselling. The best way of testing the involvement of men in isolation of women would probably have been to conduct a 3-arm study comparing a men-only arm, a women-only arm, and a control arm. A couple of male involvement trials have done this (Mullany et al., 2007, Turan et al., 2001). One reason why we decided against this was a question of achieving sufficient power with the available resources and time available to conduct the study.

But more importantly, I still believe that the intervention is principally testing male involvement, versus no male involvement. Women in the intervention group received very little additional input themselves, compared to those in the control group. They did not participate in Component A, and they would have received a similar version of Component C anyway in the form of the 6th hour postpartum consultation prior to discharge. So the only additional input for women would have been during Component B. However, as described, it is unlikely that this session would have covered information that the woman wouldn't have received at some other point during the continuum of care. Instead, the main point of the woman being present during Component B (and C) was the encouragement of couple communication on RH topics, rather than giving the woman new information. In practice, it would be hard to work out what the woman-only intervention arm would have had to be, and how to make it distinct from the control arm.

Finally, as with every complex intervention, there is the issue of identifying what exactly worked. One question raised during the dissemination meetings (see Subchapter 11.4) was whether it is possible to draw any conclusions about which intervention component was the most effective. While this is an interesting point, we believe this would be a complicated analysis to perform, given that most people attended at least two components and it would be difficult to disentangle their separate effects. Due to small numbers, it is also unlikely that there would be sufficient power to detect differential effects. In fact, the intervention was conceived and has been evaluated as a whole package and this is how it makes the most sense. However, our qualitative findings have shed some light on the component formats that participants appreciated and found most useful (see Subchapter 10.3).

11.3.2. Generalisability and methodological aspects

In relation to generalisability, the study sample was drawn from women who attend ANC in urban government-run PHCs in Bobo-Dioulasso. These women may differ from those who attend private facilities or who receive no care at all, although both of these groups account for a small proportion of the population. Furthermore, the results strictly apply to women who were considered fit to give birth in health centres. While in principle the findings of the study may be applicable in other, similar contexts, adaptations may have to be made to the intervention to take account of local contextual factors. For example, different approaches might be necessary in the rural areas of Burkina Faso, where ANC and facility births are lower. For generalisability across the country, cultural diversity between different regions would also have to be considered.

The main methodological limitations related to our study design have already been discussed in previous Chapters, and I have described the measures that were taken, where possible, to limit their effect. These include the impossibility of blinding interviewers, participants and the data analyst to arm allocation, the reliance on self-report for the measurement of the main outcomes, the fact that some measures of effect were not validated, and the risk of courtesy/social desirability bias. Another potential problem was the risk of contamination inherent in the choice of an individualised RCT for an educational intervention conducted in a densely populated area. However, if this occurred it is likely to have biased the effect estimates towards the null rather than away from it.

Another issue is that there are some data which, in retrospect, it would have been good to collect. In *Phase 2* (intervention trial), it would have been good to be able to conduct follow-up (and perhaps also baseline) interviews with men, as well as women, in order to assess differences in attitudes and in knowledge of health topics attributable to the intervention. It would also have been interesting to be able to carry out a costing analysis, which could have informed the discussions of potential scalability of the intervention.

Another limitation related to data collected must be pointed out in relation to the formative phase of this study (*Phase 1*). Prior research by myself and colleagues had shed light on women's perspectives on the role of male partners and on the support they received from men during pregnancy in the postpartum period, and in relation to FP use (Drabo et al., 2015, Daniele, 2014). As a result, we did not specifically consult women as part of this phase. During the pilot phase we ascertained that the majority of eligible women were willing to participate in the study, and at the time, we interpreted this as meaning that involving men, and involving them in this way, was acceptable to most women. Findings from the qualitative process evaluation suggest that most women were strongly supportive of our intervention (see Chapter 10).

However, in retrospect I have come to realise that if would have been important to carry out more specific formative research with women, similar to what we did with men and health workers. It would have been useful to specifically ask women whether and in what way they would like to involve their male partners in their health care, and use this data to inform the development of the intervention. The importance of involving both men and women in formative research to inform male involvement programmes has been pointed out by several authors (Greene and Levack, 2010, Stern, 2014). I therefore recognise this omission as a limitation of the study.

11.4. Dissemination activities and feedback

In order to achieve Objective 4 of this study, I carried out various dissemination activities to share my findings, and had several opportunities to present the work to academic and non-academic audiences.

I gave presentations of this work at the International Conference on Male Involvement in Improving Women's Sexual and Reproductive Health in Mumbai, India, in February-March 2016, at the GLOW conference in Manchester, UK, in November 2016, and gave seminars at WHO Geneva in February 2017 and for the MARCH centre group at LSHTM in March 2017. A poster presentation on the development of the intervention and process data on uptake won a prize at the LSHTM Research Degrees poster day in February 2016. I was able to present my results at WHO Geneva thanks to an invitation by Dr Anthony Costello, head of the Department of MNCA Health, who told us that the results would be of interest to his colleagues in view of their guideline development work.

I developed a 2-page research brief and PowerPoint presentations of the main results in French and in English. These were shared with stakeholders during a dissemination visit to Burkina Faso in January 2017. The dissemination materials will be published on the STEP UP website once academic publications have been submitted and accepted.

I travelled to Burkina Faso with my supervisor Prof. V. Filippi for a week-long dissemination visit. Dr R. Ganaba joined us for these activities. First, we presented the findings to the authorities at the Health District of Dafra, where the study was conducted (8 participants). We also held a meeting to share the findings with our research assistants and interviewers at AfricSanté (7 participants). Afterwards, over the course of three days, we held dissemination and feedback sessions in all 5 of the participating PHCs (89 participants). We shared the presentation with the health workers and gave them copies of the research summary. After each presentation we had an informal discussion in which we invited participants to give us feedback on the results and their thoughts on the implications of the findings for their practice. We also

asked for suggestions for action at the policy-level and their opinions on the feasibility of scale-up of the intervention.

We received positive feedback on the study from health workers from the participating PHCs. They noticed that the intervention is effective on all health indicators of interest, suggesting that this is a useful strategy overall. They felt particularly strongly that demand-creating initiatives such as this one are extremely important in their context in order to increase the uptake of key behaviours such as FP use. Health workers acknowledged that since the end of the project, in the absence of specific provisions and incentives for continuation, the level of male involvement in the 5 facilities had gone back to what it was before. However, several providers reported that they now invite men who spontaneously accompany their wives to take part in routine consultations. There were also reports that the intervention had increased people's level of trust in health services, and that certain couples now resorted to the health workers' advice on a variety of issues, including relationship problems, confirming findings from the qualitative evaluation (see Subchapter 10.4.6).

In Burkina Faso, we also had a meeting with the Director of Family Health (Direction de la Sante de la Famille) at the Ministry of Health of Burkina Faso, Dr R. Windsouri Sawadogo, and three of her colleagues. We also met Prof. N. Meda, who has since been nominated Minister of Health, and the country representative of the Population Council in Burkina Faso, Mrs G. Kabore. The intervention was well-received.

In the next Subchapters, I will include in my discussion some of the points raised by stakeholders in Burkina Faso, as well as by participants at the seminars at WHO and LSHTM, in relation to the policy implications of this study, further research ideas, and gender issues.

11.5. Implications for policy and further research

This was a proof of concept study focused on understanding what effect male involvement might have on health outcomes. Because of the known challenges of introducing new unfamiliar work for health providers, and of encouraging men to come into health facilities, we organised additional, specifically designed sessions as opposed to including men into routine care. We also provided additional resources, such as the payment for extra work done by health workers, money for making phone calls, the invitation letter, and the travel money given to men at the end of Component A. The intervention was therefore implemented in rather "idealised" conditions. It was not surprising, therefore, that participants in our dissemination meetings pointed out that it would be difficult to scale-up the intervention in its original formulation, due to a lack of resources. On the other hand, they said that involving men into routine care would entail the same difficulties that were identified during our formative phase, such as men's unwillingness to attend and lack of time, and the lack of physical space or the perceived

inappropriateness of men sitting among women in waiting areas. Another problem is the length of waiting time for routine ANC appointments, which is too long for men.

As an invitation strategy, phone calls are likely to be too expensive and time-consuming. In order to encourage men to attend routine care, the cheapest and therefore most feasible element that could be drawn from our intervention might be to give out leaflets or invitation letters. However, many men are unable to read, a problem which would also apply in the case of an SMS-based invitation strategy. Clearly, it would not be possible to give them travel money. However, participants in our dissemination meetings had different opinions on the impact that this had had on attendance. Some thought that it did not contribute to men's attendance at the first session, as they did not know that they would receive anything. This is in line with the opinions voiced by health workers who participated in the qualitative process evaluation (see Subchapter 10.2.6). In the dissemination meetings, some providers thought that the money might have increased men's attendance at subsequent sessions, but others thought that it was their understanding of the importance of their participation that encouraged them to come again.

Some participants pointed out that one opportunity would be to involve men who drop off their wives at the start of the ANC clinic. They could at least attend the *causerie educative*, even if they did not stay on for the antenatal appointment. A more pro-active approach to make sure that men stay at least for this meeting could be adopted. However, it is unclear whether it would be acceptable for men and women to sit together. The ideal solution would be to have an entirely appointment-based service, but this seems unfeasible because of many women's low educational level, and it would require a whole organisational shift for the service.

Given the difficulty in coming up with local solutions, health centre staff suggested that a policy-level initiative would be needed in order to integrate male involvement into routine practice. One person suggested that an operational plan could be drawn up at the District level, to be matched by a directive drawn up at the regional and possibly national level. It was suggested that the participation of men could become integrated in the evaluation of service quality, and this could be accompanied by a payment by results system in order to motivate staff. However, we have reservations about the implementation of such a system or about rolling-out performance-based incentives at scale without adequate supervision and safeguards, as this could potentially lead some providers to pressurise women into involving their male partners (for further discussion of gender issues, see the next Subchapter).

Our intervention focused on facilities, however, during the meetings, several people suggested that it might be easier to involve men through outreach activities in the community, a suggestion also made by men in the qualitative process evaluation (see Subchapter 10.2.7). Specific ideas included the involvement of community health workers, home visits, the involvement of community-based associations and NGOs, and peer-to-peer work through the men who had

responded well to our project. Participants suggested that they could be trained to be "champions" for male involvement in their communities, which is similar to what has been done in Burkina Faso by the UNFPA *Ecole de maris* and the EDM *Maris Modeles* projects (UNFPA, 2014, Perkins et al., 2016). Another possibility that was mentioned was raising awareness through the media. It is relevant to note that a programme to raise awareness of FP among men and women is currently being tested by Development Media International (Development Media International, 2016).

In our opinion, community mobilisation is important for demand creation and to stimulate participation, but work at the facility-level is also required, so that it is possible to accommodate men who do wish to attend. In general, we agree that it can be equally, if not more effective, to promote health messages and preventative interventions closer to where people live and work (Ditekemena et al., 2011). However, in a context with limited resources, the quality of the counselling and advice that can be provided is probably better in health centres, where health workers have higher levels of qualification. Furthermore, in urban areas, PHCs are also easily accessible to the population. We believe it could be useful in the future to test interventions that combine both facility-level and community-level components. These might have a stronger effect on health indicators than a purely facility-based intervention (World Health Organization, 2007a).

During our meeting with the Department for Family Health, we were asked why the study was conducted only in a city, rather than in rural areas, where unmet need for FP is higher. We explained that we chose an urban area because families are smaller (INSD, 2012) and therefore the involvement of male partners are likely to be particularly relevant to the day-to-day care of new mothers and infants, in the absence of the extended family including older female relatives (Mbekenga et al., 2011). Another reason is that the risk of contamination in an individually randomised trial is likely to be reduced in an urban area. Furthermore, in the city it was possible for us to work with better trained health workers, including midwives, and therefore offer an intervention that may have been of higher quality. However, we acknowledged that conducting similar research in a rural area would be important in the future. A cluster randomised design would probably be necessary when conducting a similar study in a rural location in order to limit contamination, especially if the intervention included a community component.

Finally, health workers in Burkina Faso expressed an interest in involving men at the time of birth, despite acknowledging that at the moment this is not routinely possible in their facilities due to limited space and privacy concerns. The reasons why we did not include this in our intervention have been mentioned (see Subchapter 6.7.2). However, this could be an interesting area for future research, given that the WHO has recently issued the recommendation that

"every woman is offered the option to experience labour and childbirth with the companion of her choice" (World Health Organization, 2016b).

11.6. Gender and scalability

One of the essential principles that must inform any male involvement programme is that women should be free to decide whether and to what extent they want to involve their male partner in their care (World Health Organization, 2015c). It is reassuring that we saw an improvement in relationship adjustment, albeit as an exploratory finding, as the result of our intervention. In addition, throughout the duration of our study, we came across no evidence that a woman had been pressurised into participating in the study or into involving her male partner, nor was any adverse effect reported resulting from the male partner's involvement. We also saw no evidence that the token payments made to health workers to compensate them for their additional work tempted them to put undue pressure on women, for the purpose of personal gain.

However, we must caution against the scaling up of this kind of intervention without specific measures to ensure that women's autonomy, rights and decision-making are respected (World Health Organization, 2015c).

First of all, a blanket policy recommendation to involve male partners, without adequate safeguards, can be misinterpreted and lead to serious adverse consequences. There are reports from other countries that the emphasis on male involvement has led to cases of discriminatory treatment or even exclusion of women who don't have a male partner or choose not to involve him in their care. For example, in Malawi, Tanzania and Rwanda, male partner participation has been recommended by national policies, but is being interpreted as an obligation in regulations issued by certain local authorities or individual clinics (Kululanga et al., 2011, Comrie-Thomson et al., 2015a, Påfs et al., 2015).

The first problematic practice mentioned in these reports is fast-track ANC services for couples, a "solution" to the fact that men don't want to participate in ANC services due to the long waiting times (Kululanga et al., 2011). This was also brought up during our dissemination meetings with health workers in Burkina Faso. Several providers mentioned that on the rare occasions when a couple attends, they are allowed to jump the queue because the man has to go back to work. However, we cannot endorse this solution, as it is discriminatory against women attending alone. Furthermore, it reinforces the idea that men's work is of higher value, whereas it is acceptable for women to sit around for hours waiting to be seen. Finally, from a practical perspective, it can only work as long as only a few couples attend.

However, the reports mention that in some clinics women who are not accompanied by their male partner are actually turned away (Kululanga et al., 2011). This approach negates individual

choice and in effect compels women to involve their partners. The only other option for women in these settings is to get a letter from a village authority to indicate that they are not married (Comrie-Thomson et al., 2015a), or to pay a stranger off the street to pose as their husband (Påfs et al., 2015). Ultimately, however, some women may forgo or delay attending ANC (Kululanga et al., 2011, Påfs et al., 2015).

It is therefore essential that male involvement programmes include monitoring and evaluation strategies to detect this type of adverse impacts (World Health Organization, 2015c). Training for programmers, ministerial staff, local authorities, and community elders is also needed in order to ensure that they fully understand the principles of free choice that must underpin male involvement initiatives.

There are also other problematic issues related to involving men in everyday clinical practice. It is essential that clinic managers and health workers working with couples have the awareness and skills necessary to ensure that women's voices are heard and their preferences are respected. During our dissemination sessions in Bobo-Dioulasso, one senior female health worker, who did not personally deliver any of the intervention components, mentioned a case in which the husband was keener to start contraception straight after birth than the woman herself. This case did not involve a study participant. In the end, "because men always have the last word", the woman agreed to start a method. It is a matter of serious concern that experienced health workers are unable or unwilling to challenge the imposition of a man's will upon a woman in this type of circumstance.

It is necessary to keep in mind that health providers need support in how to deal with couples whose relationships are characterised by the traditional male-female roles of domination and subordination (Shepard, 2004). In contexts where men tend to take charge and give orders, women may be reluctant to express themselves, and risk becoming passive participants in the care process. In addition, health workers are often short of time and are usually not trained to provide in-depth counselling on deeply personal issues. We therefore recommend that all providers who will be working with men must receive specific training in couple counselling, with a strong gender awareness component (World Health Organization, 2015c). The training should include strategies to ensure a moment of privacy during which the provider can speak to the woman alone, and obtain her consent prior to inviting the man into the consultation room. Additional options at the level of service organisation would be to routinely include men only in part of the consultation (Shepard, 2004), or to offer a combination of individual and couple sessions (Kim and Kols, 2002).

The provision of adequate training and supervision for health workers and clinic managers is a non-negotiable condition that has to be an integral part of any policy-level initiative for scaling up male involvement programmes.

11.7. Conclusion

I conducted an intervention study to test a contextualised strategy for involving men in maternity care in Burkina Faso, and I have achieved the aim and objectives of the study.

The main findings show that the intervention had a positive effect on PNC attendance, the practice of EBF, the uptake of PPFP (especially LA/PM), and improved an unvalidated measure of relationship adjustment. These positive results are largely due to the achievement of an overall good level of participation by men and couples in the sessions offered. Attendance levels may have been determined by individual participants' circumstances and motivation, or been influenced by particular organisational features within the implementing health facilities. Participation appears to have led to the desired changes in the behaviours of interest by increasing participants' knowledge of health topics, and promoting couple communication and shared decision-making.

Together with colleagues, I carried out a series of dissemination activities to share these findings, and the overall positive feedback we received has influenced our reflections on the implications of these results. Clearly, some adaptation of this intervention would be needed in view of potential scale-up. For example, the integration of a community-based component might be considered, although this would add complexity and potentially complicate the programme's evaluation. Above all, however, policy-makers intending to promote male partner participation in routine care must also allocate resources to train health workers in gender awareness, to ensure that women's autonomy is respected.

In sum, this was a rigorously conducted study which contributes to broadening the limited existing evidence-base on interventions to involve men in reproductive health. These results also provide a useful contribution to our knowledge on the range of strategies that can promote PNC attendance, the practice of EBF, and the uptake of PPFP. We conclude that gender-transformative interventions to involve men as supportive partners in women's reproductive health care can lead to improved adherence to recommended healthy practices among postpartum women. Our findings are relevant to the development of future RMNH policies in Sub-Saharan Africa and beyond.

REFERENCES

AARNIO, P., CHIPETA, E. & KULMALA, T. 2013. Men's perceptions of delivery care in rural Malawi: exploring community level barriers to improving maternal health. *Health Care Women Int,* 34**,** 419-39.

ABBASS-DICK, J., STERN, S. B., NELSON, L. E., WATSON, W. & DENNIS, C. L. 2014. Coparenting breastfeeding support and exclusive breastfeeding: a randomized controlled trial. *Pediatrics,* 135**,** 102-10.

ABDEL-TAWAB, N., HUNTINGTON, D., HASSAN, E. O., YOUSSEF, H. & NAWAR, L. 1999. Effects of husband involvement on postabortion patients' recovery and use of contraception in Egypt. New York, New York, Population Council, 1999.

ABDEL-TAWAB, N., LOZA, S. & ZAKI, A. 2008. Helping Egyptian women achieve optimal birth spacing intervals through foatering linkages between family planning and maternal/child health services. FRONTIERS Programme - Population Council.

ABRAHAM, W., ADAMU, A. & DERESSE, D. 2010. The Involvement of Men in Family Planning An Application of Transtheoretical Model in Wolaita Soddo Town South Ethiopia. *Asian Journal of Medical Sciences,* 2**,** 44-50.

ADANIKIN, A. I., ONWUDIEGWU, U. & LOTO, O. M. 2013. Influence of multiple antenatal counselling sessions on modern contraceptive uptake in Nigeria. *Eur J Contracept Reprod Health Care,* 18**,** 381-7.

ADELEKAN, A. L., EDONI, E. R. & OLALEYE, O. S. 2014. Married Men Perceptions and Barriers to Participation in the Prevention of Mother-to-Child HIV Transmission Care in Osogbo, Nigeria. *Journal of Sexually Transmitted Diseases,* 2014**,** 6.

ADELEYE, O. A. & OKONKWO, C. A. 2016. Changes in Men's Knowledge & Attitudes Following Health Education on their Role in Preventing Maternal Deaths: An Exploratory Survey in a Nigerian Community. *Social Medicine,* 10.

AGUIAR, C. & JENNINGS, L. 2015. Impact of Male Partner Antenatal Accompaniment on Perinatal Health Outcomes in Developing Countries: A Systematic Literature Review. *Maternal and Child Health Journal,* 19**,** 2012-2019.

AGUNBIADE, O. M. & OGUNLEYE, O. V. 2012. Constraints to exclusive breastfeeding practice among breastfeeding mothers in Southwest Nigeria: implications for scaling up. *International Breastfeeding Journal,* 7**,** 5.

AJAH, L. O., DIM, C. C., EZEGWUI, H. U., IYOKE, C. A. & UGWU, E. O. 2015. Male partner involvement in female contraceptive choices in Nigeria. *J Obstet Gynaecol,* 35**,** 628-31.

AJIBADE, B. L., OKUNLADE, J. O., MAKINDE, O. Y., AMOO, P. O. & ADEYEMO, M. O. A. 2013. Factors influencing the practice of exclusive breast feeding in rural communities of Osun State, Nigeria. *European Journal of Business and Management,* 5.

ALIVE & THRIVE 2012. Literature review: fathers support infant and young child feeding: their contributions to better outcomes. Available at: http://aliveandthrive.org/wp-content/uploads/2014/11/Literature-Reivew-Dads.pdf [accessed 1/11/16].

ALIVE & THRIVE 2014. Improving child feeding practices to prevent malnutrition: Alive & Thrive's approach and results in Ethiopia. Available at: http://aliveandthrive.org/wp-content/uploads/2014/11/Ethiopia-country-brief_web-version.pdf [accessed 15/11/16].

ALKEMA, L., CHOU, D., HOGAN, D., ZHANG, S., MOLLER, A. B., GEMMILL, A., FAT, D. M., BOERMA, T., TEMMERMAN, M., MATHERS, C. & SAY, L. 2016. Global, regional, and national levels and trends in maternal mortality between 1990 and 2015, with

scenario-based projections to 2030: a systematic analysis by the UN Maternal Mortality Estimation Inter-Agency Group. *Lancet,* 387**,** 462-74.

ALUISIO, A., RICHARDSON, B. A., BOSIRE, R., JOHN-STEWART, G., MBORI-NGACHA, D. & FARQUHAR, C. 2011. Male antenatal attendance and HIV testing are associated with decreased infant HIV infection and increased HIV-free survival. *J Acquir Immune Defic Syndr,* 56**,** 76-82.

AMBIA, J. & MANDALA, J. 2016. A systematic review of interventions to improve prevention of mother-to-child HIV transmission service delivery and promote retention. *Journal of the International AIDS Society,* 19**,** 20309.

AMNESTY INTERNATIONAL 2009. Donner la vie, riquer la morte: la mortalite maternelle au Burkina Faso. London: Amnesty International.

AMOOTI-KAGUNA, B. & NUWAHA, F. 2000. Factors influencing choice of delivery sites in Rakai district of Uganda. *Soc Sci Med,* 50**,** 203-13.

AMPT, F., MON, M. M., THAN, K. K., KHIN, M. M., AGIUS, P. A., MORGAN, C., DAVIS, J. & LUCHTERS, S. 2015. Correlates of male involvement in maternal and newborn health: a cross-sectional study of men in a peri-urban region of Myanmar. *BMC Pregnancy Childbirth,* 15**,** 122.

ANDERSSON, N., OMER, K., CALDWELL, D., DAMBAM, M. M., MAIKUDI, A. Y., EFFIONG, B., IKPI, E., UDOFIA, E., KHAN, A., ANSARI, U., ANSARI, N. & HAMEL, C. 2011. Male responsibility and maternal morbidity: a cross-sectional study in two Nigerian states. *BMC Health Serv Res,* 11 Suppl 2**,** S7.

ANDRO, A. & HERTRICH, V. 2002. Demand for Contraception in Sahelian Countries: Are Men's and Women's Expectations Converging? Burkina Faso and Mali, Compared to Ghana. *Population,* 57**,** 929-957.

ANIEBUE, P. N., ANIEBUE, U. U. & ADIMORA, G. N. 2010. Knowledge and beliefs about exclusive breastfeeding among rural Nigerian men in Enugu, Southeast Nigeria. *Breastfeed Med,* 5**,** 169-71.

ARTS, M., GEELHOED, D., DE SCHACHT, C., PROSSER, W., ALONS, C. & PEDRO, A. 2011. Knowledge, Beliefs, and Practices Regarding Exclusive Breastfeeding of Infants Younger Than 6 Months in Mozambique: A Qualitative Study. *Journal of Human Lactation,* 27**,** 25-32.

ASHFAQ, S. & SADIQ, M. 2015. Engaging the missing link: Evidence from FALAH for involving men in family planning in Pakistan. Case Study. Washington, DC: Population Council, The Evidence Project.

ASSEMBLEE NATIONALE BURKINA FASO 1996. Loi No. 043/96/ADP du 13 Novembre 1996 portant Code Pénal

ASSEMBLEE NATIONALE BURKINA FASO 2005. Loi n. 049-2005/AN du 22 Decembre 2005 portant Sante de la Reproduction.

AUBEL, J. 2012. The role and influence of grandmothers on child nutrition: culturally designated advisors and caregivers. *Matern Child Nutr,* 8**,** 19-35.

AUBEL, J., TOURE, I. & DIAGNE, M. 2004. Senegalese grandmothers promote improved maternal and child nutrition practices: the guardians of tradition are not averse to change. *Soc Sci Med,* 59**,** 945-59.

AUGUST, F., PEMBE, A. B., MPEMBENI, R., AXEMO, P. & DARJ, E. 2015. Men's Knowledge of Obstetric Danger Signs, Birth Preparedness and Complication Readiness in Rural Tanzania. *PLoS ONE,* 10**,** e0125978.

AUGUST, F., PEMBE, A. B., MPEMBENI, R., AXEMO, P. & DARJ, E. 2016. Community health workers can improve male involvement in maternal health: evidence from rural Tanzania. *Glob Health Action,* 9**,** 30064.

AVERBACH, S., LESTER, F., FORTIN, J., BYAMUGISHA, J., GOLDBERG, A. & KAKAIRE, O. 2012. Acceptability of the IUD among women who opted out of a randomized controlled trial of intracesarean insertion of the copper-T 380A in Kampala, Uganda. *Contraception,* 86**,** 318.

AYEBARE, E., MWEBAZA, E., MWIZERWA, J., NAMUTEBI, E., KINENGYERE, A. A. & SMYTH, R. 2015. Interventions for male involvement in pregnancy and labour: A systematic review. *African Journal of Midwifery and Women's Health,* 9**,** 23-28.

AZUINE, R. E., MURRAY, J., ALSAFI, N. & SINGH, G. K. 2015. Exclusive Breastfeeding and Under-Five Mortality, 2006-2014: A Cross-National Analysis of 57 Low- and-Middle Income Countries. *Int J MCH AIDS,* 4**,** 13-21.

BABALOLA, S. & NEETU, J. 2012. Factors underlying the use of long-acting and permanent family planning methods in Nigeria: A qualitative study. The Respond Project Study Series: Contributions to Global Knowledge. Report No. 5. New York: EngenderHealth/The RESPOND Project.

BABIRYE, J. N., RUTEBEMBERWA, E., KIGULI, J., WAMANI, H., NUWAHA, F. & ENGEBRETSEN, I. M. 2011. More support for mothers: a qualitative study on factors affecting immunisation behaviour in Kampala, Uganda. *BMC Public Health,* 11**,** 723.

BANG, A. T., REDDY, H. M., DESHMUKH, M. D., BAITULE, S. B. & BANG, R. A. 2005. Neonatal and infant mortality in the ten years (1993 to 2003) of the Gadchiroli field trial: effect of home-based neonatal care. *J Perinatol,* 25 Suppl 1**,** S92-107.

BANKOLE, A. & SINGH, S. 1998. Couples' Fertility and Contraceptive Decision-Making in Developing Countries: Hearing the Man's Voice. *International Family Planning Perspectives,* 24.

BANOS, J. P., BANOS, C. & MOUMOUNI, Z. 1996. [Constraints faced by hospitalized maternity patients in Niamey (Niger)]. *Sante,* 6**,** 345-51.

BAQUI, A. H., AHMED, S., ARIFEEN, S. E., DARMSTADT, G. L., ROSECRANS, A. M., MANNAN, I., RAHMAN, S. M., BEGUM, N., MAHMUD, A. B. A., SERAJI, H. R., WILLIAMS, E. K., WINCH, P. J., SANTOSHAM, M. & BLACK, R. E. 2009. Effect of timing of first postnatal care home visit on neonatal mortality in Bangladesh: a observational cohort study. *BMJ,* 339.

BARKER, G., CONTRERAS, J. M., HEILMAN, B., SINGH, A. K., VERMA, R. K. & NASCIMENTO, M. 2011. Evolving Men: Initial Results from the International Men and Gender Equality Survey (IMAGES). Washington, D.C.: International Center for Research on Women (ICRW) and Rio de Janeiro: Instituto Promundo.

BARNES, J., BALL, M., MEADOWS, P., MCLEISH, J., BELSKY, J. & TEAM, F. I. R. 2008. Nurse-Family Partnership Programme: First year pilot sites implementation in England. Pregnancy and the post-partum period. Research Report No DCSF-RW051. Institute for the Study of Children, Families and Social Issues, Birkbeck, University of London.

BAWAH, A. A. 2002. Spousal communication and family planning behavior in Navrongo: a longitudinal assessment. *Stud Fam Plann,* 33**,** 185-94.

BECKER, S. 1999. Measuring unmet need: wives, husbands or couples? *International Family Planning Perspectives,* 25**,** 172-180.

BECKER, S., MLAY, R., SCHWANDT, H. M. & LYAMUYA, E. 2010. Comparing couples' and individual voluntary counseling and testing for HIV at antenatal clinics in Tanzania: a randomized trial. *AIDS Behav,* 14**,** 558-66.

BERHANE, A., BIADGILIGN, S., AMBERBIR, A., MORANKAR, S., BERHANE, A. & DERIBE, K. 2011. Men's knowledge and spousal communication about modern family planning methods in Ethiopia. *Afr J Reprod Health,* 15**,** 24-32.

BERMAN, P., KENDALL, C. & BHATTACHARYYA, K. 1994. The household production of health: integrating social science perspectives on micro-level health determinants. *Soc Sci Med,* 38**,** 205-15.

BERTRAND, J. T., O'REILLY, K., DENISON, J., ANHANG, R. & SWEAT, M. 2006. Systematic review of the effectiveness of mass communication programs to change HIV/AIDS-related behaviors in developing countries. *Health Educ Res,* 21**,** 567-97.

BETANCOURT, T. S., ABRAMS, E. J., MCBAIN, R. & FAWZI, M. C. 2010. Family-centred approaches to the prevention of mother to child transmission of HIV. *J Int AIDS Soc,* 13 Suppl 2**,** S2.

BEZNER KERR, R., DAKISHONI, L., SHUMBA, L., MSACHI, R. & CHIRWA, M. 2008. "We grandmothers know plenty": breastfeeding, complementary feeding and the multifaceted role of grandmothers in Malawi. *Soc Sci Med,* 66**,** 1095-105.

BHANDARI, N., BAHL, R., MAZUMDAR, S., MARTINES, J., BLACK, R. E. & BHAN, M. K. 2003. Effect of community-based promotion of exclusive breastfeeding on diarrhoeal illness and growth: a cluster randomised controlled trial. *Lancet,* 361**,** 1418-23.

BHUSHAN, I. 1997. Understanding unmet need. Working paper No.4. Baltimore: Johns Hopkins University School of Public Health, Center for Communication Programs.

BICH, T. H. & CUONG, N. M. 2016. Changes in knowledge, attitude and involvement of fathers in supporting exclusive breastfeeding: a community-based intervention study in a rural area of Vietnam. *International Journal of Public Health***,** 1-10.

BICH, T. H., HOA, D. T., HA, N. T., VUI LE, T., NGHIA, D. T. & MALQVIST, M. 2016. Father's involvement and its effect on early breastfeeding practices in Viet Nam. *Matern Child Nutr,* 12**,** 768-77.

BICH, T. H., HOA, D. T. & MALQVIST, M. 2014. Fathers as supporters for improved exclusive breastfeeding in Viet Nam. *Matern Child Health J,* 18**,** 1444-53.

BLAKE, M. & BABALOLA, S. 2002. Impact of a Male Motivation Campaign on Family Planning Ideation and Practice in Guinea. Field Report No. 13. Baltimore: Johns Hopkins University Bloomberg School of Public Health, Center for Communication Programs.

BOHREN, M. A., VOGEL, J. P., HUNTER, E. C., LUTSIV, O., MAKH, S. K., SOUZA, J. P., AGUIAR, C., SARAIVA CONEGLIAN, F., DINIZ, A. L., TUNCALP, O., JAVADI, D., OLADAPO, O. T., KHOSLA, R., HINDIN, M. J. & GULMEZOGLU, A. M. 2015. The Mistreatment of Women during Childbirth in Health Facilities Globally: A Mixed-Methods Systematic Review. *PLoS Med,* 12**,** e1001847; discussion e1001847.

BRADLEY, S. E. K., CROFT, T. N., FISHEL, J. D. & WESTOFF, C. F. 2012. Revising unmet need for family planning. DHS analytical studies 25. Calverton, Maryland, USA.

BRESLOW, L. 1996. Social ecological strategies for promoting healthy lifestyles. *Am J Health Promot,* 10**,** 253-7.

BRUSAMENTO, S., GHANOTAKIS, E., TUDOR CAR, L., VAN-VELTHOVEN, M. H., MAJEED, A. & CAR, J. 2012. Male involvement for increasing the effectiveness of prevention of mother-to-child HIV transmission (PMTCT) programmes. *Cochrane Database Syst Rev,* 10**,** Cd009468.

BURGESS, A. 2008. The Costs and Benefits of Active Fatherhood: Evidence and Insights to Inform the Development of Policy and Practice. Marlborough, UK: Fatherhood Institute.

BUSKENS, I., JAFFE, A. & MKHATSHWA, H. 2007. Infant feeding practices: realities and mind sets of mothers in Southern Africa. *AIDS Care,* 19**,** 1101-9.

BYAMUGISHA, R., ASTROM, A. N., NDEEZI, G., KARAMAGI, C. A., TYLLESKAR, T. & TUMWINE, J. K. 2011. Male partner antenatal attendance and HIV testing in eastern Uganda: a randomized facility-based intervention trial. *Journal of the International AIDS Society,* 14**,** 43.

CAMPBELL, C. A. 1995. Male gender roles and sexuality: implications for women's AIDS risk and prevention. *Soc Sci Med,* 41**,** 197-210.

CARE QUALITY COMMISSION (CQC) 2013. Technical details – patient survey information 2013 Maternity Survey, December 2013

CHAMBLISS, L. R. 2008. Intimate partner violence and its implication for pregnancy. *Clin Obstet Gynecol,* 51**,** 385-97.

CHOU, D., DAELMANS, B., JOLIVET, R. R., KINNEY, M. & SAY, L. 2015. Ending preventable maternal and newborn mortality and stillbirths. *BMJ,* 351.

CHOWDHURY, R., SINHA, B., SANKAR, M. J., TANEJA, S., BHANDARI, N., ROLLINS, N., BAHL, R. & MARTINES, J. 2015. Breastfeeding and maternal health outcomes: a systematic review and meta-analysis. *Acta Paediatr,* 104**,** 96-113.

CHUNG, M., IP, S., YU, W., RAMAN, G., TRIKALINOS, T., DEVINE, D. & LAU, J. 2008. U.S. Preventive Services Task Force Evidence Syntheses, formerly Systematic Evidence Reviews. *Interventions in Primary Care to Promote Breastfeeding: A Systematic Review.* Rockville (MD): Agency for Healthcare Research and Quality (US).

CLELAND, J., BERNSTEIN, S., EZEH, A., FAUNDES, A., GLASIER, A. & INNIS, J. 2006. Family planning: the unfinished agenda. *Lancet,* 368**,** 1810-27.

CLELAND, J. G., ALI, M. M. & CAPO-CHICHI, V. 1999. Post-partum sexual abstinence in West Africa: implications for AIDS-control and family planning programmes. *Aids,* 13**,** 125-31.

COMRIE-THOMSON, L., MAVHU, W., MAKUNGU, C., NAHAR, Q., KHAN, R., DAVIS, J., HAMDANI, S., STILLO, E. & LUCHTERS, S. 2015a. Men Matter: Engaging Men in MNCH Outcomes. Burnet Institute and Plan Canada.

COMRIE-THOMSON, L., TOKHI, M., AMPT, F., PORTELA, A., CHERSICH, M., KHANNA, R. & LUCHTERS, S. 2015b. Challenging gender inequity through male involvement in maternal and newborn health: critical assessment of an emerging evidence base. *Culture, Health and Sexuality,* 17(sup2) 177–189.

CONDE-AGUDELO, A., ROSAS-BERMUDEZ, A. & KAFURY-GOETA, A. C. 2007. Effects of birth spacing on maternal health: a systematic review. *Am J Obstet Gynecol,* 196**,** 297-308.

CONNELL, R. W. & MESSERSCHMIDT, J. W. 2005. Hegemonic Masculinity. *Gender & Society,* 19**,** 829-859.

COWAN, P. A., COWAN, C. P., PRUETT, M. K., PRUETT, K. & WONG, J. J. 2009. Promoting Fathers' Engagement With Children: Preventive Interventions for Low-Income Families. *Journal of Marriage and Family,* 71**,** 663-679.

DANFORTH, E. J., KRUK, M. E., ROCKERS, P. C., MBARUKU, G. & GALEA, S. 2009. Household decision-making about delivery in health facilities: evidence from Tanzania. *J Health Popul Nutr,* 27**,** 696-703.

DANIELE, M. 2014. Postpartum Family Planning in Burkina Faso. STEP UP Research Report. London: London School of Hygiene and Tropical Medicine.

DARMSTADT, G. L., BAQUI, A. H., CHOI, Y., BARI, S., RAHMAN, S. M., MANNAN, I., AHMED, A. S., SAHA, S. K., RAHMAN, R., CHANG, S., WINCH, P. J., BLACK, R. E., SANTOSHAM, M. &

EL ARIFEEN, S. 2009. Validation of community health workers' assessment of neonatal illness in rural Bangladesh. *Bull World Health Organ,* 87**,** 12-9.

DARMSTADT, G. L., BHUTTA, Z. A., COUSENS, S., ADAM, T., WALKER, N. & DE BERNIS, L. 2005. Evidence-based, cost-effective interventions: how many newborn babies can we save? *Lancet,* 365**,** 977-88.

DAVANZO, J., HALE, L., RAZZAQUE, A. & RAHMAN, M. 2007. Effects of interpregnancy interval and outcome of the preceding pregnancy on pregnancy outcomes in Matlab, Bangladesh. *Bjog,* 114**,** 1079-87.

DAVIES-ADETUGBO, A. A. 1997. Sociocultural factors and the promotion of exclusive breastfeeding in rural Yoruba communities of Osun State, Nigeria. *Soc Sci Med,* 45**,** 113-25.

DAVIS, J., LUTCHERS, S. & HOLMES, W. 2012. Men and maternal and newborn health: benefits, harms, challenges and potential strategies for engaging men. Melbourne, Australia: Compass: Women's and Children's Health Knowledge Hub.

DE ALLEGRI, M., TIENDREBÉOGO, J., MÜLLER, O., YÉ, M., JAHN, A. & RIDDE, V. 2015. Understanding home delivery in a context of user fee reduction: a cross-sectional mixed methods study in rural Burkina Faso. *BMC Pregnancy and Childbirth,* 15**,** 330.

DEHNE, K. L. 2003. Knowledge of, attitudes towards, and practices relating to child-spacing methods in northern Burkina Faso. *J Health Popul Nutr,* 21**,** 55-66.

DEMOGRAPHIC AND HEALTH SURVEYS PROGRAM 2015. DHS Model QUestionnaire - Phase 7. Available at: http://dhsprogram.com/publications/publication-dhsq7-dhs-questionnaires-and-manuals.cfm [accessed 31 Mar 17].

DEVELOPMENT MEDIA INTERNATIONAL 2016. Burkina Faso: Family planning RCT. Webpage. Available at: http://www.developmentmedia.net/burkina-faso-family-planning-rct.html [Accessed 9/3/2017].

DITEKEMENA, J., KOOLE, O., ENGMANN, C., MATENDO, R., TSHEFU, A. & RYDER, R. 2012. Determinants of male involvement in maternal and child health services in sub-Saharan Africa: a review. *Reprod Health,* 9.

DITEKEMENA, J., MATENDO, R., KOOLE, O., COLEBUNDERS, R., KASHAMUKA, M., TSHEFU, A., KILESE, N., NANLELE, D. & RYDER, R. 2011. Male partner voluntary counselling and testing associated with the antenatal services in Kinshasa, Democratic Republic of Congo: a randomized controlled trial. *Int J STD AIDS,* 22**,** 165-70.

DO, M. & HOTCHKISS, D. 2013. Relationships between antenatal and postnatal care and post-partum modern contraceptive use: evidence from population surveys in Kenya and Zambia. *BMC Health Services Research,* 13**,** 6.

DO, M. & KURIMOTO, N. 2012. Women's Empowerment and Choice of Contraceptive Methods in Selected African Countries. *International Perspectives On Sexual and Reproductive Health,* 38**,** 23-33.

DOYLE, K., KATO-WALLACE, J., KAZIMBAYA, S. & BARKER, G. 2014. Transforming gender roles in domestic and caregiving work: preliminary findings from engaging fathers in maternal, newborn, and child health in Rwanda. *Gender & Development,* 22**,** 515-531.

DRABO, S., KAGAMBEGA, A., KEITA, A., KONTIEBO, S., MONTEL, L., FILIPPI, V., SOUBEIGA, A., STORENG, K. T., DA, S., ALLAHISSEM, C., GALI GALI, I. & YAOGO, M. 2015. Compte rendu d'etude: Projet PopDev au Burkina Faso. Available : http://maternalhealthgroup.lshtm.ac.uk/files/2014/05/PopDev-policy-brief_webpage.pdf [Accessed 15 Feb 2016]: London School of Hygiene & Tropical Medicine, London.

DUDGEON, M. R. & INHORN, M. C. 2004. Men's influences on women's reproductive health: medical anthropological perspectives. *Soc Sci Med,* 59**,** 1379-95.

DUIJTS, L., JADDOE, V. W., HOFMAN, A. & MOLL, H. A. 2010. Prolonged and exclusive breastfeeding reduces the risk of infectious diseases in infancy. *Pediatrics,* 126**,** e18-25.

DUVALL, S., THURSTON, S., WEINBERGER, M., NUCCIO, O. & FUCHS-MONTGOMERY, N. 2014. Scaling up delivery of contraceptive implants in sub-Saharan Africa: operational experiences of Marie Stopes International. *Global Health, Science and Practice,* 2**,** 72-92.

DYKSTRA, P. A. & KEIZER, R. 2009. The wellbeing of childless men and fathers in mid-life. *Ageing and Society,* 29**,** 1227-1242.

EDSTROM, J., HASSINK, A., SHAHROKH, T. & STERN, E. 2015. Engendering men: A collaborative review of evidence on men and boys in social change and gender equality. EMERGE Evidence review. Promundo-US, Sonke Gender Justice and the Institute of Development Studies.

ELIASON, S., BAIDEN, F., QUANSAH-ASARE, G., GRAHAM-HAYFRON, Y., BONSU, D., PHILLIPS, J. & AWUSABO-ASARE, K. 2013. Factors influencing the intention of women in rural Ghana to adopt postpartum family planning. *Reprod Health,* 10**,** 34.

ELLSBERG, M., JANSEN, H. A., HEISE, L., WATTS, C. H. & GARCIA-MORENO, C. 2008. Intimate partner violence and women's physical and mental health in the WHO multi-country study on women's health and domestic violence: an observational study. *Lancet,* 371**,** 1165-72.

ENGEBRETSEN, I. M., MOLAND, K. M., NANKUNDA, J., KARAMAGI, C. A., TYLLESKAR, T. & TUMWINE, J. K. 2010. Gendered perceptions on infant feeding in Eastern Uganda: continued need for exclusive breastfeeding support. *Int Breastfeed J,* 5**,** 13.

ESBER, A., FORAKER, R. E., HEMED, M. & NORRIS, A. 2014. Partner approval and intention to use contraception among Zanzibari women presenting for post-abortion care. *Contraception,* 90**,** 23-28.

EXNER, T. M., MANTELL, J. E., ADEOKUN, L. A., UDOH, I. A., LADIPO, O. A., DELANO, G. E., FALEYE, J. & AKINPELU, K. 2009. Mobilizing men as partners: the results of an intervention to increase dual protection among Nigerian men. *Health Educ Res,* 24**,** 846-54.

EZEH, A., SEROUSSI, M. & RAGGERS, H. 1996. Men's fertility, Contraceptive use and Reproductive Preferences.Demographic and Health Surveys Comparative Studies, No.18. Calverton, MD, USA: Macro International.

FADEYI, A. O. 2010. Gender-Equity and Reproductive Behaviour in Lagos State, Nigeria. *African Research Review,* 4**,** 257-271.

FADNES, L. T., ENGEBRETSEN, I. M., MOLAND, K. M., NANKUNDA, J., TUMWINE, J. K. & TYLLESKAR, T. 2010. Infant feeding counselling in Uganda in a changing environment with focus on the general population and HIV-positive mothers - a mixed method approach. *BMC Health Serv Res,* 10**,** 260.

FALNES, E. F., MOLAND, K. M., TYLLESKAR, T., DE PAOLI, M. M., MSUYA, S. E. & ENGEBRETSEN, I. M. 2011. "It is her responsibility": partner involvement in prevention of mother to child transmission of HIV programmes, northern Tanzania. *J Int AIDS Soc,* 14**,** 21.

FAMILY INCLUDED Maternal health apps should be family inclusive - but hardly any are. Webpage. Available at http://familyincluded.com/maternal-health-apps/ [accessed 4/3/2017].

FAPOHUNDA, B. M. & RUTENBERG, N. 1999. Expanding men's participation in reproductive health in Kenya. Nairobi, Kenya: African Population Policy Research Center.

FAPOHUNDA, E. & TODARO, M. 1988. Family Structure, Implicit Contracts and the Demand for Children in Southern Nigeria. *Population and Development Review,* 14**,** 571-594.

FARQUHAR, C., KIARIE, J. N., RICHARDSON, B. A., KABURA, M. N., JOHN, F. N., NDUATI, R. W., MBORI-NGACHA, D. A. & JOHN-STEWART, G. C. 2004. Antenatal couple counseling increases uptake of interventions to prevent HIV-1 transmission. *J Acquir Immune Defic Syndr,* 37**,** 1620-6.

FIROZ, T., CHOU, D., VON DADELSZEN, P., AGRAWAL, P., VANDERKRUIK, R., TUNCALP, O., MAGEE, L. A., VAN DEN BROEK, N. & SAY, L. 2013. Measuring maternal health: focus on maternal morbidity. *Bull World Health Organ,* 91**,** 794-6.

FISHER, J., CABRAL DE MELLO, M., PATEL, V., RAHMAN, A., TRAN, T., HOLTON, S. & HOLMES, W. 2012. Prevalence and determinants of common perinatal mental disorders in women in low- and lower-middle-income countries: a systematic review. *Bull World Health Organ,* 90**,** 139g-149g.

FJELD, E., SIZIYA, S., KATEPA-BWALYA, M., KANKASA, C., MOLAND, K. M. & TYLLESKÄR, T. 2008. 'No sister, the breast alone is not enough for my baby' a qualitative assessment of potentials and barriers in the promotion of exclusive breastfeeding in southern Zambia. *International Breastfeeding Journal,* 3**,** 26.

FORT, L., KOTHARI, M. T. & ABDERRAHIM, N. 2006. Postpartum care: levels and determinants in developing countries. Calverton, Maryland, USA: Macro International Inc.

FP2020 Momentum at the midpoint 2015-16. Unmet Need and Demand Satisfied. Available at http://progress.familyplanning2020.org/page/measurement/unmet-need-and-demand-satisfied-indicators-3-4 [Accessed 4 April 2017].

FRYE HELZNER, J. 2006. Men's involvement in family planning. *Reproductive Health Matters,* 4**,** 146-154.

FURUTA, M. & SALWAY, S. 2006. Women's position within the household as a determinant of maternal health care use in Nepal. *Int Fam Plan Perspect,* 32.

GABRYSCH, S., CIVITELLI, G., EDMOND, K. M., MATHAI, M., ALI, M., BHUTTA, Z. A. & CAMPBELL, O. M. R. 2012. New Signal Functions to Measure the Ability of Health Facilities to Provide Routine and Emergency Newborn Care. *PLOS Medicine,* 9**,** e1001340.

GANABA, R., MARSHALL, T., SOMBIE, I., BAGGALEY, R. F., OUEDRAOGO, T. W. & FILIPPI, V. 2010. Women's sexual health and contraceptive needs after a severe obstetric complication ("near-miss"): A cohort study in Burkina Faso. *Reproductive Health,* 7**,** 22.

GANLE, J. K. & DERY, I. 2015. 'What men don't know can hurt women's health': a qualitative study of the barriers to and opportunities for men's involvement in maternal healthcare in Ghana. *Reproductive Health,* 12**,** 93.

GANLE, J. K., OBENG, B., SEGBEFIA, A. Y., MWINYURI, V., YEBOAH, J. Y. & BAATIEMA, L. 2015. How intra-familial decision-making affects women's access to, and use of maternal healthcare services in Ghana: a qualitative study. *BMC Pregnancy & Childbirth,* 15**,** 1-17.

GEBREMARIAM, W. 2007. Do women with higher autonomy week more maternal and child health-care? Evidence from Ethiopia and Eritrea. Max-Planck-Institut fuer demografische Forschung. MPIDR Working Paper WP 2007-035.

GHARORO, E. P. & IGBAFE, A. A. 2000. Antenatal care: some characteristics of the booking visit in a major teaching hospital in the developing world. *Med Sci Monit,* 6**,** 519-22.

GOGIA, S. & SACHDEV, H. S. 2010. Home visits by community health workers to prevent neonatal deaths in developing countries: a systematic review. *Bull World Health Organ,* 88**,** 658-666b.

GRAHAM, W., WOODD, S., BYASS, P., FILIPPI, V., GON, G., VIRGO, S., CHOU, D., HOUNTON, S., LOZANO, R., PATTINSON, R. & SINGH, S. 2016. Diversity and divergence: the dynamic burden of poor maternal health. *Lancet,* 388**,** 2164-2175.

GREENE, M. & LEVACK, A. 2010. Synchronizing Gender Strategies: A Cooperative Model for Improving Reproductive Health and Transforming Gender Relations. Interagency Gender Working Group (IGWG) Concept Paper.

GREENE, M., MEHTA, M., PULERWITZ, J., WULF, D., BANKOLE, A. & SINGH, S. 2006. Involving Men in Reproductive Health: Contributions to Development: Background paper to the report 'Public Choices, Private Decisions: Sexual and Reproductive Health and the Millennium Development Goals. Washington, D.C.: Millennium Project.

GREENE, M. E. 2002. Lessons and future programmatic directions for involving men in reproductive health. *In:* ORGANIZATION, W. H. (ed.) *Programming for male involvement in reproductive health: Report of the meeting of WHO Regional Advisers in Reproductive Health, 5-7 September 2001.* Geneva: WHO.

GROSS, K., ALBA, S., GLASS, T. R., SCHELLENBERG, J. A. & OBRIST, B. 2012. Timing of antenatal care for adolescent and adult pregnant women in south-eastern Tanzania. *BMC Pregnancy Childbirth,* 12**,** 16.

GUEST, G., MACQUEEN, K. M. & NAMEY, E. E. 2012. *Applied Thematic Analysis*, SAGE Publishing.

GUPTA, M. L., ABORIGO, R. A., ADONGO, P. B., ROMINSKI, S., HODGSON, A., ENGMANN, C. M. & MOYER, C. A. 2015. Grandmothers as gatekeepers? The role of grandmothers in influencing health-seeking for mothers and newborns in rural northern Ghana. *Glob Public Health,* 10**,** 1078-91.

HAQUE, S. E., RAHMAN, M., MOSTOFA, M. G. & ZAHAN, M. S. 2012. Reproductive health care utilization among young mothers in Bangladesh: does autonomy matter? *Womens Health Issues,* 22**,** e171-80.

HARDEE, K., CROCE-GALIS, M. & GAY, J. 2017. Are men well served by family planning programs? *Reproductive Health,* 14**,** 14.

HARTMANN, M., GILLES, K., SHATTUCK, D., KERNER, B. & GUEST, G. 2012. Changes in couples' communication as a result of a male-involvement family planning intervention. *J Health Commun,* 17**,** 802-19.

HDI 2011. Situational analysis and communication and research needs assessment for Alive & Thrive Ethiopia. Report. Addis Ababa: Alive & Thrive.

HEISE, L. 2011. What works to prevent partner violence: An evidence overview. Working paper (version 2.0). Available at: www.oecd.org/derec/49872444.pdf [accessed 8/11/16].

HOFMANN, J., DE ALLEGRI, M., SARKER, M., SANON, M. & BOHLER, T. 2009. Breast milk as the "water that supports and preserves life"--socio-cultural constructions of breastfeeding and their implications for the prevention of mother to child transmission of HIV in sub-Saharan Africa. *Health Policy,* 89**,** 322-8.

HORTA, B. L., LORET DE MOLA, C. & VICTORA, C. G. 2015. Long-term consequences of breastfeeding on cholesterol, obesity, systolic blood pressure and type 2 diabetes: a systematic review and meta-analysis. *Acta Paediatr,* 104**,** 30-7.

HURT, L. S., ALAM, N., DIELTIENS, G., AKTAR, N. & RONSMANS, C. 2008. Duration and magnitude of mortality after pregnancy in rural Bangladesh. *Int J Epidemiol,* 37**,** 397-404.

IGWG 2004. Reaching men to improve reproductive health for all. Resource Guide. . Washington, DC: Interagency Gender Working Group (IGWG -USAID).

IJADUNOLA, M. Y., ABIONA, T. C., IJADUNOLA, K. T., AFOLABI, O. T., ESIMAI, O. A. & OLAOLORUN, F. M. 2010. Male involvement in family planning decision making in Ile-Ife, Osun State, Nigeria. *Afr J Reprod Health,* 14**,** 43-50.

ILIYASU, Z., ABUBAKAR, I. S., GALADANCI, H. S. & ALIYU, M. H. 2010. Birth preparedness, complication readiness and fathers' participation in maternity care in a northern Nigerian community. *Afr J Reprod Health,* 14**,** 21-32.

INFANT & YOUNG CHILD NUTRITION PROJECT 2011. Engaging grandmothers and men in infant and young child feeding and maternal nutrition. Report of a formative assessment in Eastern and Western Kenya. IYCN (USAID).

INSD 2004. Enquête Démographique et de Santé du Burkina Faso 2003 Calverton, Maryland, USA: Institut National de la Statistique et de la Démographie (INSD) et ORC Macro.

INSD 2008. Recensement général de la population et de l'habitation (RGPH) de 2006 du Burkina Faso-Résultats définitifs. Ouagadougou: Institut National de la Statistique et de la Démographie (INSD).

INSD 2012. Enquête Démographique et de Santé et à Indicateurs Multiples (EDSBF-MICS IV) 2010. Calverton, Maryland, USA: Institut National de la Statistique et de la Démographie (INSD) and ICF International.

INSD 2015. Annuaire Statistique 2014. Ouagadougou: Institut National de la Statistique et de la Démographie (INSD).

INTERAGENCY GENDER WORKING GROUP (USAID) Gender Equality Continuum Tool. Adapted from Gupta, G.R., Whelan, D. and Allendorf, K., 2003, Integrating gender into HIV/AIDS programmes: review paper for expert consultation. Geneva, WHO. Available at: http://www.igwg.org/about.aspx [accessed 9/11/2016].

INTERNATIONAL CONFEDERATION OF MIDWIVES 2010. Global standards for midwifery education. Available at: www.internationalmidwives.org [accessed 27 July 2017].

INTERNATIONAL LABOUR ORGANIZATION 2000. Maternity Protection Convention (No.183). Geneva: ILO.

JACKSON, E. & GLASIER, A. 2011. Return of ovulation and menses in postpartum nonlactating women: a systematic review. *Obstet Gynecol,* 117**,** 657-62.

JAH, F., CONNOLLY, S., BARKER, K. & RYERSON, W. 2014. Gender and Reproductive Outcomes: The Effects of a Serial Radio Drama in Northern Nigeria. *International Journal of Population Research,* 2014.

JANSSON, H. 2014. Scorecard on SRHR Policies Engaging Men and Boys in the Promotion of Sexual and Reproductive Health and Rights on the African Continent. Cape Town: Sonke Gender Justice Network.

JEFFERYS, L. F., NCHIMBI, P., MBEZI, P., SEWANGI, J. & THEURING, S. 2015. Official invitation letters to promote male partner attendance and couple voluntary HIV counselling and testing in antenatal care: an implementation study in Mbeya Region, Tanzania. *Reproductive Health,* 12**,** 95.

JENKINS, A. L., TAVENGWA, N. V., CHASEKWA, B., CHATORA, K., TARUBEREKERA, N., MUSHAYI, W., MADZIMA, R. C. & MBUYA, M. N. 2012. Addressing social barriers and closing the gender knowledge gap: exposure to road shows is associated with more knowledge and more positive beliefs, attitudes and social norms regarding exclusive breastfeeding in rural Zimbabwe. *Matern Child Nutr,* 8**,** 459-70.

JENNINGS, L., NA, M., CHEREWICK, M., HINDIN, M., MULLANY, B. & AHMED, S. 2014. Women's empowerment and male involvement in antenatal care: analyses of Demographic and Health Surveys (DHS) in selected African countries. *BMC Pregnancy Childbirth,* 14**,** 297.

JEWKES, R. & MORRELL, R. 2010. Gender and sexuality: emerging perspectives from the heterosexual epidemic in South Africa and implications for HIV risk and prevention. *J Int AIDS Soc,* 13**,** 6.

JEWKES, R., SIKWEYIYA, Y., MORRELL, R. & DUNKLE, K. 2009. Understanding Men's Health and Use of Violence: Interface of Rape and HIV in South Africa. Pretoria, South Africa: Medical Research Council.

KAHAN, B. C. 2014. Accounting for centre-effects in multicentre trials with a binary outcome – when, why, and how? *BMC Medical Research Methodology,* 14**,** 20.

KAIDA, A., KIPP, W., HESSEL, P. & KONDE-LULE, J. 2005. Male participation in family planning: results from a qualitative study in Mpigi District, Uganda. *Journal of Biosocial Science,* 37**,** 269-86.

KAKAIRE, O., KAYE, D. K. & OSINDE, M. O. 2011. Male involvement in birth preparedness and complication readiness for emergency obstetric referrals in rural Uganda. *Reprod Health,* 8**,** 12.

KALEMBO, F. W., ZGAMBO, M., MULAGA, A. N., YUKAI, D. & AHMED, N. I. 2013. Association between Male Partner Involvement and the Uptake of Prevention of Mother-to-Child Transmission of HIV (PMTCT) Interventions in Mwanza District, Malawi: A Retrospective Cohort Study. *PLoS ONE,* 8**,** e66517.

KARIUKI, K. F. & SERUWAGI, G. K. 2016. Determinants of male partner involvement in antenatal care in Wakiso District, Uganda. *British Journal of Medicine and Medical Research,* 18.

KASHITALA, J., NYAMBE, N., MWALO, S., MUSAMBA, J., CHISHINGA, N., KASONDE, P., LILJA, A. M., MWICHE, A. & WELSH, M. 2015. Is Male Involvement in ANC and PMTCT Associated with Increased Facility-Based Obstetric Delivery in Pregnant Women? *African Journal of Reproductive Health,* 19**,** 117-24.

KASSA, M., ABAJOBIR, A. A. & GEDEFAW, M. 2014. Level of male involvement and associated factors in family planning services utilization among married men in Debremarkos town, Northwest Ethiopia. *BMC International Health & Human Rights,* 14**,** 33.

KATZ, D. A., KIARIE, J. N., JOHN-STEWART, G. C., RICHARDSON, B. A., JOHN, F. N. & FARQUHAR, C. 2009. Male perspectives on incorporating men into antenatal HIV counseling and testing. *PLoS One,* 4**,** e7602.

KAYE, D. K., KAKAIRE, O., NAKIMULI, A., OSINDE, M. O., MBALINDA, S. N. & KAKANDE, N. 2014. Male involvement during pregnancy and childbirth: men's perceptions, practices and experiences during the care for women who developed childbirth complications in Mulago Hospital, Uganda. *BMC Pregnancy Childbirth,* 14**,** 54.

KEATING, J., MEEKERS, D. & ADEWUYI, A. 2006. Assessing effects of a media campaign on HIV/AIDS awareness and prevention in Nigeria: results from the VISION Project. *BMC Public Health,* 6**,** 123.

KIM, Y. & KOLS, A. 2002. Counselling and communicating with men to promote family planning in Kenya and Zimbabwe: findings, lessons learned and programme suggestions. *In: Programming for male involvement in reproductive health: Report of the meeting of WHO Regional Advisers in Reproductive Health, 5-7 September 2001.* Geneva: WHO.

KIRKWOOD, B. R., MANU, A., TEN ASBROEK, A. H., SOREMEKUN, S., WEOBONG, B., GYAN, T., DANSO, S., AMENGA-ETEGO, S., TAWIAH-AGYEMANG, C., OWUSU-AGYEI, S. & HILL, Z. 2013. Effect of the Newhints home-visits intervention on neonatal mortality rate and care practices in Ghana: a cluster randomised controlled trial. *Lancet,* 381**,** 2184-92.

KOBLINSKY, M. 2005. Community-based postpartum care: An urgent unmet need. Catalyst Consortium.

KOZUKI, N., LEE, A. C., SILVEIRA, M. F., VICTORA, C. G., ADAIR, L., HUMPHREY, J., NTOZINI, R., BLACK, R. E. & KATZ, J. 2013. The associations of birth intervals with small-for-gestational-age, preterm, and neonatal and infant mortality: a meta-analysis. *BMC Public Health,* 13**,** S3.

KRAFT, J. M., WILKINS, K. G., MORALES, G. J., WIDYONO, M. & MIDDLESTADT, S. E. 2014. An evidence review of gender-integrated interventions in reproductive and maternal-child health. *J Health Commun,* 19 Suppl 1**,** 122-41.

KRUK, M. E., KUJAWSKI, S., MOYER, C. A., ADANU, R. M., AFSANA, K., COHEN, J., GLASSMAN, A., LABRIQUE, A., REDDY, K. S. & YAMEY, G. 2016. Next generation maternal health: external shocks and health-system innovations. *Lancet,* 388**,** 2296-2306.

KULULANGA, L. I., MALATA, A., CHIRWA, E. & SUNDBY, J. 2012a. Malawian fathers' views and experiences of attending the birth of their children: a qualitative study. *BMC Pregnancy Childbirth,* 12**,** 141.

KULULANGA, L. I., SUNDBY, J., MALATA, A. & CHIRWA, E. 2011. Striving to promote male involvement in maternal health care in rural and urban settings in Malawi - a qualitative study. *Reproductive Health,* 8**,** 36.

KULULANGA, L. I., SUNDBY, J., MALATA, A. & CHIRWA, E. 2012b. Male involvement in maternity health care in Malawi. *Afr J Reprod Health,* 16**,** 145-57.

KUNENE, B., BEKSINSKA, M., ZONDI, S. & MTHEMBU, N. 2004. Involving men in maternity care: South Africa. FRONTIERS Final Report. Washington, DC: Population Council.

KWAMBAI, T. K., DELLICOUR, S., DESAI, M., AMEH, C. A., PERSON, B., ACHIENG, F., MASON, L., LASERSON, K. F. & TER KUILE, F. O. 2013. Perspectives of men on antenatal and delivery care service utilisation in rural western Kenya: a qualitative study. *BMC Pregnancy Childbirth,* 13**,** 134.

LABBOK, M. H., HIGHT-LAUKARAN, V., PETERSON, A. E., FLETCHER, V. & VON HERTZEN, H. 1997. Multicenter study of the lactational amenorrhea method (LAM): I. Efficacy, duration, and implications for clinical application. *Contraception***,** 327-336.

LAMB, M. E., PLECK, J. H., CHARNOV, E. L. & LEVINE, J. A. 1985. Paternal behavior in humans. *American Zoologist,* 25**,** 883-894.

LASEE, A. & BECKER, S. 1997. Husband-Wife Communication About Family Planning and Contraceptive Use in Kenya. *International Family Planning Perspectives,* 23.

LASSI, Z. S., MAJEED, A., RASHID, S., YAKOOB, M. Y. & BHUTTA, Z. A. 2013. The interconnections between maternal and newborn health--evidence and implications for policy. *J Matern Fetal Neonatal Med,* 26 Suppl 1**,** 3-53.

LAWN, J. E., BLENCOWE, H., OZA, S., YOU, D., LEE, A. C. C., WAISWA, P., LALLI, M., BHUTTA, Z., BARROS, A. J. D., CHRISTIAN, P., MATHERS, C. & COUSENS, S. N. 2014. Every Newborn: progress, priorities, and potential beyond survival. *The Lancet,* 384**,** 189-205.

LAWN, J. E., COUSENS, S. & ZUPAN, J. 2005. 4 million neonatal deaths: when? Where? Why? *Lancet,* 365**,** 891-900.

LEWIS, P. R., BROWN, J. B., RENFREE, M. B. & SHORT, R. V. 1991. The resumption of ovulation and menstruation in a well-nourished population of women breastfeeding for an extended period of time. *Fertil Steril,* 55**,** 529-36.

LOCKE, H. & WALLACE, K. 1959. Short Marital-Adjustment and Prediction Tests: Their Reliability and Validity. *Marriage and Family Living,* 21**,** 251-255.

LOCOH, T. 2002. Structures familiales et évolutions de la fécondité dans les pays à fécondité intermédiaire d'Afrique de l'Ouest. Documents de travail de l'INED. *Institut National d'Etudes Démographiques (INED), Paris, France.* .

LOPEZ, L. M., GREY, T. W., HILLER, J. E. & CHEN, M. 2015. Education for contraceptive use by women after childbirth. *Cochrane Database Syst Rev*, Cd001863.

LUGINA, H. I., LINDMARK, G., JOHANSSON, E. & CHRISTENSSON, K. 2001. Tanzanian midwives' views on becoming a good resource and support person for postpartum women. *Midwifery,* 17, 267-78.

MACQUARRIE, K., EDMEADES, J., STEINHAUS, M. & HEAD, S. K. 2015. Men and contraception: Trends in attitudes and use. DHS Analytical Studies 49. Rockville, Maryland, USA: ICF International.

MAGOMA, M., REQUEJO, J., CAMPBELL, O., COUSENS, S., MERIALDI, M. & FILIPPI, V. 2013. The effectiveness of birth plans in increasing use of skilled care at delivery and postnatal care in rural Tanzania: a cluster randomised trial. *Trop Med Int Health,* 18, 435-43.

MAGOMA, M., REQUEJO, J., CAMPBELL, O. M., COUSENS, S. & FILIPPI, V. 2010. High ANC coverage and low skilled attendance in a rural Tanzanian district: A case for implementing a birth plan intervention. *BMC Pregnancy Childbirth,* 10.

MAIBACH, E. & MURPHY, D. A. 1995. Self-efficacy in health promotion research and practice: conceptualization and measurement. *Health Education Research,* 10, 37-50.

MAIGA, O. S., POUDIOUGOU, B., KEITA, T. F., RONSE, I., BOUNDY, F., BAGAYOKO, D. & DIALLO, D. 2007. [Role of men in family planning decisions in Mali]. *Mali Medical,* 22, 27-30.

MAMAN, S., MOODLEY, D. & GROVES, A. K. 2011. Defining male support during and after pregnancy from the perspective of HIV-positive and HIV-negative women in Durban, South Africa. *J Midwifery Womens Health,* 56, 325-31.

MANGENI, J. N., MWANGI, A., MBUGUA, S. & MUKTHAR, V. 2013. Male involvement in maternal health care as a determinant of utilization of skilled birth attendants in Kenya. *DHS Working Papers No. 93.* Calverton, Maryland, USA: ICF International.

MARU, S., DATONG, P., SELLENG, D., MANG, E., INYANG, B., AJENE, A., GUYIT, R., CHARURAT, M. & ABIMIKU, A. 2009. Social determinants of mixed feeding behavior among HIV-infected mothers in Jos, Nigeria. *AIDS Care,* 21, 1114-23.

MASON, K. O. & SMITH, H. L. 2000. Husbands' versus Wives' Fertility Goals and Use of Contraception: The Influence of Gender Context in Five Asian Countries *Demography,* 37, 299-311.

MATOVU, A., KIRUNDA, B., RUGAMBA-KABAGAMBE, G., TUMWESIGYE, N. M. & NUWAHA, F. 2008. Factors influencing adherence to exclusive breast feeding among HIV positive mothers in Kabarole district, Uganda. *East Afr Med J,* 85, 162-70.

MAYCOCK, B., BINNS, C. W., DHALIWAL, S., TOHOTOA, J., HAUCK, Y., BURNS, S. & HOWAT, P. 2013. Education and support for fathers improves breastfeeding rates: a randomized controlled trial. *J Hum Lact,* 29, 484-90.

MBEKENGA, C. K., LUGINA, H. I., CHRISTENSSON, K. & OLSSON, P. 2011. Postpartum experiences of first-time fathers in a Tanzanian suburb: a qualitative interview study. *Midwifery,* 27, 174-80.

MBEKENGA, C. K., PEMBE, A. B., DARJ, E., CHRISTENSSON, K. & OLSSON, P. 2013. Prolonged sexual abstinence after childbirth: gendered norms and perceived family health risks. Focus group discussions in a Tanzanian suburb. *BMC International Health & Human Rights,* 13, 4.

MBIZVO, M. T. & BASSETT, M. T. 1996. Reproductive health and AIDS prevention in sub-Saharan Africa: the case for increased male participation. *Health Policy Plan,* 11, 84-92.

MCALLISTER, F., BURGESS, A., KATO, J. & BARKER, G. 2012. Fatherhood: Parenting Programmes and Policy. A critical review of best practice. London/Washington D.C.: Fatherhood Institute/ Promundo/ MenCare.

MCLEROY, K. R., BIBEAU, D., STECKLER, A. & GLANZ, K. 1988. An ecological perspective on health promotion programs. *Health Educ Q,* 15**,** 351-77.

MEHTA, M. 2002. Communicating with men to promote family planning: lessons learned and suggestions for programming. *In: Programming for male involvement in reproductive health: Report of the meeting of WHO Regional Advisers in Reproductive Health, 5-7 September 2001.* Geneva: WHO.

MIDHET, F. & BECKER, S. 2010. Impact of community-based interventions on maternal and neonatal health indicators: Results from a community randomized trial in rural Balochistan, Pakistan. *Reprod Health,* 7**,** 30.

MILLER, S., ABALOS, E., CHAMILLARD, M., CIAPPONI, A., COLACI, D., COMANDE, D., DIAZ, V., GELLER, S., HANSON, C., LANGER, A., MANUELLI, V., MILLAR, K., MORHASON-BELLO, I., CASTRO, C. P., PILEGGI, V. N., ROBINSON, N., SKAER, M., SOUZA, J. P., VOGEL, J. P. & ALTHABE, F. 2016. Beyond too little, too late and too much, too soon: a pathway towards evidence-based, respectful maternity care worldwide. *Lancet,* 388**,** 2176-2192.

MINISTÈRE DE L'ECONOMIE ET DES FINANCES 2011. Stratégie de croissance accélérée et de développement durable 2011-2015. Ouagadougou.

MINISTÈRE DE LA SANTÉ 2002. Circulaire n°0277/MS/SG/DAF du 5 février 2002 sur la gratuité des activités de soins préventifs portant sur la consultation prénatale des femmes enceintes. Ouagadougou.

MINISTÈRE DE LA SANTÉ 2006a. Plan d'accélération de Réduction de la Mortalité Maternelle et Néonatale au Burkina Faso (Feuille de Route). Ouagadougou.

MINISTÈRE DE LA SANTÉ 2006b. Stratégie nationale de subvention des accouchements et des soins obstétricaux et néonatals d'urgence: Burkina Faso. Ouagadougou.

MINISTÈRE DE LA SANTÉ 2010a. Politique et normes en matiere de Sante de la Reproduction. Ouagadougou.

MINISTÈRE DE LA SANTÉ 2010b. Protocoles de Sante de la Reproduction: composantes communes. Ouagadougou.

MINISTÈRE DE LA SANTÉ 2010c. Protocoles de Sante de la Reproduction: Sante de la femme et du nouveau-ne de moins de sept (7) jours. Ouagadougou.

MINISTÈRE DE LA SANTÉ 2010d. Protocoles de santé de la reproduction: Santé du nourrisson, de l'enfant, de l'adolescent et du jeune. Ouagadougou.

MINISTÈRE DE LA SANTÉ 2011. Plan National de Developpement Sanitaire 2011-2020. Ouagadougou.

MINISTÈRE DE LA SANTÉ 2013. Plan national de relance de la Planification Familiale 2013-2015. Ouagadougou.

MINISTÈRE DE LA SANTÉ 2015a. Annuaire Statistique 2014. Ouagadougou.

MINISTÈRE DE LA SANTÉ 2015b. Plan d'action 2016 du District Sanitaire de Dafra. Bobo-Dioulasso, Burkina Faso.

MINISTERE DE LA SANTE ET DE LA PREVENTION DU SENEGAL 2010. Programme Badienou Gox: Guide du prestataire. Dakar, Senegal: Division de la Sante de la Reproduction.

MOHAMMED, A., WOLDEYOHANNES, D., FELEKE, A. & MEGABIAW, B. 2014. Determinants of modern contraceptive utilization among married women of reproductive age group in North Shoa Zone, Amhara Region, Ethiopia. *Reproductive Health,* 11**,** 13.

MOHLALA, B. K., BOILY, M. C. & GREGSON, S. 2011. The forgotten half of the equation: randomized controlled trial of a male invitation to attend couple voluntary counselling and testing. *Aids,* 25**,** 1535-41.

MOHLALA, B. K., GREGSON, S. & BOILY, M. C. 2012. Barriers to involvement of men in ANC and VCT in Khayelitsha, South Africa. *AIDS Care,* 24**,** 972-7.

MORHASON-BELLO, I. O., ADEDOKUN, B. O. & OJENGBEDE, O. A. 2009. Social support during childbirth as a catalyst for early breastfeeding initiation for first-time Nigerian mothers. *International Breastfeeding Journal,* 4**,** 16.

MOSAIC, RUTGERS WPF & SONKE GENDER JUSTICE NETWORK 2016. MenCare+ South Africa outcome measurement report. Available at: http://men-care.org/resources/mencare-south-africa-outcome-measurement-report/ [accessed 8/11/2016].

MOSHA, I., RUBEN, R. & KAKOKO, D. 2013. Family planning decisions, perceptions and gender dynamics among couples in Mwanza, Tanzania: a qualitative study. *BMC Public Health,* 13**,** 523-523.

MOYER, C. A., ADONGO, P. B., ABORIGO, R. A., HODGSON, A., ENGMANN, C. M. & DEVRIES, R. 2014. "It's up to the woman's people": how social factors influence facility-based delivery in Rural Northern Ghana. *Matern Child Health J,* 18**,** 109-19.

MPEMBENI, R. N., KILLEWO, J. Z., LESHABARI, M. T., MASSAWE, S. N., JAHN, A., MUSHI, D. & MWAKIPA, H. 2007. Use pattern of maternal health services and determinants of skilled care during delivery in Southern Tanzania: implications for achievement of MDG-5 targets. *BMC Pregnancy Childbirth,* 7**,** 29.

MRISHO, M., SCHELLENBERG, J. A., MUSHI, A. K., OBRIST, B., MSHINDA, H., TANNER, M. & SCHELLENBERG, D. 2007. Factors affecting home delivery in rural Tanzania. *Trop Med Int Health,* 12**,** 862-72.

MUHWAVA, L. S., MOROJELE, N. & LONDON, L. 2016. Psychosocial factors associated with early initiation and frequency of antenatal care (ANC) visits in a rural and urban setting in South Africa: a cross-sectional survey. *BMC Pregnancy and Childbirth,* 16**,** 18.

MUKOBI, P. 2012. *Assessing the approaches to male partner involvement in PMTCT in Uganda.* MakSPH-CDC Fellowship, Makerere University, Kampala, Uganda.

MULLANY, B. C., BECKER, S. & HINDIN, M. J. 2007. The impact of including husbands in antenatal health education services on maternal health practices in urban Nepal: results from a randomized controlled trial. *Health Educ Res,* 22.

MULLANY, B. C., LAKHEY, B., SHRESTHA, D., HINDIN, M. J. & BECKER, S. 2009. Impact of husbands' participation in antenatal health education services on maternal health knowledge. *Jnma, Journal of the Nepal Medical Association,* 48**,** 28-34.

MULLICK, S., KUNENE, B. & WANJIRU, M. 2005. Involving men in maternity care: health service delivery issues. Population Council.

MURALIDHARAN, A., FEHRINGER, J., PAPPA, S., ROTTACH, E., DAS, M. & MANDAL, M. 2015. Transforming Gender Norms, Roles, and Power Dynamics for Better Health: Evidence from a Systematic Review of Gender-integrated Health Programs in Low- and Middle-Income Countries. Washington, D.C.: Futures Group, Health Policy Project.

MWANGI, A. & WARREN, C. 2008. Strengthening postnatal care services including postpartum family planning in Kenya. FRONTIERS Final Report. Washington, DC.

NANJALA, M. & WAMALWA, D. 2012. Determinants of male partner involvement in promoting deliveries by skilled attendants in Busia, Kenya. *Glob J Health Sci,* 4**,** 60-7.

NASREEN, H. E., LEPPARD, M., AL MAMUN, M., BILLAH, M., KANTI MISTRY, S., RAHMAN, M. & NICHOLLS, P. 2012. Men's knowledge and awareness of maternal, neonatal and child health care in rural Bangladesh: A comparative cross sectional study. *Reproductive Health,* 9**,** [9]p.

NATTABI, B., LI, J., THOMPSON, S. C., ORACH, C. G. & EARNEST, J. 2011. Family planning among people living with HIV in post-conflict Northern Uganda: A mixed methods study. *Conflict and Health,* 5**,** 18.

NGOM, P., WAWIRE, S., GANDAHO, T., KLISSOU, P., ADJIMON, T., SEYE, M., AKOUANOU, E. & WINTER, L. 2000. Intra-household decision-making on health and resource allocation in Bourgou, Benin: Final Report. New York, NY: Population Council.

NGUYEN, P. H., MENON, P., KEITHLY, S. C., KIM, S. S., HAJEEBHOY, N., TRAN, L. M., RUEL, M. T. & RAWAT, R. 2014. Program impact pathway analysis of a social franchise model shows potential to improve infant and young child feeding practices in Vietnam. *J Nutr,* 144**,** 1627-36.

NKUOH, G. N., MEYER, D. J., TIH, P. M. & NKFUSAI, J. 2010. Barriers to men's participation in antenatal and prevention of mother-to-child HIV transmission care in Cameroon, Africa. *J Midwifery Womens Health,* 55**,** 363-9.

NWOKOCHA, E. E. 2007. Maternal crises and the role of african men: The case of a Nigerian community. *African Population Studies,* 22.

NYONDO, A. L., CHOKO, A. T., CHIMWAZA, A. F. & MUULA, A. S. 2015. Invitation Cards during Pregnancy Enhance Male Partner Involvement in Prevention of Mother to Child Transmission (PMTCT) of Human Immunodeficiency Virus (HIV) in Blantyre, Malawi: A Randomized Controlled Open Label Trial. *PLoS ONE,* 10**,** e0119273.

OGBO, F. A., AGHO, K., OGELEKA, P., WOOLFENDEN, S., PAGE, A. & EASTWOOD, J. 2017. Infant feeding practices and diarrhoea in sub-Saharan African countries with high diarrhoea mortality. *PLoS One,* 12**,** e0171792.

OJENGBEDE, O., MORHASON-BELLO, I., ADEDOKUN, B., BECKER, S., ONI, G. & TSUI, A. 2009. Husbands' support during childbirth as a catalyst for modern family planning uptake in Nigeria: A randomised controlled trial. Uganda: International Family Planning Conference proceedings: Nov 17-19, 2009. Available from: http://fpconference.org/2009/media//DIR_169701/d7df454c660c706cffff8089ffffd502.pdf [accessed 3/11/2016].

OLAYEMI, O., AIMAKHU, C. O., BELLO, F. A., MOTAYO, V. O., OGUNLEYE, A. A., ODUNUKAN, O. W. & OJENGBEDE, O. A. 2007. The influence of social support on the duration of breast-feeding among antenatal patients in Ibadan. *J Obstet Gynaecol,* 27**,** 802-5.

OLAYEMI, O., BELLO, F. A., AIMAKHU, C. O., OBAJIMI, G. O. & ADEKUNLE, A. O. 2009. Male participation in pregnancy and delivery in Nigeria: a survey of antenatal attendees. *J Biosoc Sci,* 41**,** 493-503.

OLDS, D. L., HENDERSON, C. R., JR., TATELBAUM, R. & CHAMBERLIN, R. 1986. Improving the delivery of prenatal care and outcomes of pregnancy: a randomized trial of nurse home visitation. *Pediatrics,* 77**,** 16-28.

ONYANGO, M. A., OWOKO, S. & OGUTTU, M. 2010. Factors that influence male involvement in sexual and reproductive health in western Kenya: a qualitative study. *Afr J Reprod Health,* 14**,** 32-42.

ORJI, E. O., OJOFEITIMI, E. O. & OLANREWAJU, B. A. 2007. The role of men in family planning decision-making in rural and urban Nigeria. *European Journal of Contraception & Reproductive Health Care,* 12**,** 70-5.

OTOO, G. E., LARTEY, A. A. & PEREZ-ESCAMILLA, R. 2009. Perceived incentives and barriers to exclusive breastfeeding among periurban Ghanaian women. *J Hum Lact,* 25**,** 34-41.

PÅFS, J., MUSAFILI, A., BINDER-FINNEMA, P., KLINGBERG-ALLVIN, M., RULISA, S. & ESSÉN, B. 2015. They would never receive you without a husband: Paradoxical barriers to antenatal care scale-up in Rwanda. *Midwifery,* 31**,** 1149-1156.

PÅFS, J., RULISA, S., MUSAFILI, A., ESSÉN, B. & BINDER-FINNEMA, P. 2016. 'You try to play a role in her pregnancy' - a qualitative study on recent fathers' perspectives about childbearing and encounter with the maternal health system in Kigali, Rwanda. *Glob Health Action,* 9.

PAGE, H. J. & LESTHAEGHE, R. 1981. *Child-spacing in Tropical Africa: Traditions and change,* London, Academic Press.

PANTER-BRICK, C., BURGESS, A., EGGERMAN, M., MCALLISTER, F., PRUETT, K. & LECKMAN, J. F. 2014. Practitioner review: Engaging fathers--recommendations for a game change in parenting interventions based on a systematic review of the global evidence. *J Child Psychol Psychiatry,* 55**,** 1187-212.

PATHFINDER INTERNATIONAL 2015. Reaching Young Married Women and First-Time Parents for Healthy Timing and Spacing of Pregnancies and Contraceptive Use in Burkina Faso. Watertown, MA: Pathfinder International.

PEMBE, A. B., URASSA, D. P., DARJ, E., CARLSTED, A. & OLSSON, P. 2008. Qualitative study on maternal referrals in rural Tanzania: decision making and acceptance of referral advice. *Afr J Reprod Health,* 12**,** 120-31.

PENFOLD, S., MANZI, F., MKUMBO, E., TEMU, S., JARIBU, J., SHAMBA, D. D., MSHINDA, H., COUSENS, S., MARCHANT, T., TANNER, M., SCHELLENBERG, D. & SCHELLENBERG, J. A. 2014. Effect of home-based counselling on newborn care practices in southern Tanzania one year after implementation: a cluster-randomised controlled trial. *BMC Pediatr,* 14**,** 187.

PEREZ-ESCAMILLA, R., MARTINEZ, J. L. & SEGURA-PEREZ, S. 2016. Impact of the Baby-friendly Hospital Initiative on breastfeeding and child health outcomes: a systematic review. *Matern Child Nutr,* 12**,** 402-17.

PERKINS, J., CAPELLO, C., BARGO/MAIGA, A., YANOGO, M., EGGERTSWYLER, A. & SANTARELLI, C. 2016. The role of men in improving maternal and newborn health in Burkina Faso. *The International Journal of Person Centered Medicine,* 6**,** 180-184.

PIOTROW, P. T., KINCAID, D. L., HINDIN, M. J., LETTENMAIER, C. L., KUSEKA, I., SILBERMAN, T., ZINANGA, A., CHIKARA, F., ADAMCHAK, D. J., MBIZVO, M. T. & ET AL. 1992. Changing men's attitudes and behavior: the Zimbabwe Male Motivation Project. *Stud Fam Plann,* 23**,** 365-75.

PISACANE, A., CONTINISIO, G. I., ALDINUCCI, M., D'AMORA, S. & CONTINISIO, P. 2005. A controlled trial of the father's role in breastfeeding promotion. *Pediatrics,* 116**,** e494-8.

POPULATION COUNCIL 2000. Men as Supportive Partners in Reproductive Health: Moving from Rhetoric to Reality. New Delhi: Population Council.

POPULATION COUNCIL 2009. And how will you remember me, my child? Redefining fatherhood in Turkey. New York, NY: Population Council.

PRATA, N., BELL, S., FRASER, A., CARVALHO, A., NEVES, I. & ANDRADE, B. 2015. Partner support for family planning and modern contraceptive use in Luanda, Angola. Population Association of America, 2015 Annual Meeting. Conference draft.

PROMUNDO, CULTURASALUD & REDMAS 2013. Program P – A Manual for Engaging Men in Fatherhood, Caregiving, Maternal and Child Health. . Rio de Janeiro, Brazil, and Washington, D.C., USA: Promundo.

RANDRIANASOLO, B., SWEZEY, T., VAN DAMME, K., KHAN, M. R., RAVELOMANANA, N., LOVANIAINA RABENJA, N., RAHARINIVO, M., BELL, A. J., JAMIESON, D. & BEHETS, F. 2008. Barriers to the use of modern contraceptives and implications for woman-controlled prevention of sexually transmitted infections in Madagascar. *J Biosoc Sci,* 40**,** 879-93.

RANSJO-ARVIDSON, A. B., CHINTU, K., NG'ANDU, N., ERIKSSON, B., SUSU, B., CHRISTENSSON, K. & DIWAN, V. K. 1998. Maternal and infant health problems after normal childbirth: a randomised controlled study in Zambia. *J Epidemiol Community Health,* 52**,** 385-91.

REINSMA, K., BOLIMA, N., FONTEH, F., OKWEN, P., YOTA, D. & MONTGOMERY, S. 2012. Incorporating cultural beliefs in promoting exclusive breastfeeding. *African journal of midwifery and women's health,* 6**,** 65-70.

REQUEJO, J. H., BRYCE, J., BARROS, A. J., BERMAN, P., BHUTTA, Z., CHOPRA, M., DAELMANS, B., DE FRANCISCO, A., LAWN, J., MALIQI, B., MASON, E., NEWBY, H., PRESERN, C., STARRS, A. & VICTORA, C. G. 2015. Countdown to 2015 and beyond: fulfilling the health agenda for women and children. *Lancet,* 385**,** 466-76.

RIDDE, V. & OLIVIER DE SARDAN, J. P. E. 2012. Les politiques de suppression et de subvention du paiement des soins au Burkina Faso, Mali et Niger: Synthese de recherches. Montreal: CRCHUM/LASDEL.

RITCHIE, J. & LEWIS, J. 2003. *Qualitative research practice: A guide for social science students and researchers,* London, SAGE Publications.

ROLLINS, N. C., BHANDARI, N., HAJEEBHOY, N., HORTON, S., LUTTER, C. K., MARTINES, J. C., PIWOZ, E. G., RICHTER, L. M. & VICTORA, C. G. 2016. Why invest, and what it will take to improve breastfeeding practices? *Lancet,* 387**,** 491-504.

RONSMANS, C. & GRAHAM, W. J. 2006. Maternal mortality: who, when, where, and why. *Lancet,* 368**,** 1189-200.

ROSS, J. & WINFREY, W. 2001. Contraceptive use, intention to use and unmet need during the extended postpartum period. *International Family Planning Perspectives,* 27.

ROSSIER, C. & HELLEN, J. 2014. Traditional birthspacing practices and uptake of family planning during the postpartum period in Ouagadougou: qualitative results. *Int Perspect Sex Reprod Health,* 40**,** 87-94.

ROSSIER, C., SENDEROWICZ, L. & SOURA, A. 2014. Do Natural Methods Count? Underreporting of Natural Contraception in Urban Burkina Faso. *Studies in Family Planning,* 45**,** 171-182.

ROTH, D. M. & MBIZVO, M. T. 2001. Promoting safe motherhood in the community: the case for strategies that include men. *Afr J Reprod Health,* 5**,** 10-21.

ROTHMAN, E. F., BUTCHART, A. & CERDA, M. 2003. Intervening with perpetrators of intimate partner violence: A global perspective. Geneva, Switzerland: Department of Injuries and Violence Prevention, Noncommunicable Diseases and Mental Health, World Health Organization.

RUPLEY, D. M., MORHE, E. S., MOYER, C. A. & DALTON, V. K. 2015. Maternity care provider knowledge, attitudes, and practices regarding provision of postpartum intrauterine contraceptive devices at a tertiary center in Ghana. *Int J Gynaecol Obstet,* 128**,** 137-40.

RUTSTEIN, S. & WINTER, R. 2015. Contraception needed to avoid high-fertility-risk births, and maternal and child deaths that would be averted. DHS Analytical Studies 50. Rockville, Maryland, USA: ICF International.

RUTSTEIN, S. O. 2005. Effects of preceding birth intervals on neonatal, infant and under-five years mortality and nutritional status in developing countries: evidence from the demographic and health surveys. *Int J Gynaecol Obstet,* 89 Suppl 1**,** S7-24.

RUTSTEIN, S. O. 2008. Further evidence of the effects of preceding birth intervals on neonatal, infant, and under-five-years mortality and nutritional status in developing countries: evidence from the Demographic and Health Surveys. DHS Working Papers, Demographic and Health Research. 41.

SAEED, G. A., FAKHAR, S., RAHIM, F. & TABASSUM, S. 2008. Change in trend of contraceptive uptake-effect of educational leaflets and counseling. *Contraception,* 77**,** 377-81.

SAHIP, Y. & TURAN, J. M. 2007. Education for expectant fathers in workplaces in Turkey. *Journal of Biosocial Science,* 39**,** 843-860.

SALIM AL RABADI, H. A. 2015. Effectiveness of Timed and Targeted Counselling on Maternal, Newborn and child Health and Nutrition (MNCH/N) Outcomes in Palestine: Assessment of Intervention. Presentation at the Global Maternal Newborn Health Conference, October 18-21 2015, Mexico City.

SANTHYA, K. G., HABERLAND, N., DAS, A., LAKHANI, A., RAM, F., SINHA, R. K., RAM, U. & MOHANTY, S. K. 2008. Empowering married young women and improving their sexual and reproductive health: Effects of the First-time Parents Project. New Delhi: Population Council.

SARKER, M., SANOU, A., SNOW, R., GANAME, J. & GONDOS, A. 2007. Determinants of HIV counselling and testing participation in a prevention of mother-to-child transmission programme in rural Burkina Faso. *Trop Med Int Health,* 12**,** 1475-83.

SATZINGER, F., BEZNER KERR, R. & SHUMBA, L. 2009. Intergenerational participatory discussion groups foster knowledge exchange to improve child nutrition and food security in northern Malawi. *Ecol Food Nutr,* 48**,** 369-82.

SAY, L., CHOU, D., GEMMILL, A., TUNÇALP, Ö., MOLLER, A.-B., DANIELS, J., GÜLMEZOGLU, A. M., TEMMERMAN, M. & ALKEMA, L. 2014. Global causes of maternal death: a WHO systematic analysis. *The Lancet Global Health,* 2**,** e323-e333.

SCHULER, S. R., NANDA, G., CHEN, M., RODRIGUEZ, L. F. R. & LENZI, R. 2012. Interactive Workshops to Promote Gender Equity and Family Planning in Rural Communities of Tanzania: Results of a Field Test. Washington, D.C.: C-Change/ FHI 360.

SCHULZ, K. F., ALTMAN, D. G. & MOHER, D. 2010. CONSORT 2010 Statement: updated guidelines for reporting parallel group randomised trials. *BMC Medicine,* 8**,** 1-9.

SEBASTIAN, M. P., KHAN, M. E., KUMARI, K. & IDNANI, R. 2012. Increasing postpartum contraception in rural India: evaluation of a community-based behavior change communication intervention. *International perspectives on sexual & reproductive health,* 38**,** 68-77.

SHARAN, M. & VALENTE, T. W. 2002. Spousal communication and family planning adoption: Effects of a radio drama serial in Nepal. *International perspectives on sexual & reproductive health,* 28.

SHARMA, G., MATHAI, M., DICKSON, K. E., WEEKS, A., HOFMEYR, G., LAVENDER, T., DAY, L., MATHEWS, J., FAWCUS, S., SIMEN-KAPEU, A. & DE BERNIS, L. 2015. Quality care during labour and birth: a multi-country analysis of health system bottlenecks and potential solutions. *BMC Pregnancy Childbirth,* 15 Suppl 2**,** S2.

SHATTUCK, D., KERNER, B., GILLES, K., HARTMANN, M., NG'OMBE, T. & GUEST, G. 2011. Encouraging contraceptive uptake by motivating men to communicate about family planning: the Malawi Male Motivator project. *Am J Public Health,* 101**,** 1089-95.

SHEFNER-ROGERS, C. L. & SOOD, S. 2004. Involving husbands in safe motherhood: effects of the SUAMI SIAGA campaign in Indonesia. *J Health Commun,* 9**,** 233-58.

SHEPARD, B. L. 2004. Addressing Gender Issues with men and couples: Involving Men in Sexual and Reproductive Health Services in APROFE, Ecuador. *International Journal of Men's Health,* 3**,** 155-172.

SHROFF, M. R., GRIFFITHS, P. L., SUCHINDRAN, C., NAGALLA, B., VAZIR, S. & BENTLEY, M. E. 2011. Does maternal autonomy influence feeding practices and infant growth in rural India? *Soc Sci Med,* 73**,** 447-55.

SILEO, K. M. 2014. Determinants of family planning service uptake and use of contraceptives among postpartum women in rural Uganda. University of Connecticut Master's Theses. Paper 602.

SINGH, A., SINGH, A. & MAHAPATRA, B. 2013. The consequences of unintended pregnancy for maternal and child health in rural India: evidence from prospective data. *Matern Child Health J,* 17**,** 493-500.

SINGH, D., LAMPLE, M. & EARNEST, J. 2014. The involvement of men in maternal health care: cross-sectional, pilot case studies from Maligita and Kibibi, Uganda. *Reproductive Health,* 11**,** 68.

SINHA, D. 2008. Empowering communities to make pregnancy safer an intervention in rural Andhra Pradesh. New Delhi: Population Council.

SLOAND, E., ASTONE, N. M. & GEBRIAN, B. 2010. The Impact of Fathers' Clubs on Child Health in Rural Haiti. *American Journal of Public Health,* 100**,** 201-204.

SMITH, K. B., VAN DER SPUY, Z. M., CHENG, L., ELTON, R. & GLASIER, A. F. 2002. Is postpartum contraceptive advice given antenatally of value? *Contraception,* 65**,** 237-43.

SOLIMAN, M. H. 1999. Impact of antenatal counselling on couples' knowledge and practice of contraception in Mansoura, Egypt. *Eastern Mediterranean Health Journal,* 5**,** 1002-13.

SOMÉ, D. T., SOMBIÉ, I. & MEDA, N. 2013. How decision for seeking maternal care is made - a qualitative study in two rural medical districts of Burkina Faso. *Reproductive Health,* 10**,** 8.

SONALKAR, S., MODY, S. & GAFFIELD, M. E. 2014. Outreach and integration programs to promote family planning in the extended postpartum period. *Int J Gynaecol Obstet,* 124**,** 193-197.

SOOD, S., CHANDRA, U., PALMER, A. & MOLYNEUX, I. 2004. Measuring the effects of the SIAGA behavior change campaign in Indonesia with population-based survey results. Baltimore: JHPIEGO.

SPANIER, G. B. 1976. Measuring Dyadic Adjustment: New Scales for Assessing the Quality of Marriage and Similar Dyads. *Journal of Marriage and Family,* 38**,** 15-28.

SRIVASTAVA, A., AVAN, B. I., RAJBANGSHI, P. & BHATTACHARYYA, S. 2015. Determinants of women's satisfaction with maternal health care: a review of literature from developing countries. *BMC Pregnancy and Childbirth,* 15**,** 97.

STERN, E. 2014. Stakeholder Interviews to Inform Developments of and Recommendations to the MenEngage SRHR Initiative. Cape Town: Sonke Gender Justice Network.

STERNBERG, P. & HUBLEY, J. 2004. Evaluating men's involvement as a strategy in sexual and reproductive health promotion. *Health Promotion International,* 19**,** 389-396.

STORENG, K. T., AKOUM, M. S. & MURRAY, S. F. 2013. 'This year I will not put her to work': the production/reproduction nexus in Burkina Faso. *Anthropol Med,* 20**,** 85-97.

SUSIN, L. R. & GIUGLIANI, E. R. 2008. Inclusion of fathers in an intervention to promote breastfeeding: impact on breastfeeding rates. *J Hum Lact,* 24**,** 386-92; quiz 451-3.

SUTHERLAND, E. G., OTTERNESS, C. & JANOWITZ, B. 2011. What happens to contraceptive use after injectables are introduced? An analysis of 13 countries. *Int Perspect Sex Reprod Health,* 37**,** 202-8.

SVENSSON, J., BARCLAY, L. & COOKE, M. 2008. Effective Antenatal Education: Strategies Recommended by Expectant and New Parents. *The Journal of Perinatal Education,* 17**,** 33-42.

TADESSE, E., MUULA, A. S. & MISIRI, H. 2004. Likely stakeholders in the prevention of mother to child transmission of HIV/AIDS in Blantyre, Malawi. *Afr Health Sci,* 4**,** 155-9.

TAVERNE, B. 2000. L'allaitement dans le cycle de vie de la femme en pays mossi. *In:* DESCLAUX, A. & TAVERNE, B. (eds.) *Allaitement et VIH en Afrique de l'Ouest: De l'anthropologie a la sante publique.* Paris: Karthala.

TAWFIK, Y., RAHIMZAI, M., AHMADZAI, M., CLARK, P. A. & KAMGANG, E. 2014. Integrating family planning into postpartum care through modern quality improvement: experience from Afghanistan. *Global Health: Science and Practice,* 2**,** 226-233.

TEMMERMAN, M., KHOSLA, R., BHUTTA, Z. A. & BUSTREO, F. 2015. Towards a new Global Strategy for Women's, Children's and Adolescents' Health. *BMJ : British Medical Journal,* 351.

TEREFE, A. & LARSON, C. P. 1993. Modern contraception use in Ethiopia: does involving husbands make a difference? *American Journal of Public Health,* 83**,** 1567-1571.

THIOMBIANO, B. G. 2014. Genre et prise de décision au sein du ménage au Burkina Faso. *Cahiers québécois de démographie,* 43**,** 249-278.

TILAHUN, T., COENE, G., TEMMERMAN, M. & DEGOMME, O. 2015. Couple based family planning education: changes in male involvement and contraceptive use among married couples in Jimma Zone, Ethiopia. *BMC Public Health,* 15**,** 682.

TITALEY, C. R., DIBLEY, M. J. & ROBERTS, C. L. 2009. Factors associated with non-utilization of postnatal care services in Indonesia. *Journal of Epidemiology and Community Health*.

TOURE, L. 1996. Male involvement in family planning: a review of selected program initiatives in Africa. SARA Project, USAID.

TRIANDIS, H. C. & GELFLAND, M. J. 1998. Converging measurement of horizontal and vertical individualism and collectivism. *Journal of Personality and Social Psychology,* 74**,** 118-128.

TURAN, J. M., NALBANT, H., BULUT, A. & SAHIP, Y. 2001. Including expectant fathers in antenatal education programmes in Istanbul, Turkey. *Reproductive Health Matters,* 9**,** 114-25.

TURAN, J. M., TESFAGIORGHIS, M. & POLAN, M. L. 2011. Evaluation of a community intervention for promotion of safe motherhood in Eritrea. *J Midwifery Womens Health,* 56**,** 8-17.

TURK, D. C. & KERNS, R. D. 1985. *Health, Illness and Families: A Life-span Perspective,* New York, NY, John Wiley & Sons, Inc.

TYLLESKAR, T., JACKSON, D., MEDA, N., ENGEBRETSEN, I. M., CHOPRA, M., DIALLO, A. H., DOHERTY, T., EKSTROM, E. C., FADNES, L. T., GOGA, A., KANKASA, C., KLUNGSOYR, J. I., LOMBARD, C., NANKABIRWA, V., NANKUNDA, J. K., VAN DE PERRE, P., SANDERS, D., SHANMUGAM, R., SOMMERFELT, H., WAMANI, H. & TUMWINE, J. K. 2011. Exclusive breastfeeding promotion by peer counsellors in sub-Saharan Africa (PROMISE-EBF): a cluster-randomised trial. *Lancet,* 378**,** 420-7.

UNFPA Niger – L'Ecole des Maris, pour une participation des hommes à la santé de la reproduction. Programme brief available at http://www.fao.org/docrep/013/am035f/am035f01.pdf [accessed 8/11/2016].

UNFPA 2000. Partnering: A new approach to Sexual and Reproductive Health. Technical Paper No. 3. New York: UNFPA.

UNFPA 2014. Ecoles des Maris au Burkina Faso : Une innovation pour promouvoir la santé de la reproduction. Webpage. Available at http://burkinafaso.unfpa.org/fr/news/ecoles-des-maris-au-burkina-faso-une-innovation-pour-promouvoir-la-sant%C3%A9-de-la-reproduction [accessed 9/3/2017].

UNICEF 2005. Early marriage: A harmful traditional practice. A statistical exploration. New York, NY: UNICEF.

UNICEF 2012. Etude sur les connaissances, attitudes et pratiques (CAP) concernant les six pratiques familiales essentielles (PFE) au Burkina Faso. Rapport final. Ouagadougou.

UNICEF 2016a. Female genital mutilation/cutting: A global concern. Online brochure, available at: https://www.unicef.org/media/files/FGMC_2016_brochure_final_UNICEF_SPREAD.pdf [accessed 9/11/2016].

UNICEF 2016b. From the first hour of life: Making the case for improved infant and young child feeding everywhere. New York: UNICEF.

UNICEF, W. H. O., WORLD BANK, UN-DESA POPULATION DIVISION, 2015. Levels and trends in child mortality. Report 2015. Estimates developed by the UN Inter-agency Group for child mortality estimation. New York: UNICEF.

UNITED NATIONS 1979. Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) New York, 18 December 1979.

UNITED NATIONS 2015. World Population Prospects: The 2015 Revision, Key Findings and Advance Tables.: United Nations, Department of Economic and Social Affairs, Population Division. Available at: https://esa.un.org/unpd/wpp/Publications/Files/Key_Findings_WPP_2015.pdf [accessed 30 March 2017].

UNITED NATIONS DEVELOPMENT PROGRAMME 2015. Human Development Report 2015: Work for Human Development. New York: UNDP.

UNITED NATIONS DOEASA, P. D. 2015. Trends in contraceptive use worldwide 2015 (ST/ESA/SER.A/349). New York: United Nations.

UNITED NATIONS POPULATION FUND 1995. International Conference on Population and Development - ICPD - Programme of Action. Adopted in Cairo, 5-13 September 1994. New York: United Nations.

UNITED NATIONS STATISTICS DIVISION 2016. World Statistics Pocketbook 2016 edition. New York: United Nations.

USAID 2014. An Innovative Approach to Involving Men in Maternal and Newborn Health Care: Program Experiences in the Department of Matagalpa, Nicaragua. United States Agency for International Development (USAID) and Catholic Relief Services (CSP).

USAID, MCHIP & PSI 2014. PPIUD Services: Start-Up to Scale-Up Regional Meeting Burkina Faso. February 3-5, 2014. Meeting Report.

USAID & MCHIP 2013. Respectful Maternity Care Measurement Workshop Report. April 2013.

USDIN, S., SCHEEPERS, E., GOLDSTEIN, S. & JAPHET, G. 2005. Achieving social change on gender-based violence: a report on the impact evaluation of Soul City's fourth series. *Soc Sci Med,* 61**,** 2434-45.

VAN DEN BERG (EDITOR) 2015. State of Africa's Fathers: A MenCare advocacy publication. Adapted from Levtov R, van der Gaag N, Greene M, Kaufman M, and Barker G (2015). State of the World's fathers: a MenCare advocacy Publication. Washington, DC: Promundo, Rutgers, Save the Children, Sonke Gender Justice, and the MenEngage alliance

VAN LITH, L. M., YAHNER, M. & BAKAMJIAN, L. 2013. Women's growing desire to limit births in sub-Saharan Africa: meeting the challenge. *Global Health, Science and Practice,* 1**,** 97-107.

VARKEY, L., MISHRA, A., DAS, A., OTTOLENGHI, E., HUNTINGTON, D., ADAMCHAK, S., KHAN, M. & HOMAN, F. 2004. Involving men in maternity care in India. FRONTIERS Final Report. Washington, DC: New Delhi, India, Population Council, Frontiers in Reproductive Health, 2004 Apr.

VERMA, R. K. & COLLUMBIEN, M. 2003. Wife Beating and the Link with Poor Sexual Health and Risk Behavior Among Men in Urban Slums in India. *Journal of Comparative Family Studies,* 34**,** 61-74.

VERMEULEN, E., SOLNES MILTENBURG, A., BARRAS, J., MASELLE, N., VAN ELTEREN, M. & VAN ROOSMALEN, J. 2016. Opportunities for male involvement during pregnancy in Magu district, rural Tanzania. *BMC Pregnancy and Childbirth,* 16**,** 66.

VERNON, R. 2009. Meeting the Family Planning Needs of Postpartum Women. *Studies in Family Planning,* 40**,** 235-245.

VICTORA, C. G., BAHL, R., BARROS, A. J., FRANCA, G. V., HORTON, S., KRASEVEC, J., MURCH, S., SANKAR, M. J., WALKER, N. & ROLLINS, N. C. 2016a. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. *Lancet,* 387**,** 475-90.

VICTORA, C. G., REQUEJO, J. H., BARROS, A. J. D., BERMAN, P., BHUTTA, Z., BOERMA, T., CHOPRA, M., DE FRANCISCO, A., DAELMANS, B., HAZEL, E., LAWN, J., MALIQI, B., NEWBY, H. & BRYCE, J. 2016b. Countdown to 2015: a decade of tracking progress for maternal, newborn, and child survival. *The Lancet,* 387**,** 2049-2059.

VICTORA, C. G., SMITH, P. G., VAUGHAN, J. P., NOBRE, L. C., LOMBARDI, C., TEIXEIRA, A. M., FUCHS, S. C., MOREIRA, L. B., GIGANTE, L. P. & BARROS, F. C. 1989. Infant feeding and deaths due to diarrhea. A case-control study. *Am J Epidemiol,* 129**,** 1032-41.

VILLAR-LOUBET, O. M., COOK, R., CHAKHTOURA, N., PELTZER, K., WEISS, S. M., SHIKWANE, M. E. & JONES, D. L. 2013. HIV knowledge and sexual risk behavior among pregnant couples in South Africa: the PartnerPlus project. *AIDS & Behavior,* 17**,** 479-87.

VISSER, M. J., NEUFELD, S., DE VILLIERS, A., MAKIN, J. D. & FORSYTH, B. W. C. 2008. To tell or not to tell: South African women's disclosure of HIV status during pregnancy. *AIDS care,* 20**,** 1138-1145.

WALL, K., KARITA, E., NIZAM, A., BEKAN, B., SARDAR, G., CASANOVA, D., JOSEPH DAVEY, D., DE CLERCQ, F., KESTELYN, E., BAYINGANA, R., TICHACEK, A. & ALLEN, S. 2012. Influence network effectiveness in promoting couples' HIV voluntary counseling and testing in Kigali, Rwanda. *Aids,* 26**,** 217-27.

WARREN, C. 2006. Postnatal care. *In:* LAWN, J. E. & KERBER, K. (eds.) *Opportunities for Africa's Newborns.* Cape Town, South Africa: Partnership for Maternal, Newborn and Child Health, Save the Children, UNFPA, UNICEF, USAID, WHO.

WARREN, C. 2010. Care seeking for maternal health: challenges remain for poor women. *Ethiopian Journal of Health Development,* 24**,** 100-104.

WHITE, J. M. & KLEIN, D. F. 2002. *Family Theories (Second Edition),* Thousand Oaks, CA, SAGE Publications.

WITHERS, M., DWORKIN, S. L., ONONO, M., OYIER, B., COHEN, C. R., BUKUSI, E. A. & NEWMANN, S. J. 2015. Men's Perspectives on Their Role in Family Planning in Nyanza Province, Kenya. *Studies in Family Planning,* 46**,** 201-215.

WOLFBERG, A. J., MICHELS, K. B., SHIELDS, W., O'CAMPO, P., BRONNER, Y. & BIENSTOCK, J. 2004. Dads as breastfeeding advocates: results from a randomized controlled trial of an educational intervention. *Am J Obstet Gynecol,* 191**,** 708-12.

WORLD HEALTH ORGANIZATION Web Resource: Density of physicians (total number per 1000 population, latest available year). Global Health Observatory (GHO) data. Available at http://www.who.int/gho/health_workforce/physicians_density/en/ [accessed 22/2/17].

WORLD HEALTH ORGANIZATION 1991. Indicators for assessing breastfeeding practice: report of an informal meeting 11-12 June, 1991. Division of Child Health and Development. Geneva: WHO.

WORLD HEALTH ORGANIZATION 1998. Postpartum care of the mother and newborn: a practical guide. Geneva: WHO.

WORLD HEALTH ORGANIZATION 2002. Programming for male involvement in reproductive health. Report of the meeting of WHO Regional Advisers in Reproductive Health WHO/PAHO, Washington DC, USA, 5-7 September 2001. Geneva: WHO.

WORLD HEALTH ORGANIZATION 2003. Community-based strategies for breastfeeding promotion and support in developing countries. Geneva: WHO.

WORLD HEALTH ORGANIZATION 2004. Making pregnancy safer: The critical role of the skilled attendant. A joint statement by WHO, ICM and FIGO. Geneva: WHO.

WORLD HEALTH ORGANIZATION 2005. The World Health Report 2005: Make every mother and child count. Geneva: World Health Organization.

WORLD HEALTH ORGANIZATION 2007a. Engaging men and boys: Evidence from programme interventions. Geneva: WHO.

WORLD HEALTH ORGANIZATION 2007b. Report of a WHO Technical Consultation on Birth Spacing. Geneva, Switzerland, 13-15 June 2005. Geneva: WHO.

WORLD HEALTH ORGANIZATION 2010. WHO Technical consultation on postpartum and postnatal care. Geneva: WHO.

WORLD HEALTH ORGANIZATION 2011. The Abuja Declaration: Ten Years On. Geneva: WHO.

WORLD HEALTH ORGANIZATION 2012a. Guide de la planification familale a l'usage des agents de sante communautaires et de leurs clients. Geneva: WHO.

WORLD HEALTH ORGANIZATION 2012b. Optimizing health worker roles to improve access to key maternal and newborn health interventions through task shifting. Geneva: WHO.

WORLD HEALTH ORGANIZATION 2013. Programming strategies for Postpartum Family Planning. Geneva: WHO.

WORLD HEALTH ORGANIZATION 2014. WHO Recommendations on postnatal care of the mother and newborn. Geneva: WHO.

WORLD HEALTH ORGANIZATION 2015a. Medical eligibility criteria for contraceptive use. Fifth edition. Geneva: WHO.

WORLD HEALTH ORGANIZATION 2015b. Trends in maternal mortality: 1990 to 2015: estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division. Geneva: WHO.

WORLD HEALTH ORGANIZATION 2015c. WHO recommendations on health promotion interventions for maternal and newborn health. Geneva: WHO.

WORLD HEALTH ORGANIZATION 2016a. Selected practice recommendations for contraceptive use. Third edition 2016. Geneva: WHO.

WORLD HEALTH ORGANIZATION 2016b. Standards for improving quality of maternal and newborn care in health facilities. Geneva: WHO.

WORLD HEALTH ORGANIZATION & CENTER FOR COMMUNICATION PROGRAMS 2011. Family Planning: A Global Handbook for Providers. Baltimore and Geneva: Johns Hopkins Center for Communication Programs (CCP) and WHO.

WORLD HEALTH ORGANIZATION & UNICEF 2009. Home visits for the newborn child: a strategy to improve survival. WHO/UNICEF Joint Statement. GENEVA: WHO.

WORLD HEALTH ORGANIZATION, USAID, JHPIEGO & MCHIP 2012. Statement for Collective Action for Postpartum Family Planning.

WORLD HEALTH ORGANIZATION AND UNICEF 2003. Global Strategy for Infant and Young Child Feeding. Geneva: WHO.

WORLD HEALTH ORGANIZATION, U., IBFAN, 2016c. Marketing of Breast-milk Substitutes: National Implementation of the International Code. Status Report 2016. Geneva: WHO.

YALEW, S. A., ZELEKE, B. M. & TEFERRA, A. S. 2015. Demand for long acting contraceptive methods and associated factors among family planning service users, Northwest Ethiopia: a health facility based cross sectional study. *BMC Research Notes,* 8**,** 29.

YARGAWA, J. & LEONARDI-BEE, J. 2015. Male involvement and maternal health outcomes: systematic review and meta-analysis. *Journal of Epidemiology and Community Health,* 69**,** 604-12.

YINGER, N., PETERSON, A., AVNI, M., GAY, J., FIRESTONE, R., HARDEE, K., MURPHY, E., HERSTAD, B. & JOHNSON-WELCH, C. 2002. A framework to identify gender indicators for reproductive health and nutrition programming. Interagency Gender Working Group, Subcommittee on Research and Indicators.

YOU, D., HUG, L., EJDEMYR, S., IDELE, P., HOGAN, D., MATHERS, C., GERLAND, P., NEW, J. R. & ALKEMA, L. 2015. Global, regional, and national levels and trends in under-5 mortality between 1990 and 2015, with scenario-based projections to 2030: a systematic analysis by the UN Inter-agency Group for Child Mortality Estimation. *Lancet,* 386**,** 2275-86.

YUE, K., O'DONNELL, C. & SPARKS, P. L. 2010. The effect of spousal communication on contraceptive use in Central Terai, Nepal. *Patient Educ Couns,* 81**,** 402-8.

ZHANG, L. Y., LIU, Y. R., SHAH, I. H., TIAN, K. W. & ZHANG, L. H. 2002. Breastfeeding, amenorrhea and contraceptive practice among postpartum women in Zibo, China. *European Journal of Contraception & Reproductive Health Care,* 7**,** 121-6.

Involving Men in Maternity Care in Burkina Faso: An Intervention Study

APPENDICES

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Thesis submitted in accordance with the requirements for the Degree of Doctor of Philosophy

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April 2017

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Appendix 1: Baseline characteristics by enrolment PHC and study arm

	BOLOMAKOTE		**GUIMBI**		**OUEZZINVILLE**		**SARFALAO**		**SECTEUR 24**	
	Intervention	**Control**	**Intervention**	**Control**	**Intervention**	**Control**	**Intervention**	**Control**	**Intervention**	**Control**
Woman's age: mean	25.6	26.0	26.0	27.2	26.0	25.7	26.5	27.4	27.4	25.4
Man's age: mean	43.4	40.1	39.9	41.2	39.4	40.1	35.9	36.3	42.9	40.0
Type of marriage: %										
Monogamous	95.5	87.2	89.1	85.3	86.4	81.8	90.8	82.6	73.0	89.0
Polygamous	4.5	12.8	10.9	14.7	13.6	18.2	9.2	17.4	27.0	11.0
Ethnic group: %										
Bobo, Bwa	33.7	34.9	17.8	23.9	21.5	18.2	12.6	9.8	9.0	13.8
Dioula & similar	18.0	11.6	18.8	12.8	17.2	21.8	14.3	17.4	11.7	8.3
Mossi & similar	19.1	39.5	43.6	40.4	39.9	44.2	54.6	51.1	62.2	59.6
Lobi & similar	18.0	7.0	8.9	5.5	10.4	5.5	8.4	14.1	8.1	10.1
Other	11.2	7.0	10.9	17.4	11.0	10.3	10.1	7.6	9.0	8.3
Religion: %										
Muslim	67.4	70.9	76.2	76.2	74.2	80.0	66.4	62.0	75.5	67.9
Christian & others	32.6	29.0	23.8	23.9	25.8	20.0	33.6	38.0	24.6	32.1
Woman's education: %										
Went to school	39.3	53.5	62.4	60.6	45.4	49.1	47.9	48.9	38.2	41.3
No school	60.7	46.5	37.6	39.5	54.6	50.9	52.1	51.1	61.8	58.7
Woman work outside home: %										
Yes	52.8	73.3	65.4	63.3	62.6	63.0	58.8	68.5	59.1	45.0
No	47.2	26.7	34.7	36.7	37.4	37.0	41.2	31.5	40.9	55.1
Parity: %										
Expecting 1st child	22.5	24.4	24.8	24.8	23.3	26.7	20.2	19.6	18.0	31.2
Has 1-2 children	49.4	41.9	58.4	39.5	50.9	44.9	43.7	38.0	36.0	33.9
Has 3+ children	28.1	33.7	16.8	35.8	25.8	28.5	36.1	42.4	46.0	34.9
Prior use of contraception: %										
Yes	69.7	72.1	70.3	74.3	62.0	60.6	72.3	67.4	64.9	54.1
No	30.3	27.9	29.7	25.7	38.0	39.4	27.7	32.6	35.1	45.9
TOTAL (recruited)	**89**	**86**	**101**	**109**	**163**	**165**	**119**	**92**	**111**	**109**

Appendix 2: Budget

BUDGET FOR MEN IN MATERNITY PROJECT

ACTIVITES	SUB-ACTIVITES	CALCULATION			AMOUNT	AMOUNT
		Quantity/FTE	Cost/month	Nber/month	XOF	GBP
STAFF	*Interviewers*	*5.00*	*190,000*	*9*	*8,550,000*	*10,388.82*
	Qualitative Fieldworker	*1.00*	*190,000*	*2*	*380,000*	*461.73*
	Local P.I. (Dr Ganaba)	*0.20*	*1,186,000*	*12*	*2,846,400*	*3,458.57*
	Data management support (Henri)	*0.10*	*401,000*	*8*	*320,800*	*389.79*
	Secretary (Denise-Emma)	*0.05*	*565,000*	*12*	*339,000*	*411.91*
	Administrative support (Edgar)	*0.05*	*819,000*	*12*	*491,400*	*597.08*
	Clinical supervisor (Diane)	*1.00*	*450,000*	*6*	*2,700,000*	*3,280.68*
	Research supervisor	*1.00*	*450,000*	*9*	*4,050,000*	*4,921.02*
	Transcription and translation	*1.00*	*250,000*	*2*	*500,000*	*607.53*
	Data entry	*2.00*	*200,000*	*5*	*2,000,000*	*2,430.13*
	Transportation costs for clinical supervisor (Diane)	*1.00*	*30,000*	*6*	*180,000*	*218.71*
	Transportation costs for research supervisor	*1.00*	*30,000*	*9*	*270,000*	*328.07*
	Sub-total 1				***22,627,600***	***27,494.05***
Training	*Interviewers training workshop*	*1*	*75,000*	*2*	*150,000*	*182.26*
	Staff training A+C (Perdiem+ drink)	*1*	*330,000*	*1*	*330,000*	*400.97*
	Couple counseling trainer	*1*	*200,000*	*1*	*200,000*	*243.01*
	AIS training	*5*	*6,000*	*1*	*30,000*	*36.45*
	Staff training B (Perdiem +drink)	*5*	*8,500*	*1*	*42,500*	*51.64*
	Sub-total 2				***752,500***	***914.34***
Data Collection	*Contribution to participating facilities*	*5*	*250,000*	*1*	*1,250,000*	*1,518.83*
	AIS Door to Door invitations for components A and B	*5*	*1,500*	*120*	*900,000*	*1,093.56*
	AIS extra incentive per man/couple attending any session	*1*	*1,000*	*600*	*600,000*	*729.04*
	A+C midwife compensation for couple counseling (per hour)	*1*	*3,500*	*420*	*1,470,000*	*1,786.15*
	B men edu groups	*5*	*8,000*	*21*	*840,000*	*1,020.66*
	Facility coordinators (head of maternity)	*5*	*25,000*	*6*	*750,000*	*911.30*
	Refreshments - B (men's groups)	*1*	*1,000*	*600*	*600,000*	*729.04*
	Soap for follow up interviews	*1*	*850*	*1,200*	*1,020,000*	*1,239.37*
	Printing	*1*	*400,000*	*1*	*400,000*	*486.03*
	Transportation costs for interviewers (follow-up)	*5*	*30,000*	*5*	*750,000*	*911.30*
	Sub-total 3				***8,580,000***	***10,425.27***
Dissemination	*Dissemination*	*1*	*1,600,000*	*1*	*1,600,000*	*1,944.11*
					-	-
	Sub-total 4				***1,600,000***	***1,944.11***
Equipments	*Equipments and materials (PF counseling chart, field recorder)*	*1*	*500,000*	*1*	*500,000*	*607.53*
					-	-
	Sub-total 5				***500,000***	***607.53***
General Managment	*Ethics submission*	*1*	*75,000*	*1*	*75,000*	*91.13*
	Communications (phone bills)	*1*	*410,000*	*1*	*410,000*	*498.18*
	Office fournitures	*1*	*500,000*	*1*	*500,000*	*607.53*
					-	-
	Sub- total 6				***985,000***	***1,196.84***
						-
	General Total				***35,045,100***	***42,582.14***
						-
	Overhead (15%)				***5,256,765***	***6,387.32***
						-
Budget	**Global Amount**				**40,301,865**	**48,969.46**

Appendix 3: Focus group discussion topic guide

GUIDE POUR LES FOCUS GROUPS AVEC HOMMES – Novembre 2014

INTRODUCTION :

Comment peut-on assurer la bonne santé des femmes et des familles avec des petits enfants ?

GROSSESSE :

Pensez-vous qu'il est important que les femmes fréquentent les soins CPN ?

Dans le foyer, qui est normalement la personne qui décide à quel moment la femme doit se rendre à l'établissement de santé pour ses CPN ?

Est-ce que les femmes vont seules à l'établissement de santé, ou sont-elles accompagnées ?

PERIODE POSTPARTUM :

Est-ce que les maris sont présents dans l'établissement de sante pendant l'accouchement ?

Est-ce que les maris viennent chercher leurs femmes après l'accouchement, ou est-ce que c'est quelqu'un d'autre qui vient chercher les femmes ?

Est-ce que les femmes rentrent chez le mari après l'accouchement, ou est-ce qu'elles vont ailleurs ?

Apres combien de jours peuvent la mère et le bébé sortir de la maison ?

Selon vous, qu'est-ce que sont les bons aliments pour les nouveau-nés ?

Est-ce que les bébés allaités au sein reçoivent aussi de l'eau ou des autres liquides à boire ? Si c'est le cas, à quel moment commencent-ils à les recevoir ?

Dans le foyer, qui est normalement la personne qui décide qu'est-ce que l'enfant doit boire ?

Actuellement, il est prévu que les femmes et leurs bébés doivent revenir à l'établissement de sante pour un contrôle à 6 jours, et aussi a 6 semaines après l'accouchement. Pensez-vous que cela soit important ?

Nous avons remarqué, dans les observations faites dans les CSPS de Bobo pour une recherche, que beaucoup de femmes ne fréquentent pas ces consultations postnatales. Pouvez-vous m'expliquer pourquoi ?

Si les femmes se rendent à l'établissement de sante pour une consultation postnatale, est-ce que les hommes les accompagnent ?

PLANIFICATION FAMILIALE :

Combien de temps après l'accouchement y a-t-il la reprise des relations sexuelles ?

Dans le foyer, qui est normalement la personne qui prend la décision de reprendre les relations sexuelles ?

Quelle est votre opinion sur les méthodes qu'un couple peut utiliser pour achever un espacement avant d'avoir un autre enfant, ou pour éviter une autre grossesse ?

A quel moment pensez-vous que les conjoints devraient commencer à réfléchir et à décider s'ils veulent avoir d'autres enfants, et quand en avoir ?

Ou et à quel moment peuvent-ils recevoir des conseils sur le planning familial ?

NIVEAU D'INFORMATION CHEZ LES HOMMES

Qui peut avoir plus facilement accès aux informations sur comment maintenir la famille en bonne santé, c'est l'homme ou plutôt la femme ?

Qui peut avoir plus facilement accès aux informations sur le planning familial, c'est l'homme ou plutôt la femme ?

Pensez-vous que les hommes auraient besoin de plus d'informations, par rapport à ces qu'ils reçoivent actuellement ?

PARTICIPATION DES HOMMES AUX SOINS PRE ET POST-NATAUX

Nous avons remarqué, pendant nos observations, que même si certains hommes accompagnent leurs femmes au CSPS, ils ne participent pas eux-mêmes aux consultations prénatals et postnatals avec les femmes. Pouvez-vous m'expliquer pourquoi ? (*Types de réponses attendues : ils ne se sentent pas à l'aise, c'est un affaire de femmes, les prestataires ne le permettent pas, etc*.)

Pensez-vous qu'il serait une bonne idée d'impliquer les hommes ?

PROPOSITION DES STATEGIES DU PROJET

On est en train d'explorer des stratégies qui peuvent aider les hommes à se sentir plus impliqués avec les services de santé maternelle, et nous souhaiterons vos opinions sur cela. Par exemple, une idée serait celle d'inviter le mari à participer à une des consultations CPN avec sa femme. Le but serait de donner des conseils de sante au couple, ensemble. Pensez-vous que les hommes seraient intéressés à venir ?

Comment pourrait-on encourager les hommes à participer ? (*Suggérer des idées si nécessaire : invitation orale par la femme, invitation écrite, invitation donnée à domicile par un agent de sante*)

A quelle heure seraient les hommes disponibles à se rendre à l'établissement de santé ?

Une autre idée serait celle d'organiser une causerie éducative dédiée aux maris des femmes enceintes, pour leur donner des informations sur comment soutenir leurs femmes dans la grossesse et s'occuper de la sante de la famille après l'accouchement. Pensez-vous que les hommes seraient intéressés a participer à cette activité ?

Quel serait un bon endroit pour organiser la causerie pour les hommes ? Qui devrait animer le groupe ? Comment pourrait-on encourager les hommes à participer ?

Projet de recherche : Participation des hommes dans les soins de sante maternelle au Burkina Faso

ENTRETIEN DE BASE

Date entretien : ☐☐ ☐☐ ☐☐ **Heure du début** : ☐☐ h ☐☐ min
(Jour) (Mois) (An)

Initiales enquêtrice : _____ **Nom CSPS de recrutement**: _____

Enquêtée : Nom _____ Prénom : _____

Avant de commencer l'entretien : Les informations que nous collectons à travers nos entretiens aideront à comprendre le rôle que les hommes peuvent jouer en appuyant leurs femmes pendant la grossesse et après la naissance du bébé. Nous voudrions vous poser quelques questions aujourd'hui sur votre état de santé et votre vie familiale. Les questions prennent habituellement environ **30 minutes**. Toutes les informations que vous nous donnerez sont strictement confidentielles. Elles ne seront transmises à personne d'autre que les membres de l'équipe d'enquête. S'il arrivait que je pose une question à laquelle vous ne voulez pas répondre, dites-le moi et je passerai à la suivante. Vous pouvez également interrompre l'entretien à n'importe quel moment.
Avez-vous des questions à me poser ? Puis-je commencer l'entretien maintenant ?

1) **INFORMATIONS SUR LA FEMME**

N.	QUESTIONS	CODES	PASSEZ À:
1.1	Quelle est votre date de naissance ? DEMANDER LA PERMISSION DE **VOIR SON « CNIB » OU UN AUTRE DOCUMENT D'IDENTITÉ** (LIVRET DE FAMILLE, ETC) OU SON CARNET DE SANTÉ.	DATE DE NAISSANCE : ☐☐ ☐☐ ☐☐ (JOUR) (MOIS) (AN) NE SAIT PAS……97 97 97	
1.2	Quel âge aviez-vous à votre dernier anniversaire ? **VÉRIFIEZ QUE L'ÂGE CORRESPOND A LA DATE DE NAISSANCE DONNÉE**.	ÂGE - ANNÉES RÉVOLUES: ☐☐ NE SAIT PAS……97	
1.3	Quelle est votre **ethnie** (pour les burkinabé)/ votre **nationalité** pour les étrangers?	BOBO……..……01 DIOULA……02 FULFULDE/PEULH……..…03 GOURMANTCHE……..…04 GOUROUNSI ..……..…05 LOBI……..06 MOSSI……..07 SENOUFO……..……..08 TOUAREG/BELA……..……09 DAGARA ……...……..10 BISSA……..…11 AUTRE ETHNIE_____....12 (PRÉCISEZ) AUTRES NATIONALITÉS_____....13 (PRÉCISEZ)	

1.4	Quelle est votre **religion**?	MUSULMANE……1 CATHOLIQUE……..……..2 PROTESTANTE……..3 TRADITIONNELLE/ANIMISTE……...4 SANS RELIGION/AUCUNE…….5 AUTRE_____.....6 (PRÉCISEZ)	
1.5	Êtes-vous allée à l'école ?	OUI……..……1 NON……..……...2	⇨ **1.8**
1.6	Quel est **le plus haut niveau d'études** que vous avez atteint avec succès ou non ?	PRIMAIRE …… 1 SECONDAIRE (1ER CYCLE)……..2 SECONDAIRE (2ND CYCLE)…….....3 SUPÉRIEUR……...……4	
1.7	Quel est **la classe la plus élevée** que vous avez **complétée** ?	CLASSE…_____	
1.8	**En dehors de votre activités ménagères**, faites-vous normalement un travail **pour lequel vous gagnez** de l'argent ou vous êtes payez en nature ?	OUI……..……1 NON……..……...2	⇨ **2.1**
1.9	**Quelle est votre principale occupation**, c'est-à-dire quel genre de travail faites-vous principalement ? **SI ELLE A ARRETÉ PENDANT LA GROSSESSE**, INSISTEZ : Quelle était votre principale occupation, **quand vous n'étiez pas enceinte** ? **UNE OU PLUSIEURS RÉPONSES SONT POSSIBLES. A ENCERCLER** **N. B.** SI COIFFEUSE, ETC…, NOTER DANS « **AUTRE** »	AGRICULTURE……01 ÉLÉVAGE…….…… 02 OUVRIER……..03 SERVICES DOMESTIQUES……...04 ADMINISTRATION PUBLIQUE…….05 EMPLOYÉE SECTEUR PRIVÉ……06 ENSEIGNEMENT……..……07 SANTÉ……...…….08 PETITE ACTIVITÉ COMMERCIALE.09 COMMERCE (BOUTIQUE)……10 ARTISANAT……..……11 AUTRE_____.....12 (PRÉCISEZ)	

2) **INFORMATIONS SUR LE MARI/PARTENAIRE**

N.	QUESTIONS	CODES	PASSEZ À:
2.1	Quel âge avait votre (**mari/partenaire**) **à son dernier anniversaire** ?	ÂGE - ANNÉES RÉVOLUES: ☐☐ NE SAIT PAS…..……..97	

2.2	Est-il allé à l'école ?	OUI……..……1 NON……..……...2	**2.5**
2.3	Quel est **le plus haut niveau d'étude** qu'il a atteint ?	PRIMAIRE ……....1 SECONDAIRE (1er CYCLE)…….....2 SECONDAIRE (2nd CYCLE)….....3 SUPÉRIEUR……...4 NE SAIT PAS..……7	**2.5**
2.4	Quelle est la classe **la plus élevée qu'il a <u>complétée</u>** à ce niveau ?	CLASSE……_____ NE SAIT PAS……..…...……97	
2.5	Quelle est **l'occupation principale** de votre (mari/ partenaire) ? C'est-à-dire quel genre de travail fait-il principalement? **UNE OU PLUSIEURS RÉPONSES SONT POSSIBLES. A ENCERCLER** **N. B.** SI TAILLEUR, SOUDEUR, MECANICIEN, CHAUFFEUR, COIFFEUR, ETC…, NOTER DANS « **AUTRE** »	AGRICULTURE……..……..…..01 ÉLÉVAGE…….……..02 OUVRIER……..……..….03 SERVICES DOMESTIQUES…….04 ADMINISTRATION PUBLIQUE..…..05 EMPLOYÉ SECTEUR PRIVÉ……06 ENSEIGNEMENT……07 SANTÉ……..08 PETITE ACTIVITÉ COMMERCIALE……..09 COMMERCE (BOUTIQUE)……10 ARTISANAT……..…...…....11 AUTRE_____.....12 (PRÉCISEZ)	
2.6	Est-ce que votre (mari/partenaire) a **d'autres épouses**? C'est-à-dire, avec combien de femmes il vit comme s'ils étaient mariées ?	OUI…….…....1 NON……2 NE SAIT PAS..…….....7	**2.9**
2.7	En tout, y compris vous-même, combien a-t-il d'épouses ?	NOMBRE TOTAL D'EPOUSES : ☐☐	
2.8	Êtes-vous la première, deuxième,.....épouse ?	RANG : ☐☐	

2.9	Qui prend **habituellement** les décisions en ce qui concerne **les dépenses importantes pour le ménage** ? EXEMPLES : FRAIS D'ELECTRICITE, EAU, NOURRITURE, ECOLE…	ENQUÊTÉE……1 MARI/PARTENAIRE . . ……2 CONJOINTEMENT ENQUÊTÉE ET MARI/PARTENAIRE . ..……...3 QUELQU'UN D'AUTRE……._____.....4 (PRÉCISEZ) CELA DÉPEND/ PAS SÛRE……....5	
2.10	Qui prend **habituellement** les décisions en ce qui concerne **l'utilisation des soins et les dépenses pour la santé dans la famille** ?	ENQUÊTÉE……1 MARI/PARTENAIRE . . …….. .2 CONJOINTEMENT ENQUÊTÉE ET MARI/PARTENAIRE . ..……...3 QUELQU'UN D'AUTRE…….._____.....4 (PRÉCISEZ) CELA DÉPEND/ PAS SÛRE……5	

3) **GROSSESSES ANTERIEURES**

N.	QUESTIONS	CODES	PASSEZ À:
3.1	Je voudrais maintenant vous poser des questions sur **toutes les naissances que vous avez eues durant votre vie**. Avez-vous déjà donné naissance à un/des enfants et qui est/sont **toujours en vie** ?	OUI……...1 NON……2	⇨ **3.3**
3.2	**Combien de garçons et filles** sont-ils nés vivants et sont toujours en vie ?	NOMBRE GARCONS... ☐☐ NOMBRE FILLES…….. ☐☐	
3.3	Avez-vous déjà donné naissance à un garçon ou à une fille qui est **né vivant mais qui est décédé par la suite** ? **SI NON, INSISTEZ** : Je veux parler d'un bébé qui a crié ou montré un signe de vie mais qui n'a pas survécu par la suite.	OUI……...1 NON……2	⇨ **3.5**
3.4	Combien de garçons sont nés et décédés par la suite? Combien de filles sont nées et décédées par la suite?	NOMBRE GARCONS... ☐☐ NOMBRE FILLES…….. ☐☐	

3.5	Avez-vous déjà donné naissance à un **enfant mort-né** ?	OUI……...1 NON……2	⇨ **3.7**
3.6	Combien de garçons sont morts nés? Combien de filles sont morts nés ?	NOMBRE GARCONS...☐☐ NOMBRE FILLES……..☐☐	
3.7	FAITES LA SOMME DES REPONSES A **3.2 , 3.4, ET 3.6** ET INSCRIVEZ LE TOTAL CI-DESSOUS. Je voudrais être sure d'avoir bien compris : vous avez eu au TOTAL ☐☐ naissances dans votre vie. Est-ce bien exact ?	OUI……...……1 NON……...…….2 **SI NON, INSISTEZ ET CORRIGEZ 3.2, 3.4 ET 3.6 COMME IL SE DOIT**	
3.8	Avez-vous déjà eu une grossesse qui s'est terminée par **une fausse couche ou un avortement** ?	OUI……...1 NON……2	⇨ **4.1**
3.9	Combien de grossesses se sont terminées par une fausse couche ou un avortement ?	NOMBRE……☐☐	

4) **INFORMATIONS SUR CETTE GROSSESSE (Grossesse actuelle)**

N.	**QUESTIONS**	**CODES**	**PASSEZ À:**
4.1	Je voudrais vous poser quelque question sur votre **grossesse actuelle**. Quand vous êtes tombée enceinte, **vouliez-vous devenir enceinte à ce moment-là** ?	OUI……...1 NON……2 NE SAIT PAS……7	⇨ **4.3**
4.2	Est-ce que vous vouliez avoir un enfant **plus tard** ou est-ce que vous ne vouliez pas/plus d'enfant ?	PLUS TARD……..……..…1 NE PAS/NE PLUS AVOIR D'ENFANT……...2	
4.3	Est-ce que je pourrais voir votre Carnet de Santé ? **SI OUI, est-ce que on pourrait regarder quelques détails écrits dans votre Carnet de Santé** ?	OUI……...1 REFUS……2 CARNET MANQUANT..……3	

- SI OUI, VEUILLEZ PRENDRE NOTE DES INFORMATIONS QUI SE TROUVENT A LA **PAGE 6 DU CARNET DE SANTE** (TITRE « GESTATION »).
- EN CAS DE REFUS, D'ABSENCE DE CARNET OU D'INFORMATIONS MANQUANTES, DEMANDER DIRECTEMENT A LA FEMME ET COCHEZ « ESTIMATION » :

4.4	DATE DES **DERNIÈRES RÈGLES**	☐☐ ☐☐ ☐☐ [JOUR] [MOIS] [AN] NE SAIT PAS…….....97 97 97 SOURCE : CARNET/ ECHOGR…☐ ESTIMATION…….. ☐	
4.5	ACCOUCHEMENT PRÉVU LE :	☐☐ ☐☐ ☐☐ [JOUR] [MOIS] [AN] NE SAIT PAS…….....97 97 97 SOURCE : CARNET/ ECHOGR…☐ ESTIMATION…….. ☐	
4.6	CPN FAITE AUJOURD'HUI (**ou DERNIERE CPN**) : SI ELLE **N'A PAS FAIT UNE CPN** AUJOURD'HUI, NOTEZ ICI LA DATE DE LA **DERNIERE CPN :** ☐☐ ☐☐ ☐☐ [JOUR] [MOIS] [AN]	1er CPN……1 2e CPN……2 3e CPN……3 4e CPN……4	⇨ **4.8**
4.7	DATE DE LA **1ere CPN**:	☐☐ ☐☐ ☐☐ [JOUR] [MOIS] [AN] NE SAIT PAS…….....97 97 97 SOURCE : CARNET……..☐ ESTIMATION..☐	
4.8	**HAUTEUR UTÉRINE** AUJOURD'HUI (OU A LA **DERNIERE CPN**, SELON LA REPONSE A **4.6**):	☐☐ CENTIMETRES CARNET MANQUANTE……98 CARNET PRESENTE MAIS INFORMATION MANQUANTE……97	

5) **UTILISATION DE LA CONTRACEPTION**

N.	QUESTIONS	CODES	PASSEZ À:
5.1	Je voudrais maintenant que nous parlions de planification familiale, c'est-à-**dire les différents moyens ou méthodes qu'un couple peut utiliser pour retarder ou éviter une grossesse**. Dans le passé, avez-vous déjà fait quelque chose ou utilisé une méthode **pour retarder ou éviter une grossesse** ?	OUI……...1 NON……2	⇨ **FIN**
5.2	Pouvez-vous me **citer toutes les méthodes contraceptives que vous avez déjà eu à utiliser** ? **Y-at-il d'autres méthodes encore** ? **PLUSIEURES RÉPONSES SONT POSSIBLES.** **A ENCERCLER**	DIU (Sterilet)……01 INJECTABLES……02 IMPLANTS……03 PILULE……04 CONDOM MASCULIN……...05 CONDOM FEMININ……06 MAMA……..……07 RYTHME……08 RETRAIT……...09 COLLIER……...10 ABSTINENCE PERIODIQUE…….11 ABSTINENCE POSTPARTUM……..12 METHODE TRADITION_____.....13 (PRÉCISEZ) AUTRE METHODE_____.14 (PRÉCISEZ)	
5.3	Avez-vous déjà utilisé l'une de ces méthodes **à l'insu de votre partenaire/conjoint ?**	OUI……...1 NON……2	**FIN**

Heure de fin de l'entretien : ☐☐ h ☐☐ min

Entretien réalisé en : Dioula ……. ☐

Moore……...☐

Français :…….☐

Autre (précisez) :☐ _____

Signature enquêtrice : _____

Projet de recherche : Participation des hommes dans les soins de sante maternelle au Burkina Faso

PREMIER ENTRETIEN DE SUIVI (3 Mois postpartum)

Date entretien : ☐☐ ☐☐ ☐☐ **Heure du début** : ☐☐ h ☐☐ min
(Jour) (Mois) (An)

Enquêtrice:____ **Enquêtée**: Nom _____Prénom: _____

Avant de commencer l'entretien : Nous revenons après l'accouchement pour voir comment vous vous portez et poser quelques questions encore sur votre état de santé et votre vie familiale. Les questions prennent habituellement environ **30 minutes**. Toutes les informations que vous nous donnerez seront strictement confidentielles. Elles ne seront transmises à personne d'autre que les membres de l'équipe d'enquête. S'il arrivait que je pose une question à laquelle vous ne voulez pas répondre, dites-le moi et je passerai à la suivante. Vous pouvez également interrompre l'entretien à n'importe quel moment.
Avez-vous des questions à me poser ? On peut commencer l'entretien maintenant ?

APRES UN PREMIER ECHANGE AVEC LA DAME…
LA GROSSESSE S'EST TERMINEE PAR :

ACCOUCHEMENT A TERME : ☐	**ACCOUCHEMENT PREMATURE :** ☐ (GROSSESSE QUI S'EST TERMINEE ENTRE 6 ET 8 MOIS)	**FAUSSE COUCHE ou AVORTEMENT :** ☐ (GROSSESSE QUI S'EST TERMINEE A 5 MOIS OU PLUS TOT)
COMMENCEZ PAR LA SECTION 1) ET SUIVEZ L'ORDRE NORMAL DU QUESTIONNAIRE		**DATE FAUSSE COUCHE** : [__][__] [__][__] [__][__] (jour) (mois) (an) NE SAIT PAS…..…….... 97 **POSER SEULEMENT LES QUESTIONS DES SECTIONS :** **3)** SATISFACTION A L'EGARD DES SOINS RECUS **5)** PREFERENCES EN MATIERE DE FERTILITE **6)** UTILISATION DE LA CONTRACEPTION → **3.1**

1) **L'ACCOUCHEMENT**

N.	QUESTIONS	CODES	PASSEZ À:
1.2	A quelle date avez-vous accouché ? SI ELLE N'EST PAS SURE, VÉRIFIEZ LA DATE DE L'ACCOUCHEMENT DANS LE CARNET (**A LA PAGE 12**)	DATE DE L'ACCOUCHEMENT : [__][__] [__][__] [__][__] (jour) (mois) (an) NE SAIT PAS…..…….....97	
1.3	Comment avez-vous accouché cette fois, normalement ou par césarienne ?	VOIE BASSE…… 1 CÉSARIENNE…….…….... 2 AUTRE_____..... 3 . (PRÉCISEZ)	

1.4	Avez-vous accouché d'un seul bébé ou de jumeaux? **AUTRE=** PLUS DE 2 BEBES	UN BEBE……. 1 JUMEAUX…….……..……. 2 AUTRE _____..... 3 (PRÉCISEZ)	
1.5	Votre bébé (**si jumeaux, le premier - Enfant 1**), est-il toujours en vie aujourd'hui ?	OUI……. 1 NON, DÉCÉDÉ……. 2	⇨ **1.7**
1.6	Est-il mort-né, ou est-il né vivant et décédé par la suite ?	MORT-NE……..……..……..……. 1 DECEDE PAR LA SUITE…… 2	⇨ **1.8**
1.7	Quelle est/était le sexe du bébé **(si jumeaux, Enfant 1) ?**	MASCULIN…….…..... 1 FEMININ…..…… 2 NE SAIT PAS……. 7	
1.8	VÉRIFIEZ LA **REPONSE A LA QUESTION 1.4** : SI UN SEUL BEBE SI DES **JUMEAUX** (OU PLUS) ⇩		⇨ **2.1**
1.9	**Pour le deuxième des jumeaux – Enfant 2** : L'autre bébé est-il toujours en vie aujourd'hui ?	OUI……. 1 NON, DÉCÉDÉ……. 2	⇨ **1.11**
1.10	Est-il mort-né, ou est-il né vivant et décédé par la suite ?	MORT-NE……..……..……..……. 1 DECEDE PAR LA SUITE…… 2	⇨ **2.1**
1.11	Quelle est/était le sexe de ce bébé (Enfant 2) ?	MASCULIN…….…..... 1 FEMININ…..…… 2 NE SAIT PAS……..…….. 7	

2) **UTILISATION DES SOINS PRE- ET POSTNATALES**

N.	QUESTIONS	CODES	PASSEZ À:
2.1	Combien de consultations prénatales avez-vous faites ? SI ELLE N'EST PAS SURE, VERIFIEZ LE NOMBRE DANS LE CARNET **À LA PAGE 6**	NOMBRE CPN FAITES : 1……. 1 2…… 2 3…… 3 4……..……..... 4 5 OU PLUS..……..... 5 NE SAIT PAS…… 7	
2.2	Avez-vous accouché dans un établissement de santé, ou ailleurs ? « **AUTRE** » PEUT ETRE : au champ, en voiture, au bord de la route… **PRECISEZ**	ETABLISSEMENT DE SANTE.. 1 DOMICILE DAME…….…..... 2 AUTRE_____.... 3	⇨ **2.5**

2.3	**SI ACCOUCHEMENT HORS DE L' HOPITAL :** Après l'accouchement, est-ce que **pendant les 3 premiers jours** vous vous êtes rendu dans un établissement de sante ?	OUI……..... 1 NON…….…….. 2 NE SAIT PAS……..…… 7	**2.9**
2.4	Combien de temps après l'accouchement êtes-vous parti à l'hôpital ?	LE MEME JOUR……. 0 LE LENDEMAIN…….…. 1 2 JOURS APRES…..……. 2 3 JOURS APRES……..…….. 3 NE SAIT PAS…… 7	
2.5	C'était dans quel établissement de santé ?	CSPS BOLOMAKOTE.....……. 01 CSPS GUIMBI……. 02 CSPS SARFALAO…….. 03 CSPS SECT 24……. 04 CSPS OUEZZINVILLE…….. 05 AUTRE CSPS…….. 06 CMA…….. 07 CHU…….....…..... 08 CLINIQUE…… 09 AUTRE_____.... 10 (PRECISEZ)	
2.6	Combien de temps après l'accouchement avez-vous quitté **la maternité** ?	LE MEME JOUR……. 0 LE LENDEMAIN…….…. 1 2 JOURS APRES…..……. 2 3 JOURS APRES……..…….. 3 4 JOURS APRES……..…….. 4 5 JOURS OU PLUS…… 5 NE SAIT PAS……..... 7	**2.8** **2.8**
2.7	**SI 5 JOURS OU PLUS :** Pour quelle raison êtes-vous restez aussi longtemps a l'hôpital ? C'était pour un problème de sante pour vous-même, ou pour le bébé ? **PRECISER LE PROBLEME DE SANTE OU TOUTE AUTRE RAISON**	BEBE SEULEMENT……..... 1 MERE SEULE OU LES DEUX….. 2 AUTRE RAISON…….. 3 _____ _____	
2.8	Est-ce que **avant de vous laisser rentrer** à la maison un agent de santé a examiné votre état de santé, pour s'assurer que votre corps s'est bien rétabli depuis l'accouchement ? **(**C'EST BIEN LA **6eme HEURE**, ET NON AVANT !)	OUI…….....1. NON……...2 NE SAIT PAS……..…… 7	
	Maintenant je voudrais vous poser quelques questions sur la période après votre rentrée à la maison de l'hôpital.		

2.9	Depuis ce jour, est-ce que vous avez eu **une maladie ou un problème de sante sérieux, tel que vous avez été re-hospitalisee** (vous êtes retournées a l'hôpital et vous êtes y restée pour au moins une nuit pour être soignée) ? **POUR PROBLEMES DE LA MERE SEULEMENT !** **Ex:** infection grave, saignements, éclampsie…	OUI_____ 1 _____..... (**PRECISEZ)** NON…….. 2	
2.10	**Depuis le jour que vous êtes rentrée a la maison**, est-ce que vous êtes déjà allez en consultation avec un agent de sante **qui a examiné votre état de santé**, **pour s'assurer que votre corps s'est bien rétabli depuis l'accouchement** ? **=ON A FAIT UN EXAMEN PHYSIQUE DE LA DAME!**	OUI……. 1 NON…….. 2	⇨ **3.1**
2.11	**Combien de fois** êtes-vous allé faire une telle consultation ? N.B. Les pansements de la césarienne ne comptent pas	1…… 1 2…… 2 3…… 3 4 ou plus…… 4	
	<u>PREMIERE CONSULTATION</u> :		
2.12	Combien de temps après l'accouchement a eu lieu **la première** de ces consultations ? SI REPONSE DONNEE EN SEMAINES OU MOIS, **CALCULEZ VOUS-MEME** LE TEMPS EN JOURS	[___][___] JOURS APRES L'ACCOUCHEMENT NE SAIT PAS……97	
	2.12.1 DEMANDEZ LA PERMISSION DE VOIR SI LA CONSULTATION EST DOCUMENTEE DANS LE CARNET DE SANTE	OUI, DOCUMENTEE…….. 1 NON DOCUMENTEE…..…….. 2 CARNET PAS DISPONIBLE……. 3 REFUS…….. 4	
2.13	**Où** a eu lieu cette consultation ?	CSPS BOLOMAKOTE.....……. 01 CSPS GUIMBI……. 02 CSPS SARFALAO…….. 03 CSPS SECT 24……. 04 CSPS OUEZZINVILLE…….. 05 AUTRE CSPS……. 06 CMA…….. 07 CHU…….....…..... 08 CLINIQUE…… 09 DOMICILE DAME……..... 10 AUTRE_____.... 11 (PRECISEZ)	
2.14	Ce jour-là, est-ce que vous étiez allé en consultation **parce qu'il y avait un problème de sante spécifique** chez vous ou le bébé, **ou c'était juste pour un suivi (=se rassurer que tout va bien)** ? **PLUS D'UNE REPONSE EST POSSIBLE !**	POUR UN SUIVI…….. A POUR UN PROBLEME : _____.... B (PRECISEZ) POUR FAIRE LA PF…… C NE SAIT PAS…… D	

	VERIFIEZ LA REPONSE A **2.11** : LA FEMME A FAIT **2 CONSULTATIONS OU PLUS ?** NON, **UNE SEULE :** → **3.1** **OUI** : **DEUXIEME CONSULTATION** ↓		
2.15	Combien de temps après l'accouchement a eu lieu **la deuxième** consultation ? SI REPONSE DONNEE EN SEMAINES OU MOIS, **CALCULEZ VOUS-MEME** LE TEMPS EN JOURS	[___][___] JOURS APRES L'ACCOUCHEMENT NE SAIT PAS……97	
	2.15.1 DEMANDEZ LA PERMISSION DE VOIR SI LA CONSULTATION A ETE DOCUMENTEE DANS LE CARNET DE SANTE	OUI, DOCUMENTEE…….. 1 NON DOCUMENTEE…..…….. 2 CARNET PAS DISPONIBLE……. 3 REFUS…….. 4	
2.16	**Où** a eu lieu cette consultation ?	CSPS BOLOMAKOTE.....……. 01 CSPS GUIMBI……. 02 CSPS SARFALAO…….. 03 CSPS SECT 24……. 04 CSPS OUEZZINVILLE…….. 05 AUTRE CSPS……. 06 CMA…….. 07 CHU…….....…..... 08 CLINIQUE…… 09 DOMICILE DAME……..... 10 AUTRE_____.... 11 (PRECISEZ)	
2.17	Ce jour-là, est-ce que vous étiez allé en consultation **parce qu'il y avait un problème de sante spécifique** chez vous ou le bébé, **ou c'était juste pour un suivi (=se rassurer que tout va bien)** ? **PLUS D'UNE REPONSE EST POSSIBLE !**	POUR UN SUIVI…….. A POUR UN PROBLEME : _____.... B (PRECISEZ) POUR FAIRE LA PF…… C NE SAIT PAS…… D	
	VERIFIEZ LA REPONSE A **2.11** : LA FEMME A FAIT **3 CONSULTATIONS OU PLUS** ? **NON, 2 SEULEMENT :** → **3.1** OUI : **TROISIEME CONSULTATION** ↓		
2.18	Combien de temps après l'accouchement a eu lieu **la troisième** consultation ? SI REPONSE DONNEE EN SEMAINES OU MOIS, **CALCULEZ VOUS-MEME** LE TEMPS EN JOURS	[___][___] JOURS APRES L'ACCOUCHEMENT NE SAIT PAS……97	
	2.18.1 DEMANDEZ PERMISSION A VOIR SI LA CONSULTATION A ETE DOCUMENTEE DANS LE CARNET DE SANTE	OUI, DOCUMENTEE…….. 1 NON DOCUMENTEE…..…….. 2 CARNET PAS DISPONIBLE……. 3 REFUS…….. 4	

2.19	**Où** a eu lieu cette consultation ?	CSPS BOLOMAKOTE.....……. 01 CSPS GUIMBI……. 02 CSPS SARFALAO…….. 03 CSPS SECT 24……. 04 CSPS OUEZZINVILLE…….. 05 AUTRE CSPS……. 06 CMA…….. 07 CHU…….....……..... 08 CLINIQUE…… 09 DOMICILE DAME……..... 10 AUTRE_____.... 11 (PRECISEZ)	
2.20	Ce jour-là, est-ce que vous étiez allé en consultation **parce qu'il y avait un problème de sante spécifique** chez vous ou le bébé, **ou c'était juste pour un suivi (=se rassurer que tout va bien)** ? **PLUS D'UNE REPONSE EST POSSIBLE !**	POUR UN SUIVI…….. A POUR UN PROBLEME : _____.... B (PRECISEZ) POUR FAIRE LA PF…… C NE SAIT PAS…… D	

3) **SATISFACTION A L'ÉGARD DES SOINS REÇUS**

N.	QUESTIONS	CODES	PASSEZ À:
Maintenant, je voudrais vous poser quelques questions sur la qualité des soins de santé que vous avez reçus ces derniers mois. Les questions concernent les soins que vous avez reçu **pendant toute la période de la grossesse, l'accouchement et les semaines après l'accouchement**. S'il vous plait, rappelez-vous que nous ne sommes pas des agents de santé, même si nous travaillons souvent avec eux. Pourtant, nous souhaiterions que vous répondiez le plus honnêtement possible. **Vos réponses ne seront pas transmises aux agents de santé !**			
3.1	Est-ce qu'il est **déjà arrivé** que les agents de santé se soient adressés à vous en utilisant un **langage** pas clair pour vous, ou que vous ne comprenez pas ?	OUI…….. ….....……. 1 NON, JAMAIS...……..... 2 NE SAIT PAS…… 7	
3.2	**Chaque fois** que vous avez posé une question ou demandé une explication aux agents, avez-vous reçu une **réponse satisfaisante** ?	OUI, CHAQUE FOIS..……..… 1 NON, PAS CHAQUE FOIS..…….. 2 JAMAIS POSE DE QUESTION… 3 NE SAIT PAS…… 7	
3.3	Est-ce qu'il y a **déjà eu une occasion** ou vous aurez voulu **poser des questions** ou demander des explications, mais on ne vous a pas donné la possibilité de le faire ?	OUI…….. ….....……. 1 NON, JAMAIS...……..... 2 NE SAIT PAS…… 7	
3.4	Chaque fois qu'il y a eu une **décision à prendre concernant vos soins/traitements**, est-ce qu'il est **déjà arrivé** qu'un agent n'ait **pas respecté votre volonté ou préférence** ? **Ex :** choix de médicaments, durée du séjour à l'hôpital, choix du prestataire…	OUI…….. ….....……. 1 NON, JAMAIS...……..... 2 NE SAIT PAS…… 7	

3.5	Est-ce il y a **déjà eu un moment** ou les prestataires n'ont pas respecté votre **intimité** ?	OUI…….. …..…….. 1 NON, JAMAIS...……..... 2 NE SAIT PAS…… 7	
3.6	Est-ce que vous vous êtes déjà senti mal à l'aise parce que les prestataires ont partagé des **informations personnelles** ou sur votre état de santé avec d'autres personnes ?	OUI…….. …..…….. 1 NON, JAMAIS...……..... 2 NE SAIT PAS…… 7	
3.7	Est-ce qu'il est déjà arrivé qu'un agent de santé se soit adressé à vous avec **impatience ou colère** ?	OUI…….. …..…….. 1 NON, JAMAIS...……..... 2 NE SAIT PAS…… 7	
3.8	Est-ce qu'il y a eu un moment où vous auriez aimé avoir **quelqu'un de proche** à côté de vous pour vous soutenir, mais ça n'a pas été possible parce que les agents n'ont pas accepté ?	OUI…….. …..…….. 1 NON, JAMAIS...……..... 2 NE SAIT PAS…… 7	

4) **ALLAITEMENT**

N.	QUESTIONS	CODES	PASSEZ À:
VERIFIEZ LES **REPONSES DONNEES DANS LA <u>SECTION 1</u> (ACCOUCHEMENT**) : ***SI LA DAME A ACCOUCHE DES **JUMEAUX,** REPONDEZ D'ABORD **POUR LE <u>PREMIER BEBE</u>** ****			
EST-CE QUE LE BEBE EST **TOUJOURS EN VIE** ?		**NON**, MORT-NE OU DECEDE **OUI**, VIVANT	⇨ **4.9**
4.1	Allaitez-vous le bébé au sein ?	OUI…… 1 NON……... 2	
Depuis sa naissance, est-ce que le bébé a déjà eu à prendre :			
4.2	… du **lait autre que le lait maternel**, y compris le lait en poudre pour bébé ?	OUI…… 1 NON…….. 2 NE SAIT PAS…… 7	⇨ **4.3**
	4.2.1 Est-ce qu'il prend ca **habituellement,** ou combien de fois c'est déjà arrivé ?	CHAQUE JOUR…….. 1 CHAQUE SEMAINE…… 2 OCCASIONNELLEMENT…… 3 1-2 FOIS SEULEMENT.....……. 4 NE SAIT PAS…… 7	
4.3	…de **l'eau simple** ?	OUI…… 1 NON…….. 2 NE SAIT PAS…… 7	⇨ **4.4**
	4.3.1 Est-ce qu'il prend ca **habituellement**, ou combien de fois c'est déjà arrivé ?	CHAQUE JOUR…….. 1 CHAQUE SEMAINE…… 2 OCCASIONNELLEMENT…… 3 1-2 FOIS SEULEMENT.....……. 4 NE SAIT PAS…… 7	

4.4	…des **infusions** ou des **tisanes** ?	OUI…… 1 NON…… 2 NE SAIT PAS…… 7	⇨ **4.5**
	4.4.1 Est-ce qu'il prend ca **habituellement**, ou combien de fois c'est déjà arrivé ?	CHAQUE JOUR…….. 1 CHAQUE SEMAINE…… 2 OCCASIONNELLEMENT……. 3 1-2 FOIS SEULEMENT.....……. 4 NE SAIT PAS…… 7	
4.5	…de **l'eau salée** ou de **l'eau coranique** ?	OUI…… 1 NON…… 2 NE SAIT PAS…… 7	⇨ **4.6**
	4.5.1 Est-ce qu'il prend ca **habituellement,** ou combien de fois c'est déjà arrivé ?	CHAQUE JOUR…….. 1 CHAQUE SEMAINE…… 2 OCCASIONNELLEMENT……. 3 1-2 FOIS SEULEMENT.....……. 4 NE SAIT PAS…… 7	
4.6	…de **l'eau sucrée**, une boisson à base de miel, du **café ou du jus de fruit** ?	OUI…… 1 NON…… 2 NE SAIT PAS…… 7	⇨ **4.7**
	4.6.1 Est-ce qu'il prend ca **habituellement,** ou combien de fois c'est déjà arrivé ?	CHAQUE JOUR…….. 1 CHAQUE SEMAINE…… 2 OCCASIONNELLEMENT……. 3 1-2 FOIS SEULEMENT.....……. 4 NE SAIT PAS…… 7	
4.7	…un **autre aliment liquide ou semi/solide** ? EX : BOUILLE, SOUPE, SAUCE..	OUI_____…….. 1 (PRECISEZ) NON…… 2 NE SAIT PAS…… 7	⇨ **4.8**
	4.7.1 Est-ce qu'il prend ca **habituellement,** ou combien de fois c'est déjà arrivé ?	CHAQUE JOUR…….. 1 CHAQUE SEMAINE…… 2 OCCASIONNELLEMENT……. 3 1-2 FOIS SEULEMENT.....……. 4 NE SAIT PAS…… 7	
4.8	Le bébé a-t-il déjà subi un **gavage** ?	OUI…… 1 NON…… 2 NE SAIT PAS…… 7	⇨ **4.9**
	4.8.1 Est-ce que on fait cela **habituellement**, ou combien de fois c'est déjà arrivé ?	CHAQUE JOUR…….. 1 CHAQUE SEMAINE…… 2 OCCASIONNELLEMENT……. 3 1-2 FOIS SEULEMENT.....……. 4 NE SAIT PAS…… 7	
4.9	VERIFIEZ LES REPONSES DONNEES DANS LA **SECTION 1 (ACCOUCHEMENT**) : EST-CE QUE LA FEMME A ACCOUCHE DES JUMEAUX ? NON ⇨ **5.1** OUI ⇩		

	EST-CE QUE LE DEUXIEME BEBE EST **ENCORE EN VIE** AUJOURD'HUI ? NON → **5.1** OUI, VIVANT ↓		
	Allaitez-vous le bébé au sein ?	OUI…… 1 NON…… 2	
Depuis sa naissance, est-ce que le bébé a déjà eu à prendre :			
4.10	…du **lait autre que le lait maternel**, y compris le lait en poudre pour bébé ?	OUI…… 1 NON…… 2 NE SAIT PAS…… 7	→ **4.11**
	4.10.1 Est-ce qu'il prend ca **habituellement**, ou combien de fois c'est déjà arrivé ?	CHAQUE JOUR…… 1 CHAQUE SEMAINE…… 2 OCCASIONNELLEMENT…… 3 1-2 FOIS SEULEMENT…… 4 NE SAIT PAS…… 7	
4.11	…de **l'eau simple** ?	OUI…… 1 NON…… 2 NE SAIT PAS…… 7	→ **4.12**
	4.11.1 Est-ce qu'il prend ca **habituellement**, ou combien de fois c'est déjà arrivé ?	CHAQUE JOUR…… 1 CHAQUE SEMAINE…… 2 OCCASIONNELLEMENT…… 3 1-2 FOIS SEULEMENT…… 4 NE SAIT PAS…… 7	
4.12	…des **infusions** ou des **tisanes** ?	OUI…… 1 NON…… 2 NE SAIT PAS…… 7	→ **4.13**
	4.12.1 Est-ce qu'il prend ca **habituellement,** ou combien de fois c'est déjà arrivé ?	CHAQUE JOUR…… 1 CHAQUE SEMAINE…… 2 OCCASIONNELLEMENT…… 3 1-2 FOIS SEULEMENT…… 4 NE SAIT PAS…… 7	
4.13	…de **l'eau salée** ou de **l'eau coranique** ?	OUI…… 1 NON…… 2 NE SAIT PAS…… 7	→ **4.14**
	4.13.1 Est-ce qu'il prend ca **habituellement,** ou combien de fois c'est déjà arrivé ?	CHAQUE JOUR…… 1 CHAQUE SEMAINE…… 2 OCCASIONNELLEMENT…… 3 1-2 FOIS SEULEMENT…… 4 NE SAIT PAS…… 7	
4.14	…de **l'eau sucrée**, une boisson à base de miel, du **café ou du jus de fruit** ?	OUI…… 1 NON…… 2 NE SAIT PAS…… 7	→ **4.15**

	4.14.1 Est-ce qu'il prend ca **habituellement,** ou combien de fois c'est déjà arrivé ?	CHAQUE JOUR…….. 1 CHAQUE SEMAINE…… 2 OCCASIONNELLEMENT……. 3 1-2 FOIS SEULEMENT.....……. 4 NE SAIT PAS…… 7	
4.15	…un **autre aliment liquide ou semi/solide** ? EX : BOUILLE, SOUPE, SAUCE..	OUI_____…….. 1 (PRECISEZ) NON…….. 2 NE SAIT PAS…… 7	⇨ **4.16**
	4.15.1 Est-ce qu'il prend ca **habituellement**, ou combien de fois c'est déjà arrivé ?	CHAQUE JOUR…….. 1 CHAQUE SEMAINE…… 2 OCCASIONNELLEMENT……. 3 1-2 FOIS SEULEMENT.....……. 4 NE SAIT PAS…… 7	
4.16	Le bébé a-t-il déjà subi un **gavage** ?	OUI…… 1 NON…….. 2 NE SAIT PAS…… 7	⇨ **5.1**
	4.16.1 Est-ce que on fait cela **habituellemen**t, ou combien de fois c'est déjà arrivé ?	CHAQUE JOUR…….. 1 CHAQUE SEMAINE…… 2 OCCASIONNELLEMENT……. 3 1-2 FOIS SEULEMENT.....……. 4 NE SAIT PAS…… 7	

5) **PREFERENCES EN MATIERE DE FERTILITE**

N.	QUESTIONS	CODES	PASSEZ À:
5.1	**Excusez-moi**, êtes-vous actuellement enceinte ?	OUI . . . . 1 NON . . . . 2 NE SAIT PAS….. 7	⇨ **FIN**
5.2	Si vous pouviez choisir exactement le nombre d'enfants à avoir dans votre vie, **combien d'autres enfants** voudriez-vous dans le futur ?	PAS D'AUTRES ENFANTS…….. 0 1 AUTRE…….. 1 2 AUTRES……..... 2 3 AUTRES OU PLUS……..…… 3 SELON LA VOLONTE DE DIEU... 4 NE SAIT PAS…… 7	⇨ **5.4**
5.3	**Combien de temps** voudriez-vous attendre avant de tomber enceinte ?	**MOINS DE 12 MOIS**…….. **00** 1 AN…….. 01 2 ANS…..... 02 3 ANS…… 03 4 OU 5 ANS…… 04 PLUS QUE 5 ANS……..…. 05 JUSQU'À CE QUE L'ENFANT MARCHE…….. 06 SELON LA VOLONTÉ DU MARI.. 07 SELON LA VOLONTÉ DE DIEU... 08 NE SAIT PAS……..…… 97	**RAPPEL POUR 6.16 !**

5.4	**Excusez-moi**, depuis l'accouchement, **vos règles** sont-elles revenues ?	OUI…… 1 NON……... 2 NE SAIT PAS…… 7	⇨ **5.6**
5.5	Combien de temps après l'accouchement vos règles sont-elles revenues **pour la première fois**? (Le bébé avait combien de jours/mois ?) **SUR LA BASE DE CE QUE LA FEMME DIT, ESTIMEZ LA DATE LE PLUS PRECISEMENT POSSIBLE**	DATE : [__][__] [__][__] [__][__] *jour* *mois* *an* NE SAIT PAS……97	
5.6	**Excusez-moi, maintenant je voudrais vous poser quelques questions sur les rapports sexuels** : Avez-vous déjà repris les rapports sexuels depuis l'accouchement?	OUI…… 1 NON……... 2	⇨ **5.8**
5.7	Combien de temps après l'accouchement avez-vous repris vos rapports sexuels **pour la première fois** ? (Le bébé avait combien de jours/mois ?) **SUR LA BASE DE CE QUE LA FEMME DIT, ESTIMEZ LA DATE LE PLUS PRECISEMENT POSSIBLE**	DATE : [__][__] [__][__] [__][__] *jour* *mois* *an* NE SAIT PAS……..97	⇨ **6.1**
5.8	Si vous pouviez choisir en toute liberté, combien de temps souhaiteriez-vous attendre, avant de reprendre vos relations sexuelles ? **SI BEBE VIVANT, CALCULER EN TENANT COMPTE DE L'AGE ACTUEL DU BEBE**	DANS [__][__] MOIS…….…... 1 QUAND L'ENFANT CESSERA DE TÉTER…… 2 QUAND L'ENFANT MARCHE…... 3 SELON LA VOLONTÉ DU MARI.. 4 AUTRE_____.... 5 (PRECISEZ) NE SAIT PAS…… 7	

6. **UTILISATION DE LA CONTRACEPTION**

N.	QUESTIONS	CODES	PASSEZ À:
6.1	**AUJOURD'HUI**, faites-vous quelque chose ou utilisez-vous une méthode pour retarder ou éviter une grossesse ?	OUI…… 1 NON……... 2	⇨ **6.16**
6.2	Quelles méthodes utilisez-vous **actuellement** ? **INSISTEZ** : Utilisez-vous encore une autre méthode actuellement ? **A PARTIR DE « CONDOM MASCULIN », MENTIONNER AINSI LES AUTRES METHODES UNE A LA FOIS :** « Utilisez-vous le condom masculin ? » « Utilisez-vous le condom féminin ? » Etc.	STÉRILISATION FÉMININE…….. A STÉRILISATION MASCULINE….. B DIU/STERILET. . .. . …… C INJECTABLES. . ……. D IMPLANT/NORPLANT …….. E PILULE..... F CONDOM MASCULIN…… G CONDOM FÉMININ..... H MÉTHODE DU RYTHME …….. I MAMA..... J RETRAIT. .. . . . . ……... K COLLIER . . . . …… L AUTRE_____.. M (PRECISEZ)	

SELON LA **RÉPONSE À LA QUESTION 6.2**, ENREGISTREZ ICI LA **PREMIÈRE MÈTHODE** ENCERCLÉ **:**

_____

COMPLÉTEZ LES QUESTIONS SUIVANTES POUR CETTE METHODE :

6.3	**Où** avez-vous obtenue/appris la méthode ?	CSPS BOLOMAKOTE.....……. 01 CSPS GUIMBI…….. 02 CSPS SARFALAO……... 03 CSPS SECT 24…… 04 CSPS OUEZZINVILLE…… 05 AUTRE CSPS…….. 06 CMA……... 07 CHU…….....…..... 08 CLINIQUE ABBEF…..…… 09 PHARMACIE……..... 10 MARI QUI AMENE……... 11 AUTRE_____.... 12 (PRECISEZ)	
6.4	**Quand** est-ce que vous avez commencé à utiliser la méthode ? Combien de temps après l'accouchement ? (Le bébé avait combien de jours/mois ?) SI LA METHODE EST **SUR PRESCRIPTION**, DEMANDEZ A CONSULTER LA **FICHE DE P.F**. (**ou autre document**) ET REPORTEZ LA DATE. SI **NON, ESTIMEZ LA DATE** LE PLUS PRECISEMENT POSSIBLE.	DATE : [__][__] [__][__] [__][__] *jour* *mois* *an* SOURCE : FICHE PF……1 ESTIMATION..……2 NE SAIT PAS……..……..97	

VÉRIFIEZ LES METHODES UTILISEES (**QUESTION 6.2**) :
EST-CE QU'ELLE UTILISE UNE DEUXIÈME MÈTHODE ? NON ⇨ **6.7**

OUI ⇩

ENREGISTREZ ICI LA **DEUXIÈME MÈTHODE** : _____

COMPLÉTEZ LES QUESTIONS SUIVANTES POUR CETTE MÈTHODE:

6.5	**Où** avez-vous obtenue/appris la méthode ?	CSPS BOLOMAKOTE.....……. 01 CSPS GUIMBI…….. 02 CSPS SARFALAO……... 03 CSPS SECT 24…… 04 CSPS OUEZZINVILLE…… 05 AUTRE CSPS…….. 06 CMA……... 07 CHU…….....…..... 08 CLINIQUE ABBEF…..…… 09 PHARMACIE……..... 10 MARI QUI AMENE……... 11 AUTRE_____.... 12 (PRECISEZ)	

6.6	Quand est-ce que vous avez commencé à utiliser la méthode ? Combien de temps après l'accouchement ? (Le bébé avait combien de jours/mois ?) SI LA METHODE EST **SUR PRESCRIPTION**, DEMANDEZ A CONSULTER LA **FICHE DE P.F**. (**ou autre document**) ET REPORTEZ LA DATE. SI **NON, ESTIMEZ LA DATE** LE PLUS PRECISEMENT POSSIBLE.	DATE : [__][__] [__][__] [__][__] *jour* *mois* *an* SOURCE : FICHE PF……1 ESTIMATION..……2 NE SAIT PAS……..……..97	
6.7	VERIFIEZ ENCORE LES **METHODES UTILISEES** (QUESTION **6.2**) : EST-CE QUE LA FEMME PREND **LA PILULE** ?	OUI……. 1 NON……..... 2	⇨ **6.13**
6.8	Avez-vous pris une pilule dans les **dernières 24 heures ?**	OUI……. 1 NON……... 2	⇨ **6.10**
6.9	Si non, pour quelle raison ?	SEMAINE DE PAUSE……. 1 OUBLI…… 2 EFFETS INDESIRABLES…….. 3 AUTRE : _____ 4 (PRECISEZ)	
6.10	DEMANDEZ LA PERMISSION POUR **VOIR LA BOITE** OU LA PLAQUETTE ****** USEZ DU TACT ! *****	DISPONIBLE……. 1 PAS DISPONIBLE……... 2 REFUS…….. 3	⇨ **FIN**
6.11	ENCERCLEZ LE **NOM DE LA PILULE** :	MICROGYNON……..... 1 MICROLUT……... 2 AUTRE _____..... 3 (PRECISEZ)	
6.12	VERIFIEZ S'IL **RESTE** ENCORE DES PILULES DANS LA BOITE/PLAQUETTE :	OUI……. 1 NON…….. 2	⇨ **FIN**
6.13	VERIFIEZ ENCORE LES **METHODES UTILISEES** (QUESTION **6.2**) : EST-CE QUE LA FEMME UTILISE L'**IMPLANT** ?	OUI……. 1 NON…….. 2	⇨ **FIN**
6.15	DEMANDEZ SI ELLE PEUT VOUS MONTRER LA **CICATRICE D'INSERTION** SUR LE BRAS ****** USEZ DU TACT ! *****	CICATRICE VISIBLE…… 1 CICATRICE PAS VISIBLE…… 2 REFUS…… 3	⇨ **FIN**
6.16	**<u>VERIFIER LES REPONSES A 5.2 ET 5.3</u>** : EST-CE QUE ELLE VOUDRAIT TOMBER ENCEINTE **DANS MOINS DE 12 MOIS** ? **NON** ⇩		**OUI** ⇨ **FIN**

	Vous avez dit qu'**au moins dans l'immédiat**, vous ne souhaitiez pas avoir un autre enfant. Pouvez-vous-me dire **pourquoi vous n'utilisez pas une méthode** pour éviter une grossesse **en ce moment**? **PLUSIEURS RÉPONSES SONT POSSIBLES !** **INSISTEZ** : Y a-t-il d'autres raisons encore ?		
	<u>RAISONS RELATIVES À LA FÉCONDITÉ</u> : PAS DE RAPPORTS SEXUELS…….. A RAPPORTS SEXUELS PEU FRÉQUENTS……..... B HYSTÉRECTOMIE…… C PAS DE RÉGLES DEPUIS L'ACCOUCHEMENT……. D REFUS DU PRESTATAIRE DE DONNER A CAUSE DE L'ABSENCE DES REGLES…….. E ALLAITE…….. F <u>OPPOSITION À L'UTILISATION :</u> ENQUÊTÉE OPPOSÉE……..... G MARI/PARTENAIRE OPPOSÉ……..... H AUTRES OPPOSÉS…… I INTERDITS RELIGIEUX …..... J <u>RAISONS LIÉES AUX MÉTHODES :</u> CRAINTE DE L'EFFET SUR LA FERTILITE…….. K EFFETS SECONDAIRES/ PROBLÈMES DE SANTÉ…… L PAS ACCESSIBLE / TROP LOIN……..... M TROP CHÈRE …… N MÉTHODE PRÉFÉRÉE NON DISPONIBLE …….. O PAS PRATIQUE À UTILISER……..... P INTERFÈRE AVEC LES FONCTIONS NORMALES DU CORPS…….. Q AUTRE _____..... R (PRECISEZ) NE SAIT PAS…….. S		
6.17	Pensez-vous que vous allez faire quelque chose ou utiliser une méthode pour retarder ou éviter une grossesse, à un certain moment dans le futur ?	OUI…… 1 NON……... 2 NE SAIT PAS…… 7	**FIN**

NUMEROS DE TELEPHONE POUR LE PROCHAIN RDV :

Dame : [__][__] [__][__] [__][__] [__][__] / [__][__] [__][__] [__][__] [__][__]

Mari : [__][__] [__][__] [__][__] [__][__] / [__][__] [__][__] [__][__] [__][__]

Autres : Nom et lien :_____

[__][__] [__][__] [__][__] [__][__]

Autres : Nom et lien :_____

[__][__] [__][__] [__][__] [__][__]

Heure de fin de l'entretien : [__][__] h [__][__] min

Initiales et signature enquêtrice : **Signature participante** :

_____ _____

Appendix 6: Eight-month postpartum follow-up questionnaire

Projet de recherche : Participation des hommes dans les soins de sante maternelle au Burkina Faso

DEUXIEME ENTRETIEN DE SUIVI (8 Mois postpartum)

Date entretien : ☐☐ ☐☐ ☐☐ **Heure du début** : ☐☐ h ☐☐ min
(Jour) (Mois) (An)

Enquêtrice:____ **Enquêtée**: Nom _____Prénom: _____

Avant de commencer l'entretien : Nous revenons après quelques mois pour voir comment vous vous portez et poser quelques questions encore sur votre état de santé et votre vie familiale. Les questions prennent habituellement environ **30 minutes**. Toutes les informations que vous nous donnerez seront strictement confidentielles. Elles ne seront transmises à personne d'autre que les membres de l'équipe d'enquête. S'il arrivait que je pose une question à laquelle vous ne voulez pas répondre, dites-le moi et je passerai à la suivante. Vous pouvez également interrompre l'entretien à n'importe quel moment.
Avez-vous des questions à me poser ? Pouvons-nous commencer l'entretien maintenant ?

VERIFIEZ OU DEMANDEZ A LA DAME…
(**N.B. Si elle a eu d'autres grossesses, ici on parle de la grossesse pendant laquelle elle a été recrutée dans l'étude)**

LA GROSSESSE S'EST TERMINEE PAR :

ACCOUCHEMENT A TERME : ☐	**ACCOUCHEMENT PREMATURE :** ☐ (GROSSESSE QUI S'EST TERMINEE ENTRE 6 ET 8 MOIS)	**FAUSSE COUCHE ou AVORTEMENT :** ☐ (GROSSESSE QUI S'EST TERMINEE A 5 MOIS OU PLUS TOT)
COMMENCEZ PAR LA SECTION 1) ET SUIVEZ L'ORDRE NORMAL DU QUESTIONNAIRE		**PASSEZ DIRECTEMENT A LA SECTION 2**

1) L' ENFANT

N.	QUESTIONS	CODES	PASSEZ À:
1.1	Puis-je voir votre bébé ?	OUI, BEBE VU…… 1 NON BEBE PAS VU…….. 2	1.4
		NON BEBE DECEDE…….. 3	
		OUI 2 BEBES VUS…….. 4 1 BEBE VU/ 1 BEBE PAS VU…... 5 2 BEBES PAS VUS…… 6	1.4
		1 BEBE VU/ 1 BEBE DECEDE…. 7 2 BEBES DECEDES…….... 8	

1.2	Quelle est la date du décès du bébé ? EN CAS DE **DECES D'UN SEUL DES JUMEAUX**, CONSIDEREZ LE DECEDE COMME **BEBE 2.** AYEZ DU TACT : **SI LE DECES EST RECENT**, EVALUEZ SI C'EST MIEUX DE REPORTER L'ENTRETIEN.	DATE DU DECES DU BEBE (**Bebe 1**): [__][__] [__][__] [__][__] *jour* *mois* *an* **SI JUMEAUX ET Bebe 2 DECEDE** : [__][__] [__][__] [__][__] *jour* *mois* *an* NE SAIT PAS……..……..97	
1.3	SI POSSIBLE, NOTEZ QUELQUES MOTS SUR LES **CIRCONSTANCES DU DECES** : **N.B.** CONTINUEZ DERRIER LA FEUILLE, SI NECESSAIRE.	**Bebe 1 :**..... ..... **Bebe 2 :**……..……	**2.1**
1.4	Actuellement, le bébé **(Bebe 1 si jumeaux)** est-il en bonne santé ?	OUI…… 1 NON……... 2	**1.6**
1.5	Quel est le problème de santé du bébé **(Bebe 1 si jumeaux)** ? PLUSIEURS REPONSES SONT POSSIBLES. **N.B.** CONTINUEZ DERRIER LA FEUILLE, SI NECESSAIRE.	FIEVRE…….. A TOUX……. B DIARRHEE…… C AUTRE (PRECISER) : ..... D	
1.6	Dans la **dernière semaine**, avez-vous donné à boire ou à manger à votre bébé **(Bebe 1 si jumeaux)**, au moins une fois**, l'un des liquides ou aliments que je vais vous citer** ? CITEZ LES ALIMENTS **UN A UN**. PLUSIEURS REPONSES SONT POSSIBLES	LAIT MATERNEL……. A EAU SIMPLE…… B EAU SUCREE OU EAU SALEE… C CAFE, THE……... D INFUSION, DECOCTION……... E JUS……. F DOLO OU AUTRE ALCOOL…….. G LAIT DE VACHE OU CHEVRE.… H LAIT EN POUDRE…….. I AUTRE LIQUIDE (PRECISER) : _____..... J YAOURT……. K SOUPE…….. L BOUILLE DE CEREALES…….. M PLAT A BASE DE TO, RIZ, PATES OU AUTRES CEREALES. N LEGUMES…… O VIANDE, POISSON OU ŒUF….. P FRUITS……. Q BEIGNETS OU BISCUITS……. R AUTRE SEMI-SOLIDE OU SOLIDE (PRECISER) : _____..... S	

	JUMEAUX ? NON → **2.1** OUI ↓ **BEBE 2 VIVANT ?** NON OUI ↓			
1.7	Actuellement, le bébé **(Bebe 2)** est-il en bonne santé ?	OUI……	1	→ **1.9**
		NON……..	2	
1.8	Quel est le problème de santé du bébé **(Bebe 2)** ? PLUSIEURS REPONSES SONT POSSIBLES. **N.B.** CONTINUEZ DERRIER LA FEUILLE, SI NECESSAIRE.	FIEVRE……..	A	
		TOUX…….	B	
		DIARRHEE……	C	
		AUTRE (PRECISER) : ……	D	
1.9	Dans la **dernière semaine**, avez-vous donné à boire ou à manger à votre bébé **(Bebe 2)**, au moins une fois**, l'un des liquides ou aliments que je vais vous citer** ? CITEZ LES ALIMENTS **UN A UN**. PLUSIEURS REPONSES SONT POSSIBLES	LAIT MATERNEL…….	A	
		EAU SIMPLE……	B	
		EAU SUCREE OU EAU SALEE…	C	
		CAFE, THE……..	D	
		INFUSION, DECOCTION……...	E	
		JUS…….	F	
		DOLO OU AUTRE ALCOOL……..	G	
		LAIT DE VACHE OU CHEVRE.…	H	
		LAIT EN POUDRE……..	I	
		AUTRE LIQUIDE (PRECISER) : _____.....	J	
		YAOURT…….	K	
		SOUPE……..	L	
		BOUILLE DE CEREALES……..	M	
		PLAT A BASE DE TO, RIZ, PATES OU AUTRES CEREALES.	N	
		LEGUMES……	O	
		VIANDE, POISSON OU ŒUF…..	P	
		FRUITS…….	Q	
		BEIGNETS OU BISCUITS…….	R	
		AUTRE SEMI-SOLIDE OU SOLIDE (PRECISER) : _____.....	S	

2) QUALITE DE VIE

N.	QUESTIONS	CODES		PASSEZ À:
2.1	Comment vous portez vous aujourd'hui?	TRES BIEN……..	1	
		BIEN……..	2	
		MOYEN…….	3	
		PAS BIEN……	4	
		PAS BIEN DU TOUT……...	5	
		NE SAIT PAS……	7	

Je voudrais que vous réfléchissez sur votre vie durant les dernières 4 semaines, jusqu'à aujourd'hui.
Les questions suivantes expriment des sentiments sur ce que vous éprouvez.
Aucune réponse n'est plus juste qu'une autre, elle est avant tout personnelle.

2.2	Comment décririez-vous votre **qualité de vie ?** (EN GENERAL : TRAVAIL, RELATIONS SOCIALES, HABITATION, SANTE, ETC.)	MAUVAISE…….. 1 NI MAUVAISE NI BONNE……. 2 BONNE…….. 3	
2.3	Etes-vous satisfait(e) de votre **santé** ? (ETAT DE SANTE)	INSATISFAITE…….. 1 NI SATISFAITE,NI INSATISFAITE 2 SATISFAITE …… 3	⇨ **2.5**
2.4	SI POSSIBLE, NOTEZ QUELQUES MOTS SUR **POURQUOI ELLE N'EST PAS SATISFAITE DE SA SANTE / SES PROBLEMES DE SANTE** : (CONTINUEZ DERRIER LA FEUILLE, SI NECESSAIRE)	…… …… ……	
Les questions suivantes demandent jusqu'à quel point vous avez vécu certaines choses durant les 4 dernières semaines :			
2.5	Avez-vous eu une **douleur physique qui vous a empêchée** de faire ce que vous vouliez faire ?	PAS DU TOUT…….. 1 DE FACON MODEREE…….. 2 BEAUCOUP…….. 3	
2.6	Avez-vous (eu) besoin de **soins médicaux quotidiennement ?** (REPONDRE PAR RAPPORT A L'INTENSITE DU TRAITEMENT MEDICAL, PLUTOT QUE LA DUREE)	PAS DU TOUT…….. 1 DE FACON MODEREE…….. 2 BEAUCOUP…….. 3 **SI REPONSES 2 OU 3**, **PRECISER:**……. ……..	
2.7	Aimez-vous **votre vie** ?	PAS DU TOUT…….. 1 DE FACON MODEREE…….. 2 BEAUCOUP…….. 3	
2.8	Pensez-vous que **votre vie a un sens ?** (S'AGIT D'ETRE SATISFAITE DE SA VIE EN GENERAL)	PAS DU TOUT…….. 1 DE FACON MODEREE…….. 2 BEAUCOUP…….. 3	
2.9	Êtes-vous capable de vous **concentrer** ? (QUAND VOUS DEVEZ FAIRE UN TRAVAIL OU VOS ACTIVITES QUOTIDIENNES)	PAS DU TOUT…….. 1 DE FACON MODEREE…….. 2 BEAUCOUP…….. 3	
2.10	Vous sentez vous **en sécurité** dans votre vie de tous les jours ? (SECURITE PHYSIQUE MAIS AUSSI SOCIALE, EX. POSITION STABLE EN FAMILLE / AU TRAVAIL)	PAS DU TOUT…….. 1 DE FACON MODEREE…….. 2 BEAUCOUP…….. 3	
2.11	Votre environnement physique est-il **sain?** (MAISON ET ENTOURAGE)	PAS DU TOUT…….. 1 DE FACON MODEREE…….. 2 BEAUCOUP…….. 3	

Les questions suivantes demandent jusqu'à quel point vous avez eu la possibilité de vivre complètement ou avez été capable de faire certaines choses durant les 4 dernières semaines:			
2.12	Est-ce que vous avez **assez d'énergie** pour votre vie de tous les jours ? (ENERGIE PHYSIQUE OU FORCE - DUREE)	PRESQUE PAS…….. 1 DE FACON MODEREE.....……. 2 LE PLUS SOUVENT..…… 3	
2.13	Acceptez-vous votre **apparence physique** ?	PRESQUE PAS…….. 1 DE FACON MODEREE.....……. 2 LE PLUS SOUVENT..…… 3	
2.14	Disposez-vous **d'assez d'argent**, pour satisfaire vos besoins ? (ARGENT SUFFISANT POUR LES DEPENSES A LA CHARGE DE LA DAME **ELLE-MEME**)	PRESQUE PAS…….. 1 DE FACON MODEREE.....……. 2 LE PLUS SOUVENT..…… 3	
2.15	Disposez-vous des **informations dont vous avez besoin** pour votre vie de tous les jours ? (EX: OU ALLER POUR FAIRE DES PAPIERS, OU POUR SE FAIRE SOIGNER)	PRESQUE PAS…….. 1 DE FACON MODEREE.....……. 2 LE PLUS SOUVENT..…… 3	
2.16	Avez-vous l'occasion de vous **prendre du temps pour vous reposer** ?	PRESQUE PAS…….. 1 DE FACON MODEREE.....……. 2 LE PLUS SOUVENT..…… 3	
2.17	Dans quelle mesure pouvez-vous **vous déplacer**? (MOUVOIR PHYSIQUEMENT, MAIS AUSSI LIBRE DE SE DEPLACER COMME ELLE VEUT)	DIFFICILEMENT……..... 1 NI DIFFICILEMENT, NI FACILEMENT……... 2 FACILEMENT……... 3	
2.18	Êtes-vous satisfaite de la **qualité de votre sommeil**?	INSATISFAITE…… 1 NI INSATISFAITE NI SATISFAITE 2 SATISFAITE…… 3	
2.19	Êtes-vous satisfaite de votre **capacité à accomplir vos activités quotidiennes** ?	INSATISFAITE…… 1 NI INSATISFAITE NI SATISFAITE 2 SATISFAITE…… 3	
2.20	Êtes-vous satisfaite de votre **capacité à accomplir vos activités professionnelles** ? (**SI ELLE TRAVAILLE:** CAPACITE PHYSIQUE **SI NE TRAVAILLE PAS:** SATISFAITE DE SON STATUT DE MENAGERE)	INSATISFAITE…… 1 NI INSATISFAITE NI SATISFAITE 2 SATISFAITE…… 3	
2.21	Êtes-vous **satisfaite de vous-même** ? (PAR VOS PROPRES CAPACITES)	INSATISFAITE…… 1 NI INSATISFAITE NI SATISFAITE 2 SATISFAITE…… 3	
2.22	Êtes-vous satisfaite des **relations personnelles** que vous avez **avec les autres** ? (MARI, FAMILLE, AMIS, VOISINS…)	INSATISFAITE…… 1 NI INSATISFAITE NI SATISFAITE 2 SATISFAITE…… 3	
2.23	Êtes-vous satisfaite de votre **vie sexuelle** ?	INSATISFAITE…… 1 NI INSATISFAITE NI SATISFAITE 2 SATISFAITE…… 3	
2.24	Êtes-vous satisfaite de **l'aide que vous apportent vos connaissances ?** (SERVICES / AIDE FINANCIER)	INSATISFAITE…… 1 NI INSATISFAITE NI SATISFAITE 2 SATISFAITE…… 3	

2.25	Êtes-vous satisfaite de vos **conditions d'habitation**? (CONDITIONS PHYSIQUES ET AMBIANCE)	INSATISFAITE…… 1 NI INSATISFAITE NI SATISFAITE 2 SATISFAITE…… 3	
2.26	Êtes-vous satisfaite de votre **accès aux services de santé ?** (SI PAS ALLE: CAPACITE D'ALLER)	INSATISFAITE…… 1 NI INSATISFAITE NI SATISFAITE 2 SATISFAITE…… 3	
2.27	Êtes-vous satisfaite de votre **moyen de transport**? (SATISFACTION AVEC SON ACCES A UN OU PLUSIEURS MOYENS DE TRANSPORT)	INSATISFAITE…… 1 NI INSATISFAITE NI SATISFAITE 2 SATISFAITE…… 3	
2.28	Durant les quatre dernières semaines, avez-vous eu des **sentiments négatifs tels que la mélancolie, le désespoir, l'anxiété, la dépression** ?	PRESQUE JAMAIS…… 1 ASSEZ SOUVENT……. 2 PRESQUE TOUJOURS…….. 3	

3) PREFERENCES EN MATIERE DE FERTILITE

N.	QUESTIONS	CODES	PASSEZ À:
3.1	**Excusez-moi**, depuis la fin de votre grossesse, **vos règles** sont-elles revenues ?	OUI……. 1 NON……... 2 NE SAIT PAS…… 7	⇨ **3.3**
3.2	Combien de temps après la fin de votre grossesse vos règles sont-elles revenues **pour la première fois**? (Le bébé avait combien de jours/mois ?) **SUR LA BASE DE CE QUE LA FEMME DIT, ESTIMEZ LA DATE LE PLUS PRECISEMENT POSSIBLE**	DATE : [__][__] [__][__] [__][__] *jour* *mois* *an* NE SAIT PAS……97	
3.3	Est-ce que vous êtes **toujours en couple** (avec le père du bébé) ?	OUI……. 1 NON……... 2	⇨ **3.6**
3.4	Si non, quel est le changement ?	SEPARATION TEMPORAIRE….. 1 AUTRE PARTENAIRE…..…….. 2 AUTRE_____..... 3 (PRECISEZ) DIVORCE……. 4 DEVENUE VEUVE…….. 5	⇨ **3.6**
3.5	Avez-vous un **nouveau mari/partenaire** ?	OUI……. 1 NON……... 2	⇨ **FIN**
3.6	Apres la fin de votre grossesse, **ou êtes-vous allé habiter ?**	CHEZ LE MARI/PARTENAIRE…. 1 CHEZ LA BELLE FAMILLE……. 2 DANS SA FAMILLE D'ORIGINE.. 3 AUTRE (PRECISEZ) : _____.. 4 ..	

3.7	Habitez-vous **toujours là-bas actuellement ?**	OUI……. 1 NON……... 2	**3.10**
3.8	**Ou** habitez-vous **actuellement ?**	CHEZ LE MARI/PARTENAIRE…. 1 CHEZ LA BELLE FAMILLE…… 2 CHEZ SA FAMILLE D'ORIGINE... 3 AUTRE (PRECISER) : _____.... 4	
3.9	**Depuis quand** habitez-vous là-bas ? **Quand** avez-vous déménagé ? **SUR LA BASE DE CE QUE LA FEMME DIT, ESTIMEZ LA DATE LE PLUS PRECISEMENT POSSIBLE**	DATE : [__][__] [__][__] [__][__] *jour* *mois* *an* NE SAIT PAS……..……..97	
3.10	**Excusez-moi, maintenant je voudrais vous poser quelques questions sur les rapports sexuels** : Avez-vous déjà repris les rapports sexuels depuis la fin de votre grossesse?	OUI……. 1 NON……... 2	**3.14**
3.11	Combien de temps après la fin de votre grossesse avez-vous repris vos rapports sexuels **pour la première fois** ? (Le bébé avait combien de jours/mois ?) **SUR LA BASE DE CE QUE LA FEMME DIT, ESTIMEZ LA DATE LE PLUS PRECISEMENT POSSIBLE**	DATE : [__][__] [__][__] [__][__] *jour* *mois* *an* NE SAIT PAS……..……..97	
3.12	**Qui a pris la décision** de reprendre les rapports sexuels : vous, votre mari/partenaire, ou conjointement vous et votre mari/partenaire ?	ENQUÊTÉE……. 1 MARI/CONJOINT…..…….. 2 CONJOINTEMENT ENQUÊTÉE ET MARI…….....3 NE SAIT PAS…… 7	
3.13	**Est-ce que c'est difficile pour vous de refuser d'avoir des rapports sexuels** avec votre mari/partenaire quand vous ne souhaitez pas en avoir ?	PAS DIFFICILE…… 1 DIFFICILE……. 2 CELA DÉPEND/ NE SAIT PAS…. 7	**3.15**
3.14	Si cela ne dépendait que de vous seule, combien de temps souhaiteriez-vous attendre, avant de reprendre vos relations sexuelles ? **SI BEBE VIVANT, CALCULER EN TENANT COMPTE DE L'AGE ACTUEL DU BEBE**	DANS [__][__] MOIS……..….. 01 QUAND L'ENFANT CESSERA DE TÉTER…… 02 QUAND L'ENFANT MARCHE…... 03 QUAND L'ENFANT FERA 4 PATTES…… 04 QUAND JE REJOINDRAI MON MENAGE…….. 05 SELON LA VOLONTÉ DU MARI.. 06 AUTRE_____.... 07 (PRECISEZ) NE SAIT PAS…… 97	

3.15	Excusez-moi, êtes-vous **actuellement enceinte** ?	OUI . . . . 1 NON . . . . 2 NE SAIT PAS….. 7	⇨ **5.1**
3.16	Si vous pouviez choisir exactement le nombre d'enfants à avoir dans votre vie, **combien d'autres enfants voudriez-vous** dans le futur ?	PAS D'AUTRES ENFANTS…….. 0 1 AUTRE…….. 1 2 AUTRES……..... 2 3 AUTRES……..…….…… 3 4 AUTRES…… 4 5 AUTRES OU PLUS..…… 5 SELON LA VOLONTE DE DIEU... 6 NE SAIT PAS…… 7	⇨ **4.1**
3.17	**Quand aimerez-vous** tomber enceinte de nouveau ?	DANS MOINS DE 12 MOIS..... 00 DANS 1 AN…….. 01 DANS 2 ANS…..... 02 DANS 3 ANS…… 03 DANS 4 OU 5 ANS……. 04 DANS PLUS QUE 5 ANS……..…. 05 QUAND L'ENFANT MARCHE….. 06 SELON LA VOLONTÉ DU MARI.. 07 SELON LA VOLONTÉ DE DIEU... 08 NE SAIT PAS……..……. 97	**RAPPEL POUR 4.16 !**

4. UTILISATION DE LA CONTRACEPTION

N.	QUESTIONS	CODES	PASSEZ À:
4.1	**AUJOURD'HUI**, faites-vous quelque chose ou utilisez-vous une méthode pour retarder ou éviter une grossesse ?	OUI…… 1 NON…….. 2	⇨ **4.16**
4.2	Quelles méthodes utilisez-vous **actuellement** ? **PLUS D'UNE REPONSE EST POSSIBLE.** **INSISTEZ** : Utilisez-vous encore une autre méthode actuellement ? **A PARTIR DE « CONDOM MASCULIN », CITEZ AINSI LES AUTRES METHODES, UNE A UNE :** « Utilisez-vous le condom masculin ? » « Utilisez-vous le condom féminin ? » Etc.	STÉRILISATION FÉMININE…….. A STÉRILISATION MASCULINE….. B DIU/STERILET. . .. . …… C INJECTABLES. . …… D IMPLANT/NORPLANT …….. E PILULE..... F CONDOM MASCULIN…… G CONDOM FÉMININ..... H MÉTHODE DU RYTHME …….. I MAMA..... J RETRAIT. .. . . . . ……... K COLLIER . . . . …… L AUTRE_____.. M (PRECISEZ)	

SELON LA **RÉPONSE À LA QUESTION 4.2**, ENREGISTREZ ICI LA **PREMIÈRE MÈTHODE** ENCERCLÉ **:**

_____

COMPLÉTEZ LES QUESTIONS SUIVANTES POUR CETTE METHODE :

4.3	**Où** avez-vous obtenue/appris la méthode ?	CSPS BOLOMAKOTE.....……. 01 CSPS GUIMBI…….. 02 CSPS SARFALAO……... 03 CSPS SECT 24…… 04 CSPS OUEZZINVILLE…… 05 AUTRE CSPS…….. 06 CMA……... 07 CHU…….....…..... 08 CLINIQUE ABBEF…..…… 09 PHARMACIE…….....… 10 MARI QUI AMENE……... 11 AUTRE_____.... 12 (PRECISEZ)	
4.4	**Quand** est-ce que vous avez commencé à utiliser la méthode ? Combien de temps après la fin de votre grossesse ? (Le bébé avait combien de jours/mois ?) SI LA METHODE EST **SUR PRESCRIPTION**, DEMANDEZ A CONSULTER LA **FICHE DE P.F**. (**ou autre document**) ET REPORTEZ LA DATE. SI **NON, ESTIMEZ LA DATE** LE PLUS PRECISEMENT POSSIBLE.	DATE : [__][__] [__][__] [__][__] *jour* *mois* *an* SOURCE : FICHE PF……1 ESTIMATION..……2 NE SAIT PAS……..……..97	

VÉRIFIEZ LES METHODES UTILISEES (**QUESTION 4.2**) :
EST-CE QU'ELLE UTILISE UNE DEUXIÈME MÈTHODE ?

NON ⇨ **4.7**

OUI ⇩

ENREGISTREZ ICI LA **DEUXIÈME MÈTHODE :** _____

COMPLÉTEZ LES QUESTIONS SUIVANTES POUR CETTE MÈTHODE:

4.5	**Où** avez-vous obtenue/appris la méthode ?	CSPS BOLOMAKOTE.....……. 01 CSPS GUIMBI…….. 02 CSPS SARFALAO……... 03 CSPS SECT 24…… 04 CSPS OUEZZINVILLE…… 05 AUTRE CSPS…….. 06 CMA……... 07 CHU…….....…..... 08 CLINIQUE ABBEF…..…… 09 PHARMACIE…….....… 10 MARI QUI AMENE……... 11 AUTRE_____.... 12 (PRECISEZ)	

4.6	Quand est-ce que vous avez commencé à utiliser la méthode ? Combien de temps après la fin de votre grossesse? (Le bébé avait combien de jours/mois ?) SI LA METHODE EST **SUR PRESCRIPTION**, DEMANDEZ A CONSULTER LA **FICHE DE P.F**. (**ou autre document**) ET REPORTEZ LA DATE. SI **NON, ESTIMEZ LA DATE** LE PLUS PRECISEMENT POSSIBLE.	DATE : [__][__] [__][__] [__][__] *jour* *mois* *an* SOURCE : FICHE PF……1 ESTIMATION..……2 NE SAIT PAS……..……..97	
4.7	VERIFIEZ ENCORE LES **METHODES UTILISEES** (QUESTION **4.2**) : EST-CE QUE LA FEMME PREND **LA PILULE** ?	OUI…… 1 NON……..... 2	⇨ **4.13**
4.8	Avez-vous pris une pilule dans les **dernières 24 heures ?**	OUI…… 1 NON……... 2	⇨ **4.10**
4.9	Si non, pour quelle raison ?	SEMAINE DE PAUSE……. 1 OUBLI…… 2 EFFETS INDESIRABLES…….. 3 AUTRE : _____ 4 (PRECISEZ)	
4.10	DEMANDEZ LA PERMISSION POUR **VOIR LA BOITE** OU LA PLAQUETTE ****** AYEZ DU TACT ! *****	DISPONIBLE…….. 1 PAS DISPONIBLE……... 2 REFUS……... 3	⇨ **5.1**
4.11	ENCERCLEZ LE **NOM DE LA PILULE** :	MICROGYNON……..... 1 MICROLUT……... 2 AUTRE _____..... 3 (PRECISEZ)	
4.12	VERIFIEZ S'IL **RESTE** ENCORE DES PILULES DANS LA BOITE/PLAQUETTE :	OUI…… 1 NON…….. 2	⇨ **5.1**
4.13	VERIFIEZ ENCORE LES **METHODES UTILISEES** (QUESTION **4.2**) : EST-CE QUE LA FEMME UTILISE L'**IMPLANT** ?	OUI…… 1 NON…….. 2	⇨ **5.1**
4.15	DEMANDEZ SI ELLE PEUT VOUS MONTRER LA **CICATRICE D'INSERTION** SUR LE BRAS ****** AYEZ DU TACT ! *****	CICATRICE VISIBLE…… 1 CICATRICE PAS VISIBLE…… 2 REFUS…… 3	⇨ **5.1**
4.16	**<u>VERIFIER LES REPONSES A 3.16 ET 3.17</u>**: EST-CE QUE ELLE VOUDRAIT TOMBER ENCEINTE **DANS MOINS DE 12 MOIS** ? **OUI** **NON** ⇩		⇨ **5.1**

	Vous avez dit qu'**au moins dans l'immédiat**, vous ne souhaitiez pas avoir un autre enfant. Pouvez-vous-me dire **pourquoi vous n'utilisez pas une méthode** pour éviter une grossesse **en ce moment**? **PLUSIEURS RÉPONSES SONT POSSIBLES !** **INSISTEZ** : Y a-t-il d'autres raisons encore ?		
	RAISONS RELATIVES À LA FÉCONDITÉ : PAS DE RAPPORTS SEXUELS…….. A RAPPORTS SEXUELS PEU FRÉQUENTS……..... B HYSTÉRECTOMIE…… C PAS DE RÉGLES DEPUIS LA FIN DE LA GROSSESSE…….…… D REFUS DU PRESTATAIRE DE DONNER A CAUSE DE L'ABSENCE DES REGLES…….. E ALLAITE……... F OPPOSITION À L'UTILISATION : ENQUÊTÉE OPPOSÉE……..... G CA DEPEND DE DIEU…….. H MARI/PARTENAIRE OPPOSÉ……..... I AUTRES OPPOSÉS…….. J INTERDITS RELIGIEUX …..... K RAISONS LIÉES AUX MÉTHODES : CRAINTE DE L'EFFET SUR LA FERTILITE…….. L EFFETS SECONDAIRES/ PROBLÈMES DE SANTÉ…… M PAS ACCESSIBLE / TROP LOIN……..... N TROP CHÈRE …… O MÉTHODE PRÉFÉRÉE NON DISPONIBLE …….. P PAS PRATIQUE À UTILISER……..... Q INTERFÈRE AVEC LES FONCTIONS NORMALES DU CORPS…….. R AUTRE _____..... S (PRECISEZ) NE SAIT PAS…….. T		
4.17	Pensez-vous que vous allez faire quelque chose ou utiliser une méthode pour retarder ou éviter une grossesse, à un certain moment dans le futur ?	OUI…… 1 NON……... 2 NE SAIT PAS…… 7	

5) RELATION AVEC LE MARI/PARTENAIRE

N.	QUESTIONS	CODES	PASSEZ A :
5.1	Les relations homme/femme peuvent être à la fois heureuses et malheureuses. **De façon générale,** diriez-vous q**u'actuellement** votre relation avec votre conjoint/partenaire est heureuse ou malheureuse ?	TRÈS HEUREUSE…… 1 ASSEZ HEUREUSE…… 2 QUELQUE PEU MALHEUREUSE.. 3 MALHEUREUSE…… 4 TRÈS MALHEUREUSE..... 5	

Maintenant, je vais vous lire une liste de sujets qui sont normalement importants dans la vie d'un ménage. **Je vous demanderai de bien vouloir m'indiquer combien de fois vous et votre mari avez discuté de chaque sujet, au cours des 12 derniers mois.**

COCHER SELON LA REPONSE DONNEE :

		JAMAIS	Occasionnellement	Plusieurs fois	
5.2	Les finances ou les biens du ménage				
5.3	La relation avec votre famille d'origine				
5.4	La relation avec la belle-famille				
5.5	Le nombre d'enfants				
5.6	La sante des enfants				
5.7	L'éducation des enfants				
5.8	La nourriture/ l'allaitement des enfants				
5.9	Le travail du mari				
5.10	Votre propre travail				
5.11	La durée du temps passé ensemble entre mari et femme				
5.12	La contraception				
5.13	Les coépouses ou d'autres femmes				

Maintenant, j**e vous demanderai de bien vouloir m'indiquer si vous et votre mari êtes rarement, parfois, ou la plupart du temps d'accord, sur chaque sujet discuté :**

COCHER SELON LA REPONSE DONNEE :

		NON APPLICABLE	Rarement d'accord	Parfois d'accord	La plupart du temps d'accord
5.14	Les finances ou les biens du ménage				
5.15	La relation avec votre famille d'origine				
5.16	La relation avec la belle-famille				
5.17	Le nombre d'enfants				
5.18	La sante des enfants				
5.19	L'éducation des enfants				
5.20	La nourriture/ l'allaitement des enfants				
5.21	Le travail du mari				
5.22	Votre propre travail				
5.23	La durée du temps passé ensemble, mari et femme				
5.24	La contraception				
5.25	Les coépouses ou d'autres femmes				

VERIFIEZ LA REPONSE A LA QUESTION 1.1 : EST-CE QUE **AU MOINS UN BEBE EST TOUJOURS EN VIE** ? OUI ⇩		NON ⇨	**5.30**
5.26	Depuis la fin de votre grossesse jusqu'à aujourd'hui, **qui dans le ménage prend habituellement les décisions** en ce qui concerne **l'allaitement et la nourriture du bébé** (des bébés) ?	ENQUÊTÉE…… 1 MARI/PARTENAIRE . ……. 2 QUELQU'UN D'AUTRE _____..... 3 (PRÉCISEZ) CONJOINTEMENT ENQUETEE ET QUELQU'UN D'AUTRE _____..... 4 (PRÉCISEZ) DES FOIS L'ENQUETEE, DES FOIS QUELQU'UN D'AUTRE _____..... 5 (PRÉCISEZ) CELA DÉPEND/ NE SAIT PAS..... 7	
5.27	Depuis la fin de votre grossesse, **qui** dans le ménage prend habituellement la décision **d'amener le bébé (les bébés) pour** faire **les vaccinations ou la pesée ?**	ENQUÊTÉE…… 1 MARI/PARTENAIRE . ……. 2 QUELQU'UN D'AUTRE _____..... 3 (PRÉCISEZ) CONJOINTEMENT ENQUETEE ET QUELQU'UN D'AUTRE _____..... 4 (PRÉCISEZ) DES FOIS L'ENQUETEE, DES FOIS QUELQU'UN D'AUTRE _____..... 5 (PRÉCISEZ) CELA DÉPEND/ NE SAIT PAS..... 7	
5.28	Depuis la fin de votre grossesse, qui dans le ménage prend habituellement la **décision d'amener le bébé** (ou les enfants) en consultation pour avoir un **avis médical ou pour les faire soigner en cas de maladie** ?	JAMAIS AMENE UN ENFANT…… 0 ENQUÊTÉE…… 1 MARI/PARTENAIRE . ……. 2 QUELQU'UN D'AUTRE _____..... 3 (PRÉCISEZ) CONJOINTEMENT ENQUETEE ET QUELQU'UN D'AUTRE _____..... 4 (PRÉCISEZ) DES FOIS L'ENQUETEE, DES FOIS QUELQU'UN D'AUTRE _____..... 5 (PRÉCISEZ) CELA DÉPEND/ NE SAIT PAS..... 7	

5.29	Depuis la fin de votre grossesse, **qui** donne habituellement l'argent que vous utilisez pour payer le **transport, les frais et les produits nécessaires** pour la **pesée/vaccination** de votre bébé (vos enfants)**, ou pour le faire soigner en cas de maladie** (même si la personne ne sait pas que l'argent a été utilisé pour cela) ?	ENQUETEE……..…… 1 MARI/PARTENAIRE…….…… 2 QUELQU'UN D'AUTRE _____..... 3 (PRÉCISEZ) RIEN PAYE……. 4 CELA DÉPEND/ NE SAIT PAS..… 7	
Les questions suivantes concernent vos propres soins de santé (santé de la femme) :			
5.30	Est-ce que depuis la fin de votre grossesse, vous êtes déjà allée en consultation **au moins une fois pour faire une consultation postnatale (6eme ou 42eme jour**) ?	OUI…… 1 NON…….. 2 NE SAIT PAS…… 7	⇨ **5.32**
5.31	Dans le ménage, **qui a pris la décision d'aller en consultation postnatale** ?	ENQUÊTÉE…… 1 MARI/PARTENAIRE . ……. 2 QUELQU'UN D'AUTRE _____..... 3 (PRÉCISEZ) CONJOINTEMENT ENQUETEE ET QUELQU'UN D'AUTRE _____..... 4 (PRÉCISEZ) DES FOIS L'ENQUETEE, DES FOIS QUELQU'UN D'AUTRE _____..... 5 (PRÉCISEZ) CELA DÉPEND/ NE SAIT PAS..… 7	
5.32	Est-ce que depuis la fin de votre grossesse, vous êtes déjà allée en consultation au moins une fois **pour avoir un avis médical, ou pour vous faire soigner en cas ou vous étiez malade** ?	OUI…… 1 NON…….. 2 NE SAIT PAS…… 7	⇨ **5.34**
5.33	Depuis la fin de votre grossesse, qui dans le ménage prend habituellement la **décision pour que vous aillez en consultation pour** avoir un avis médical, ou pour vous faire soigner en cas de maladie**?**	ENQUÊTÉE…… 1 MARI/PARTENAIRE . ……. 2 QUELQU'UN D'AUTRE _____..... 3 (PRÉCISEZ) CONJOINTEMENT ENQUETEE ET QUELQU'UN D'AUTRE _____..... 4 (PRÉCISEZ) DES FOIS L'ENQUETEE, DES FOIS QUELQU'UN D'AUTRE _____..... 5 (PRÉCISEZ) CELA DÉPEND/ NE SAIT PAS..… 7	

5.34	Depuis la fin de votre grossesse, **qui** donne habituellement l'argent que vous utilisez pour payer le **transport, les frais et les produits pour vos consultations postnatales et pour vos consultations et soins en cas de maladie** (même si la personne ne sait pas que l'argent a été utilisé pour cela) ?	AUCUNE CONSULTATION FAITE. 0 ENQUETEE……..…… 1 MARI/PARTENAIRE…….…… 2 QUELQU'UN D'AUTRE _____..... 3 (PRÉCISEZ) RIEN PAYE…… 4 CELA DÉPEND/ NE SAIT PAS..… 7	
5.35	VERIFIER LA REPONSE A LA **QUESTION 3.15** : LA FEMME EST ENCEINTE ? OUI		**5.40**
	NON Pensez-vous que votre (mari/partenaire) voudrait **avoir d'autres enfants avec vous** ? Combien d'autres enfants voudrait-il avoir avec vous ?	PAS D'AUTRES..……..... 0 NE SAIT PAS S'IL EN VEUT..…… 1 1 AUTRE…… 2 2 AUTRES…….. 3 3 AUTRES OU PLUS…… 4 IL EN VEUT, MAIS ELLE NE SAIT PAS COMBIEN…….. 5	**5.37**
5.36	VÉRIFIER LA RÉPONSE À LA **QUESTION 3.16 :** EST-CE QUE LA FEMME VEUT AVOIR D'AUTRES ENFANTS DANS LE FUTUR, OU EST-CE QU'ELLE NE VEUT PLUS D'ENFANT ? NE VEUT PLUS D'ENFANT VEUT D'AUTRES ENFANTS		**5.37**
	Pensez-vous que votre mari/partenaire **veut attendre plus ou moins de temps que vous, avant d'avoir un autre enfant**, ou bien vous êtes d'accord ?	MÊME TEMPS/ D'ACCORD.....… 1 PLUS LONGTEMPS……. 2 MOINS DE TEMPS…….. 3 NE SAIT PAS..…… 7	
5.37	VÉRIFIEZ LA REPONSE A LA **QUESTION 4.1 :** EST-CE QUE LA FEMME UTILISE UNE METHODE DE CONTRACEPTION ACTUELLEMENT ? NON OUI		**5.40**
	Les questions suivantes concernent l'utilisation de votre méthode de contraception.		
	Qui a pris la décision **d'utiliser la méthode de contraception** ?	MARI/PARTENAIRE . …… 1 CONJOINTEMENT ENQUÊTÉE ET MARI……. ..... 2 ENQUÊTÉE…… 3 QUELQU'UN D'AUTRE _____..... 4 (PRÉCISEZ) CONJOINTEMENT ENQUETEE ET QUELQU'UN D'AUTRE 5 _____..... 7 (PRÉCISEZ) CELA DÉPEND/ NE SAIT PAS..…	**5.39**
5.38	Votre mari est-il **au courant** du fait que vous utilisez une méthode de contraception ?	OUI……..…… 1 NON……..... 2 LA DAME NE SAIT PAS…….…….. 7	

5.39	Depuis la fin de votre grossesse, **qui donne** habituellement l'argent que vous utilisez pour payer le transport, l**es frais et les produits contraceptifs** (même si la personne ne sait pas que l'argent a été utilisé pour cela)?	ENQUETEE……..…… 1 MARI/PARTENAIRE…….…… 2 QUELQU'UN D'AUTRE _____..... 3 (PRÉCISEZ) RIEN PAYE……. 4 CELA DÉPEND/ NE SAIT PAS..…. 7	
5.40	**Finalement, nous allons parler EN GENERAL des relations entre homme et femme. Je vais vous proposer des situations qui peuvent se produire dans certains ménages. Selon vous, est-il justifié qu'un mari frappe ou batte sa femme dans les situations suivantes:**		
	Si elle sort sans le lui dire ?	OUI…….. 1 NON……. 2 NE SAIT PAS…… 7	
5.41	Si elle néglige les enfants ?	OUI…….. 1 NON……. 2 NE SAIT PAS…… 7	
5.42	Si elle donne son point de vue qui diffère de celui de son mari ?	OUI…….. 1 NON……. 2 NE SAIT PAS…… 7	
5.43	Si elle refuse d'avoir des rapports sexuels avec lui ?	OUI…….. 1 NON……. 2 NE SAIT PAS…… 7	
5.44	Si elle jette/gaspille la nourriture ?	OUI…….. 1 NON……. 2 NE SAIT PAS…… 7	

NUMEROS DE TELEPHONE POUR LE PROCHAIN RDV :

Dame : [__][__] [__][__] [__][__] [__][__] / [__][__] [__][__] [__][__] [__][__]

Mari : [__][__] [__][__] [__][__] [__][__] / [__][__] [__][__] [__][__] [__][__]

Autres : Nom et lien :_____

[__][__] [__][__] [__][__] [__][__]

Heure de fin de l'entretien : [__][__] h [__][__] min

Initiales et signature enquêtrice : **Signature participante** :

_____ _____

Projet de recherche : Participation des hommes dans les soins de sante maternelle au Burkina Faso

GUIDE ENTRETIEN SEMI-STRUCTURE : FEMMES

Bonjour, je m'appelle_____.

Je suis ici parce que l'équipe d'AfricSanté souhaite réaliser des entretiens avec un certain nombre de dames qui ont participé au projet de recherche sur la participation des hommes aux soins de santé maternelle.

Pendant l'entretien, je vais vous proposer des sujets pour la discussion. J'aimerais qu'on parle de votre dernière grossesse et des mois après l'accouchement, de votre expérience dans les établissements de santé que vous avez fréquentés, et de votre situation familiale.

Avant de commencer, je voudrais vous rassurer que toutes les informations que vous nous donnerez seront strictement confidentielles. Elles ne seront transmises à personne d'autre que les membres de l'équipe d'enquête. S'il arrivait que je pose une question à laquelle vous ne voulez pas répondre, dites-le moi et je passerai à la suivante. Vous pouvez également interrompre l'entretien à n'importe quel moment.

L'entretien prend habituellement environ **45 minutes**.

Avec votre permission, nous allons utiliser un enregistreur pendant l'entretien.
Avez-vous des questions à me poser ? Pouvons-nous commencer maintenant ?

Informations sur l'enquêtée: Nom :_____Prenom :_____

ID Etude:_____ Groupe : Intervention [__] **Témoin** [__]
Profession:_____ Age:_____

INDICATEURS PRINCIPALS DE L'ETUDE		
Questions principales	**Questions additionelles**	**Questions de clarification**
1) Je voudrais qu'on commence à parler de la **période après votre accouchement**. Etes-vous allée faire une ou plusieurs **CONSULTATIONS POSTNATALES** ? Si non, pourquoi pas ?	**Différents facteurs** peuvent jouer sur la décision d'une femme d'aller ou pas aux consultations postnatales. **Exemples** de thèmes à aborder : Perception de l'utilité des soins	Pouvez-vous mieux m'expliquer? Il y a d'autres choses encore?

Avez-vous fréquenté la consultation postnatale du 6eme jour? Pour quelles raisons avez-vous décidé de vous y rendre, ou de ne pas vous y rendre ? **Avez-vous fréquenté la consultation postnatale de la 6eme semaine** (42eme jour)? **Pour quelles raisons** avez-vous décidé de vous y rendre, ou de ne pas vous y rendre ?	Perception de la qualité des soins Invitation donnée par les agents Courtoisie des agents Transport/distance Coût des produits Raisons liées à la coutume/ à la religion Manque de temps, autres obligations … Est-ce que des **membres de votre famille** vivent à Bobo ? Et la famille de votre femme ? Habitez-vous avec eux ? Etes-vous la seule épouse ? Quelle était **l'opinion de votre mari/de votre famille** à ce sujet ? Ont-ils influencé votre décision ? Si vous êtes allée à une des deux consultations mais pas à l'autre, pourquoi ? Avez-vous fait **d'autres consultations** durant les six semaines après l'accouchement ? Si oui, pourquoi avez-vous fait ces consultations ? Avec qui ? Quand ?	Pouvez-vous me donner des exemples?
2) A un moment donné, la mère commence à donner de l'eau ou d'autres aliments au bébé. **Jusqu'à quel âge avez-vous ALLAITE EXCLUSIVEMENT le bébé**, et à quel âge avez-vous commence à lui donner d'autres liquides, comme l'eau ? Qu'est-ce que vous avez donné ? Qu'est que le bébé prend actuellement ?	**Différents facteurs** peuvent jouer sur les décisions prise par une femme par rapport à la manière d'allaiter et nourrir son bébé. Qu'est-ce que vous a amené à **décider que c'était le bon moment pour commencer à donner l'eau** (ou le premier aliment à part le lait maternel) ? Et ensuite, pour les autres aliments donnés ? Avez-vous utilisée/ utilisez-vous **des décoctions dans le lavement du bébé ?** Pourquoi, ou pourquoi pas ? **Exemples** de thèmes à aborder : Perception des bénéfices pour la santé Tradition Expérience avec d'autres enfants Opinion/soutien donne par les agents	Pouvez-vous mieux m'expliquer? Il y a d'autres choses encore? Pouvez-vous me donner des exemples?

	Prix du lait artificiel Manque de temps … Quelle était **l'opinion de votre mari/de votre famille** sur ce sujet ? Ont-ils influencé votre décision ?	
3) A un moment donné après l'accouchement, la femme redevient fertile. Comment voyiez-vous votre situation actuelle ? Avez-vous déjà repris les rapports sexuels ? **Utilisez-vous une METHODE CONTRACEPTIVE** ou faites-vous quelque chose pour retarder ou éviter une grossesse, en ce moment ? **Pour quelles raisons ?**	**Différents facteurs** peuvent jouer sur les décisions prise par une femme par rapport à la planification familiale ou contraception. **Exemples** de thèmes à aborder : Désir personnel de limiter/espacer les naissances Niveau d'information sur les options Soutien ou barrières posées par les agents Disponibilité de la méthode souhaitée Transport/distance Cout des produits Raisons liées à la religion Reprise de rapports sexuels/ séparation du conjoint Retour des règles et perception de fertilité Expérience/crainte d'effets secondaires … Pourquoi le choix **de cette méthode** et ne pas d'une autre ? Avez-vous déjà repris les rapports sexuels ? C'était votre choix, ou le choix de votre conjoint, ou avez-vous décidé ensemble ? Quelle est **l'opinion de votre mari/de votre famille sur ce sujet** ? Ont-ils influencé votre décision ?	Pouvez-vous mieux m'expliquer? Il y a d'autres choses encore? Pouvez-vous me donner des exemples?

4) Maintenant, je voudrais parler de la **PARTICIPATION DE VOTRE FAMILLE ET DE VOTRE MARI** à vos soins de santé. Trouvez-vous que **votre santé** est un sujet qui concerne vous seulement, ou aussi **d'autres membres de la famille** ? Trouvez-vous que c'est un sujet qui concerne **votre mari** ? Pourquoi, pourquoi pas ? Dans quelle mesure **votre famille s'est intéressé à votre santé** pendant la grossesse l'accouchement et après ? Dans quelle mesure **votre mari** s'est intéressé à votre santé ? Dans quelle mesure **votre famille s'intéresse a la sante du bébé** ? Dans quelle mesure **votre mari** s'intéresse à la santé du bébé ?	Est-ce que **quelqu'un de la famille vous a accompagné aux consultations** pré- et post-natales? Est-ce qu'il est déjà arrivé que **votre mari** vous accompagne ? Pourquoi, pourquoi pas ? Est-ce qu'il vous est déjà arrivé de discuter avec des membres de la famille **de ce que s'est passé pendant les consultations pré- et post-natales ?** Avec qui ? Est-ce qu'il vous est arrivé d'en parler avec **votre mari ?** Quand vous avez accouche, est-ce que **quelqu'un de la famille vous a accompagné**? Est-ce que **votre mari** vous a accompagné ? Pourquoi, pourquoi pas ? Si oui, quel a été son rôle ? Etes-vous satisfaite du **niveau de participation de votre mari** à vos soins de santé pendant la grossesse, l'accouchement et après ? Aurez-vous aimé qu'il soit plus impliqué dans vos soins de santé, ou moins impliqué ? Pourquoi ? En général, est-ce qu'il vous arrive d'avoir **des discussions avec votre mari sur** des sujets tels que votre santé/ la santé du bébé / la reprise des rapports sexuels / la contraception ? Si pas avec le mari, avec d'autres membres de la famille ? Parlez-moi de la **dernière discussion** que vous avez ou sur ces sujets : c'était quand, et à propos de quoi ? A-t-il eu des différences d'opinion ? Comment avez-vous trouvé une solution ?	Pouvez-vous mieux m'expliquer? Il y a d'autres choses encore? Pouvez-vous me donner des exemples?
POSER LES 4 QUESTIONS SUIVANTES SEULEMENT AUX FEMMES DU GROUPE D'INTERVENTION :		

5) Pendant votre dernière grossesse, vous avez reçu une lettre à donner à votre mari, pour l'inviter à participer à une **DISCUSSION DE GROUPE POUR HOMMES**. Est-ce que vous avez lui donné la lettre ? **Est-ce qu'il y est allé** à la discussion de groupe ? Pourquoi, ou pourquoi pas ?	Est-ce que vous avez **remis la lettre** à votre mari ? Avez-vous essayé de **l'encourager ou de le décourager** à y aller ? Est-ce que **quelqu'un d'autre** a essayé de l'encourager ou de le décourager à y aller ? **SI PAS ALLE :** Auriez-vous **aimé qu'il y aille**, ou pas ? Pourquoi ? **SI ALLE :** Apres la causerie, **avez-vous en parlé avec votre mari** ? Qu'est-ce qu'il vous a dit ? Quel a été le **contenu de la rencontre** ? Etc. Pensez-vous que le fait qu'il y soit allé a été une **bonne chose** ou pas ? Pourquoi ?	Pouvez-vous mieux m'expliquer? Il y a d'autres choses encore? Pouvez-vous me donner des exemples?
6) Pendant la grossesse, les agents de santé ont proposé à votre mari de se rendre à l'établissement de sante avec vous pour participer à une séance de **COUNSELING DE COUPLE**. **Etes-vous allez** ou pas à cette consultation de couple ? Pourquoi, ou pourquoi pas ?	Qui vous a invités à aller ? Est-ce que votre mari **vous a proposé d'y aller** ? Avez-vous essayé de **persuader ou de dissuader** votre mari à y aller ? Est-ce que **votre mari** a essayé de vous persuader à y aller ? Est-ce que **quelqu'un d'autre** a essayé de vous encourager ou décourager à y aller, ou de persuader ou encourager votre mari ? Est-ce que le **rendez-vous** pris vous convenait ? Est-ce que le rendez-vous pris convenait à votre mari ? Est-ce que le rendez-vous a était respecté ?	Pouvez-vous mieux m'expliquer? Il y a d'autres choses encore? Pouvez-vous me donner des exemples?

	SI PAS ALLES : Auriez-vous **aimé aller** ? Pourquoi, ou pourquoi pas ? **SI ALLES:** Comment était l'**accueil** par les agents de santé ? Comment était leur **comportement et leur attitude** envers vous et votre mari ? Quel a été le **contenu de la rencontre** ? Est-ce que vous arriviez a **bien comprendre** ce que les agents disaient ? C'était intéressant, utile, ou pas ? Est-ce que les agents ont utilisé **la boite à images** ? Comment ? Quelle est votre impression de cette manière de mener la causerie ? Est-ce qu'ils vous ont montré des **échantillons de méthodes contraceptives** ? Quelle a été votre réaction ? Avez-vous acquis des nouvelles connaissances ? Avez-vous posé des **questions** ? Lesquelles ? Est-ce que votre mari a posé des questions ? Des réponses ont-elles été apportées à vos questions ou préoccupations ? Ont-elles été satisfaisantes ? Etiez-vous **à l'aise** ou pas, pendant la consultation ? Pourquoi ? Est-ce que votre **mari** était à l'aise, ou pas ? Pensez-vous que participer a été une **bonne chose** ou pas ? Pourquoi ?	
7) Normalement, six heures après l'accouchement, les agents de santé s'entretiennent avec la femme pour vérifier son état de santé et lui donner des conseils avant de la	Avez-vous essayé de **l'encourager ou de le décourager** à venir/participer ?	Pouvez-vous mieux m'expliquer? Il y a d'autres choses encore?

libérer. Il s'agit de la **CONSULTATION POSTNATALE DE LA 6eme HEURE**. Est-ce que les agents se sont entretenus avec vous, avant de vous libérer ? Est-ce qu'ils ont examiné votre état de sante ? Est-ce qu'ils vous ont donné des conseils ? Apres l'accouchement, est-ce que votre mari était présent dans l'établissement de santé ? Est-ce qu'il a été invité à participer à la consultation de la 6eme heure avec vous ? **Y a-t-il participé ?** Pourquoi, ou pourquoi pas ?	Est-ce que **quelqu'un d'autre** a essayé de l'encourager ou de le décourager à venir/participer ? **SI MARI PAS PARTICIPE :** Auriez-vous **aimé** qu'il participe ? Pourquoi, pourquoi pas ? Comment était le **comportement et l'attitude des agents de santé** envers vous ? Quel a été le **contenu de la consultation** ? Est-ce que vous arriviez a **bien comprendre** ce que les agents disaient ? C'était intéressant, utile, ou pas ? Avez-vous posé des **questions** ? Des **réponses** ont-elles été apportées à vos questions ou préoccupations ? Ont-elles été satisfaisantes ? **SI MARI PARTICIPE :** Comment était le **comportement et l'attitude des agents de santé** envers vous et votre mari ? Quel a été le **contenu de la consultation** ? Est-ce que vous arriviez a **bien comprendre** ce que les agents disaient ? C'était intéressant, utile, ou pas ? Est-ce que les agents ont utilisé la **boite à images** ? Comment ? Quelle est votre impression de cette manière de mener la causerie ? Est-ce qu'ils vous ont montré des **échantillons de méthodes contraceptives** ? Quelle a été votre réaction ? Avez-vous acquis des nouvelles connaissances ? Avez-vous posé des **questions** ? Est-ce que votre **mari** a posé des questions ? Lesquelles ? Des **réponses** ont-elles été	Pouvez-vous me donner des exemples?

	apportées à vos questions ou préoccupations ? Ont-elles été satisfaisantes ? Etiez-vous **à l'aise** ou pas, pendant la consultation ? Pourquoi ? Est-ce que **votre mari** était à l'aise, ou pas ? Pensez-vous que le fait que votre mari ait participé a été une **bonne chose** ou pas ? Pourquoi ?	
8) Les trois composantes (discussion de groupe + counseling couple + consultation 6eme heure en couple) font partie d'une **intervention** pour encourager les hommes à s'intéresser et à participer aux soins de santé de leur femme. **Quel est votre opinion de ce projet** ?	Trouvez-vous que c'est une **bonne idée d'inviter les hommes à participer** à ces activités, ou pas ? Pourquoi ? Si le mari participe, quels peuvent être les **avantages/ désavantages pour une femme** ? **SI LE MARI/COUPLE A FREQUENTE AUX MOINS 2/3 COMPOSANTES :** Entre discussion de groupe/counseling de couple/consultation 6eme heure, **quelle a été l'occasion la plus utile/intéressante** pour vous et votre mari ? Trouvez-vous que participer à ce projet a amené quelque **changement (positif ou négatif) dans votre famille ?** Trouvez-vous que participer a amené quelque **changement (positif ou négatif) dans les rapports entre vous et votre mari** ? Avez-vous parlé du projet avec **d'autres femmes qui viennent d'avoir un bébé**, voisines, sœurs, amies, ou d'autres femmes rencontrées au CSPS ? Est-ce que elles aussi ont participé au projet ? Leurs maris ont participé ? Quelle a été leur expérience ? Quelle est leur opinion du projet ? Etes-vous d'accord ?	Pouvez-vous mieux m'expliquer? Il y a d'autres choses encore? Pouvez-vous me donner des exemples?

	Si le mari participe activement, quels peuvent être les avantages pour une femme ? Quels peuvent être les désavantages ? Si vous voyez une femme qui se présente au CSPS accompagnée par son mari, qu'est-ce que vous allez penser d'eux? De la femme, de l'homme, de la relation entre eux? Avez-vous déjà eu à participer à **d'autres rencontres/évènements de sensibilisation sur ces thèmes**, dans une formation sanitaire ou ailleurs ? Si oui, quand, et organise par qui ? Quel était le contenu de la rencontre ? Votre mari était aussi impliqué ? Quelles sont vos **suggestions pour améliorer le projet ?**	

Projet de recherche : Participation des hommes dans les soins de sante maternelle au Burkina Faso

GUIDE ENTRETIEN SEMI-STRUCTURE : HOMMES

Bonjour, je m'appelle_____.

Je suis ici parce que l'équipe d' AfricSanté souhaite réaliser des entretiens avec un certain nombre de maris des femmes qui ont participé au projet de recherche sur la participation des hommes aux soins de santé maternelle.

Pendant l'entretien, je vais vous proposer des sujets pour la discussion. J'aimerais qu'on parle de la dernière grossesse de votre femme et des mois après l'accouchement, de votre expérience par rapport aux soins de santé de votre femme et du bébé, et de votre situation familiale.

Avant de commencer, je voudrais vous rassurer que toutes les informations que vous nous donnerez seront strictement confidentielles. Elles ne seront transmises à personne d'autre que les membres de l'équipe d'enquête. S'il arrivait que je pose une question à laquelle vous ne voulez pas répondre, dites-le moi et je passerai à la suivante. Vous pouvez également interrompre l'entretien à n'importe quel moment.

L'entretien prend habituellement environ **45 minutes**.

Avec votre permission, nous allons utiliser un enregistreur pendant l'entretien.
Avez-vous des questions à me poser ? Pouvons-nous commencer maintenant ?

Informations sur l'enquêté: Nom :_____Prenom :_____

ID Etude:_____ Groupe : Intervention [__] **Témoin** [__]
Profession:_____ Age:_____

Questions principales	Questions additionelles	Questions de clarification
1) Dans votre famille**,** trouvez-vous que **la santé de votre femme est un sujet que vous concerne** ? Trouvez-vous que la sante du **bébé** est un sujet que vous concerne ? Pourquoi, pourquoi pas ?	Est-ce qu'il vous arrive habituellement d'avoir des **discussions avec votre femme sur ce qui concerne sa santé** ? Si oui, qui aborde le sujet ? Quels sujets touchez-vous pendant vos discussions ? Est-ce qu'il vous arrive d'avoir des **discussions avec votre femme sur ce qui concerne la sante du bébé** ? Si oui, qui	Pouvez-vous mieux m'expliquer? Il y a d'autres choses encore? Pouvez-vous me donner des exemples?

	aborde le sujet ? Quels sujets touchez-vous pendant vos discussions ? Est-ce que des **membres de votre famille** vivent à Bobo ? Et la famille de votre femme ? Habitez-vous avec eux ? Est-ce que vous avez plus d'une femme ? Est-ce qu'il vous arrive d'avoir des discussions sur ce qui concerne la sante de la femme et de l'enfant avec d'autres membres de la famille ? Quels sujets touchez-vous ? Depuis l'accouchement, a-t-il eu des décisions importantes en matière de sante que vous avez eu a prendre ? Qui dans la famille a **participé à la prise des décisions importantes** qui concernent la sante de la mère et du bébé? A-t- il eut des **différences d'opinion** entre vous et votre femme, ou entre vous et autres membres de la famille ? Comment êtes-vous arrivés à la décision finale ? **Exemples** de décisions prises (suggérer les exemples en gras) : - **Aller ou pas aux consultations postnatales (6eme jour et 6eme semaine)** - **Introduire (ou pas) d'autres liquides ou nourriture, à part le lait maternel, dans l'alimentation du bébé, inclus l'eau** - **Utilisation des décoctions dans le lavement du bébé** - **La reprise des rapports sexuels** - **Commencer (ou pas) une méthode de contraception** - **Choix de la méthode :** Pourquoi cette méthode ? Est-ce qu'ils avaient déjà expérience de la méthode ? Est-ce qu'il y avait d'autres méthodes qui les intéressaient ? Est-ce que les agents ont mis pression pour une méthode ou une autre ? - Lieu de l'accouchement - Aller consulter en cas de maladie - La nourriture de la mère - La reprise du travail de la mère - La garde de l'enfant …	
2) Votre femme a fréquenté **le centre de santé** pendant la	Avez-vous **participé dans la prise de décision de consulter** ?	Pouvez-vous mieux m'expliquer?

grossesse. Quel a été votre rôle ? Quel a été votre rôle **pendant l'accouchement** de votre femme? Est-ce que votre femme a fréquenté le centre de santé **après l'accouchement** pour faire les consultations postnatales**?** Quel a été votre rôle ?	Avez-vous déjà **accompagné votre femme aux consultations prenatales/ a l'accouchement/ aux consultations postnatales ?** Si oui, avez-vous personnellement participé aux consultations/ étiez-vous présente en salle d'accouchement ? Pourquoi, pourquoi pas ? Qui a payé le prix de l'essence ou les frais lies a la visite ? Avez-vous eu des **interactions avec les agents de santé** qui se sont occupés de votre femme/bébé ? Si oui, décrivez l'expérience. Avez-vous **posé des questions** ? Lesquelles ? Des réponses ont-elles été apportées à vos questions ou préoccupations ? Ont-elles été satisfaisantes ? Etes-vous **satisfait de votre propre niveau de participation** ? Le fait d'avoir participé (ou pas) aux consultations, êtes-vous satisfait de cela ? Le fait d'avoir assisté (ou pas) à l'accouchement, êtes-vous satisfait de cela ? Ou bien auriez-vous aimé rentrer/participer personnellement ? Auriez vu aimé participer davantage, ou moins ? Pourquoi ? Qu'est-ce que les services de santé devraient faire, **pour encourager les hommes à participer** ?	Il y a d'autres choses encore? Pouvez-vous me donner des exemples?
POSER LES 4 QUESTIONS SUIVANTES SEULEMENT AUX HOMMES DU GROUPE D'INTERVENTION :		
3) Pendant la dernière grossesse de votre femme, avez-vous reçu une invitation de la part des agents de santé, pour vous inviter à participer à une	Comment avez-vous reçu **l'invitation à participer** : par lettre, par téléphone, les deux, ou autre ?	Pouvez-vous mieux m'expliquer? Il y a d'autres choses encore?

DISCUSSION DE GROUPE POUR HOMMES ? **Est-ce que vous êtes allé ?** Pourquoi, ou pourquoi pas ?	Est-ce que quelqu'un a **essayé de vous encourager ou de vous décourager** à y aller ? **SI PAS ALLE :** Pourquoi ? Auriez-vous aimé aller ? **SI ALLE :** Quel a été le **contenu de la rencontre** ? Quelle a été le **message clé** que vous avez reçu ? Est-ce que vous arriviez a **bien comprendre** ce que les agents disaient ? Il y avait des **thèmes** que vous ont frappé ? C'était intéressant, utile, ou pas ? Pourquoi, pourquoi pas ? Comment était l'**accueil** par les agents de santé ? Comment était leur **comportement et leur attitude** envers vous et les autres participantes ? Avez-vous **posé des questions** ? Lesquelles ? Des réponses ont-elles été apportées à vos questions ou préoccupations ? Ont-elles été satisfaisantes ? Etiez-vous **à l'aise**, ou pas ? Pensez-vous que le fait d'y être allé a été une **bonne chose** ou pas ?	Pouvez-vous me donner des exemples?
4) Est-ce que les agents de sante vous ont invité à participer à une séance de **COUNSELING DE COUPLE** avec votre femme ? **Est-ce que vous êtes allés ?** Pourquoi, ou pourquoi pas ?	Comment avez-vous reçu **l'invitation** à participer : pendant la discussion de groupe, par téléphone, ou autre ? Est-ce que le RDV vous convenait-il ? Est-ce que le rendez-vous a été respecté par les agents de sante ? Est-ce que quelqu'un a **essayé de vous encourager ou de vous décourager** à y aller ?	Pouvez-vous mieux m'expliquer? Il y a d'autres choses encore? Pouvez-vous me donner des exemples?

	Est-ce que votre **femme** voulait y aller, ou pas ? **SI PAS ALLES :** Auriez-vous aimé aller ? **SI ALLES :** Comment était l'**accueil** par les agents de santé ? Comment était leur **comportement et leur attitude** envers vous et votre femme ? Quel a été le **contenu de la rencontre** ? Est-ce que vous arriviez a **bien comprendre** ce que les agents disaient ? Il y avait des **thèmes** que vous ont frappé ? C'était intéressant, utile, ou pas ? Est-ce que les agents ont utilisé **la boite à images** ? Comment ? Quelle est votre impression de cette manière de mener la causerie ? Est-ce qu'ils vous ont montré des **échantillons de méthodes contraceptives** ? Quelle a été votre réaction ? Avez-vous acquis des nouvelles connaissances ? Avez-vous posé des **questions** ? Votre femme a posé des questions ? Lesquelles ? Des réponses ont-elles été apportées à vos questions ou préoccupations ? Ont-elles été satisfaisantes ? Etiez-vous **à l'aise**, ou pas ? Est-ce que votre femme était à l'aise, ou pas? Pensez-vous que le fait d'y être allé a été une **bonne chose** ou pas ?	

5) Normalement, six heures après l'accouchement, les agents de santé s'entretiennent avec la femme pour vérifier son état de santé et lui donner des conseils, avant de la libérer. Il s'agit de la **CONSULTATION POSTNATALE DE LA 6eme HEURE**. Apres l'accouchement de votre femme, est-ce que vous étiez présent dans l'établissement de santé ? Est-ce que les agents vous ont invité à participer à la consultation de la 6eme heure avec votre femme ? **Avez-vous participé ?** Pourquoi, ou pourquoi pas ?	Comment avez-vous reçu l'**invitation** à participer : oralement, par téléphone, ou autre ? Est-ce que quelqu'un a essayé de vous **encourager ou de vous décourager** à aller/ participer? **SI PAS PARTICIPE :** Auriez-vous aimé participer ? **SI PARTICIPE :** Comment était l'**accueil** par les agents de santé ? Comment était leur **comportement et leur attitude** envers vous et votre femme ? Quel a été le **contenu** de la rencontre ? Est-ce que vous arriviez a bien **comprendre** ce que les agents disaient ? Il y avait des **thèmes** que vous ont frappé ? C'était intéressant, utile, ou pas ? Est-ce que les agents ont utilisé la **boite à images** ? Comment ? Quelle est votre impression de cette manière de mener la causerie ? Est-ce qu'ils vous ont montré **des échantillons de méthodes contraceptives** ? Quelle a été votre réaction ? Avez-vous acquis des nouvelles connaissances ? Avez-vous **posé des questions** ? Votre femme a posé des questions ? Lesquelles ? Des réponses ont-elles été apportées à vos questions ou préoccupations ? Ont-elles été satisfaisantes ? Etiez-vous **à l'aise**, ou pas ? Est-ce que votre femme était à l'aise, ou pas? Pensez-vous que le fait d'y être allé a été une **bonne chose** ou pas ?	Pouvez-vous mieux m'expliquer? Il y a d'autres choses encore? Pouvez-vous me donner des exemples?

6) Les trois composantes (discussion de groupe + counseling couple + consultation 6eme heure en couple) font partie d'une **intervention** pour encourager les hommes à s'intéresser et à participer aux soins de santé de leur femme. **Quel est votre opinion de ce projet** ?	Comment avez-vous trouve l'**idée d'inviter les hommes à participer** à ces activités ? **QUESTION A POSER SI FREQUENTE AUX MOINS 2/3 COMPOSANTES :** Entre discussion de groupe/counseling de couple/consultation 6eme heure, **quelle a été l'occasion la plus utile ou intéressante** pour vous ? Trouvez-vous que participer à ce projet a amené quelque **changement (positif ou négatif) dans votre famille ?** Trouvez-vous que participer a amené quelque **changement (positif ou négatif) dans les rapports entre vous et votre femme** ? Avez-vous parlé du projet avec **d'autres femmes qui viennent d'avoir un bébé**, voisines, sœurs, amies, ou d'autres femmes rencontrées au CSPS ? Est-ce que elles aussi ont participé au projet ? Leurs maris ont participé ? Quelle a été leur expérience ? Quelle est leur opinion du projet ? Etes-vous d'accord ? Avez-vous déjà eu à participer à **d'autres rencontres/évènements de sensibilisation sur ces thèmes**, dans une formation sanitaire ou ailleurs ? Si oui, quand, et organise par qui ? Quel était le contenu de la rencontre ? Quelles sont vos **suggestions pour améliorer le projet ?**	Pouvez-vous mieux m'expliquer? Il y a d'autres choses encore? Pouvez-vous me donner des exemples?

Projet de recherche : Participation des hommes dans les soins de sante maternelle au Burkina Faso

GUIDE ENTRETIEN SEMI-STRUCTURE : AGENTS DE SANTE

Bonjour, je m'appelle_____.

Je suis ici parce que l'équipe d' AfricSanté souhaite réaliser des entretiens avec un certain nombre d'agents de santé, dans les établissements où le projet sur la participation des hommes aux soins de santé maternelle a été mené. Nous sommes intéressés à comprendre les aspects positifs et les problèmes de l'intervention que nous avons réalisé, pour voir comment on pourrait l'améliorer dans le futur.

Pendant l'entretien, je vais vous proposer des sujets de discussion. J'aimerais qu'on parle du projet qui a été réalisé ici, de votre expérience, et de manière plus générale de la question de l'implication des hommes dans les soins maternels.

Avant de commencer, je voudrais vous rassurer que toutes les informations que vous nous donnerez sont strictement confidentielles à moi-même et à l'équipe de recherche qui analysera les données. Elles ne seront pas transmises à vos collègues, ni à personne d'autre que les membres de l'équipe d'enquête. Dans le reportage des résultats de l'étude, vos affirmations ne seront pas associées à votre nom, ni au nom du CSPS. Au cas où vous mentionniez d'autres personnes pendant l'entretien, leurs noms seront changés dans le reportage.

L'entretien prend habituellement environ **45 minutes**. Avec votre permission, nous allons utiliser un enregistreur pendant l'entretien.

Avez-vous des questions à me poser ? Pouvons-nous commencer maintenant ?

Informations sur l'enqueteur: NOM:_____ PRENOM:_____

Informations sur l'enquêté : NOM :_____ PRENOM :_____

CSPS :_____ **Profession :**_____ **Sexe :**_____ **Point focal ?** OUI [__] NON [__]

Questions principales	**Questions additionelles**	**Questions de clarification**
1) Comment décririez-vous votre **expérience de travail** dans le cadre du projet?	**POUR LES POINTS FOCAUX :** Dans le cadre du projet, quel a été votre rôle ? **Exemples** : Gestion du personnel Formation ou restitution / Supervision	Pouvez-vous mieux m'expliquer? Il y a d'autres choses encore?

	Etiez-vous le seul point focal ? Parmi les **trois composantes** de l'intervention, lesquelles avez-vous menées? **[Composantes** : Causerie de groupe hommes Counselling couple (grossesse) Consultation 6eme heure couple **]** Est-ce que **les maris de toutes les femmes** enrôlées dans l'étude ont été invités à participer aux activités, ou seulement certains ? Pendant la période de l'étude, **comment saviez-vous quels maris** devaient participer, qui appeler, qui inviter : - a la causerie de groupe? - au counseling couple ? - a la 6eme heure ? Comment décririez-vous votre **expérience** dans la réalisation **de chaque activité menée**? **Entre les 3 composantes** de l'intervention (discussion de groupe/counseling de couple/consultation 6eme heure), quelle a été pour vous **la plus facile/difficile ou agréable/désagréable** a mener ? Par rapport avec ce travail, quelle était **votre niveau de satisfaction avec** : - Vos compétences techniques - Vos compétences relationnelles (animer le groupe d'hommes ou consulter un couple) - La qualité/durée de la formation - Pour ce qui n'ont pas suivi la formation : la restitution faite par les collègues - La qualité des outils (ex. boite a images, outil avec les 3 histoires pour la causerie) - La répartition des taches - Le travail d'équipe, par exemple la composition des équipes qui devaient mener la causerie (creuser sur les détails de l'organisation interne) - Le soutien des collègues - Pour les points focaux : le rapport avec l'autre point focal / le fait d'être le seul point focal - Le soutien des supérieurs - Le rapport avec l'équipe de recherche	Pouvez-vous me donner des exemples?

	- La motivation financière … Si vous avez eu des **difficultés** dans la réalisation des activités, comment ces problèmes auraient-ils pu être résolus ?	
2) Sur la base de votre expérience, **comment les hommes ont-ils réagi** par rapport au projet? Sur la base de votre expérience, **comment les femmes ont-elles réagi** par rapport au projet?	Quel a été le **niveau d'adhésion des hommes** aux différentes composantes de l'intervention? (Préciser effectif invite par apport à l'effectif qui a réellement pris part pour les 3 activités) Pourquoi, selon vous ? Pouvez-vous décrire les **attitudes et comportements des hommes** que vous avez rencontrés dans le cadre du projet? Pendant la discussion de groupe et les counselling, quelle a été la **réaction des hommes aux thèmes proposés et aux informations données**? Quels thèmes les ont intéressés ? Quels ont étés plus difficiles à comprendre ? Y-a-t-il eu une réticence sur certains thèmes ? **Exemples** de themes traitees dans les outils : planification familiale, importance des consultations postnatales, signes de danger pour mere et bebe, allaitement exclusif, etc Quelle a été la **réaction des femmes** quand vous avez proposé de faire participer leur mari ? Comment, selon vous, ont les femmes vécu l'expérience de se faire consulter avec leur mari ? Entre les 3 composantes de l'intervention (discussion de groupe/counseling de couple/consultation 6eme heure), **quelle a été selon vous la plus utile/ intéressante** pour les hommes/couples ? Quelle a été la réaction des hommes par rapport à la motivation financière ? Pensez-vous que cela a eu un effet sur le niveau de participation aux activités ?	Pouvez-vous mieux m'expliquer? Il y a d'autres choses encore? Pouvez-vous me donner des exemples?

3) Quel effet pensez-vous que l'intervention pourrait avoir sur la **vie du couple et de la famille**?	**Sur la base de votre expérience de cas concrets**, pensez-vous que l'intervention a eu un **effet (positif ou négatif) sur la vie des couples** qui ont participé ? **Exemples :** communication, harmonie d'objectifs, (partage des ressources financières) … Si oui, est-ce que cet effet de l'intervention se manifeste surtout **à niveau des couples du groupe d'intervention (rose),** ou d'autres couples aussi (groupe témoin – jaune, ou couples pas participantes a l'étude) ? Pourquoi ? **Sur la base de votre expérience de cas concrets**, pensez-vous que l'intervention a changé (en positif ou négatif) **l'attitude des maris envers la santé de leur femme et du nouveau-né** ? Si oui, est-ce que ce changement se manifeste surtout **à niveau des couples du groupe d'intervention (rose),** ou d'autres couples aussi (groupe témoin – jaune, ou couples pas participantes a l'étude) ? Pourquoi ? **Sur la base de votre expérience de cas concrets**, pensez-vous que l'intervention ait un effet (positif ou négatif) **sur le niveau de santé de la femme et du nouveau-né** ? **Exemples de domaines dans lesquelles l'implication de l'homme pourrait avoir un impact** : **Fréquentation soins postnatals** Consultation d'un agent de sante en cas de maladie ou signes de danger **Utilisation de la contraception** **Allaitement exclusif** (Reprise du travail de la femme) … Si oui, est-ce que cet effet se manifeste surtout **à niveau des couples du groupe d'intervention (rose**), ou d'autres couples aussi (groupe témoin – jaune, ou couples pas participantes à l'étude) ? Pourquoi ?	Pouvez-vous mieux m'expliquer? Il y a d'autres choses encore? Pouvez-vous me donner des exemples?

	Pensez-vous que l'intervention peut augmenter ou diminuer le pouvoir de l'homme par rapport à celui de la femme, dans le ménage ? Quel pourrait être l'effet de ce changement pour la femme ? Est-ce que cet effet se manifeste surtout **à niveau des couples du groupe d'intervention (rose),** ou d'autres couples aussi (groupe témoin – jaune, ou couples pas participantes à l'étude) ? Pourquoi ?	
4) Quel est votre **opinion globale** sur le projet ?	Est-ce que **d'autres projets similaires ou initiatives sur les mêmes thèmes** ont été déjà menés dans le CSPS ou ailleurs? Qu'est-ce que vous changeriez pour **améliorer l'intervention**? **Qu'est-ce que vous a motivé** (ou pas) à participer aux activités du projet ? Avec le recul, seriez-vous d'accord pour participer à ce projet **si tout/il était à refaire**?	

Appendix 10: Information sheet – men's focus group discussions

Project de recherche : « Participation des hommes aux soins maternelles au Burkina Faso »

FICHE DE CONSENTEMENT ECLAIRE

VOLET QUALITATIF HOMMES – FOCUS GROUP DISCUSSIONS

Vous êtes invité à participer à une étude de recherche mené par AFRICSanté, un centre de recherche basé à Bobo-Dioulasso, et par la London School of Hygiene & Tropical Medicine. Avant de décider de participer ou non, il faut que vous comprenez pourquoi la recherche se fait et ce que cela impliquerait. Veuillez prendre le temps de lire ou de m'écouter lire les informations suivantes. Vous pouvez parler à d'autres de l'étude si vous le souhaitez. Veuillez me demander s'il y a quelque chose qui n'est pas clair, ou si vous souhaitez plus d'informations. Lorsque toutes vos questions ont été répondues et vous sentez que vous comprenez cette étude, il vous sera demandé si vous souhaitez participer à l'étude, et si oui à signer ce formulaire de consentement éclairé. Vous recevrez une copie signée à garder

But de l'étude et critères d'admissibilité

Pourquoi fait-on l'étude? Le but de l'étude est de comprendre le rôle joué par les maris ou partenaires des femmes enceintes dans l'utilisation des services de santé après la naissance. Nous sommes intéressés à comprendre si informer les hommes peut les rendre plus sensibles aux exigences de leurs femmes.

Pourquoi on m'invite à prendre part à cette partie de l'étude? On est en train d'inviter un certain nombre d'hommes à participer dans une discussion de groupe (« focus group discussion »), mené par un enquêteur/enquêtrice.

Que se passera-t-il si je prends part à cette partie de l'étude? Si vous êtes d'accord à participer, on va vous demander de signer ce formulaire. L'enquêteur/enquêtrice va organiser la discussion de groupe avec vous et les autres participants dans un endroit qui vous convient. Entre 6 et 10 hommes prendront part à la discussion tous ensemble. La discussion durera environ une heure. L'enquêteur/enquêtrice va poser des questions au groupe et encourager les participants à discuter ensemble sur un certain nombre de thèmes. En particulier, le groupe va discuter sur les questions suivantes : comment les hommes peuvent soutenir leurs femmes avant et après l'accouchement ? Est-ce-que les hommes sont généralement intéressés à participer dans les soins maternels ? Comment pourrait-on faire pour engager les hommes ? La conversation sera enregistrée avec un enregistreur audio.

Risques

Est-ce que je vais courir des risques si j'accepte de participer? Il n'y a pas de risque physique. Toutefois, l'enquêteur pourrait aborder des sujets qui peuvent parfois être sensibles, comme par exemple la reprise de vos relations intimes avec votre femme/partenaire. Si vous vous souhaitez ne pas discuter de quelque question, vous n'avez qu'à le dire. Vous pouvez également quitter le groupe à n'importe quel moment que vous souhaitez.

Si l'enquêteur/enquêtrice se rend compte que vous ou quelqu'un dans la famille souffre d'un sérieux problème de santé, il informera l'équipe de recherche qui vous référera à un spécialiste indiqué. Nous mettrons également en contact les familles aux prises avec de très grandes difficultés sociales ou économiques avec un centre de promotion sociale si elles le désirent.

Avantages

Est-ce que je vais obtenir des avantages si j'accepte de participer ? Il n'y a pas d'avantages directs pour vous à participer à l'étude. Toutefois, vous pouvez trouver un avantage indirect en sachant que vous avez participé à une importante étude qui pourrait aider d'autres à l'avenir.

Confidentialité

L'information qui sera collectée dans cette étude sera-t-elle confidentielle ? Toutes les informations seront traitées confidentiellement. L'équipe de recherche ne parlera à personne de votre participation dans cette étude, ni partagera aucune information personnelle avec votre famille ou dans votre milieu de travail. Nous ne révèlerons pas les noms et les détails personnels des participants, quelles que soient les circonstances. Des dispositions seront prises afin que vous ne puissiez pas être identifié dans les rapports de l'étude et les banques de données.

Dans le cadre de leur programme de surveillance pour la recherche, il est possible qu'un représentant des bailleurs de fonds vous demande de participer à une interview, conduite dans une langue que vous comprenez, pour évaluer votre compréhension des risques, des avantages, des procédures et du caractère expérimental de l'étude. Si un entretien est demandé, vous aurez la possibilité d'accepter ou refuser d'y participer. Toutes les informations seront gardées confidentiellement.

Caractère volontaire de la participation

Suis-je tenu de prendre part à l'étude ? Non, vous n'êtes pas tenu de prendre part à l'étude. La participation est volontaire. Votre décision de participer ou non ne changera pas la qualité des soins que votre famille va recevoir à l'avenir auprès des agents de santé. Vous pouvez également quitter l'étude à n'importe quel moment sans avoir à donner une raison.

Informations supplémentaires

Qu'est que je vais recevoir si je participe à l'étude? La participation est volontaire et gratuite donc vous ne serez pas payé. Un rafraîchissement sera offert aux participants pendant la discussion de groupe.

Comment va-t-on utiliser les résultats de l'étude? Les résultats seront partagés avec les chefs de service et autorités locaux et nationaux, afin qu'ils puissent améliorer les services de santé. Les résultats seront aussi présentés aux conférences et publiés dans des revues scientifiques.

Cette étude a-t-elle reçu l'approbation du comité d'éthique? Le protocole de cette étude a reçu un avis favorable des Comités d'éthique du Population Council, du Comité d'éthique pour la recherche en santé du Burkina Faso et de la London School of Hygiene and Tropical Medicine (Grande Bretagne).

Qui puis-je contacter si j'ai un problème ou une question ? L'équipe de recherche d'AFRICSanté est disponible à répondre à vos questions concernant l'étude. Veuillez contacter Marina Daniele (Tel. 64 02 44 75), ou Dr Rasmané Ganaba, (Tél. 76 64 75 20).

Project de recherche : « Participation des hommes aux soins maternelles au Burkina Faso »

FICHE D'INFORMATION - (VOLET QUANTITATIF – RCT)

Vous êtes invitée à participer à une étude de recherche mené par AFRICSanté, un centre de recherche basé à Bobo-Dioulasso, et par la London School of Hygiene & Tropical Medicine. Avant de décider de participer ou non, il faut que vous comprenez pourquoi la recherche se fait et ce que cela impliquerait. Veuillez prendre le temps de lire ou de m'écouter lire les informations suivantes. Vous pouvez parler à d'autres de l'étude si vous le souhaitez. Veuillez me demander s'il y a quelque chose qui n'est pas clair, ou si vous souhaitez plus d'informations. Lorsque toutes vos questions ont été répondues et vous sentez que vous comprenez cette étude, il vous sera demandé si vous souhaitez participer à l'étude, et si oui à signer ce formulaire de consentement éclairé. Vous recevrez une copie signée à garder.

But de l'étude et critères d'admissibilité

Pourquoi fait-on l'étude? Le but de l'étude est de comprendre le rôle joué par les maris ou partenaires des femmes enceintes dans l'utilisation des services de santé après la naissance. Nous sommes intéressés à comprendre si informer les hommes peut les rendre plus sensibles aux exigences de leurs femmes.

Pourquoi on m'invite à prendre part à l'étude? Toutes les femmes enceintes et en bonne santé qui fréquentent ce CSPS et qui habitent actuellement avec leur mari/partenaire sont invitées à participer à l'étude.

Que se passera-t-il si je prends part à l'étude? Si vous êtes d'accord à participer, on va vous demander de signer ce formulaire. On a organisé des séances supplémentaires pour femme et mari/partenaire ensemble, en plus des consultations prénatals normales. Toutefois, on ne peut pas inviter tous les couples. Pour permettre une sélection entre les femmes, on va choisir au hasard une de ces enveloppes. L'enveloppe qu'on va sélectionner va nous révéler si vous êtes invitées à une de ces séances, ou non. Quel que soit le résultat, après la fin de cette consultation, une enquêtrice va s'entretenir avec vous durant 15 à 20 minutes. Trois et huit mois après votre accouchement, elle va vous contacter pour effectuer deux autres entretiens, d'environ 30 minutes chacun. Pour cela, elle pourra venir chez vous, ou dans un autre endroit que vous allez lui indiquer. Enfin, si l'équipe de recherche obtient d'autres financements pour l'étude, il est possible qu'on vous recontacte un an et deux ans après l'accouchement pour effectuer un autre entretien similaire. Pendant les entretiens, on va vous demander des informations sur vous-même et sur votre famille, par exemple votre occupation, le nombre d'enfants que vous avez, votre état de santé, et votre utilisation des services de santé.

Risques

Est-ce que je vais courir des risques si j'accepte de participer? Il n'y a pas de risque physique. Toutefois, les enquêtrices pourraient vous poser des questions sur des sujets qui peuvent parfois être sensibles, comme par exemple vos problèmes de santé ou la reprise de vos relations intimes avec votre mari. Si vous souhaitez ne pas répondre à quelque question, vous n'avez que le dire à

l'enquêtrice. Vous pouvez également mettre fin à l'entretien à n'importe quel moment que vous souhaitez. Si l'enquêtrice se rend compte que vous ou votre enfant souffrez d'un sérieux problème de santé, elle informera l'équipe de recherche. L'équipe de recherche vous référera à un spécialiste indiqué. Nous mettrons également en contact les femmes aux prises avec de très grandes difficultés sociales ou économiques avec un centre de promotion sociale si elles le désirent.

Avantages

Est-ce que je vais obtenir des avantages si j'accepte de participer ? Il n'y a pas d'avantages directs pour vous à participer à l'étude. Toutefois, vous pouvez trouver un avantage indirect en sachant que vous avez participé à une importante étude qui pourrait aider d'autres à l'avenir.

Confidentialité

L'information qui sera collectée dans cette étude sera-t-elle confidentielle ? Toutes les informations seront traitées confidentiellement. L'équipe de recherche ne parlera à personne de votre participation dans cette étude, ni partagera aucune information personnelle avec votre famille. Nous ne révèlerons pas les noms et les détails personnels des participantes, quelles que soient les circonstances. Des dispositions seront prises afin que vous ne puissiez pas être identifiée dans les rapports de l'étude et les banques de données.

Dans le cadre de leur programme de surveillance pour la recherche, il est possible qu'un représentant des bailleurs de fonds vous demande de participer à une interview, conduite dans une langue que vous comprenez, pour évaluer votre compréhension des risques, des avantages, des procédures et du caractère expérimental de l'étude. Si un entretien est demandé, vous aurez la possibilité d'accepter ou refuser d'y participer. Toutes les informations seront gardées confidentiellement.

Caractère volontaire de la participation

Suis-je tenue de prendre part à cette étude ? Non, vous n'êtes pas tenue de prendre part à cette étude. La participation à cette étude est volontaire. Votre décision de participer ou non à l'étude ne changera pas la qualité des soins que vous allez recevoir ici ou ailleurs, ni votre relation avec les prestataires. Vous pouvez également quitter l'étude à n'importe quel moment sans avoir à donner une raison.

Informations supplémentaires

Qu'est que je vais recevoir si je participe à l'étude? La participation est volontaire et gratuite donc vous ne serez pas payée.

Comment va-t-on utiliser les résultats de l'étude? Les résultats seront partagés avec les chefs de service et autorités locaux et nationaux, afin qu'ils puissent améliorer les services de santé. Les résultats seront aussi présentés aux conférences et publiés dans des revues scientifiques.

Cette étude a-t-elle reçu l'approbation du comité d'éthique? Le protocole de cette étude a reçu un avis favorable des Comités d'éthique du Population Council, du Comité d'éthique pour la recherche en santé du Burkina Faso et de la London School of Hygiene and Tropical Medicine (Grande Bretagne).

Qui puis-je contacter si j'ai un problème ou une question ? L'équipe de recherche d'AFRICSanté est disponible à répondre à vos questions concernant l'étude. Veuillez contacter Marina Daniele (Tel. 64 02 44 75), ou Dr Rasmané Ganaba, (Tél. 76 64 75 20).

Appendix 12: Information sheet – health workers' semi-structured interviews

Project de recherche : « Participation des hommes aux soins maternelles au Burkina Faso »

FICHE D'INFORMATION -

VOLET QUALITATIF PRESTATAIRES – ENTRETIENS APPROFONDIS

Vous êtes invité(e) à participer à une étude de recherche mené par AFRICSanté, un centre de recherche basé à Bobo-Dioulasso, et par la London School of Hygiene & Tropical Medicine. Avant de décider de participer ou non, il faut que vous comprenez pourquoi la recherche se fait et ce que cela impliquerait. Veuillez prendre le temps de lire ou de m'écouter lire les informations suivantes. Vous pouvez parler à d'autres de l'étude si vous le souhaitez. Veuillez me demander s'il y a quelque chose qui n'est pas clair, ou si vous souhaitez plus d'informations. Lorsque toutes vos questions ont été répondues et vous sentez que vous comprenez cette étude, il vous sera demandé si vous souhaitez participer à l'étude, et si oui à signer ce formulaire de consentement éclairé. Vous recevrez une copie signée à garder.

But de l'étude et critères d'admissibilité

Pourquoi fait-on l'étude? Le but de l'étude est de comprendre le rôle joué par les maris ou partenaires des femmes enceintes dans l'utilisation des services de santé après la naissance. Nous sommes intéressés à comprendre si informer les hommes peut les rendre plus sensibles aux exigences de leurs femmes.

Pourquoi on m'invite à prendre part à cette partie de l'étude? On est en train d'inviter un certain nombre de prestataires qui ont contribué à la réalisation de l'étude principale, à effectuer un entretien approfondi avec un enquêteur/enquêtrice.

Que se passera-t-il si je prends part à cette partie de l'étude? Si vous êtes d'accord à participer, on va vous demander de signer ce formulaire. L'enquêtrice/enquêteur va prendre un rendez-vous avec vous dans un endroit qui vous convient pour realiser un entretien d'environ 45 minutes. Cet entretien est une conversation sur des sujets que l'enquêtrice/enquêteur va vous proposer. En particulier, on voudrait que vous nous parliez de votre récente expérience de participation au projet et de sa mise en œuvre dans la formation sanitaire où vous travaillez. On est intéressé à connaitre l'opinion des prestataires sur la participation des hommes dans les soins maternels.

Risques

Est-ce que je vais courir des risques si j'accepte de participer? Il n'y a pas de risque physique. Toutefois, les enquêtrices/enquêteurs pourraient aborder des sujets qui peuvent parfois être sensibles, comme par exemple les relations interpersonnelles dans votre milieu de travail. Si vous souhaitez ne pas répondre à quelque question, vous n'avez qu'à le dire. Vous pouvez également mettre fin à l'entretien à n'importe quel moment que vous souhaitez.

Avantages

Est-ce que je vais obtenir des avantages si j'accepte de participer ? Il n'y a pas d'avantages directs pour vous à participer. Toutefois, vous pouvez trouver un avantage indirect en sachant que vous avez participé à une importante étude qui pourrait aider d'autres à l'avenir.

Confidentialité

L'information qui sera collectée dans cette étude sera-t-elle confidentielle ? Toutes les informations seront traitées confidentiellement. L'équipe de recherche ne parlera à personne de votre participation dans cette étude, ni partagera aucune information personnelle avec vos collègues ou supérieurs. Nous ne révèlerons pas les noms et les détails personnels des participants, quelles que soient les circonstances. Des dispositions seront prises afin que vous ne puissiez pas être identifié(e) dans les rapports de l'étude et les banques de données.

Dans le cadre de leur programme de surveillance pour la recherche, il est possible qu'un représentant des bailleurs de fonds vous demande de participer à une interview, conduite dans une langue que vous comprenez, pour évaluer votre compréhension des risques, des avantages, des procédures et du caractère expérimental de l'étude. Si un entretien est demandé, vous aurez la possibilité d'accepter ou refuser d'y participer. Toutes les informations seront gardées confidentiellement.

Caractère volontaire de la participation

Suis-je tenu(e) de prendre part à cette partie de l'étude ? Non, vous n'êtes pas tenu(e) de prendre part à cette partie de l'étude. La participation est volontaire. Vous pouvez également quitter l'étude à n'importe quel moment sans avoir à donner une raison.

Informations supplémentaires

Qu'est que je vais recevoir si je participe à l'étude? La participation est volontaire et gratuite donc vous ne serez pas payé(e).

Comment va-t-on utiliser les résultats de l'étude? Les résultats seront partagés avec les chefs de service et autorités locaux et nationaux, afin qu'ils puissent améliorer les services de santé. Les résultats seront aussi présentés aux conférences et publiés dans des revues scientifiques.

Cette étude a-t-elle reçu l'approbation du comité d'éthique? Le protocole de cette étude a reçu un avis favorable des Comités d'éthique du Population Council, du Comité d'éthique pour la recherche en santé du Burkina Faso et de la London School of Hygiene and Tropical Medicine (Grande Bretagne).

Qui puis-je contacter si j'ai un problème ou une question ? L'équipe de recherche d'AFRICSanté est disponible à répondre à vos questions concernant l'étude. Veuillez contacter Marina Daniele (Tel. 64 02 44 75), ou Dr Rasmané Ganaba, (Tél. 76 64 75 20)

Appendix 13: Information sheet – men's semi-structured interviews

Project de recherche : « Participation des hommes aux soins maternelles au Burkina Faso »

FICHE D'INFORMATION -

VOLET QUALITATIF HOMMES – ENTRETIENS APPROFONDIS

Vous êtes invité à participer à une étude de recherche mené par AFRICSanté, un centre de recherche basé à Bobo-Dioulasso, et par la London School of Hygiene & Tropical Medicine. Avant de décider de participer ou non, il faut que vous comprenez pourquoi la recherche se fait et ce que cela impliquerait. Veuillez prendre le temps de lire ou de m'écouter lire les informations suivantes. Vous pouvez parler à d'autres de l'étude si vous le souhaitez. Veuillez me demander s'il y a quelque chose qui n'est pas clair, ou si vous souhaitez plus d'informations. Lorsque toutes vos questions ont été répondues et vous sentez que vous comprenez cette étude, il vous sera demandé si vous souhaitez participer à l'étude, et si oui à signer ce formulaire de consentement éclairé. Vous recevrez une copie signée à garder.

But de l'étude et critères d'admissibilité

Pourquoi fait-on l'étude? Le but de l'étude est de comprendre le rôle joué par les maris ou partenaires des femmes enceintes dans l'utilisation des services de santé après la naissance. Nous sommes intéressés à comprendre si informer les hommes peut les rendre plus sensibles aux exigences de leurs femmes.

Pourquoi on m'invite à prendre part à cette partie de l'étude? On est en train d'inviter un certain nombre de maris/partenaires des femmes déjà participants à l'étude principale, à effectuer un entretien approfondi avec un enquêteur/enquêtrice.

Que se passera-t-il si je prends part à cette partie de l'étude? Si vous êtes d'accord à participer, on va vous demander de signer ce formulaire. L'enquêteur/enquêtrice va prendre un rendez-vous avec vous dans un endroit qui vous convient pour realiser un entretien d'environ 45 minutes. Cet entretien est une conversation sur des sujets que l'enquêtrice/enquêteur va vous proposer. En particulier, on voudrait que vous nous parliez de votre récente expérience d'être à côté de votre femme/partenaire pendant sa grossesse et après l'accouchement. On est intéressé à connaitre votre opinion sur la participation des hommes dans les soins maternels.

Risques

Est-ce que je vais courir des risques si j'accepte de participer? Il n'y a pas de risque physique. Toutefois, les enquêteurs pourraient aborder des sujets qui peuvent parfois être sensibles, comme par exemple les problèmes de santé dans votre famille ou la reprise de vos relations intimes avec

votre femme/partenaire. Si vous souhaitez ne pas répondre à quelque question, vous n'avez qu'à le dire. Vous pouvez également mettre fin à l'entretien à n'importe quel moment que vous souhaitez.

Si l'enquêteur/enquêtrice se rend compte que vous ou quelqu'un dans la famille souffre d'un sérieux problème de santé, il informera l'équipe de recherche qui vous référera à un spécialiste indiqué. Nous mettrons également en contact les familles aux prises avec de très grandes difficultés sociales ou économiques avec un centre de promotion sociale si elles le désirent.

Avantages

Est-ce que je vais obtenir des avantages si j'accepte de participer ? Il n'y a pas d'avantages directs pour vous à participer à l'étude. Toutefois, vous pouvez trouver un avantage indirect en sachant que vous avez participé à une importante étude qui pourrait aider d'autres à l'avenir.

Confidentialité

L'information qui sera collectée dans cette étude sera-t-elle confidentielle ? Toutes les informations seront traitées confidentiellement. L'équipe de recherche ne parlera à personne de votre participation dans cette étude, ni partagera aucune information personnelle avec votre famille ou dans votre milieu de travail. Nous ne révèlerons pas les noms et les détails personnels des participants, quelles que soient les circonstances. Des dispositions seront prises afin que vous ne puissiez pas être identifié dans les rapports de l'étude et les banques de données.

Dans le cadre de leur programme de surveillance pour la recherche, il est possible que un représentant des bailleurs de fonds vous demande de participer à une interview, conduite dans une langue que vous comprenez, pour évaluer votre compréhension des risques, des avantages, des procédures et du caractère expérimental de l'étude. Si un entretien est demandé, vous aurez la possibilité d'accepter ou refuser d'y participer. Toutes les informations seront gardées confidentiellement.

Caractère volontaire de la participation

Suis-je tenu de prendre part à l'étude ? Non, vous n'êtes pas tenu de prendre part à l'étude. La participation est volontaire. Votre décision de participer ou non ne changera pas la qualité des soins que votre famille va recevoir par les agents de santé à l'avenir. Vous pouvez également quitter l'étude à n'importe quel moment sans avoir à donner une raison.

Informations supplémentaires

Qu'est que je vais recevoir si je participe à l'étude? La participation est volontaire et gratuite donc vous ne serez pas payé.

Comment va-t-on utiliser les résultats de l'étude? Les résultats seront partagés avec les chefs de service et autorités locaux et nationaux, afin qu'ils puissent améliorer les services de santé. Les résultats seront aussi présentés aux conférences et publiés dans des revues scientifiques.

Cette étude a-t-elle reçu l'approbation du comité d'éthique? Le protocole de cette étude a reçu un avis favorable des Comités d'éthique du Population Council, du Comité d'éthique pour la recherche en santé du Burkina Faso et de la London School of Hygiene and Tropical Medicine (Grande Bretagne).
Qui puis-je contacter si j'ai un problème ou une question ? L'équipe de recherche d'AFRICSanté est disponible à répondre à vos questions concernant l'étude. Veuillez contacter Marina Daniele (Tel. 64 02 44 75), ou Dr Rasmané Ganaba, (Tél. 76 64 75 20).

Appendix 14: Information sheet – women's semi-structured interviews

Project de recherche : « Participation des hommes aux soins maternelles au Burkina Faso »

FICHE D'INFORMATION -

VOLET QUALITATIF FEMMES – ENTRETIENS APPROFONDIS

Vous êtes invitée à participer à une étude de recherche mené par AFRICSanté, un centre de recherche basé à Bobo-Dioulasso, et par la London School of Hygiene & Tropical Medicine. Avant de décider de participer ou non, il faut que vous comprenez pourquoi la recherche se fait et ce que cela impliquerait. Veuillez prendre le temps de lire ou de m'écouter lire les informations suivantes. Vous pouvez parler à d'autres de l'étude si vous le souhaitez. Veuillez me demander s'il y a quelque chose qui n'est pas clair, ou si vous souhaitez plus d'informations. Lorsque toutes vos questions ont été répondues et vous sentez que vous comprenez cette étude, il vous sera demandé si vous souhaitez participer à l'étude, et si oui à signer ce formulaire de consentement éclairé. Vous recevrez une copie signée à garder.

But de l'étude et critères d'admissibilité

Pourquoi fait-on l'étude? Le but de l'étude est de comprendre le rôle joué par les maris ou partenaires des femmes enceintes dans l'utilisation des services de santé après la naissance. Nous sommes intéressés à comprendre si informer les hommes peut les rendre plus sensibles aux exigences de leurs femmes.

Pourquoi on m'invite à prendre part à cette partie de l'étude? On est en train d'inviter un certain nombre de femmes qui participent déjà à l'étude principale, à effectuer un entretien approfondi avec une enquêtrice.

Que se passera-t-il si je prends part à cette partie de l'étude? Si vous êtes d'accord à participer, on va vous demander de signer ce formulaire. L'enquêtrice va prendre un rendez-vous avec vous dans un endroit qui vous convient pour realiser un entretien d'environ 45 minutes. Cet entretien est une conversation sur des sujets que l'enquêtrice va vous proposer. En particulier, on voudrait que vous nous parliez de votre récente expérience des soins maternels, et de la participation et l'appui que vous avez reçu de la part de votre mari/partenaire. On est intéressé à connaitre l'opinion des femmes sur la participation des hommes dans les soins maternels.

Risques

Est-ce que je vais courir des risques si j'accepte de participer? Il n'y a pas de risque physique. Toutefois, les enquêtrices pourraient aborder des sujets qui peuvent parfois être sensibles, comme par exemple vos problèmes de santé ou la reprise de vos relations intimes avec votre partenaire/mari. Si vous souhaitez ne pas répondre à quelque question, vous n'avez qu'à le dire. Vous pouvez également mettre fin à l'entretien à n'importe quel moment que vous souhaitez.

Si l'enquêtrice se rend compte que vous ou votre enfant souffrez d'un sérieux problème de santé, elle informera l'équipe de recherche qui vous référera à un spécialiste indiqué. Nous mettrons également en contact les

femmes aux prises avec de très grandes difficultés sociales ou économiques avec un centre de promotion sociale si elles le désirent.

Avantages

Est-ce que je vais obtenir des avantages si j'accepte de participer ? Il n'y a pas d'avantages directs pour vous à participer à l'étude. Toutefois, vous pouvez trouver un avantage indirect en sachant que vous avez participé à une importante étude qui pourrait aider d'autres à l'avenir.

Confidentialité

L'information qui sera collectée dans cette étude sera-t-elle confidentielle ? Toutes les informations seront traitées confidentiellement. L'équipe de recherche ne parlera à personne de votre participation dans cette étude, ni partagera aucune information personnelle avec votre famille. Nous ne révèlerons pas les noms et les détails personnels des participantes, quelles que soient les circonstances. Des dispositions seront prises afin que vous ne puissiez pas être identifiée dans les rapports de l'étude et les banques de données.

Dans le cadre de leur programme de surveillance pour la recherche, il est possible qu'un représentant des bailleurs de fonds vous demande de participer à une interview, conduite dans une langue que vous comprenez, pour évaluer votre compréhension des risques, des avantages, des procédures et du caractère expérimental de l'étude. Si un entretien est demandé, vous aurez la possibilité d'accepter ou refuser d'y participer. Toutes les informations seront gardées confidentiellement.

Caractère volontaire de la participation

Suis-je tenue de prendre part à cette partie de l'étude ? Non, vous n'êtes pas tenue de prendre part à cette partie de l'étude. La participation est volontaire. Votre décision de participer ou non ne changera pas la qualité des soins que vous allez recevoir à l'avenir auprès des agents de santé. Vous pouvez également quitter l'étude à n'importe quel moment sans avoir à donner une raison.

Informations supplémentaires

Qu'est que je vais recevoir si je participe à l'étude? La participation est volontaire et gratuite donc vous ne serez pas payée.

Comment va-t-on utiliser les résultats de l'étude? Les résultats seront partagés avec les chefs de service et autorités locaux et nationaux, afin qu'ils puissent améliorer les services de santé. Les résultats seront aussi présentés aux conférences et publiés dans des revues scientifiques.

Cette étude a-t-elle reçu l'approbation du comité d'éthique? Le protocole de cette étude a reçu un avis favorable des Comités d'éthique du Population Council, du Comité d'éthique pour la recherche en santé du Burkina Faso et de la London School of Hygiene and Tropical Medicine (Grande Bretagne).

Qui puis-je contacter si j'ai un problème ou une question ? L'équipe de recherche d'AFRICSanté est disponible à répondre à vos questions concernant l'étude. Veuillez contacter Marina Daniele (Tel. 64 02 44 75), ou Dr Rasmané Ganaba, (Tél. 76 64 75 20).

Appendix 15: Consent form – for participants in all study components

Déclaration du participant:

J'ai lu la fiche de consentement éclairé relative à cette étude (ou j'ai compris l'explication orale), et je comprends ce qui me sera demandé ainsi que les implications liées à ma participation. Je donne mon consentement à participer à cette étude. Je comprends que ma participation est volontaire, et que mes données personnelles seront traitées de façon confidentielle.

Votre nom:_____

Votre signature:_____**Date:**_____

Déclaration de la personne qui a mené la discussion sur le Consentement Eclairé:

Je confirme que j'ai expliqué personnellement au participant le but et les implications de l'étude, les procédures, les risques potentiels et les avantages, et le traitement confidentiel des informations personnelles.

Nom de la personne obtenant le consentement:_____

Signature de la personne obtenant le consentement:_____ **Date:**_____

Pour les hommes analphabètes :

Je confirme que la femme a compris l'explication orale et donne son consentement éclairé à participer à l'étude.

Nom d'un témoin impartial :_____

Signature du témoin impartial :_____

Date :_____

Appendix 16: Example invitation letter for male partner to group discussion, Component A

Bonjour Mr _____,

Nous avons consulté votre femme/partenaire à la maternité du CSPS de Bolomakoté le _____(*date*).

Dans le cadre d'un projet de recherche, le CSPS a organisé des causeries pour les maris/partenaires des femmes enceintes. Le but est de discuter entre hommes sur comment vous pouvez au mieux soutenir votre femme pendant la grossesse et après l'accouchement. On vous donnera aussi des informations sur la santé de la femme et du nouveau-né. La causerie sera menée par un agent de santé, et durera 30-40 minutes.

Vous êtes invités à vous présenter au **CSPS de Bolomakoté**

_____(*jour, date, mois*), **à** _____ **heures**.

Seuls ceux qui auront la lettre d'invitation pourront prendre part à la rencontre. Merci d'amener cette lettre en venant.

En cas de besoin, veuillez nous contacter au numéro _____.

Au plaisir de faire votre connaissance,

Le personnel de la maternité

Appendix 17: Egibility checklist

A

ID Femme | | | | |

Projet de recherche: Participation des hommes aux soins de santé maternelle au Burkina Faso

FICHE D'ELIGIBILITÉ

DATE : | | | | | (jour / mois) **NOM CSPS :** _____

FEMME : Nom _____ **Prénom :** _____

CRITERES D'ELIGIBILITÉ :	AGENT(S) DE SANTÉ:	ENQUETRICE :
1. La femme est-elle dans la fourchette de 24 à 36 semaines de grossesse ? (SI OUI, REMPLIR LA FICHE)	OUI ☐ NON ☐	
2. La femme peut-elle accoucher au CSPS ? (C'est-à-dire qu'elle ne présente a priori aucun facteur de risque tel qu'on doit lui conseiller d'accoucher au CMA/ CHU)	OUI ☐ NON ☐	
3. La femme a-t-elle 16 ans ou plus ?	OUI ☐ NON ☐	OUI ☐ NON ☐
4. Est-ce que la femme réside dans la ville de Bobo ?	OUI ☐ NON ☐	OUI ☐ NON ☐
5. Vi-t-elle présentement avec son mari/partenaire ? (C'est-à-dire qu'elle et son mari/partenaire vivent actuellement dans la même maison ou cour. Si l'homme est en voyage et sera de retour d'ici à une semaine, c'est oui.)	OUI ☐ NON ☐	OUI ☐ NON ☐
6. Est-ce que la femme compte rester au moins 1 an dans la ville de Bobo ? (On veut savoir si elle n'a pas l'intention de déménager hors de Bobo d'ici 1 an)	OUI ☐ NON ☐	OUI ☐ NON ☐
LA FEMME EST-ELLE ELIGIBLE ? Si la réponse est « OUI » pour toutes les questions ci-dessus, elle est éligible pour participer à l'étude. Si oui, veuillez lui demander si elle est d'accord.	**OUI ☐ NON ☐**	**OUI ☐ NON ☐**
Madame, on est en train de recruter des femmes enceintes pour participer à un projet de recherche. Le but de l'étude est de comprendre quel rôle jouent vos maris/partenaires depuis la grossesse, jusqu'à après l'accouchement. Il s'agit de comprendre ce que l'implication des hommes peut entrainer sur la santé des femmes et de leurs bébés. ***Etes-vous intéressés à participer*** ? OUI ☐ NON ☐ Si « Oui », veuillez-la référer vers l'enquêtrice.	Nom et prénom : _____ _____ Signature : _____ Nom et prénom: _____ _____ Signature : _____	Initiales enquêtrice : _____ Signature : _____

Version du 20 Fev. 15

B

Projet de recherche : Participation des hommes dans les soins de sante maternelle au Burkina Faso

FICHE CONTACT COUPLES (GROUPE INTERVENTION) **CSPS du SECTEUR 24**

NUM. SÉRIE:	DATE DE RÉCRUTEMENT:	NOMS ET PRENOMS DES PARTICIPANTS :	NUMÉROS DE TELEPHONE : (en cas de difficulté, contacter les enquêtrices, elles pourraient avoir d'autres coordonnées)	RDV PRIS POUR LA CAUSERIE DE CETTE SEMAINE? (Si NON, noter en crayon)	NOTES : (Par exemple, si RDV PAS PRIS, expliquer la raison et quelles actions sont prévues. Si autres coordonnées utiles, noter ici)	RESUMÉ pour la supervision
_____	☐☐ ☐☐ (jour) (mois) Initiales enquêtrice : _____	Femme : _____ _____ Mari/partenaire : _____ _____	Femme : ☐☐ ☐☐ ☐☐ ☐☐ ☐☐ ☐☐ ☐☐ ☐☐ Mari/partenaire : ☐☐ ☐☐ ☐☐ ☐☐ ☐☐ ☐☐ ☐☐ ☐☐	OUI☐ NON☐ Nom et prénom de l'agent qui a appelé : _____ _____ Signature : _____	....	Causerie de groupe OUI☐ NON☐ Counseling couple gross. OUI☐ NON☐ Counseling couple 6 h OUI☐ NON☐
_____	☐☐ ☐☐ (jour) (mois) Initiales enquêtrice : _____ *(Version du 14 Fev 15)*	Femme : _____ _____ Mari/partenaire : _____ _____	Femme : ☐☐ ☐☐ ☐☐ ☐☐ ☐☐ ☐☐ ☐☐ ☐☐ Mari/partenaire : ☐☐ ☐☐ ☐☐ ☐☐ ☐☐ ☐☐ ☐☐ ☐☐	OUI☐ NON☐ Nom et prénom de l'agent qui a appelé : _____ _____ Signature : _____	....	Causerie de groupe OUI☐ NON☐ Counseling couple gross. OUI☐ NON☐ Counseling couple 6 h OUI☐ NON☐

C

Projet de recherche: Participation des hommes aux soins de santé maternelle au Burkina Faso

FICHE PRESENCE CAUSERIE

Date causerie : ☐☐ ☐☐ à ☐☐ . ☐☐ Nom CSPS _____
(jour) (mois) (heures) (minutes)

Agent animant la causerie : 1) Nom _____Signature_____

2) Nom_____ Signature_____

NUM. SÉRIE	Nom et prénom homme	Présent le jour de la causerie ?	SI ABSENT, raison et action prévue :	SI PRESENT : A amené la lettre d'invitation ?	RDV counseling pris pour la prochaine semaine?	SI RDV PAS PRIS, raison et action prévue :
		OUI☐ NON☐		OUI☐ NON☐	OUI☐ NON☐	
		OUI☐ NON☐		OUI☐ NON☐	OUI☐ NON☐	
		OUI☐ NON☐		OUI☐ NON☐	OUI☐ NON☐	
		OUI☐ NON☐		OUI☐ NON☐	OUI☐ NON☐	
		OUI☐ NON☐		OUI☐ NON☐	OUI☐ NON☐	
		OUI☐ NON☐		OUI☐ NON☐	OUI☐ NON☐	
		OUI☐ NON☐		OUI☐ NON☐	OUI☐ NON☐	
		OUI☐ NON☐		OUI☐ NON☐	OUI☐ NON☐	
		OUI☐ NON☐		OUI☐ NON☐	OUI☐ NON☐	

Version du 14 Fev 15

D

Projet de recherche: Participation des hommes aux soins de santé maternelle au Burkina Faso

CALENDRIER COUNSELING DE COUPLE – Semaine du ☐☐ (jour) ☐☐ (mois) **au** ☐☐ (jour) ☐☐ (mois) **Nom CSPS**_____

N. B. RDV pour les séances de counseling : noter le numéro série, le nom et le prénom de l'homme. Noter les noms des agents chargés de mener le counseling.

	LUNDI	MARDI	MERCREDI	JEUDI	VENDREDI	SAMEDI	DIMANCHE
Noms agents chargés							
7.00							
8.00							
9.00							
10.00							
11.00							
12.00							
13.00							
14.00							
15.00							
16.00							
17.00							
18.00							

Version du 14 Février 15

E

Projet de recherche: Participation des hommes aux soins de santé maternelle au Burkina Faso

FICHE COUNSELING DE COUPLE - GROSSESSE

Nom CSPS _____ Date séance : ☐☐ (jour) ☐☐ (mois) à ☐☐ (heures) . ☐☐ (minutes)

Nom et prénom prestataire (1) _____ Signature_____

Nom et prénom prestataire (2) _____ Signature_____

NUMÉRO SÉRIE :_____ Nom et prénom femme_____

Nom et prénom mari _____

SUJETS ABORDÉS (Aide-mémoire) :

GROSSESSE ET ACCOUCHEMENT :		**SUJETS CLÉ :**	
Une grossesse saine et heureuse	OUI☐ NON☐	1. L'importance des consultations postnatales	OUI☐ NON☐
L'importance des CPN	OUI☐ NON☐	2. L'allaitement maternel exclusif	OUI☐ NON☐
Les signes de danger de la grossesse	OUI☐ NON☐	3. Une famille heureuse et prospère	OUI☐ NON☐
Le plan d'accouchement	OUI☐ NON☐	4. La fertilité après l'accouchement	OUI☐ NON☐
Reconnaitre les signes de travail	OUI☐ NON☐	5. Quelles méthodes peut-on utiliser après l'accouchement – Counseling PF générale	OUI☐ NON☐

PLANIFICATION FAMILIALE: Counseling **spécifique** fait? OUI ☐ NON ☐

Documentation dans le Carnet de Santé d'un « **Plan pour la Contraception du Postpartum** » ? OUI ☐ NON ☐

PLAN POUR LA CONTRACEPTION DU POSTPARTUM :	1) Méthode(s) choisie(s) : .....
	2) Quand commencer ? .....
	3) Ou revenir/aller pour prendre la méthode ? .....
	4) Autres conseils ?.....

Prochain RDV donné au mari/partenaire pour la **6eme heure après l'accouchement** ? OUI ☐ NON ☐

VOS OBSERVATIONS ET COMMENTAIRES SUR LA SEANCE (si necessaire, continuer derrier la feuille):

.....

.....

.....

Version du 14 Fev 15

F

Projet de recherche: Participation des hommes aux soins de santé maternelle au Burkina Faso

FICHE COUNSELING DE COUPLE – 6eme HEURE POSTPARTUM

Nom CSPS _____ Date séance : ☐☐ ☐☐ ☐☐ à ☐☐ . ☐☐
(jour) (mois) (heures) (minutes)

Nom et prénom prestataire (1) _____Signature_____

Nom et prénom prestataire (2) _____Signature_____

NUMÉRO SÉRIE : _____ Nom et prénom femme_____

Nom et prénom mari _____

SUJETS ABORDÉS (Aide-mémoire) :

POSTPARTUM :		**SUJETS CLÉ** :	
Signes de danger pour la mère	OUI☐ NON☐	1. L'importance des consultations postnatales	OUI☐ NON☐
Signes de danger pour le nouveau-né	OUI☐ NON☐	2. L'allaitement maternel exclusif	OUI☐ NON☐
		3. Une famille heureuse et prospère	OUI☐ NON☐
		4. La fertilité après l'accouchement	OUI☐ NON☐
		5. Quelles méthodes peut-on utiliser après l'accouchement – Counseling PF **générale**	OUI☐ NON☐

PLANIFICATION FAMILIALE:

« Plan pour la contraception du Postpartum » **déjà présent** dans le Carnet de Santé ? OUI☐ NON☐

Counseling **spécifique** fait? OUI☐ NON☐

La femme a **déjà commencé** une méthode ? OUI☐ NON☐ **Si OUI, laquelle ?**_____

Si NON, documentation aujourd'hui du « **Plan pour la Contraception du Postpartum** » dans le Carnet? OUI☐ NON☐

PLAN POUR LA CONTRACEPTION DU POSTPARTUM :	1) Méthode(s) choisie(s) : .....
	2) Quand commencer ? .....
	3) Ou revenir/aller pour prendre la méthode ? .....
	4) Autres conseils ?.....

VOS OBSERVATIONS ET COMMENTAIRES SUR LA SEANCE (si necessaire, continuer derrier la feuille):

.....

.....

.....

Version du 14 Fev 15

Projet de recherche : Participation des hommes aux soins de santé maternelle au Burkina Faso

Causerie de groupe pour hommes au cours de la grossesse

GUIDE POUR L'ANIMATEUR

INTRODUCTION:

Le but de la causerie est de sensibiliser les hommes sur le thème de la santé maternelle et infantile et de les encourager à s'intéresser à la santé de leur femme.

On essayera d'explorer comment, actuellement, les couples prennent les décisions qui concernent la santé de l'enfant et de la femme. A travers les discussions, on essayera d'explorer les différentes manières de prendre des décisions et les manières de transmettre un message, c'est-à-dire **l'importance même de la communication au sein du couple**.

On essayera d'expliquer que, même si la grossesse est portée physiquement par la femme, il serait souhaitable **que l'homme aussi ait accès aux mêmes conseils, informations** et renseignements sur comment soutenir la femme et promouvoir sa santé et celle du bébé.

Finalement, on expliquera qu'au CSPS on a décidé d'offrir, a un certain nombre de femmes enceintes et leurs maris, de façon expérimentale, la possibilité de faire une séance de **counseling de couple** pour donner **plus d'explications et de conseils** sur comment promouvoir la bonne santé de la mère et de l'enfant. On finira la causerie en donnant des indications pratiques sur quand revenir avec leur femme pour le counseling de couple, et on prendra des rendez-vous précis avec chacun d'eux à la fin de chaque causerie.

ASPECTS PRATIQUES:

Les causeries seront répétées **chaque semaine**, avec le même programme, selon le calendrier de chaque CSPS. On suggère de les organiser chaque semaine le même jour, a la même heure. La durée totale de chaque causerie sera d'environ **30 à 40 minutes**. **La causerie sera animée par certains agents de santé du CSPS.** Le(s) prestataire(s) responsable(s) d'organiser la causerie se chargera d'appeler les hommes chaque semaine selon le « *calendrier des activités* ». Un prestataire sera désigné comme *« **point focal causerie** »* dans chaque CSPS.

Pendant **les jours précédents la causerie)**, les prestataires responsables pour la causerie devront appeler les maris /partenaires des femmes qui font parti du groupe d'intervention un jour après leur recrutement **(voir la Fiche B)** et documenter les noms de ceux qui acceptent de participer dans la **Fiche C.** Pour les appels des participants, le prestataire devra faire deux (02) appels : le premier appel dès le lendemain du recrutement de la femme, le second (2^{nd}) appel, le matin même du jour de la causerie, pour rappeler le RDV.

Liste de matériels à amener à la causerie: cette *« Guide pour l'animateur »*, les **Fiches B, C et D**, contribution essence (1000 CFA par homme) plus un sachet d'eau par homme.

Avant de commencer la causerie, le prestataire documentera les présences dans la **Fiche C**. En cas d'absence à la causerie, le prestataire documentera dans la Fiche qu'il faudra le rappeler. Si un homme se présente, avec ou sans la lettre d'invitation, **et que son nom n'est pas sur la Fiche C**, il faut vérifier dans les **Fiches**

B si sa femme fait partie de l'étude (groupe d'intervention). Si sa femme ne fait pas partie de l'étude (et du groupe d'intervention), il peut rester et participer à la causerie, mais il faut lui dire qu'il ne pourra pas bénéficier de la contribution pour l'essence, et il ne pourra pas être invité à participer à la prochaine activité du programme (counseling de couple). Il faudra lui expliquer que le programme est expérimentale, et que pourtant on a du faire un choix au hasard entre les maris qui peuvent participer au programme. Si l'homme est un parent ou ami qui est venu en lieu et place du mari, **il peut rester pendant la causerie s'il le souhaite**, mais il faudra prendre un nouveau RDV avec le mari lui-même, pour le faire venir à la prochaine causerie.

A la fin de la causerie, le prestataire prendra les rdv pour le counseling de couple, pour chaque homme qui est admissible (on a pu confirmer que sa femme fait partie du groupe d'intervention). Les rdv seront pris pour la semaine suivante (juste après la causerie), et documentés dans la **Fiche D**. **Au moment de la prise des RDV**, on remettra à chaque participant **1000 CFA de contribution pour l'essence**.

ACTIVITÉS PRÉVUES PENDANT LA CAUSERIE :

1) PRESENTATION ET REMERCIEMENT DES PARTICIPANTS

Le(s) prestataire(s) animateur(s) se présente et donne le mot de bienvenu aux participants :

« *Bienvenus à la causerie. Je m'appelle_____ (nom, profession). Merci d'être venus aujourd'hui.*

Le CSPS participe dans un projet de recherche qui essaie de comprendre si les hommes sont intéressés à avoir plus d'information sur la santé de la femme et du nouveau-né. C'est dans ce cadre qu'on a voulu vous inviter et échanger avec vous. On a choisi au hasard un certain nombre de maris de femmes enceintes, qui sont invités à participer à ce programme ».

2) PRESENTATION DE 3 SCENARIOS ET DISCUSSION GUIDÉE

L'animateur explique l'activité aux participants : « *Je vais vous lire **03 scenarios** (petites histoires). Après chaque histoire, je vais échanger avec vous en vous posant des questions, et vous allez me dire qu'est-ce que vous en pensez, et on discutera ensemble* ».

L'animateur **lit le texte de chaque scenario** (colonne à gauche). Ensuite, il utilise la guide pour **poser les questions** (colonne au milieu du tableau) pour s'assurer que les participants ont bien compris le scenario. Il doit surtout les guider vers les **réponses souhaitées** (colonne à droite).

Le **temps prévu** pour chaque scenario est de **10 minutes au maximum**: **3** minutes de lecture, et **7** minutes de discussion. Il est important de proposer tous les 3 scenarios.

SCENARIO A – L'histoire d'Adama et Mariam :	**QUESTIONS A POSER AU GROUPE:**	**REPONSES SOUHAITEES :**
Adama, un homme de 25 ans, en visite à Bobo pour quelques jours dans la cadre de son travail, mais il est en compagnie de Mariam, sa femme de 23 ans. Elle est enceinte de leur premier bébé. Trois semaines plus tôt que prévu, Mariam entre en travail, et accouche à la clinique. Avant de la libérer, l'accoucheuse lui conseille de donner ***uniquement le lait maternel à l'enfant, et de ne pas lui donner aucune autre nourriture ou boisson.*** *L'accoucheuse explique: "c'est la pratique recommandée pour tous les bébés: le lait maternel contient tous les nutriments, y compris l'eau, dont le bébé a besoin. Il ne faut pas donner de l'eau ou des tisanes, ou aucun autre aliment, jusqu'à 6 mois après la naissance du bébé". Toutefois, Mariam n'a rien compris, parce qu'elle ne parle pas bien Dioula, mais elle a honte à le dire. Entre temps, Adama arrive et ramène Mariam et le bébé à la maison. Il n'a donc pas assisté aux échanges entre l'accoucheuse et sa femme.* *Le couple séjourne chez un oncle d'Adama, qui vit seul. Le couple ne connait personne d'autre dans le quartier. Quelques jours après l'accouchement, Mariam est inquiète parce il fait chaud, et* ***elle pense que le bébé doit avoir soif****. Elle échange avec son mari. Ils décident de donner à l'enfant un peu d'eau à boire. Mais l'eau n'étant pas propre, dès le lendemain matin, le bébé a la diarrhée. Le soir, il fait aussi de la fièvre. Comme son état de santé ne s'améliore pas, ils décident de l'amener à l'hôpital.* ***A l'hôpital****, les examens indiquent que le bébé a une infection grave. Ils sont obligés de garder le bébé à l'hôpital pour une meilleure prise en charge. Le bébé y est reste pendant deux semaines avant de commencer à guérir et à prendre du poids. Adama est très choqué quand il se rende compte que son bébé a risqué de perdre sa vie.*	**Le problème de santé du bébé était dû à une mauvaise décision prise par les parents : laquelle ?** **Quelles sont les raisons qui ont amené le couple à prendre cette mauvaise décision?** **En observant ce couple, comment est la communication entre les deux conjoints ?** **<u>Donc, quel était le problème principal dans cette histoire ?</u>**	La décision de donner de l'eau et surtout non potable au bébé. - Le problème de langue a fait que la femme n'avait pas compris les conseils du prestataire. - Il n'y a pas eu d'échange entre les prestataires et le mari. **Résultat :** le couple ne disposait pas d'informations correctes sur l'alimentation du nouveau-né. Il y a la communication dans le couple même si ce n'est pas à tout moment. <u>Le manque d'information et l'insuffisance de communication chez le couple.</u>

SCENARIO B – L'histoire de Nafi et Karim :	**QUESTIONS A POSER AU GROUPE:**	**REPONSES SOUHAITEES :**
*Nafi, une femme de **15 ans,** est en travail de son premier enfant. Mais le travail est difficile, car le bébé est positionné de façon inhabituelle dans le ventre. Finalement, il faut amener Nafi au CHU pour faire une césarienne d'urgence, **pour sauver la vie de la mère et du bébé**. Avant de la libérer, le docteur lui dit qu'il serait mieux qu'elle **évite d'avoir d'autres enfants dans les prochaines 3 ans**. Il explique: «Vous êtes très jeune. En plus, vous venez d'avoir une césarienne. Votre corps est épuisé et il faut que vous vous reposiez. Il y a un risque que la prochaine fois la suture de la césarienne lâche. Si cela arrivait, vous risquerez de perdre beaucoup de sang et même de mourir. En outre, si vous tombez enceinte très bientôt, le bébé pourrait naitre prématuré, ou être très petit et faible a la naissance. Pour éviter tous ces risques, je vous conseille vivement de commencer à prendre une méthode contraceptive fiable, telle que l'implant. Cette méthode ne va pas vous empêcher d'avoir d'autres enfants plus tard. On pourra l'enlever facilement. Il faudrait que vous en parlez à votre mari, et au contrôle de la 6eme semaine après l'accouchement on pourra vous fournir la méthode».* *Nafi rentre chez elle. Mais **elle a peur d'aborder le sujet** avec son mari Karim, parce qu'elle est **convaincue qu'il ne sera pas d'accord.** Ils n'ont jamais parlé de planning familial et ne sont pas habitués à communiquer beaucoup sur ces questions. **Elle réfléchit** : « il ne sera même pas d'accord pour me donner l'argent pour l'implant, car nous avons déjà dépensé beaucoup au moment de l'accouchement ».* *À la visite de la **6eme semaine**, les agents de santé offrent l'implant à Nafi, mais elle refuse. **3 mois plus tard, elle est de nouveau enceinte.** Le deuxième enfant nait prématuré et, malheureusement, il décède.*	**Quel est le conseil que le docteur a donné à la femme, après l'accouchement et pourquoi?** **Est-ce que, la femme avait été bien informée sur comment prendre soin de sa propre santé dans le futur ?** **Quelle est la raison pour laquelle la femme a refusé de se faire placer l'implant?** **En observant ce couple, qu'est-ce que vous remarquez? Comment est la communication entre ces deux conjoints ?** **<u>Quel était le principal problème dans cette histoire ?</u>**	De commencer une méthode contraceptive, à cause des risques d'une deuxième grossesse trop rapprochée (moins de 3 ans). Oui, elle disposait d'assez d'informations correctes. Elle avait peur de la réaction de son mari. Il y a manque de communication et, peut-être, même méfiance entre ces deux conjoints. <u>Le manque de communication entre les conjoints.</u>

SCENARIO C – L'histoire de Djibril et Adja	**QUESTIONS A POSER AU GROUPE:**	**REPONSES SOUHAITEES :**
*Adja, une femme de 33 ans, est enceinte de **son troisième enfant**. Pendant la dernière pesée/CPN, les prestataires expliquent qu'il faut que toutes les femmes reviennent pour faire des consultations postnatales, **à 6 jours et a 6 semaines après l'accouchement**. L'accoucheuse dit : « même si vous vous sentez bien, c'est quand-même important de revenir après l'accouchement pour les contrôles. On pourra vous donner des conseils et vérifier que tout se passe bien pour vous et le bébé. Si vous restez à la maison, peut-être qu'il y a un problème et personne ne pourra le déceler et vous soigner ».* *Quelques semaines après, un petit garçon vient au monde. Pendant les premiers jours, Adja se sent très fatiguée, mais elle se dit que cela doit être normal. **Le 5eme jour** après l'accouchement, elle se rappelle des informations données par les prestataires, c'est-à-dire qu'il faut se rendre au CSPS pour un contrôle **le 6eme jour**. Elle décide d'en parler à son mari, Djibril. Au début, il est un peu hésitant : « Tu sais que chez nous normalement la mère et le bébé doivent rester à la maison pendant la première semaine, et qu'ils ne peuvent sortir qu'après le baptême ! ». Mais après les explications de Adja, il donne son accord : « Tu as raison, je crois que c'est mieux de suivre le conseil des agents de santé. Demain on ira ensemble au CSPS. Cela ne gênera en rien les plans prévu pour le baptême».* *Donc, **le 6eme jour** après l'accouchement, ils partent ensemble à la consultation. L'accoucheuse remarque qu'Adja présente des signes d'un **manque de fer**. L'examen le confirme. Cela explique pourquoi elle se sentait aussi fatiguée. On lui donne des comprimées. Le jour après, le baptême de l'enfant se passe bien. Adja prend ses comprimées chaque jour et recommence petit à petit à récupérer ses forces. La 6eme semaine, elle repart pour **la deuxième** consultation postnatale. Les prestataires disent qu'elle s'est désormais bien rétablie, et que l'enfant aussi est en bonne santé. Quand Djibril est informé, il est beaucoup soulagé.*	**Quel est le conseil que la sage-femme a donné à la femme, après l'accouchement, et pourquoi?** **Est-ce que, la femme avait été bien informée sur ce qu'il fallait faire après l'accouchement pour s'assurer de rester en bonne santé ?** **Pour quelle raison l'homme était d'abord hésitant à ce que sa femme parte à la consultation? Comment est-ce qu'il a fini par changer d'opinion?** **En observant ce couple, qu'est-ce que vous remarquez? Comment est la communication entre ces deux conjoints ?** **<u>Qu'est-ce qui a fait que cette histoire s'est bien terminée ?</u>**	On lui a conseillé de revenir pour faire des consultations de contrôle à 6 jours et a 6 semaines après l'accouchement. Oui, elle disposait d'assez d'informations correctes. Parce qu'il se sentait lié à la tradition de sa famille. (sortir après le baptême c.-à-d. 7 jours après la naissance). Il a changé d'opinion grâce aux explications de sa femme. Il y a eu un bon niveau de communication et coopération entre les conjoints. <u>La disponibilité d'informations correctes chez le couple, et aussi la bonne communication.</u>

3) **QUESTIONS SUPPLEMENTAIRES POUR APPROFONDIR LA DISCUSSION** :

SI LE TEMPS LE PERMET et les participants ont envie de continuer la discussion, l'animateur peut utiliser les questions suivantes pour animer le débat :

- *« Qui est-ce que dispose de plus d'information sur les questions sante de la famille, c'est l'homme ou plutôt la femme ?*
- *Pourquoi est-ce que souvent l'homme ne participe pas activement dans tout ce qui concerne la santé de la femme et du nouveau-né ?*
- *Pourquoi pensez-vous qu'il y a un manque de communication entre certains conjoints?*
- *Avez-vous des suggestions sur comment on pourrait essayer d'impliquer les hommes dans le domaine des soins de maternité ? »*

4) **MESSAGE CLÉ :**

L'animateur résume les discussions avec le message clé qui **devrait sortir des 3 scenarios** proposés, et invite les participants **à prendre un RDV pour le counseling de couple** :

MESSAGE CLÉ :

« Pour qu'un couple puisse être bien préparée pour vivre avec sérénité la période de la grossesse, de l'accouchement et après, ***deux éléments sont essentiels : un bon niveau d'INFORMATION, et une bonne COMMUNICATION entre les conjoints.***

La ***COMMUNICATION*** *se gère entre le couple, cas par cas à votre guise.*

Mais, pour ce qui concerne les ***INFORMATIONS*** *à donner,* ***nous, agents de santé, pouvons vous aider****.*

C'est dans ce cadre *que nous voudrions vous inviter à revenir au CSPS la semaine prochaine, avec votre femme, pour* ***une séance de counseling de couple****. C'est-à-dire, on va vous donner un rendez-vous un jour et à une heure qui vous convient, et à cette occasion on pourra vous donner plus de renseignements et conseils sur* ***comment promouvoir la bonne santé de la mère et du nouveau-né****.*

Après ce rdv, on va vous inviter encore une fois à échanger avec nous ici, ***au moment de libérer votre femme après l'accouchement*** *»*

5) **PRISE DES RDV POUR LE COUNSELING DE COUPLE** :

L'animateur conclut la rencontre, remercie encore une fois les participants et prend les rdv pour le counseling de couple avec chacun. En venant, il rappelle que le couple doit **amener le Carnet de Santé de la femme**. Au moment de la prise du rdv, il remet les 1000 CFA au participant.

Projet de recherche « Participation des hommes aux soins de santé maternelle au Burkina Faso »:

AIDE-MEMOIRE POUR LE COUNSELING

Guide pour l'utilisation de l'aide-memoire

L'outil contient des **sujets avec un seul symbole** GR et d'autres avec **un seul symbole** PP **:**

- Abordez les sujets GR **seulement** pendant la grossesse (counseling de couple)
- Abordez les sujets PP **seulement** dans le postpartum (sixième heure)
- Pour tous ces sujets, donnez **seulement les informations encadrées!**

L'outil contient aussi **5 SUJETS CLÉ** avec les deux symboles GR et PP :

- Il faut aborder ces sujets **pendant la grossesse ET dans le postpartum!**
- Prenez **un peu plus de temps** sur ces Sujets Clé.

N. B. : Chaque séance de counseling **ne devrait pas dépasser 30-40 minutes.**

Adaptez le choix des sujets à aborder **en fonction des exigences du couple** devant vous.

L'outil est conçu pour être utilisé **de façon interactive**: par exemple, demandez au couple « *qu'est-ce que vous voyez dans cette image?* », pour stimuler leur intérêt.

Une grossesse saine et heureuse

GR

Une grossesse saine et heureuse

Pendant la grossesse, un **mode de vie sain** est importante pour:

- La santé de la mère
- La bonne croissance du foetus
- Une bonne préparation à l'accouchement.

La femme **peut se fatiguer beaucoup** pendant la grossesse, donc il faut:

- Eviter le stress, les travaux durs et de soulever des poids lourds
- L'exercice physique modéré est conseillé, mais la femme a aussi besoin de repos

Les **maladies infectieuses** peuvent nuire a la santé de la mère et du bébé, donc il faut:

- Utiliser une moustiquaire imprégnée
- Observer des normes d'hygiene de vie et du milieu
- Eviter de s'exposer aux rapports sexuels a risque

L'importance d'une **alimentation saine et variée** chez la femme enceinte est très importante.

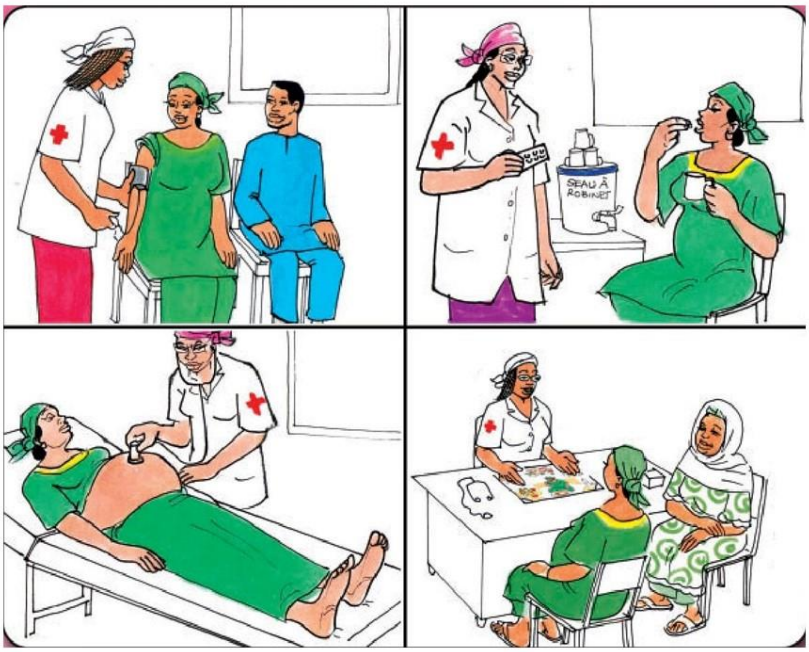
En particulier, il est important qu'elle consume beaucoup d'aliments:

- riches en fer : feuilles vertes, foie,
- riches en acide folique (feuilles vertes)
- riches en vitamines C (par exemples, fruits, tomates, poivrons verts)
- bonnes sources de protéines : haricot, viande, poisson, éphémères, chenilles

Tabous alimentaires: Aucun aliment n'est interdit à la femme enceinte en dehors des substances nocives telles que l'alcool, le tabac, etc.

Il faut éviter de consommer les **produits et les médicaments** qui n'ont pas été conseillés par l'agent de santé.

L'importance des Consultations Prénatales



GR L'importance des Consultations Prénatales

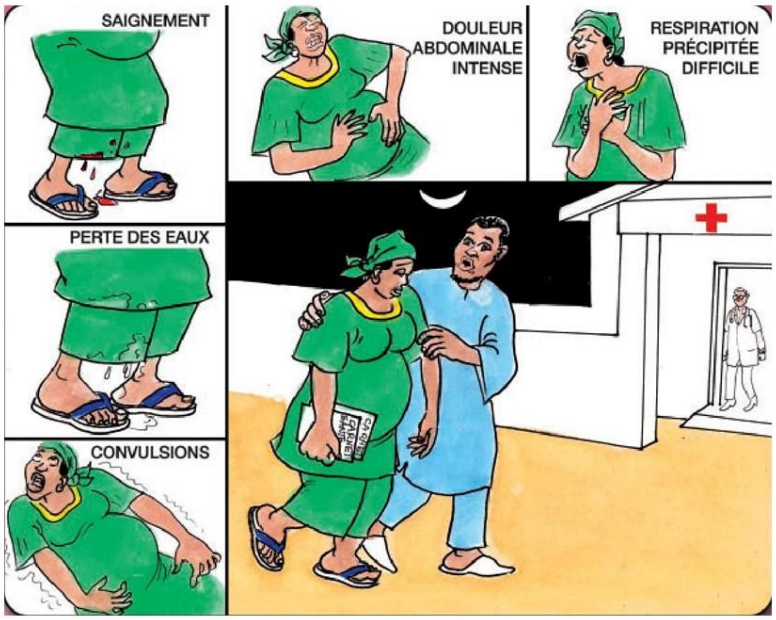
Quels sont les **avantages de faire la CPN** et respecter le calendrier des CPN?

- Confirmation de la grossesse: il faut se faire consulter dès qu'on a un retard de règles
- Consultation et examens pour vérifier que la grossesse se déroule sans problèmes
- Identification et prise en charge des signes morbides et de danger de la grossesse ;
- Conseils et soins préventifs du paludisme et d'autres maladies
- Offre de dépistage du VIH et PTME (Prévention de la transmission mère-enfant du VIH)

Il est important de se rendre au CSPS pour la CPN aux **dates de rendez-vous** fixées par l'agent de santé:

- Un nombre **minimum de quatre CPN**: 1er trimestre; 2ème trimestre; 3ème trimestre, et 2 semaines avant l'accouchement
- Immédiatement en cas de signes d'alerte ou de danger
- N'oubliez pas le carnet de santé!

Les signes de danger de la grossesse



GR

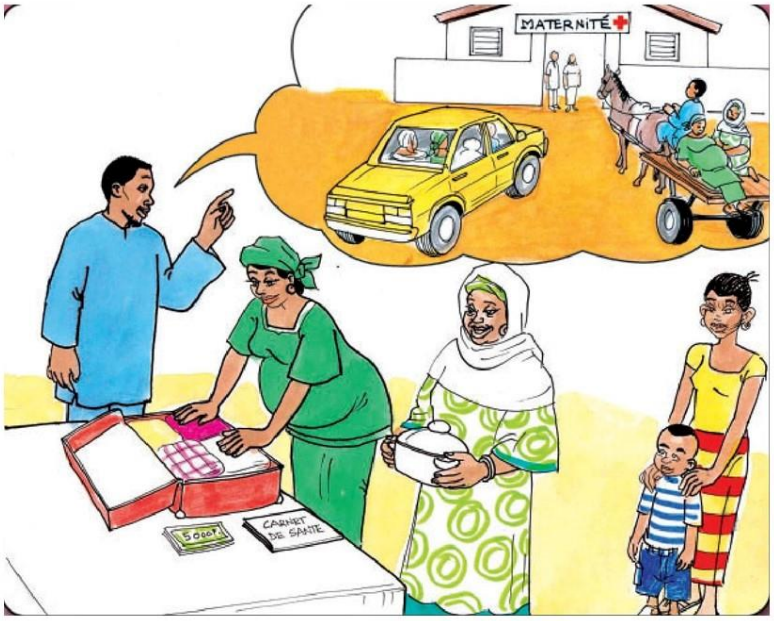
Les signes de danger de la grossesse

Il faut prêter attention aux **signes de danger** suivants, que peuvent se présenter pendant la grossesse:

- Une fièvre
- Des maux de tête et vertiges sévères associés à une vision floue
- Un saignement vaginal
- Une douleur abdominale intense
- Une respiration précipitée ou difficile
- La perte des eaux
- Les doigts, le visage et les jambes enflés
- Des convulsions
- L'enfant ne bouge pas plus comme avant dans le ventre, ou ne bouge pas de tout.

Dès que vous présentez l'un des signes évoqués ici, **rendez vous SANS ATTENDRE à la structure de santé la plus proche**, de jour comme de nuit, ou qu'on vous y accompagne.

Le plan d'accouchement



GR

Le plan d'accouchement

À chaque consultation au centre de santé, il faut réexaminer le **plan d'accouchement**.

Ce plan pourra être modifié si des complications apparaissent.

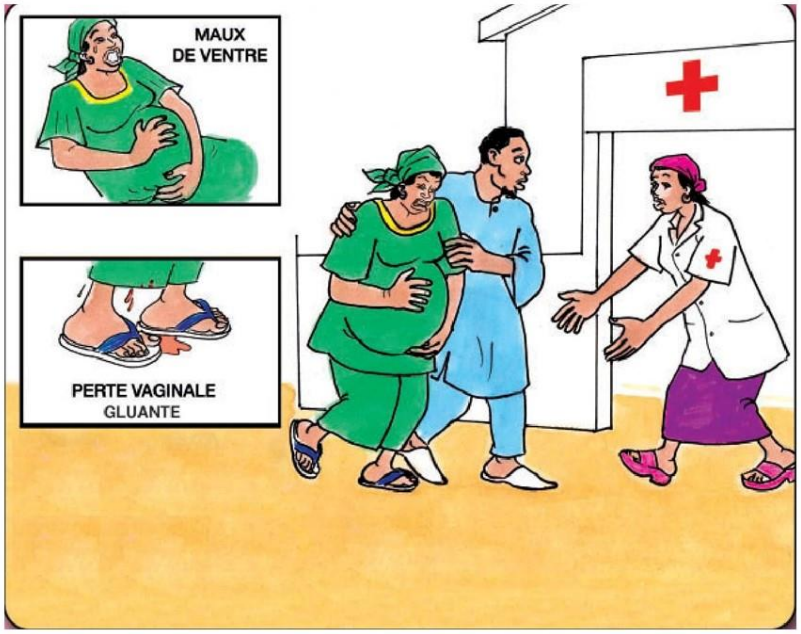
Eléments à prendre en compte pour planifier un accouchement :

- Lieu d'accouchement le plus approprié
- Moyen de transport
- Coût de l'accouchement dans une structure de santé et comment payer
- Economies à faire pour faire face à ces dépenses
- Soutien et accompagnement pendant le travail et l'accouchement
- Dispositions à prendre pour le bon fonctionnement de la maison pendant l'absence

Ce qu'il faut **emporter** :

- Le carnet de santé
- Au moins 5 pagnes propres
- Des protections hygiéniques
- Des vêtements propres pour elle-même et pour le bébé
- De quoi manger et de l'eau y compris pour l'accompagnant
- Du savon et de l'eau de Javel.

Reconnaître les signes de travail



GR

Reconnaître les signes de travail

Les **signes de travail**:

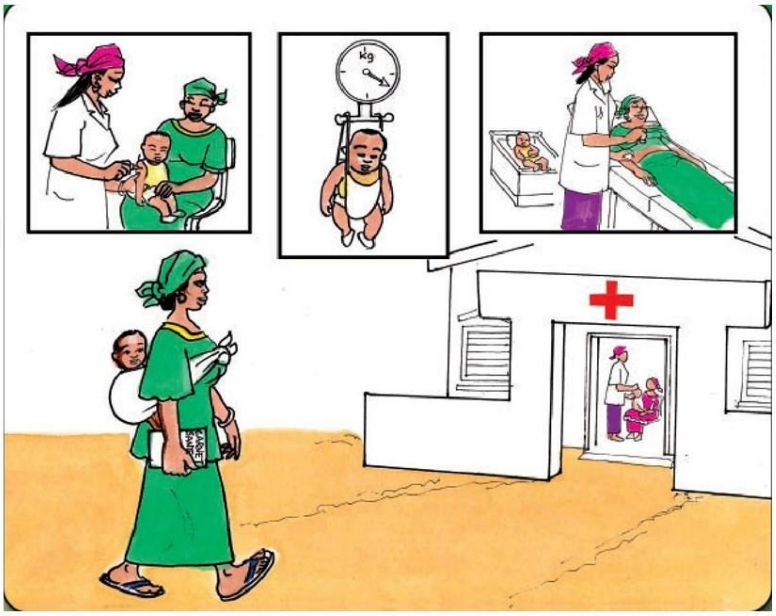
- Maux de ventre de plus en plus intenses et rapprochés
- Pertes vaginales sanguinolantes

Dispositions à prendre :

- Rassembler les éléments du plan d'accouchement
- Amener le carnet de santé

Dès que vous avez un des signes ci-dessus, **rendez-vous sans attendre au centre de santé** ou hôpital le plus proche, accompagnée d'un membre de la famille.

L'importance des Consultations Postnatales



GR PP

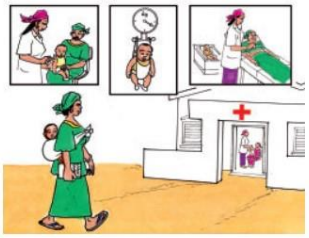
SUJET CLÉ 1: L'importance des Consultations Postnatales

Après l'accouchement, il est important que la mère et le bébé se rendent au centre de santé pour des visites, **même si l'on se sent bien**.

Ca permet de surveiller l'état de santé de la mère et du bébé.

Quels sont les **avantages de faire les consultations postnatales** et respecter le calendrier?

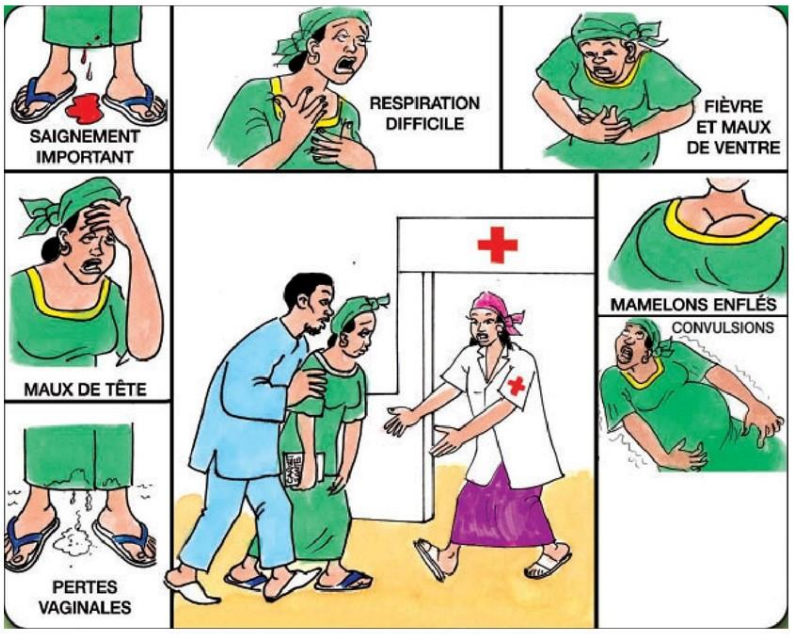
- Dépistage de certaines anomalies
- Conseils en matière de nutrition
- Conseils et services de planification familiale
- Conseils pour bien mener l'Allaitement Maternel Exclusif
- Vaccination de l'enfant contre plusieurs maladies selon le calendrier vaccinal
- Suivi de la croissance de l'enfant
- Conseils pour la prévention du paludisme
- Supplémentation en vitamine A et en fer au besoin.



Il faut se rendre au CSPS aux dates de rendez-vous fixées par l'agent de santé:

- Un nombre minimum de 2 visites: **1ère visite le 6me jour après la naissance, 2ème visite le 42ème jour**
- Immédiatement en cas de signes d'alerte ou de danger
- Ne pas oublier le carnet de santé!

Signes de danger après l'accouchement chez la mère



PP

Les signes de danger après l'accouchement chez la mère

Quels sont les **signes de danger chez la mère** après l'accouchement ?

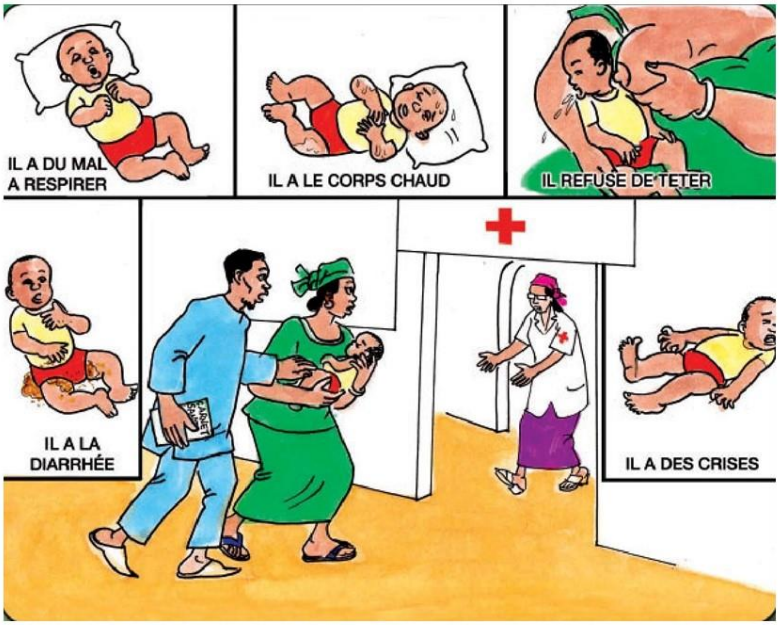
Les signes suivants représentent un danger pour vous si vous avez accouché récemment:

- vous saignez beaucoup
- vous respirez difficilement ou rapidement
- vous avez le corps très chaud et avez très mal au ventre
- vous avez des maux de tête persistants accompagnés de troubles de la vision
- vous avez les seins ou mamelons enflés, rouges ou sensibles
- vous avez du mal à uriner
- vous avez du mal à retenir vos urines
- vous avez des pertes vaginales qui sentent mauvais
- vous avez les mains, les pieds et le visage enflés.

Que faire devant ces signes de danger ?

- **Il faut vous rendre immédiatement, a l'etablissement de santé le plus proche, SANS ATTENDRE**, de jour comme de nuit
- Demandez qu'on vous y accompagne par mesure de sécurité
- N'oubliez pas votre carnet de santé!

Les signes de danger pour le nouveau-né



PP

Les signes de danger pour le nouveau-né

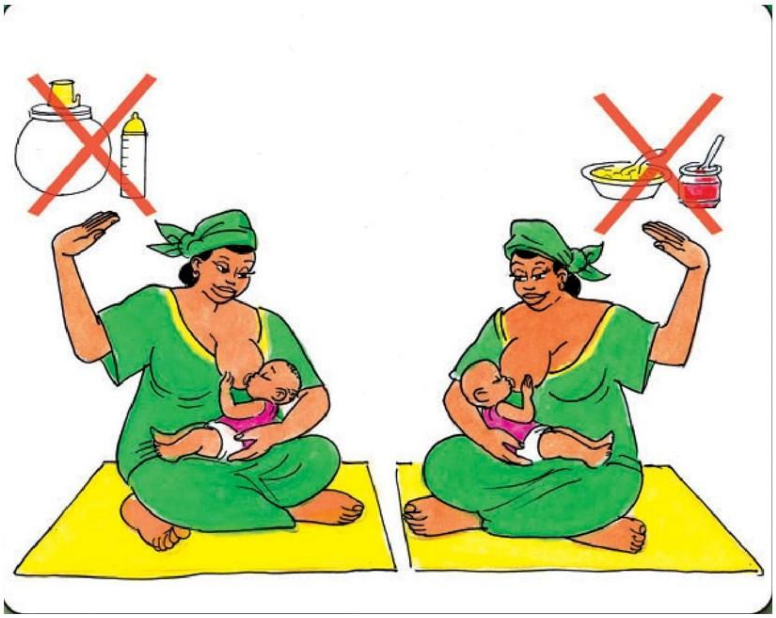
Quels sont les **signes de danger chez l'enfant** et quand consulter?

- il a du mal à respirer
- il a le corps chaud
- il a le corps froid
- il a la fontanelle bombée
- il refuse de téter ou vomit tout ce qu'il tète
- il a de la diarrhée et/ou du sang dans les selles
- il a l'ombilic rouge, irrité avec du pus ou du sang
- il a les yeux ou la peau jaune
- il a le ventre gonflé (ballonnement)
- il est mou (léthargique)
- il a des crises (convulsions).

Que faut-il faire devant un de ces signes ?

- **Amenez le bébé a l'etablissement de santé le plus proche, SANS ATTENDRE**, de jour comme de nuit
- N'oubliez pas le carnet de santé et la fiche de vaccination.

L'allaitement maternel exclusif



GR PP

SUJET CLÉ 2: L'allaitement maternel exclusif

L'allaitement au sein présente de **nombreux avantages**:

POUR L'ENFANT

- Le premier lait (celui qui est jaune) est nutritif, protège votre bébé et lui permet de rester en bonne santé.
- Le lait maternel contient exactement l'eau et les nutriments dont le corps de l'enfant a besoin pour grandir et se développer jusqu'à 6 mois
- Le lait maternel est facile à digérer pour le bébé

POUR LA MÈRE

- La tétée diminue le saignement après accouchement.
- L'allaitement maternel exclusif permet de retarder une nouvelle grossesse.

POUR LA FAMILLE

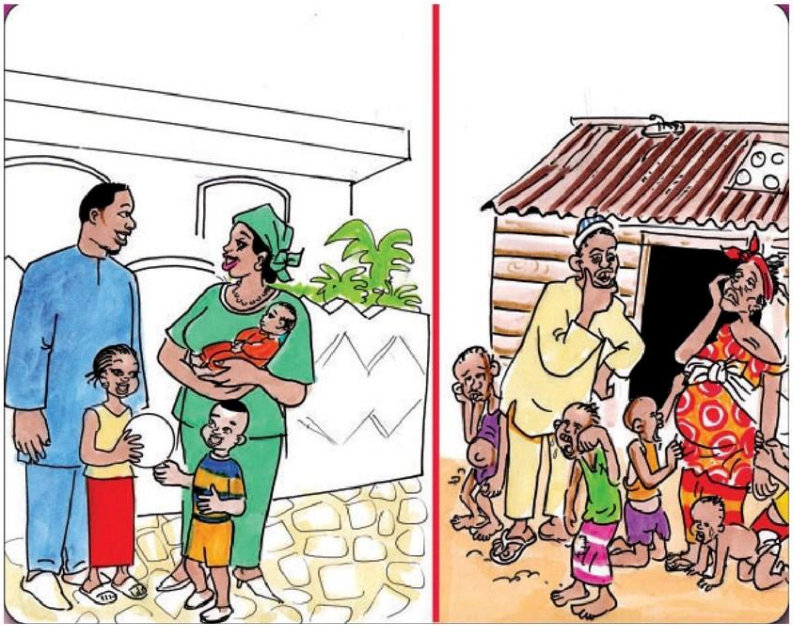
- Le lait maternel est gratuit et sûr
- La tétée renforce le lien affectif entre la mère et l'enfant
- Le lait maternel ne nécessite pas de préparation

Pendant les six premiers mois, l'enfant n'a besoin de RIEN D'AUTRE que de lait maternel – ni eau, ni les tisanes, ni lait d'une autre nature, ni céréales, ni beurre, ni thé, ni miel, ni huile de palme, ni jus de fruits.

Suggestions pour un allaitement exclusif au sein réussi:

- Mettez-le bébé au sein **dans la demi-heure qui suit la naissance**.
- **Donnez-lui le premier lait** (le colostrum). Il est nutritif, protège votre bébé et lui permet de rester en bonne santé.
- Allaitez votre bébé de jour comme de nuit, au moins huit fois dans la journée, **aussi souvent et aussi longtemps qu'il le souhaite**.
- A chaque tété, laissez le bébé vider le premier sein avant de lui donner le second. A la tété suivante, commencez par le deuxième sein si celui-ci n'a pas été vidé.
- La tétée favorise la production de lait. Plus il tète, plus vous produisez de lait.
- Pendant que vous allaitez, buvez beaucoup d'eau propre, mangez sainement et reposez-vous dès que vous pouvez.
- La nuit, faites dormir votre bébé près de vous pour pouvoir l'allaiter.
- Seuls les médicaments prescrits par l'agent de santé peuvent etre donnés à l'enfant.
- Lavez-vous les mains à l'eau et au savon avant chaque tétée.
- Lavez-vous tous les jours et portez des sous-vêtements propres.

Une famille heureuse et prospère



GR PP

SUJET CLÉ 3: Une famille heureuse et prospère

Demandez au couple de décrire les images:

Que voyez vous sur l'image a gauche? Quels sont les différences entre cette famille et celle dans l'image a droite?

*Qu'est-ce que vous observez en rapport avec **l'âge des enfants** ?*

Un bon **espacement entre les naissances** conduit a la bonne santé et a la prosperité de la famille.

- Ça signifie qu'il y a **au moins trois ans entre chaque naissance**
- Le couple attend **au moins 2 ans avant de chercher une autre grossesse**

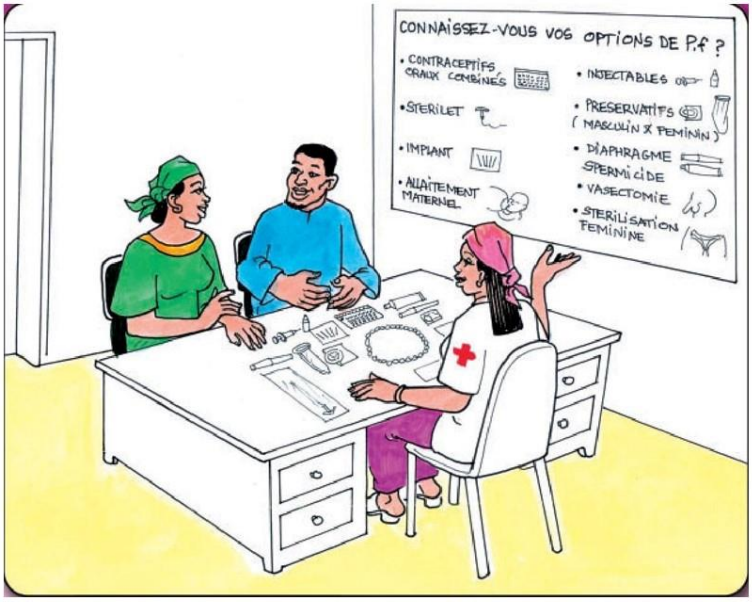
- L'espacement des naissances accorde à la mère le temps de se reposer
- Ceci favorise que ces enfants naissent en bonne santé.

Il est souhaitable de commencer déjà a échanger, au sein du couple, pour **décider si vous souhaitez un autre enfant, et, si c'est le cas, combien de temps vous souhaitez attendre** après cet accouchement.

Questions a poser au couple:

- *Combien d'enfants avez-vous ? Apres l'enfant que vous portez/la naissance du dernier enfant, voulez-vous avoir d'autres enfants ?*
- *Voulez-vous éviter une grossesse après l'accouchement ?*
- *Si vous voulez avoir d'autres enfants, combien de temps souhaiterez-vous attendre?*

La fertilité
après
l'accouchement



GR PP SUJET CLÉ 4: La fertilité après l'accouchement

- **Le moment de la reprise des relations sexuelles** apres l'accouchement est **un choix personel**, il n'y a pas de regle
- Avoir des relations sexuelles lors que l'enfant est petit **ne nuit pas a sa santé et ne gate pas le lait**
- Mais, **il est essentiel de communiquer et de negocier** le moment de la reprise au sein du couple pour s'assurer que tous les deux se sentent a l'aise

ATTENTION! Il est **possible d'avoir une nouvelle grossesse meme avant que les regles soient revenues!**

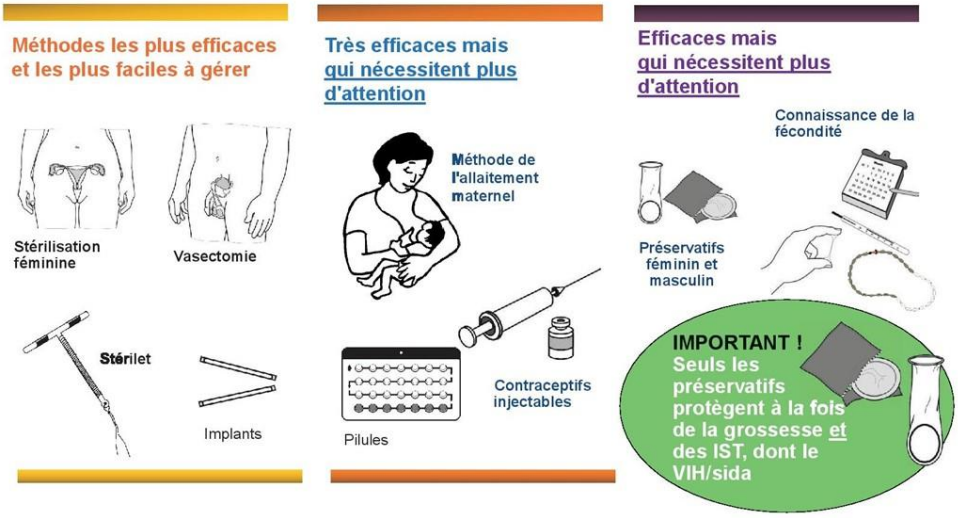
- Pour eviter une grossesse rapprochée, il est pourtant important de **commencer une méthode contraceptive avant de reprendre les relations sexuelles**

- Le risque de transmettre les IST/SIDA a la femme, et donc potentiellement a l'enfant, est plus haut pendant la grossesse et apres l'accouchement: en cas de risque, il faut s'assurer d'avoir des **rapports protegés** (avec preservatif)

Quels-que soient vos exigences, nous pouvons vous donner des **renseignements sur la planification familiale** pour vous aider a obtenir l'espacement entre les naissances et la taille de famille que vous souhaitez.

Les méthodes contraceptives commences apres l'accouchement, si prises selon les critères etablies, **ne nuient pas a la santé de l'enfant, ni a la sante de la mère, ni changent la qualité ou quantité du lait** maternel.

Quelles méthodes contraceptives peut-on utiliser après l'accouchement?



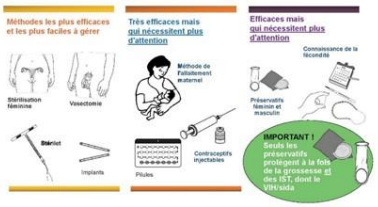
GR PP

SUJET CLÉ 5: Quelles méthodes contraceptives peut-on utiliser après l'accouchement?

Plusieures méthodes contraceptives peuvent etre utilises après l'accouchement:

- Certaines sont plus efficaces que d'autres.
- Certaines sont plus faciles à utiliser que d'autres.
- Les méthodes plus difficiles à utiliser sont parfois moins efficaces si elles ne sont pas utilisées correctement.

N. B. Utiliser les échantillons des méthodes pour faire le counseling!



Questions a poser pour faciliter le choix d'une méthode:

- *Quelles méthodes connaissez-vous*?
- *Y a-t-il une méthode que vous souhaiteriez utiliser ? Qu'est-ce qui vous plaît dans cette méthode ?*
- *Avez-vous déjà utilisé une méthode de contraception ?*
- *Avez-vous des inquiétudes vis-à-vis la possibilité d'avoir d'autres enfants dans le futur?*
- *Avez-vous des inquiétudes vis-à-vis des IST ou du VIH/sida ?*
- *Avez-vous des problèmes de santé ?*

La Planification Familiale:
Méthodes contraceptives et tableaux de reference

La méthode d'allaitement maternel et aménorrhée (MAMA)

La méthode d'allaitement maternel et aménorrhée (MAMA)

Ce que c'est:

- L'allaitement maternel est l'une des façons de prévenir la grossesse.
- Empêche l'ovulation.

Apres l'accouchement:

- Commencer a allaiter l'enfant aussitôt que possible après l'accouchement
- Allaiter souvent, jour et nuit, sans donner aucune autre nourriture solide ou liquide. Eviter meme de donner de l'eau ou des tisanes (allaiter exclusivement)
- Si vous commencez a donner de l'autre nourriture solide ou liquide au bébé, si vos règles reviennent, ou si votre enfant a plus de 6 mois, cette méthode ne sera pas plus efficace.

Ce qui arrive:

- Absence de règles (C'est une condition pour continuer d'utiliser la méthode).

Retour de la fertilité:

- L'utilisation de la méthode ne retarde pas le retour de la fécondité, une fois que une ou plus conditions d'utilisation de la méthode ne sont plus respectées.

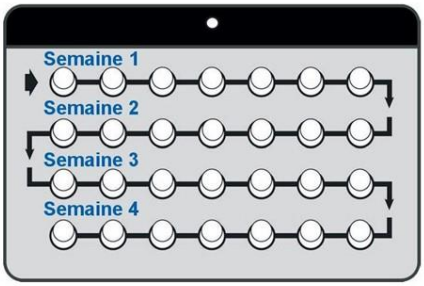
À retenir:

- Très efficace pendant 6 mois après l'accouchement en cas d'allaitement exclusif.
- Préparez-vous à utiliser une autre méthode au bout de 6 mois, ou même avant si les règles reviennent ou vous arrêtez d'allaiter exclusivement.
- La méthode vous permette au meme temps de bien nourrir l'enfant.

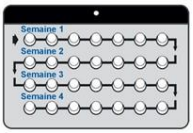
Attention:

Cette méthode ne protège pas des IST ou du VIH/SIDA! En cas de risque, utilisez aussi un préservatif masculin ou féminin.

La pilule minidosée



La pilule minidosée



Ce que c'est:

- C'est une pilule qui contient une hormone, à prendre tous les jours. Cette pilule est particularment indiquée pour les femmes qui allaitent.
- Elle empêche la rencontre du spermatozoïde et de l'ovule.

Après l'accouchement:

- On peut commencer 6 semaines après l'accouchement. Si vous n'allaitez pas au sein, vous pouvez commencer immédiatement après l'accouchement.
- Prendre une pilule chaque jour à la même heure.
- Lorsque la boîte de pilules est finie, en entamer une nouvelle le lendemain.

En cas de retard dans la prise de la pilule, quand la femme allaite :

- Prendre la pilule dès que possible et continuer à la prendre.

En cas de retard dans la prise de la pilule, quand la femme n'allaite pas :

- Si vous prenez la pilule avec plus de 3 heures de retard, utilisez le préservatif pendant les 2 jours suivants et continuez à prendre la pilule.

Retour de la fertilité:

- L'utilisation de la pilule ne retarde pas le retour de la fécondité une fois que la femme arrête de la prendre.

Ce qui peut arriver quand la femme n'allaite pas:

- La modification des règles (règles irrégulières, saignotements, règles plus abondantes ou absence de règles) est courante et sans gravité.

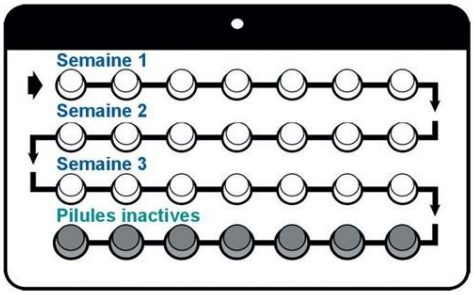
À retenir:

- Il faut prendre une pilule chaque jour à la même heure.
- Assurez-vous d'avoir suffisamment de pilules. Réapprovisionnez-vous avant d'en manquer.
- Pensez à la méthode que vous utiliserez quand vous n'allaiterez plus.

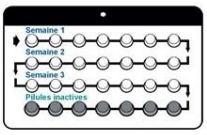
Attention:

Cette méthode ne protège pas des IST ou du VIH/sida! En cas de risque, utilisez aussi un préservatif masculin ou féminin.

La pilule combinée



La pilule combinée



Ce que c'est:

- C'est une pilule qui contient des hormones, à prendre tous les jours.
- Elle empêche l'ovulation et la rencontre du spermatozoïde et de l'ovule.

Apres l'accouchement:

- Pendant les premiers 6 mois, si vous allaitez, la pilule mini-dosée est plus indiquée.
- En cas d'allaitement, la pilule combine peut etre utilise a partir de 6 mois après l'accouchement
- Si vous n'allaitez pas au sein, vous pouvez commencer cette pilule 6 semaines après l'accouchement.
- Prendre une pilule par jour.
- Lorsqu'on finit une boîte de pilules, il faut en entamer une nouvelle le lendemain.

Ce qui peut arriver:

- Parfois, saignements irréguliers, dans un premier temps, suivis de règles moins abondantes et d'une diminution des crampes.
- Certaines femmes ont des embarras gastriques ou de légers maux de tête, qui disparaissent au bout de quelques mois.

En cas d'oubli:

- Il faut prendre la pilule dès que possible.
- On peut prendre 2 pilules à la fois.
- En cas d'oubli pendant plus de 2 jours consécutifs, utiliser le préservatif pendant 7 jours et continuer à prendre la pilule. En cas d'oubli au cours de la 3e semaine, NE PAS prendre les pilules inactives et entamer une nouvelle boîte.

Retour de la fertilité:

- L'utilisation de la pilule ne retarde pas le retour de la fécondité une fois que la femme arrête de la prendre.

À retenir:

- Il faut prendre une pilule par jour.
- Assurez-vous d'avoir assez de pilules.
- Réapprovisionnez-vous avant d'en manquer.

Attention:

Cette méthode ne protège pas des IST ou du VIH/sida! En cas de risque, utilisez aussi un préservatif masculin ou féminin.

Les contraceptifs injectables

Les contraceptifs injectables

Ce que c'est:

- C'est une injection d'hormones
- Elle empêche l'ovulation.

Après l'accouchement:

- En cas d'allaitement maternel, on peut commencer 6 semaines après l'accouchement
- Si on n'allaite pas, immediatement apres l'accouchement
- Injection tous les 2 mois (NET-EN) ou tous les 3 mois (DMPA)
- Plus efficace si les injections sont faites à temps.

En cas de retard dans les injections :

- DMPA : Il est encore possible de faire une injection jusqu'à 4 semaines de retard
- NET-EN : Il est encore possible de faire une injection jusqu'à 2 semaines de retard
- En cas de retard plus long, utiliser le préservatif et revenir pour une injection le plus tôt possible.

Retour de la fertilité:

- Il faut attendre plusieurs mois en moyenne avant de pouvoir tomber enceinte après avoir arrêté de prendre les injectables à progestatifs seuls.

Ce qui peut arriver:

- Règles irrégulières, dans un premier temps, puis saignements ou absence de règles. Ces effets sont courants et sans gravité.
- Légère prise ou perte de poids éventuelle.
- Certaines femmes ont des embarras gastriques ou de légers maux de tête, qui disparaissent au bout de quelques mois.

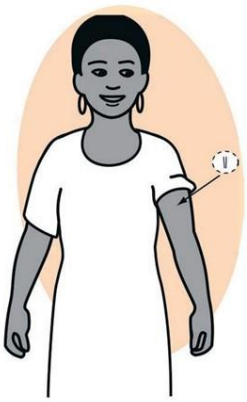
À retenir:

- N'entraîne pas de stérilité.
- Les injections doivent être faites à temps.

Attention:

Cette méthode ne protège pas des IST ou du VIH/sida! En cas de risque, utilisez aussi un préservatif masculin ou féminin.

Les implants



Les implants

Ce que c'est:

- Ce sont de petits tubes, placés sous la peau, sur la face intérieur du haut du bras.
- Les hormones contenues dans les tubes empêchent l'ovulation et la rencontre du spermatozoïde et de l'ovule.

Après l'accouchement:

- L'implant peut être posé 6 semaines après l'accouchement en cas d'allaitement
- Si vous n'allaitez pas au sein, l'implant peut être pose immédiatement après l'accouchement
- Les implants doivent être posés et retirés par un prestataire qualifié.
- Il n'y a rien à se rappeler après la pose.

Durée et retour de la fertilité:

- L'implant protége de la grossesse pendant 5-7 ans pendant qu'il est en place (5 – Jadelle, 7 – Norplant)
- Les implants ne retardent pas le retour de fécondité d'une femme, une fois qu'ils sont retirés.

Ce qui peut arriver:

- La modification des règles (règles irrégulières, saignotements, règles plus abondantes ou absence de règles) est courante et sans gravité.

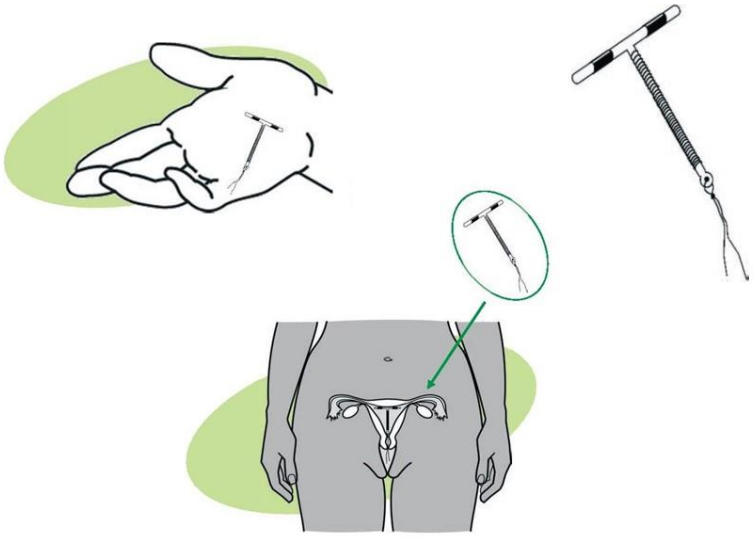
À retenir:

- Si vous attendez un rendez-vous pour vous faire poser des implants, utilisez une autre méthode pendant ce temps.

Attention:

Cette méthode ne protège pas des IST ou du VIH/sida! En cas de risque, utilisez aussi un préservatif masculin ou féminin.

Le DIU/ stérilet



Le DIU/stérilet

Ce que c'est:

- C'est un petit dispositif en plastique souple, en forme de "T", équipé d'un fil de cuivre, placé dans l'utérus.
- Empêche la rencontre du spermatozoïde et de l'ovule.

Après l'accouchement:

- Peut être posé juste après l'accouchement (entre 48 heures), ou bien à partir de quatre semaines après l'accouchement, ou encore à tout autre moment en dehors de la grossesse.
- Le stérilet doit être posé et retiré par un prestataire qualifié.
- Il n'y a rien à se rappeler après la pose.

Durée et retour de la fertilité:

- Tant qu'il est en place, le DIU au cuivre est efficace pour prevenir la grossesse pendant 10 ans. Le DIU au levonorgestrel est efficace pendant 5 ans.
- Une femme peut tomber enceinte une fois le DIU retiré tout aussi rapidement qu'une femme qui n'a jamais utilisé un DIU.

Ce qui peut arriver:

- Quelques crampes et des règles plus abondantes pendant les premiers mois.

À retenir:

- Si vous attendez un rendez-vous pour vous faire poser un stérilet, utilisez une autre méthode pendant ce temps.

Attention:

Cette méthode ne protège pas des IST ou du VIH/sida! En cas de risque, utilisez aussi un préservatif masculin ou féminin.

Le préservatif masculin

Le préservatif masculin

Ce que c'est:

- C'est un fin capuchon en caoutchouc que l'on place sur le pénis en érection.
- Il empêche le sperme de pénétrer dans le vagin.

Comment l'utiliser:

- Mettre un préservatif neuf sur le pénis en érection avant chaque rapport sexuel.
- Après le rapport, le jeter à la poubelle ou dans une latrine.

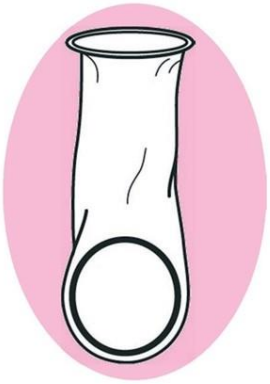
Ce qui peut arriver:

- Pas d'effets secondaires.

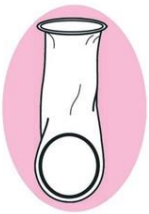
À retenir:

- Peut être utilisé en même temps que d'autres méthodes de planification familiale pour prévenir les infections sexuellement transmissibles, y compris à VIH.
- Il est important de l'utiliser correctement à chaque rapport sexuel.
- Il faut faire attention à ne pas déchirer le préservatif en le mettant ou en ouvrant l'emballage.
- Les deux partenaires doivent être d'accord de l'utiliser.
- En cas de rupture ou d'oubli du préservatif, il est possible d'avoir recours à la contraception d'urgence.

Le préservatif féminin



Le préservatif féminin



Ce que c'est:

- C'est une gaine en plastique que l'on insère dans le vagin avant le rapport sexuel.
- Il empêche le sperme de pénétrer dans le vagin.

Comment l'utiliser:

- Insérer un préservatif féminin neuf dans le vagin avant chaque rapport sexuel.
- Après le rapport, le jeter à la poubelle ou dans une latrine.

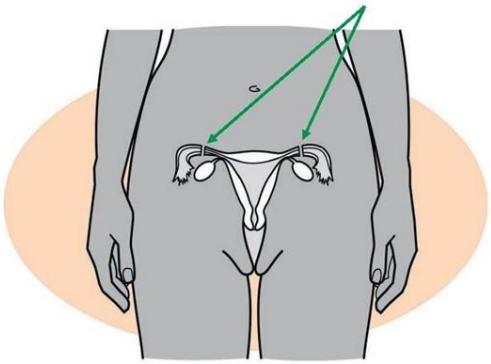
Ce qui peut arriver:

- Pas d'effets secondaires.

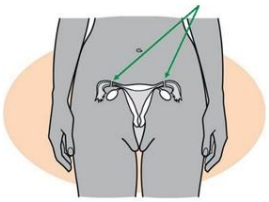
À retenir:

- Peut être utilisé en même temps que d'autres méthodes de planification familiale pour prévenir les infections sexuellement transmissibles, y compris à VIH.
- Il est important de l'utiliser correctement à chaque rapport sexuel.
- Il faut veiller à ce que le pénis entre dans l'anneau du préservatif et y reste pendant le rapport sexuel.
- Les deux partenaires doivent être d'accord de l'utiliser.
- Si le préservatif glisse ou n'est pas utilisé correctement, il est possible d'avoir recours à la contraception d'urgence.

La stérilisation féminine



La stérilisation féminine



Ce que c'est:

- Un prestataire qualifié pratique une ou deux petites incisions pour accéder aux canaux qui transportent les ovules vers l'utérus (les trompes).
- Il coupe ou bouche les trompes. Il n'enlève pas l'utérus.

Apres l'accouchement:

- La stérilisation est possible juste après l'accouchement, ou bien à partir de six semaines après l'accouchement, où encore à d'autres moments en dehors de la grossesse.

Aspects pratiques:

- Après l'opération, il n'y a rien à se rappeler et il n'y a pas d'effets secondaires.
- L'intervention ne nécessite pas d'anesthésie générale.
- Généralement, le retour à domicile est possible quelques heures après l'intervention.
- Douleurs possibles pendant quelques jours après l'intervention.
- Les règles ne seront pas modifiées.

Durée et retour de la fertilité:

- La méthode est permanente, et généralement pas réversible

Ce qui peut arriver:

- Quelques crampes et des règles plus abondantes pendant les premiers mois.

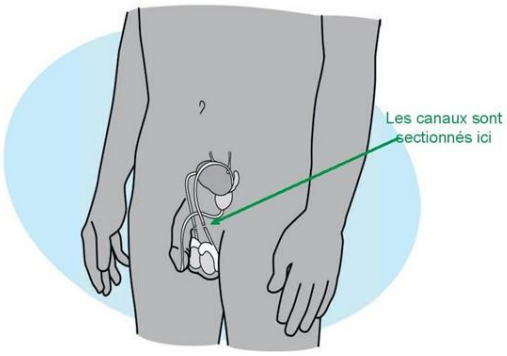
À retenir:

- Si vous attendez un rendezvous pour faire la sterilisation, utilisez une autre méthode pendant ce temps.

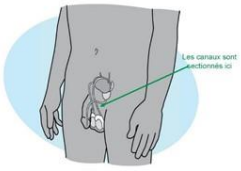
Attention:

Cette méthode ne protège pas des IST ou du VIH/sida! En cas de risque, utilisez aussi un préservatif masculin ou féminin.

La vasectomie



La vasectomie



Ce que c'est:

- Un prestataire qualifié pratique deux petites incisions pour accéder aux canaux qui transportent les spermatozoïdes.
- Il coupe les canaux. Il n'enlève pas les testicules.
- Après une vasectomie, le sperme ne contient plus de spermatozoïdes.

Apres l'accouchement:

- La vasectomie peut etre effectuee a tout moment.
- Idéalement, elle devrait etre effectue trois mois avant l'accouchement, car la vasectomie est efficace au bout de 3 mois.

Aspects pratiques:

- La vasectomie sera efficace au bout de 3 mois. En attendant, le couple doit utiliser une autre méthode.
- Au bout de trois mois, il n'y a plus rien à se rappeler.

Déroulement et ce qui peut arriver:

- L'intervention ne nécessite pas d'anesthésie générale.
- Généralement, le retour à domicile est possible quelques heures après l'intervention.
- Petits caillots sous la peau et douleurs possibles pendant quelques jours après l'intervention.

À retenir:

- Ne diminue ni la libido, ni l'érection, ni l'éjaculation.
- Méthode définitive.

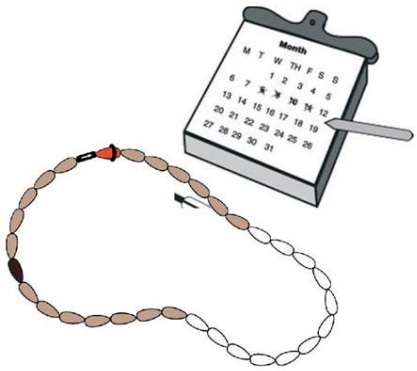
Durée et retour de la fertilité:

- La méthode est permanente, et généralement pas réversible

Attention:

Cette méthode ne protège pas des IST ou du VIH/sida! En cas de risque, utilisez aussi un préservatif masculin ou féminin.

La méthode des jours fixes
à l'aide d'un calendrier ou
d'un "collier du cycle"



La méthode des jours fixes
à l'aide d'un calendrier ou d'un "collier du cycle"

Ce que c'est:

- La méthode permet de savoir quels jours du mois vous pouvez tomber enceinte (jours fertiles).
- Il faut éviter les rapports sexuels ou utiliser un préservatif ces jours-là.

Comment l'appliquer:

- Utilisez un "collier du cycle" ou un calendrier pour compter les jours du cycle, en commençant le premier jour des règles.
- Vous pouvez tomber enceinte du 8e au 19e jour du cycle.
- Évitez les rapports sexuels non protégés ces jours-là.

Aspects pratiques:

- Il faut éviter les rapports sexuels ou utiliser un préservatif pendant 12 jours consécutifs chaque mois.
- Pas d'effets secondaires.

A retenir:

- Les deux partenaires doivent être d'accord d'éviter les rapports sexuels ou d'utiliser un préservatif les jours fertiles.
- Si les règles deviennent irrégulières, il vaut mieux choisir une autre méthode.

Attention:

Cette méthode ne protège pas des IST ou du VIH/sida! En cas de risque, utilisez aussi un préservatif masculin ou féminin.

Le retrait

Le retrait

Ce que c'est:

- L'homme retire son pénis du vagin de sa partenaire lorsqu'il sent qu'il va bientôt éjaculer, et éjacule en dehors.
- Le sperme ne pénètre pas dans le corps de la femme.

Apres l'accouchement:

- Cette methode peut etre utilise a tout moment

Aspects pratiques:

- Apprendre à appliquer correctement la méthode peut prendre du temps.
- Cette méthode n'est pas adaptée aux hommes qui éjaculent rapidement.

À retenir:

- Pour la plupart des gens, les autres méthodes protègent davantage de la grossesse.
- En cas d'éjaculation avant le retrait, il est possible d'avoir recours à la contraception d'urgence.

Attention:

Cette méthode ne protège pas des IST ou du VIH/sida! En cas de risque, utilisez aussi un préservatif masculin ou féminin.

La contraception d'urgence

La contraception d'urgence

Ce que c'est:

- Ce sont des pilules à prendre après un rapport sexuel non protégé pour éviter la grossesse.
- Empêche ou retarde l'ovulation.
- Ne provoque pas d'avortement.

Comment faire:

- À prendre jusqu'à 5 jours après un rapport sexuel non protégé.
- La méthode est plus efficace quand les pilules sont prises dès que possible après un rapport sexuel non protégé.

Retour de la fertilité:

- Les femmes qui prennent la CU devraient savoir qu'elles peuvent tomber enceintes la prochaine fois qu'elles ont des rapports sexuels, à moins qu'elles commencent à utiliser tout de suite une autre méthode de contraception.

Ce qui arrive:

- Parfois, nausées, vomissements, saignotements ou saignements vaginaux pendant quelques jours.

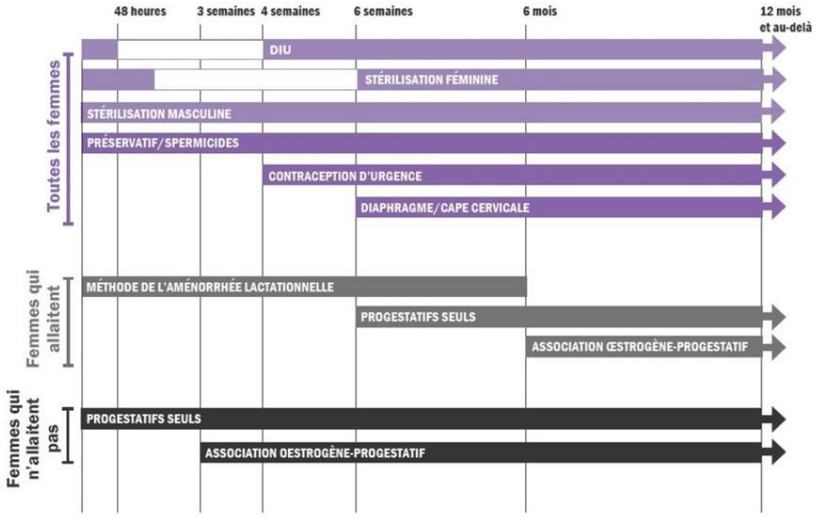
À retenir:

- Ne prévient pas la grossesse lors de rapports sexuels ultérieurs.
- La contraception régulière est plus efficace. Aimeriez-vous utiliser régulièrement une méthode contraceptive ?

Attention:

Cette méthode ne protège pas des IST ou du VIH/sida! Si vous risquez d'avoir été exposée aux IST ou au VIH, faites-vous soigner.

Quand peut-on commencer les méthodes après l'accouchement?



Questions à poser pour être relativement certain qu'une femme n'est pas enceinte

Les femmes qui n'ont pas leurs règles au moment de la visite peuvent toutefois commencer à utiliser une méthode hormonale (pilule, contraceptifs injectables ou pilule minidosée) IMMÉDIATEMENT.
Posez les questions ci-dessous pour être relativement certain que la personne n'est pas enceinte.

Si la cliente répond NON à TOUTES les questions, une grossesse n'est pas à exclure. Elle doit attendre jusqu'aux prochaines règles (et éviter les rapports sexuels ou utiliser le préservatif) ou subir un test de grossesse.	**Si la cliente répond OUI à une question AU MOINS, et si elle ne présente ni signes ni symptômes de grossesse*, proposez-lui une méthode.**

NON		OUI
	1. Vous avez accouché au cours des 6 derniers mois, vous allaitez exclusivement et vous n'avez pas eu de règles depuis ?	
	2. Vous n'avez pas eu de rapports sexuels depuis vos dernières règles ou votre dernier accouchement ?	
	3. Avez-vous accouché au cours des 4 dernières semaines	
	4. Vos règles ont-elles commencé au cours des 7 derniers jours ?	
	5. Avez-vous eu une fausse couche ou subi un avortement au cours des 7 derniers jours ?	
	6. Avez-vous utilisé systématiquement et correctement une méthode contraceptive fiable ?	

Signes de grossesse

Si une femme présente un retard de règles ou plusieurs autres signes, il se peut qu'elle soit enceinte. Essayez d'en avoir confirmation par un test de grossesse ou un examen clinique.	**Signes précoces**		**Signes plus tardifs**
	Retard de règles	Modification du poids	Augmentation du volume des seins
	Seins douloureux	Lassitude permanente	Mamelons plus foncés
	Nausées	Fluctuations de l'humeur	Pertes vaginales plus abondantes
	Vomissements	Modification des habitudes alimentaires	Augmentation de la taille de l'abdomen
	Urines plus fréquentes		Mouvements du fœtus

Questions fréquemment posées

Les méthodes de planification familiale rendent-elles stérile ?

- **NON -** Seules la stérilisation féminine et la vasectomie sont définitives
- Avec toutes les autres méthodes, les couples peuvent avoir un enfant peu après l'arrêt de la contraception
- Les couples qui n'ont jamais eu d'enfant peuvent recourir à la planification familiale sans risque et avoir un enfant peu après l'arrêt de la contraception

Les méthodes de planification familiale provoquent-elles le cancer ?

- **NON -** Certaines méthodes permettent même de prévenir certains cancers

Les méthodes de planification familiale provoquent-elles des malformations congénitales ?

- **NON** - Aucune méthode de planification familiale ne provoque des malformations congénitales même si elles sont utilisées pendant la grossesse

Quelle est la différence entre vasectomie et castration?

- La castration consiste à enlever les testicules. Dans la vasectomie, on ne touche pas aux testicules. On sectionne les canaux qui acheminent les spermatozoïdes, sans incidence sur la fonction sexuelle ou l'éjaculation.

Les méthodes de planification familiale font-elles grossir ?

- Certaines femmes qui utilisent des méthodes hormonales prennent du poids et d'autres en perdent. Ces changements sont en général faibles.

Les jeunes peuvent-ils utiliser une méthode de planification familiale sans danger ?

- **OUI** – Les jeunes peuvent utiliser les méthodes qui ne sont pas définitives puis avoir des enfants quand ils arrêtent la contraception.
- Toutes les personnes qui risquent de contracter une IST, y compris l'infection à VIH/sida, doivent utiliser le préservatif même si elles utilisent une autre méthode.

Ajouter les questions qui sont souvent posées dans votre communauté.

Situations particulières

VIH/sida:

- Séropositivité (sans sida) : toutes les méthodes peuvent être utilisées, sauf les spermicides.
- Traitement antirétroviral ou vivant avec le sida : la plupart des méthodes peuvent en général être utilisées. Orienter vers le centre de référence.
- Traitement antituberculeux : la plupart des méthodes peuvent en général être utilisées. Orienter vers un spécialiste.
- Le préservatif est recommandé pour éviter la transmission du VIH, même en cas d'utilisation d'une autre méthode.

Si une femme séropositive choisit d'allaiter, il faut lui conseiller :

- D'allaiter au sein exclusivement jusqu'à ce que son enfant ait 6 mois.
- Ensuite, de continuer à allaiter pendant 12 mois en ajoutant d'autres aliments.
- Arrêter l'allaitement lorsqu'une nourriture sûre est disponible en quantité suffisante.
- Les mères séropositives devraient recevoir les traitements antirétroviraux prophylactiques à vie pour réduire la transmission du VIH à travers le lait maternel selon les recommandations de l'OMS.

Hommes et femmes qui ne veulent plus d'enfants:

- Envisager une méthode definitive (stérilisation féminine ou vasectomie) et des méthodes de longue durée (stérilet, implant).

Âge de la personne:

- Personnes jeunes : toutes les méthodes peuvent être utilisées. Insister sur la protection contre les IST et le VIH/sida.
- Personnes plus âgées : toutes les méthodes peuvent être utilisées. Envisager les méthodes définitives et de longue durée.

Après un avortement:

- Toutes les méthodes peuvent être utilisées immédiatement après un avortement.
- En cas d'infection, attendre la guérison avant de poser un stérilet.

Après un viol:

- Si aucune méthode régulière n'est utilisée, recourir à la contraception d'urgence.
- Orienter vers un centre de référence pour des conseils sur les IST et le VIH/sida.

Prise de la pilule, de contraceptifs injectables et de la pilule minidosée en cas de problèmes de santé...

Demander à la personne si elle a de graves problèmes de santé.

- Si elle signale qu'elle a un problème, vérifier s'il figure dans la liste ci-dessous.
- Si c'est le cas, voyez quelles méthodes elle peut utiliser.

En cas d'**hypertension artérielle**
Elle ne peut pas prendre la pilule
Elle peut prendre des contraceptifs injectables ou la pilule minidosée

Si la personne **fume et a plus de 35 ans**
Elle ne peut pas prendre la pilule
Elle peut prendre des contraceptifs injectables ou la pilule minidosée

En cas de **graves maux de tête** à répétition, souvent d'un seul côté et/ou pulsatiles, qui provoquent des nausées et qui sont aggravés par la lumière, le bruit ou le mouvement (migraine)
Elle ne peut pas prendre la pilule
Elle peut prendre des contraceptifs injectables ou la pilule minidosée

Si la personne **prend régulièrement des médicaments contre la tuberculose ou l'épilepsie, ou du ritonavir dans le cadre d'un traitement ARV**
Elle ne peut pas prendre la pilule
Elle peut prendre des contraceptifs injectables ou la pilule minidosée

En cas de **saignements inhabituels entre les règles ou de saignements après un rapport sexuel**
Elle ne peut pas prendre de contraceptifs injectables
Elle peut prendre la pilule ou la pilule minidosée

En cas d'antécédents de **cardiopathie grave ou d'accident vasculaire cérébral**
Elle ne peut prendre ni la pilule ni des contraceptifs injectables
Elle peut prendre la pilule minidosée

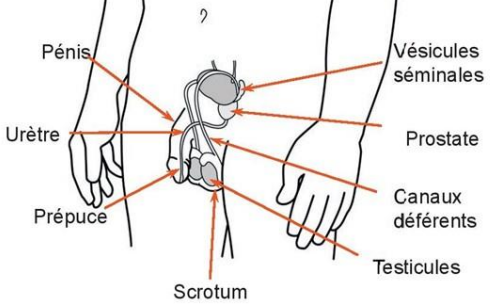
En cas de **diabète (concentration trop élevée de glucose dans le sang) depuis plus de 20 ans**
Elle ne peut prendre ni la pilule ni des contraceptifs injectables
Elle peut prendre la pilule minidosée

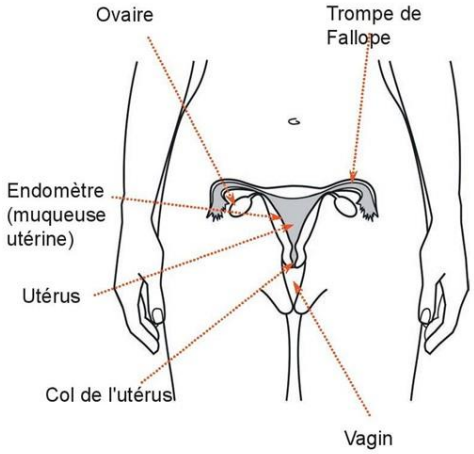
En cas d'antécédents de **caillot dans les jambes ou dans les poumons**
Elle ne peut prendre ni la pilule ni des contraceptifs injectables ni la pilule minidosée
Elle peut utiliser le préservatif ou d'autres méthodes non hormonales (orienter si nécessaire)

En cas d'antécédents de **cancer du sein**
Elle ne peut prendre ni la pilule ni des contraceptifs injectables ni la pilule minidosée
Elle peut utiliser le préservatif ou d'autres méthodes non hormonales (orienter vers un centre de référence si nécessaire)

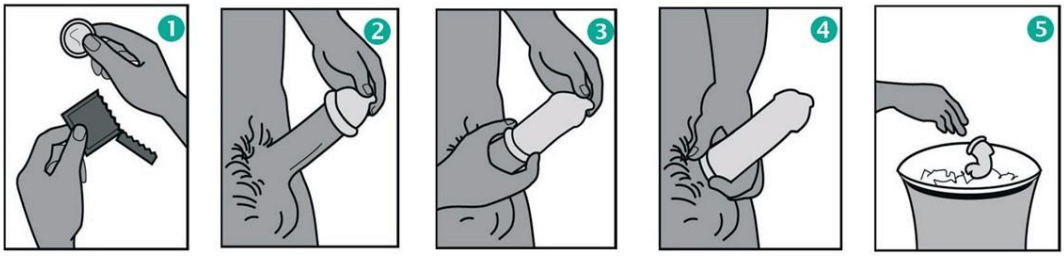
En cas de **maladie grave du foie ou de jaunisse (coloration jaune de la peau ou des yeux)**
Elle ne peut prendre ni la pilule ni des contraceptifs injectables ni la pilule minidosée
Elle peut utiliser le préservatif ou d'autres méthodes non hormonales (orienter vers un centre de référence si nécessaire)

Les appareils génitaux de l'homme et de la femme





Mode d'emploi du préservatif masculin



Utilisez **un préservatif neuf** à chaque rapport sexuel

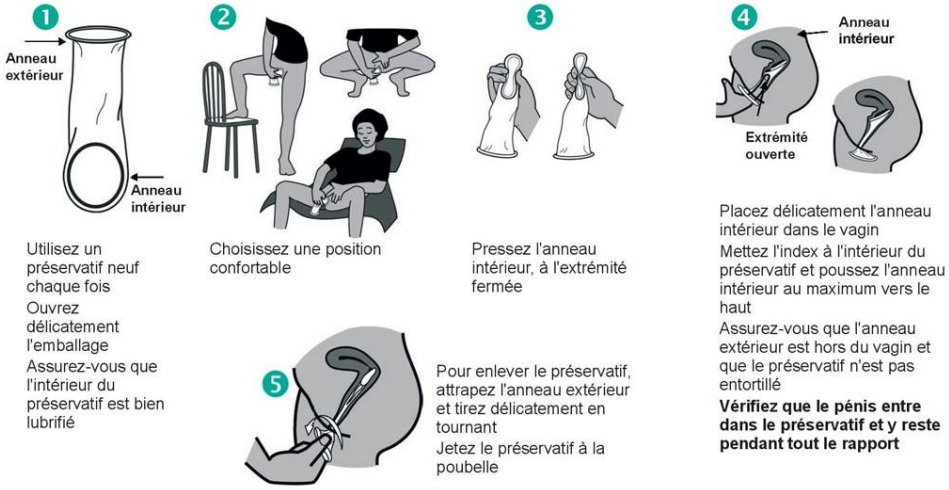
Avant tout contact, placez le préservatif à la pointe du pénis en érection, **la partie à dérouler à l'extérieur**

Déroulez complètement le préservatif jusqu'à la base du pénis

Après l'éjaculation, tenez le bord pour que le préservatif ne glisse pas et retirez votre pénis du vagin pendant qu'il est encore en érection

Le préservatif est à usage unique. Jetez le préservatif usagé à la poubelle

Mode d'emploi du préservatif féminin



Utilisez un préservatif neuf chaque fois

Ouvrez délicatement l'emballage

Assurez-vous que l'intérieur du préservatif est bien lubrifié

Choisissez une position confortable

Pressez l'anneau intérieur, à l'extrémité fermée

Placez délicatement l'anneau intérieur dans le vagin

Mettez l'index à l'intérieur du préservatif et poussez l'anneau intérieur au maximum vers le haut

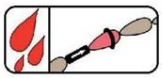
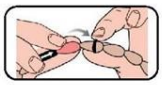
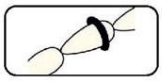
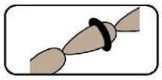
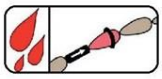
Assurez-vous que l'anneau extérieur est hors du vagin et que le préservatif n'est pas entortillé

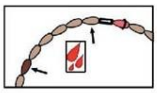
Vérifiez que le pénis entre dans le préservatif et y reste pendant tout le rapport

Pour enlever le préservatif, attrapez l'anneau extérieur et tirez délicatement en tournant

Jetez le préservatif à la poubelle

Mode d'emploi du "collier du cycle"

1. 
   Le premier jour des règles, mettez l'anneau en caoutchouc sur la perle ROUGE.
2. 
   Tous les matins, même quand vous avez vos règles, déplacez l'anneau en caoutchouc sur la perle suivante.
3. 
   Quand l'anneau est sur une perle BLANCHE, utilisez le préservatif ou abstenez-vous d'avoir des rapports sexuels.
4. 
   Les perles MARRON correspondent aux jours où vous ne tomberez pas enceinte.
5. 
   Au premier jour des règles suivantes, remettez l'anneau sur la perle rouge.


Vérifiez toujours que vos règles se situent entre la perle marron foncé et la dernière perle marron