Planning a family in Nairobi's informal settlements: results of a qualitative study

Catriona A. Towriss (corresponding author) a, Donatien Beguy b, Alison Wringe c, Barwako Hassan Hussein d, Ian M. Timæus c,a.

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^a Centre for Actuarial Research, University of Cape Town, Rondebosch, South Africa, catriona.towriss@uct.ac.za

^bUN-Habitat, Nairobi, Kenya (at time of research author was at Africa Population and Health Research Centre, Nairobi, Kenya.)

^cDepartment of Population Health, London School of Hygiene & Tropical Medicine, London, UK.

^d Independent Researcher, Nairobi, Kenya.

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ABSTRACT

Childbearing intentions among women in high-fertility contexts have standardly been classified into those women wanting to have a baby, those 'space' a birth and those wanting to 'limit' their family size. However, evidence from Africa increasingly suggests that the women's intentions are more complex than this classification suggests, and that there is fluidity in these intentions. This research explores women's accounts of their childbearing intentions and decisions in order to examine how this fluidity plays out in a low-fertility context in urban Africa. Six focus group discussions were conducted with women of reproductive age in Nairobi, Kenya. Participants were recruited using random and purposive sampling techniques. The focus group discussions had an average of seven participants each. Data were coded thematically and analysed using Nvivo software. The analysis explores the factors that women consider to be influential for childbearing and find that that the health of mother and child, costs of raising child and relationships are commonly reported to be important. Evidence of intentions to space births and limit family size was found. However, the data also show that there is fluidity in women's family planning intentions, driven by changes in relationships or household finances, which often results in a desire to avoid pregnancy in the present moment. The fluidity observed in women's childbearing intentions cannot be accounted for by the concepts of either 'spacing' or 'limitation' but is best explained by the concept of postponement. The research reveals the need for family planning clinics to provide a full method mix, as well as high-quality counselling to enable women to choose a method that best suits their needs.

BACKGROUND

The literature on fertility intentions from low-fertility countries has long recognised the significance of fluidity in childbearing intentions. Indeed, as early as 1965, the National Fertility Study in America asked participants about whether they thought they might change their minds about their childbearing intentions at a later time. Analysing this data, Morgan (1981; cited in Trinitapoli and Yeatman, 2018) found high levels of uncertainty: 13 percent were uncertain about their intention to stop childbearing, and 50 percent were uncertain of their intention to continue childbearing. From this, Morgan asserts that reproductive uncertainty, and inconsistencies between intention and action are inherently part of the reproductive decision-making process. Additionally, the literature on intentions in low-fertility countries has also recognised a diversity of contextual influences on childbearing intentions. In their cognitive-social model of fertility intentions, Bachrach and Morgan (2013) argue that schemas, intentions and actions relating wider aspects of life, such as work, relationships and leisure can affect fertility outcomes. Similarly, schemas, intentions and actions relating to fertility can affect outcomes in other areas of women's lives. As they write: "the multiplicity of structures relevant to fertility implies that individuals encounter a great many situations in which action relevant to fertility must be undertaken" (Bachrach and Morgan, 2013, pp. 472).

In contrast, much of the literature concerning childbearing in low-income countries takes a less nuanced approach to intentions. Women who are understood to be 'planning' their families are theorised to have two, mutually exclusive, motivations for doing so: either seeking to limit their family size or to space a birth (Pressat, 1985). 'Limiters' (or 'stoppers') are women who do not want to bear any more children. They are thought to have a target number of children that they wish to bear and stop wanting to conceive once they have borne this number (Pressat, 1985). By contrast, spacing is defined as 'deliberate action on the part of couples to space the births of their children at particular intervals' (Pressat, 1985: 20). It is often assumed that women who want to delay having another child (or children) are doing so in order to space their births for reasons that depend on the age of their youngest child (Timæus and Moultrie, 2008). For example, a mother may wish to delay a conception until she has weaned her youngest child or because she wants time to recover her physical strength following her previous pregnancy and childbirth, or to prevent an increase in her domestic workload that results from having two young children close in age. This kind of thinking about childbearing intentions has been reinforced, and reified, by the abundance of Demographic and Health Survey (DHS) data from low and middle-income countries. These surveys operationalise Pressat's definitions of spacing and limitation in the questions that they ask women about their childbearing intentions. These data are then used to derive widely-used estimates of unmet need for contraception for birth spacing and family limitation.

This spacing-limiting dichotomy has been criticised in the wider literature on childbearing intentions as it fails to acknowledge the diversity of factors that influence reproductive decision-making. In the case of family limitation, it tends to assume that women who wish to stop childbearing do so because they have reached their desired family size (Knodel, 1987). But this decision may also result from other circumstances. A woman may wish to avoid further pregnancies for reasons related to her age, rather than her family size, for example, if she believes herself to be too old to bear a child safely (Bledsoe, Banja and Hill, 1998; cited in Timæus and Moultrie, 2008). The concept of spacing has also been critiqued; women may seek to space a birth for reasons that are independent of the age of her last-born child. For example, she may be delaying a birth for reasons associated with her relationship status or because of concerns about her income (Ware, 1976). Similarly, women living with HIV who are initiating antiretroviral therapy are often encouraged to delay a pregnancy until their CD4 count rises (Bekker *et al.*, 2011).

Indeed, recent research on childbearing preferences in Africa has drawn attention to the influence of a wide variety of factors upon women's preferences. For example, in Ghana, women's desire to stop childbearing was found to be influenced by their reproductive life stage (i.e. their age or parity), by a marriage or experience of a child death, perceptions of their own health and by the economic welfare of the household (Kodzi, Johnson and Casterline, 2012). Similarly, longitudinal data from Malawi has shown that the formation of a new relationship, moving into a new house, and a spouse or partner getting a new job were all associated with a change in childbearing preferences (Sennott and Yeatman, 2012; Yeatman, Sennott and Culpepper, 2013). In Mozambique, Hayford and Agadjanian (2017); (2019) find that marital dissolution, poor economic conditions, improvements in health and concerns about HIV are associated with women's childbearing desires. Together, these findings suggest that analyses of fertility in Africa would benefit from a broader theorisation of reproductive decision-making.

Returning to the theoretical classification of childbearing intentions, the spacing-limiting classification has also been criticised for failing to recognise the dynamic relationship between birth spacing and family limitation. Literature from the 1980's acknowledged this dynamism, for example, Cleland and Rutstein (1986) argue that the desire to delay a birth and the desire to stop childbearing constitute a 'motivational continuum' rather than mutually exclusive categories. Ryder (1985) and Lightbourne (1985) both demonstrated that even at long durations after their last birth, women are undecided about having another child and are using contraception to prevent pregnancy. This is interpreted as a reflection of 'a vague and weak desire to have additional children, coupled with a stronger motivation to avoid having one in the present' (Lightbourne, 1985). However, perhaps because of the widespread use of DHS data to divide women who want to avoid childbearing into two groups, stoppers and spacers, the idea of a motivational continuum has largely been absent from the demographic literature on Africa.

In response to the emergence of extremely long birth intervals in South Africa, and the inability of the existing mainstream conceptualisation of childbearing intentions to explain this phenomenon, Timæus and Moultrie (2008) proposed a third category of intention: postponement, which is the intention to avoid any further pregnancy in the present. Postponers are distinct from birth spacers, as they are delaying pregnancy for reasons that are unrelated to the age of their youngest child. They differ from limiters since they are not preventing a conception for reasons that are associated with the size of their existing family. Such women may not have decided whether they want another child or not.

Increases in the availability of longitudinal data on childbearing intentions among African women have led to a body of evidence that examines changes in African women's reproductive intentions over time. In Nairobi, a longitudinal study showed that, over the course of a year, two in five women changed their preferences from wanting no more children to desiring to continue childbearing. Moreover, almost a quarter of women in the study changed from reporting that they wanted another child to wanting to have no more over the year (Beguy and Mberu, 2015). Similar levels of instability of fertility preferences have been observed in Malawi. Among women aged 15-25, Sennott and Yeatman (2012) found that over each four-month study segment, more than half of the respondents changed their mind about their desired timing of their next birth. Similarly, over a quarter of women reported changes in their ideal family size between interviews, and this figure rose to more than two-thirds of women over the total 30-month study period (Yeatman, Sennott and Culpepper, 2013).

The fluidity observed in childbearing intentions in Africa reflects the existential and socio-economic uncertainty that characterises the region. Johnson-Hanks (2005) describes how flexibility in many aspects of life – including childbearing – is a necessary and strategic response to these conditions of uncertainty. Similarly, Agadjanian (2006) writes that the unpredictability of the economic situation in Mozambique shapes couples childbearing intentions. Building on this,

work from Yeatman and colleagues in Malawi, has demonstrated that ambivalence and flexibility in childbearing intentions is related to life course events and transitions, changes in health and economic conditions (Sennott and Yeatman, 2018; Trinitapoli and Yeatman, 2018; Yeatman *et al.*, 2016; Yeatman, Sennott and Culpepper, 2013).

A number of authors have made explicit connections between the fluidity of reproductive intentions and birth postponement. For example, Trinitapoli and Yeatman (2018) describe how their observations of flexible fertility intentions in Malawi speak to the central importance of postponement in fertility in Sub-Saharan Africa. In their words "flexibility helps make sense of an approach to fertility that is not based simply on age or parity, but is a strategic response to life's contingencies" (Trinitapoli and Yeatman, 2018: 100). Similarly, Timæus and Moultrie (2008) describe how their concept of birth postponement echoes the empirical findings of Agadjanian (2006), who describes how, in Maputo, Mozambique, the sharp theoretical distinction between spacing and limiting in not reflected in women's narratives. Rather he describes how women often desire to 'wait' before a conception.

This paper explores women's childbearing decisions and intentions in Korogocho and Viwandani informal settlements in Nairobi, Kenya. Kenya has witnessed significant fertility decline since the 1980s, particularly in urban areas, and contraceptive use is comparatively higher than in many other African populations. It seeks to explore how notions of fluidity in childbearing intentions unfold in a low fertility context of urban Africa.

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Nairobi was chosen as the study location since levels of contraceptive use are high (46 percent in 2008/09 (Fotso *et al.*, 2011)), and the literature suggests that fluid reproductive intentions and birth postponement are associated with contraceptive use. This indicates that large numbers of women are actively taking decisions to control their childbearing. More specifically, Korogocho and Viwandani informal settlements were chosen because such a large proportion of the city's population lives in such contexts: at the turn of the century, it was estimated to be 60 per cent (Alder, 1995).

The Korogocho and Viwandani informal settlements host the Nairobi Urban Health and Demographic Surveillance System (NUHDSS), a longitudinal data collection platform run by the Africa Population and Health Research Center (APHRC) which has been monitoring the health and well-being of 72,000 people since 2002. Between 2003-2009, total fertility in Korogocho and Viwandani averaged 3.4 children per woman (Emina *et al.*, 2011). This is slightly higher than the fertility rate of Nairobi as a whole (2.8 children per woman in 2008), while being significantly lower than the national fertility rate (which was 4.6 children per woman in 2008).

METHODS

Six focus group discussions (FGDs) were conducted in Korogocho and Viwandani informal settlements in Nairobi in April and May 2012.

Sampling frame

Only parous women between the ages of 18-40 were eligible for participation. Although nulliparous women also engage in decisions about family formation, parous women were selected because there was a particular interested in exploring their intentions concerning birth intervals and birth spacing. It was also specified that respondents should be women who had ever been in a co-residential relationship, since there was an interest in the impact of

relationships on childbearing decisions. Routine data from the NUHDSS was used to select women into the potential participant list, which was drawn in equal proportions from the different neighbourhoods of the two settlements.

The sample frame consisted of women drawn from two samples. The first was a simple random sample that used the criteria above to select women in equal proportions from Viwandani and Korogocho. This sample generated a diversity of respondent characteristics that was broadly representative of the populations of the two settlements. The second was also a simple random sample of women who met the same criteria, but in addition had experienced a birth interval of more than three years in length. These women were recruited to include women whose birth history might not fit into the spacing-limitation classification system. It is important to note that it was not known why a respondent had experienced a long birth interval. It may have been due to a deliberate effort to delay a birth, but may equally have been due to sub-fecundity or a lack of opportunity to conceive. The list of potential respondents was drawn with a ratio of 3:1 between the simple random and purposive samples.

Participant recruitment

Recruitment of the women involved two members of the research team [CT & BH] visiting all potential participants in their homes to invite them to participate in a FGD. The purpose of the research was explained and the risks and benefits of their involvement described. If a woman was not found at her home, a second attempt was made to visit her at another time. Table 1 shows the number of participants included in each FGD:

FGD No.	1	2	3	4	5	6
Total participants	9	5	6	8	5	8

Table 1: Number of participants in each focus group discussion

Although the aim was to recruit women a quarter of the participants from the sample with long birth intervals, due to differing rates of turn out by respondents, the ratio of the randomly to purposively sampled women in the individual FGDs ranged from 2:3 to 7:2.

The demographic characteristics of the participants were representative of the populations of Korogocho and Viwandani, in terms of diversity in age, education, religion and ethnicity.

The Focus Group Discussions

The FGDs were moderated by the research assistant (BH), who grew up in Korogocho and has extensive experience conducting interviews and FGDs in informal settlements. The lead author (CT), was present and followed the discussions with assistance from a translator. Also present during the discussions was a note-taker, who recorded what the participants said in order to improve the accuracy of the translation and transcription. Prior to data collection, CT trained all members of the research team in the aims of the project, the content and structure of the FGD schedule and in research ethics.

The FGD guide consisted of seven sections: motherhood, conjugal relationships, extended family, raising children, women's paid work, family planning and childbearing ideals and intentions. Each section had a series of questions and suggested probes for the moderator, which were designed to gather responses on both norms and individual practices associated with

childbearing. The protocol was written in English, translated into Swahili and then backtranslated into English.

Analytical procedures

The FGDs were transcribed and translated into English from digital recordings. A qualitative thematic analysis was conducted, using a deductive approach, which enabled an explicit exploration of fluid childbearing intentions and birth postponement (Braun and Clarke, 2006). During the initial stage of coding of the transcripts, the data were open-coded: analysis was conducted on a line-by-line basis, and a large number of concepts were highlighted. These concepts were then modified, merged and renamed to form the coding structure which was used for thematic analysis of the remaining transcripts. The lead author coded an initial selection of transcripts to produce a coding framework with input from the fieldworkers. To ensure consistency in interpretation, a sample of transcripts were independently coded by a research assistant, and emerging themes compared with those identified by the lead author. The remaining transcripts were coded by the lead author (CT). Regular discussions between the authors were conducted. The full transcripts were coded in NVivo (version 9.2).

In the results presented, quotations are followed by brief information identifying the respondent, including her respondent number (e.g. R4), FGD, her number of children (this information was unavailable for some women), and the settlement in which she lived.

RESULTS

This section begins with a discussion of the factors women consider important in the context of childbearing, and how these influence their intentions. Thereafter, the results on women's experiences of childbearing, and how their intentions relate to their actions, are presented. The first section mostly draws from the data on concerning childbearing norms, while the second section draws more heavily from data concerns individual practices.

Considerations for childbearing:

Health of mother and baby

An important consideration related to childbearing given by the respondents was their health and their post-pregnancy recovery. In all the FGDs, women expressed concern about the toll that childbearing and breastfeeding takes on their bodies. This concern has a large effect on when women feel that they are next ready to conceive. Most of the respondents in this study stated that they thought women should wait three or more years between births, with the majority saying that five years was ideal. Short birth intervals were widely believed to be hazardous to a mother's health. Women wanted to give their bodies time to recover in order to maintain their physical strength for the rest of their childbearing years:

"Having children quickly also affects the mother herself. This is because when a woman delivers she loses a lot of blood and if she takes only 6 months to get pregnant again it leaves her not yet recovered from her last delivery ordeal. She doesn't have the strength; this affects her health." [R8 (unknown number of children) FGD 6, Korogocho]

Another reason that women were keen to space their births is to protect the health of their youngest child. In particular, they wanted to avoid becoming pregnant before their youngest

child was weaned, as pregnancy is widely believed to be detrimental to the health of the child that is breastfeeding:

"R3: The child will get sick.

R6: There are two different hormones that are not supposed to interact. There are hormones that are produced when one is pregnant and one is not supposed to breastfeed.

[...]

R5: It will affect him [the child which is breastfeeding]

[...]

R3: If a child has started crawling, he will slow down. Become somewhat retarded.

R1: He will start to get diarrhoea, vomit[ing] and such kinds of disease.

[...]

R3: If the child had already started to crawl, he will slow down and go back to sitting until [the time when] you give birth." [R3 (3 children), R6 (2 children), R5 (6 children), R1 (3 children), FGD 3, Korogocho]

This interchange illustrates a concern about short birth intervals mentioned by many participants. Because of this belief, women claim to stop breastfeeding their child if they become pregnant, and they are aware that this compromises the health of that child. Thus, they desire to delay their next birth until their youngest child is no longer breastfeeding. In addition to their concerns about simultaneous pregnancy and breastfeeding, many women were keen to delay their next birth until their youngest child was at least five years old in order to ensure that their attention and care would not be diverted to their next child too early.

The costs of childbearing

Respondents in this study spoke frequently about how tight their household budgets are, the financial uncertainty that their families face, and the lengths that they go to ensure that their children have an adequate quality of life.

There is a widespread sense among the respondents that smaller families are more desirable which is usually framed in economic terms. Because of this, great importance is attached to family size. The following quote is a typical response to the moderator's question about the importance attached to motherhood:

"Mod: [...] So, how do you feel about being a mother or being called a mother?

[...]

R5: You are happy when you are called a mother because when you look at your child, you feel proud. And when he calls you mother, you are happy having a child [...] but life today has made two or three children enough [...] Take me for example, I have no need to have more; I feel these children are enough for me." [R5 (3 children), FDG 4 Viwandani]

Indeed, children were often referred to as a "burden" in this context.

Just as these financial considerations affect women's desired family size, they also have implications for the timing of births. Household income has an impact on when they feel that they are ready to become pregnant again:

"I feel that family planning is good because you get to space your children the way you want and you should be able to save money. If, for example, you want to have a child next year, you use family planning till then and you save money in anticipation of that child so that you can raise the child without financial problems." [R2 (unknown number of children), FGD 1 Korogocho]

There is strong desire among women in these two communities to ensure that all children in a family gain a good education in the belief that education brings the best chance of upward social mobility in an urban environment. Since the majority of households in the informal settlements are surviving on very low and unpredictable incomes, the cost of schooling is a major household expense and is often cited as a reason to have fewer children. It was also framed as a factor which has a major influence over the timing of births. Women often listed the ages of their children using their class numbers rather than their years of age.

Government primary school education is free in Kenya, but secondary schools charge fees. Respondents commonly stated a wish to space births widely, frequently by 5 years, in order to ensure that they do not have two children in secondary school concurrently. In addition, a number of respondents in this study also aimed to send their children to low-fee private primary schools where the quality of education, in particular with regard to class sizes, is better (Oketch *et al.*, 2010; Oketch, Mutisya and Sagwe, 2011). For these respondents, education more generally became a factor in decisions about the timing of births:

"R3: Five years are also good because, by the time you give birth, the first-born will be six years and will be going to class one.

[...]

R3: You will have given them a good spacing.

Mod: There are those who have said 3 years. [R2], [R5] you said 5 years. Why? Why do you think 5 years is a good gap?

R2: To give you time to prepare, so that when this one is born the other one will be in school." [R3 (3 children), R2 (3 children), FGD 3, Korogocho].

Women seek to time their births in such a way as to allow them time to save money for the school fees of their younger child.

Relationships

The women in this study felt autonomous from men (and from their extended family) in matters relating to childbearing. They feel that they are expected to take the lead on childbearing decisions: they report needing to understand the limits of their household resources and to decide how many children can be provided for. Women also demonstrate their autonomy when it comes to decisions about childbearing through their use of contraceptives, which they almost universally regarded as solely the business of women. While some women do discuss the use of family planning with their partners, the discussion is reported to be initiated by women.

Moreover, it is also common for men not to be consulted about contraception and a significant amount of use of hormonal methods reportedly happens without a partner's knowledge.

Although they report making them independently, the majority of the women's childbearing decisions occurred within the context of a marital or long-term relationship. Their desire to maintain the stability of their intimate relationships has a huge influence on women's childbearing intentions, decisions and experiences. Most frequently, this wish exerts a downward pressure on their childbearing decisions. Women fear that having large numbers of children will put pressure on their conjugal relationships:

"I feel that, if I give birth to many children (I already have two), it will bring a lot of problems in the household because that love will be a bit suppressed [...]. Thus, you ought to hold onto the two because, if you exceed that, it will be bad [...]. If you have many children, he will abandon you. [...] You should have a number that you are able to take care of, so you are not making him suffer because of those children, because of the many expenses." [R4 (2 children), FGD 5, Korogocho]

This was a typical response, with many respondents feeling that large families put their relationships in danger. This strain is associated with the costs related to raising children, and also with the instability of relationships in the informal settlements.

The considerations outlined above are also the factors that women report that they *should* take into account when considering the birth of a child. It is interesting to note that women appear to have mastered the technical use of the term 'birth spacing' in their dialogue, suggesting that the public health discourse on safe birth spacing has infiltrated deeply into these communities, perhaps through official media campaigns. It also suggests that the respondents may have felt that they ought to demonstrate their knowledge of these matters to the researchers, as perceived experts. The following section focuses on what women say they *actually* do with regards to childbearing and will describe how this departs from the more normative accounts outlined so far.

The fluidity and responsiveness of childbearing intentions and decisions

Although women have clear ideas about their ideal birth spacing patterns and their ideal family size, there is fluidity in their childbearing intentions and decisions. A change in their circumstances or a growing recognition of the costs associated with childbearing often lead to adjustments in their plans. Frequently, women begin childbearing wanting a large number of children, but as the costs of raising children become apparent to them, they adjust their expectations and often seek to avoid pregnancy. The small number of children that the majority of women want is often portrayed as a something which is forced upon them by their limited household incomes, and they claim that, if circumstances were different, they would desire more children:

- "R3: You may also find that you are jobless and your husband is jobless too.
 [...] Thus, you are forced to use family planning, because what will you raise the child with when you get one?
- R4: But if you have a good job and you are earning good money, [...] you will continue to give birth because you know you can manage." [R4 (3 children), R3 (2 children), FGD 5, Korogocho]

Similarly, commitments to paid work can lead women to alter their childbearing intentions and wait to conceive again. Many of the women included in this study were engaged in casual employment or had small businesses. This income is vital for the well-being of their households, as the income brought in by their husband or partner (if they have one) is often insufficient, or too irregular, to provide for all the household needs. Taking time away from work following childbirth means that their household income drops at a time when the economic needs of the household have increased. Respondents describe wanting to continue childbearing, but deciding to avoid pregnancy for the meantime while waiting to see whether their circumstances will improve. Women used phrases such as 'take a break', 'hold' and 'take some time off' to describe this strategy.

It is not only women's household circumstances that can make them adjust their childbearing intentions: conjugal relationships are a major consideration. The respondents frequently used the words 'observe' and 'investigate' to describe building trust in their partner: women informed us that they specifically looked at their partner's commitment to the relationship before feeling ready to become pregnant.

The high levels of poverty in these informal settlement communities mean that intimate relationships are placed under considerable stress. The respondents reported that extra-marital relationships are commonplace and levels of trust between partners are often low. Their limited trust in their partners leads women to seek to delay their next conception:

"[...] if I know my boyfriend or my husband, who I have had a child with, is having an affair with another woman out there... Let us say I am married and I had planned that, when my child reaches four or five years, I will have another one. And then I start seeing his behaviour change; he comes home late and I hear that he has another girlfriend out there. I will use family planning because things are not going right. I don't know whether tomorrow or the day after he will turn on me." [R1 (1 child), FGD 5, Korogocho]

As with the women who are delaying a birth due to concerns over their household resources, women who are avoiding pregnancy due to the deterioration of their conjugal relationship have not necessarily decided to halt childbearing altogether. Rather they appear to be waiting for their situation to improve, although, again, it is unclear how often these women do end up desiring another child.

On the other hand, especially for women who are entering a new relationship, the childbearing expectations of their partners can lead them to decide to become pregnant again even if they already have the number of children they desired. Although many women expressed their autonomy in childbearing decisions, some women state that the payment of bridewealth and a man's belief that he is the main bread-winner in the household can lead him to feel that he has the final say about childbearing, in particular with regard to the number of children. Some women fear that refusing to become pregnant again might result in their relationships breaking down. Thus, they decide to conceive again:

"For my first born, [it was born when] I was in school. And because of the problems that I went through raising him, I had to wait for a long time without [having] another. Even if a man told me that he would marry me, when I remembered the problems that I had gone through, I felt I could not do it. I had to raise that one first.

[...] I had spent almost five years with my husband threatening to send me away the following day if I did not give birth [to another child]. And so I had to [conceive again]. [R5 (2 children), FGD 5, Korogocho]

Thus, although it is most common for women's adjusted childbearing intentions to result in a reluctance to conceive, some women end up deciding to have another child despite having earlier decided not to do so.

DISCUSSION

This paper has presented an exploration of women's accounts of childbearing decisions and intentions in Korogocho and Viwandani, Nairobi, Kenya. The analysis sought to explore how notions of fluidity in childbearing intentions unfold in a low fertility context of urban Africa. In this section the findings are discussed in relation to the literature on childbearing intentions in Africa, and to the constructs of birth spacing, family limitation and postponement.

The paper began with a description of the considerations that women believe to influence childbearing in their communities. As others have shown in different communities in Sub-Saharan Africa (Caldwell and Caldwell, 1981; Desgrées-du-Loû and Brou, 2005; Lesthaeghe *et al.*, 1981), concerns about the health of both mother and child have a major influence on desired birth intervals. This leads women to desire to delay their next conception until their youngest child has been weaned. In particular, this finding mirrors that of Bledsoe *et al.* (1994) who found that, in The Gambia, women are believed to have limited sustenance to pass onto a child; thus, they are expected to space their births in order to maximise their physical strength.

Economic considerations strongly influence reproductive intentions and decision-making. The costs of raising children, in particular education, reportedly make smaller numbers of children more desirable. The dominance of these considerations in the participant's narratives echoes the findings of Garver (2018) qualitative research on childbearing intentions in Malawi. Like her, this research found that participants were not referring to calculations of economic resources available in their own households but were rather sharing what Garver (2018) refers to as a "shared social wisdom". Compared with rural areas, the costs and benefits of childbearing in urban areas encourage lower fertility and higher child investment strategies (Caldwell, 1976; Parish and Willis, 1993; Stecklov, 1997). Indeed, echoing Caldwell's work on the central influence of mass education upon fertility change (Caldwell, 1976; Caldwell, 1980), the role of education as a form of child investment is found to be central. School enrolment rates are higher in urban areas and urban parents are more likely to see first-hand that schooling is necessary for success in the workplace, whereas rural parents are likely to be less aware of this (Agadjanian, 2006; Montgomery *et al.*, 2004).

While the influence of education, and the costs associated with child rearing more generally, are well understood to influence women's family size intentions, they also affect women's intended birth intervals. It is common for women to use contraception to delay a birth in order to save up the money needed for the costs associated with having another child, in particular for school fees. This is not recognised in the literature on childbearing intentions.

Furthermore, women's relationships with their partners are an important consideration. Women report making autonomous decisions about childbearing, especially with regards contraceptive use. This stands in contrast to the common understanding that men exert important influence on their partners' childbearing decision-making and contraceptive behaviours (Blanc, 2001). This emphasis on reproductive autonomy may be a result of the all-women group dynamic. On the

other hand, a contrasting narrative of the influence of partner's childbearing wishes and the security of their relationship was also presented in the discussions. The desire for fewer children should be seen within the context of the unstable nature of marriages and relationships in Korogocho and Viwandani: survey data from Nairobi's informal settlements suggests that the proportion of women who are divorced or separated is higher than anywhere else in Kenya (9.2 percent versus 4.9 percent nationally) (Africa Population and Health Research Centre, 2002). As Agadjanian (2006) has shown in Maputo, Mozambique, relationship instability exerts a downward pressure on women's childbearing desires. Large numbers of children increase the chance of relationship breakdown, as men fear the increased financial costs that accompanies each extra birth. Furthermore, if a relationship does break down, large numbers of children become a heavy financial cost that women report is usually carried by the mother. More research is needed to improve understanding of how gender norms underlie the different attitudes among men and women towards longer birth intervals.

Despite women having well-defined ideal birth spacing times and family sizes, fluidity exists in women's reproductive decision-making. Often, this is manifested in a downwards adjustment in family size intentions and in an upward adjustment in their preferred birth intervals, which is framed as a response to financial and relationship circumstances. Concerns over household income, in particular in relation to their own income-earning activities, as well as a deteriorating relationship with a partner can lead to a desire to avoid pregnancy. Often, this desire is framed as temporary, although many women have no clear idea about when, or whether, they might be able to resume childbearing. However, as discussed in the introduction, longitudinal data gathered from women in the same two communities as this research has shown that women often change their preferences from wanting no more children to desiring to continue childbearing. Equally, a sizeable proportion of women also changed from reporting that they wanted another child to wanting to have no more over the 12-month study duration (Beguy and Mberu, 2015). As in this research, the authors concluded that this switching of stated preferences from wanting another child to not wanting another child instability is often reflective of a desire to prevent childbearing in the current moment, rather than a commitment to halting childbearing altogether.

The fluidity of women's reproductive intentions in Korogocho and Viwandani bears similarities to the findings of other qualitative studies in Malawi, Maputo, Mozambique, and Ougadougou, Burkina Faso. The phrases used by respondents in this study, such as 'take a break', 'hold' and 'take some time off', echo the term 'waiting' used by Agadjanian to describe how women in Maputo use contraception to "postpone future births 'until the situation gets better". Furthermore, in both Maputo and Ougadougou, this "waiting" may last indefinitely if women's circumstances never improve (Agadjanian, 2006; Garver, 2018; Rossier, Senderowicz and Soura, 2013). These strong similarities suggest that the findings from this study are not merely specific to the context in which it was conducted.

The narratives of participants in this study reveal that women have intentions to both space births and limit their family size. Women expressed desires to space their births based on concerns that are contingent on the age of their youngest child, and desires to limit their family size based on an ideal number of children. Alongside these narratives, that conform to long-standing demographic understandings of reproductive intentions, this study also found that the distinction between birth spacing and family limitation is often blurred in the accounts given by women in this study. The concept of postponement can shed theoretical clarity on these findings. Women who are postponing are distinct from women who are spacing births, since their desire to avoid pregnancy is not driven by considerations that are contingent on the amount of time since the birth of their last child (Timæus and Moultrie, 2008). This study has shown that women's adjustments to their childbearing intentions are generally driven by concerns about

their financial circumstances or their relationship. Postponers are also theoretically distinct from limiters, because they may not have made a decision about whether they want to have another child (Timæus and Moultrie, 2008). This equivocation about whether or not to continue childbearing was widely observed in this research.

This study has several limitations. First, only the perspectives of women were investigated. Other work in similar contexts suggests that men demonstrate particular concern for the economic hardships and costs involved in raising children when considering having another child (Agadjanian, 2001; Agadjanian, 2006; Randall and Legrand, 2003). Second, the nature of FGDs as tools for data collection may have over-emphasised the importance of economic considerations for childbearing. The group context likely meant that discussion focussed more on what women *should* do, and rather less on the more personal factors which might affect individuals, such as their relationships or health. However, normative responses are likely to have limited, rather than exaggerated, the frequency with which birth postponement and fluid intentions will have been raised in the discussions.

This study's strengths lie in its utilisation of qualitative data to explore notions of fluidity in women's reproductive intentions and it's discussion of how the theoretical constructs of spacing, postponing and limiting reflect the intentions, decisions and actions that women make. While the focus group discussions provided limited access to detailed accounts of individual experiences, these data allowed us to understand childbearing in its broader context as a social phenomenon.

Along with the other studies from Africa (Sennott and Yeatman, 2012; Sennott and Yeatman, 2018; Trinitapoli and Yeatman, 2018; Yeatman, Sennott and Culpepper, 2013), the results of this study suggest that, to better understand women's childbearing decisions and intentions in higher-fertility contexts, it would be beneficial to take a less prescriptive perspective to the conceptual approach adopted. There are a multiplicity of factors which influence women's childbearing and it might be instructive to draw more deeply upon literature from lower-fertility settings which has succeeded in recognising this complexity (Bachrach and Morgan, 2013; Kuhnt and Trappe, 2013). It should also be acknowledged that women's intentions respond to changes in their circumstances. This research suggests that the classification of motivations for birth control into stopping and spacing should be expanded to include postponement.

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