Antiretroviral treatment roll-out in Zambia and South Africa -

a policy analysis of national to sub-national policy implementation processes

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I have read and understood the School's definition of plagiarism and cheating given in the Research Degrees Handbook. I declare that this thesis is my own work, and that I have acknowledged all results and quotations from the published or unpublished work of other people. I have read and understood the School's definition and policy on the use of third parties (either paid or unpaid) who have contributed to the preparation of this thesis by providing copy editing and, or, proof reading services. I declare that no changes to the intellectual content or substance of this thesis were made as a result of this advice, and, that I have fully acknowledged all such contributions.

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To Roswitha and Folker Hanefeld

Abstract

From 2002 international and national policies transformed the availability of anti-retroviral medicines for people living with HIV/AIDS in Africa. By the end of 2008 an estimated 42 percent of people requiring such treatment were accessing medication and anti-retroviral treatment (ART) programmes had been rolled out in many countries (UNAIDS and WHO 2009). However, this expansion was implemented unevenly across and within different countries raising questions about the gap between policy intention and execution.

This thesis addresses this gap. It examines the processes of implementation, comparing rapid ART roll-out in Zambia with South Africa where implementation was initially much slower. It draws on both top-down and bottom-up perspectives to better understand factors hindering and enabling implementation. The focus is on actors and their networks and how they were able to exert power on the implementation of policy. It is a qualitative study that relies on document review and over 150 interviews conducted with actors in the policy processes in both countries, during field work in 2007 and 2008.

Findings confirmed the importance of communication, resources and structures in determining implementation, but the comparative analysis indicated their influence varied considerably according to context. The findings also offer new insights into how contrasting networks of actors affected implementation. A broad range of actors made it possible to roll-out ART in South Africa despite a hostile policy environment, by drawing on diverse sets of skills and ties that dated back to the anti-apartheid struggle. In Zambia the network which most influenced ART roll-out was an epistemic community of clinicians, which, by forging alliances with PEPFAR implementing agencies was able to rapidly scale up access to treatment in spite of health systems constraints. The economic capital of donors allowed them to shape policy and blur boundaries between state and non-state actors in Zambia while social capital of networks was important in South Africa. Findings suggest that focusing on the sources of power of networks in implementation enriches the understanding of health policy processes.

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List of acronyms

ANC	African National Congress
ART	Antiretroviral treatment
ARVs	Antiretroviral drugs
AZT	Azidothymidine
CBOH	Central Board of Health, Zambia
CCMT	Comprehensive Care Management and Treatment
CHAZ	Churches Health Association Zambia
CIDRZ	Centres for Infectious Disease Research Zambia
COSATU	Congress of South African Trade Unions
DACA	District AIDS Coordinator, Zambia
DATF	District AIDS Task Force, Zambia
DDH	District Director of Health
DHMT	District Health Management Team
DoH	Department of Health, South Africa
HAST	HIV/AIDS, STI and TB Directorate, Department of Health South Africa
JCSMF	Joint Civil Society Monitoring Forum
LSA	Local Service Area in South Africa
MEC	Member of the Executive Committee, South Africa
Min-MEC	Minister and MEC's Forum, South Africa
MoH	Ministry of Health Zambia
MSF	Medecins Sans Frontieres
MRC	Medical Research Council, South Africa
MTCT+	Mother to Child Transmission prevention programme that includes the provision of ART to mothers.
NAC	National AIDS Council, Zambia
NAMDA	National Medical and Dental Association South Africa

NCH	Ndola Central Hospital, Zambia's second largest hospital
NMF	Nelson Mandela Foundation
NMH	Nelson Mandela Hospital
NZP+	National Network of People Living with HIV in Zambia
PACA	Provincial AIDS Coordinator
PATF	Provincial AIDS Task Force
PEPFAR	President's Emergency Plan for AIDS Relief
PHD	Provincial Health Director, Zambia
PHO	Provincial Health Office, Zambia
PMTCT	Prevention of Mother to Child Transmission of HIV
PS	Permanent Secretary, Zambia
SACC	South African Council of Churches
SANAC	South African National AIDS Council
SAMA	South African Medical Association
SAMDC	South African Medical and Dental Council
TAC	Treatment Action Campaign
TWG	Technical Working Group, Zambia
UCT	University of Cape Town, South Africa
UGH	Umthatha General Hospital, Mthatha, South Africa
UNAIDS	The Joint United Nations Programme on HIV/AIDS
UNICEF	United Nations Children's Fund
UTH	University Teaching Hospital, Lusaka, Zambia
WHO	World Health Organisation
ZPCT	Zambia Prevention Care and Treatment Programme

CHAPTER 1- INTRODUCTION: ASKING FOR HEAVEN

> It was difficult, especially for us as poor people. When I was diagnosed with HIV in the 1990s, I remember when we approached the Minister [of Health] and one of our demands was access to treatment. That time, it was like asking for heaven.
>
> *Activist living with HIV/AIDS, Lusaka, Zambia*

Until the 2000s the cost of life-saving anti-retroviral (ARV) medication for people living with HIV/AIDS meant that treatment (UNAIDS 2006) was beyond the reach of most people in low and middle income countries, including in Africa (Farmer 2005). However, from 2002 onwards, international and national policies changed to increase the availability of anti-retroviral medicines and access to ARVs for people living with HIV/AIDS in Africa. By the end of 2006 an estimated third of people requiring such treatment in low and middle income countries were accessing the medication (UNAIDS 2008) and by the end of 2008 this had risen to 42 per cent of treatment coverage (UNAIDS and WHO 2009). However, 'rolling-out' anti-retroviral treatment (ART) to all those in need has proved difficult and despite the initial successes, roll-out happened unevenly across and within different countries (Whiteside and Lee 2005; Nattrass 2006).

This research explores the gap between policy intentions and execution. It examines the processes of implementation, comparing ART roll-out in Zambia and South Africa, looking at both top-down and bottom-up perspectives to better understand factors hindering and enabling implementation. Focus is on actors, their networks and sources of power to gain new knowledge on their role in policy implementation from national to district level.

Many scholars have observed that understanding of the many factors that affect district level implementation is lacking (Hill and Hupe 2002; Jann and Wegrich 2005;

Gilson and Raphaely 2008). Only a few studies have been undertaken to explore how national level policies are communicated, resourced, translated and implemented at district level. These include (Walker and Gilson 2004; Schneider, Gilson et al. 2006; Gilson and Raphaely 2008; Sundewall, Forsberg et al. 2009). This study is designed to fill that gap, focusing on two countries, Zambia and South Africa.

The two countries offer a compelling comparison. Both face a severe HIV epidemic with 14.3% in Zambia and 18.2% of the adult population in South Africa infected with the virus (GRZ 2008; UNAIDS 2008); both introduced antiretroviral treatment in the public sector in the last seven years. In addition, South Africa and Zambia underwent a dramatic restructuring of their health systems during the 1990s that saw greater power devolved to provincial health authorities (in Zambia), and independent provinces within a more federal system in South Africa (Coovadia, Jewkes et al. 2009).[1] South Africa's treatment programme appeared comparatively more horizontally integrated in the health service whereas the Zambian programme appeared more vertical, funded to a large extent through external resources. These included the Global Fund to Fight AIDS TB and Malaria (the Global Fund), and US Presidential Emergency Plan for AIDS Relief (PEPFAR). Yet, even though South Africa had greater economic resources and administrative capacity, including for health, Zambia rolled out treatment for people living with HIV/AIDS initially at a faster speed than South Africa. At the time this study was conceived in 2006, Zambia was providing treatment to more than a third of its population requiring ART, whereas South Africa was only reaching 18 per cent of people in need of treatment (UNAIDS 2007).

[1] In South Africa this was due to the transition from apartheid regime to democracy, in Zambia as part of conditionality limiting public sector expenditure of the government imposed by external funders. Gilson, L., J. Doherty, et al. (2003). "The SAZA study: implementing health financing reform in South Africa and Zambia." Health Policy Plan. **18**(1): 31-46.

In 2002 the then Zambian president Levy Mwanawasa announced the government's intention to treat 10,000 people with ARVs in the public sector, initially through two sites in Ndola and Lusaka (Garbus 2003). Until then ARVs in Zambia were only available from private providers. Throughout 2003 there was little progress even in reaching the modest target of 10,000 people, and towards the end of that year only an estimated 3000 people were accessing treatment in the public sector and they had to pay for their medications (Zambia 2006).

The situation began to change from August 2004 when in the government announced a treatment target of 100,000 people by the end of 2005, within the remit of the WHO's '3 by 5' Initiative (Jones 2004)[2], elevating HIV/AIDS to national emergency status (Avert 2007). While only 13,000 people were receiving ARVs in September 2004 (Irin 2004), this was rapidly scaled up to 24,000 people by the end of 2004 (Zambia 2006), by 2007 149,199 people were accessing treatment (GRZ 2008), and in early 2009 this had risen to 200,000 (NAC 2009).

Until June 2005, ART was not free in the public sector. Patients had to pay a fee of around 40,000 Zambian Kwatcha (at that time approximately 8 USD) every month (Jones 2004; WHO 2005). Despite the relatively low cost, treatment was beyond the reach of many.[3] The Zambian government changed its policy on ART in August 2005, making ARV treatment free in the public sector. This coincided with significant amounts of external funding for treatment through PEPFAR, the Global Fund and others.

[2] WHO's 3x5 initiative aimed to treat 3 million people in low and middle income countries with ARVs by the end of 2005. At the time the 3x5 was announced in 2003 the treatment target of 3 million represented 50% of people living with HIV requiring such medication at the time. http://www.who.int/3by5/en/

[3] Zambia per capita income per annum was PPP$934 in 2004; UNDP (2006) Human Development Report 2006; http://hdr.undp.org/hdr2006/statistics/countries/data_sheets/cty_ds_ZMB.html. Accessed January 17th 2007.

The contrast with South Africa is striking. Where the Zambian government demonstrated a clear commitment to tackle HIV/AIDS, the South African government's response to HIV/AIDS has been highly controversial and perceived as failing to meet the great need of its population (Schneider and Stein 2001; Nattrass 2004; Butler 2005). Controversy focused in particular on the government's refusal to acknowledge the link between HIV and AIDS (Baleta 2000), and its delay in the introduction of ART (Schneider and Stein 2001).

It was civil society, through effective advocacy and the use of litigation (Baleta 2001) which forced the introduction of ART, initially for prevention-of-mother-to-child-transmission (PMTCT) in South Africa. In a case brought by the Treatment Action Campaign (TAC) the Constitutional Court ruled in 2002 that the government had to provide ART for PMTCT in the public sector (Court 2002). This ruling, the drop in prices of medication, the shift in global public opinion that increasingly viewed the provision of ART in resource –poor settings as an ethical imperative (Karim 2004), and continued civil society advocacy led to Cabinet approval of the Comprehensive Operational Plan for AIDS Care, Management and Treatment in South Africa in November 2003. ART became available in April 2004 (ALP 2007) and the Plan set targets for providing treatment (RSA 2003). However, the first interim target was not reached and further targets were revised and eventually abandoned (Hassan 2005). From the outset there were great differences between provinces in the speed and success of ART roll-out (Schneider 2006a). The Plan was replaced in April 2007, by a new National Strategic Plan 2007 -2011, which included South Africa's roadmap to achieving universal access to ART by 2010 (SANAC 2007).

By the conclusion of data collection for this study in 2008 both counties were providing ART to around fifty percent of their population requiring the treatment – Zambia to

around 200,000 patients (NAC 2009) and South Africa to around 700,000 patients (Hogan 2009), an increase from the coverage at the time the study was designed. In South Africa this reflected changes in key government posts, including the Presidency, and because of its greater economic resources and health systems capacity this meant that once the political obstacles to ART roll-out were removed scaling up treatment was less challenging than in Zambia.

The study's overall aim was to identify factors that influence implementation of policy. Focusing on national to provincial to district level implementation processes of policy guiding ART roll-out in Zambia and South Africa, this study draws on data (interviews and documents) collected in each country from mid 2007 to mid 2008. It analyses the processes of implementing ART scale-up in both countries through a framework that draws on theories of the policy process, specifically implementation and power. It links different levels of the policy process by exploring the influence of networks of actors. The resulting findings and analysis offer new insights into policy implementation of health, the role of networks in policy processes and their sources of power, as well as on using networks and power analysis for health policy analysis of implementation processes. The study positions the processes observed within the context of an emerging global health governance, showing how changes in global actors and mechanisms may impact on sub-national implementation. It is hoped that the knowledge gained from this research will not only assist in health policy analysis but also help better planning of future health policy implementation.

Thesis structure

This thesis is organised into eight chapters. Following this brief introduction is a review of the literature of the policy process, focusing in particular on implementation. Based on the literature the third chapter explains the study framework, sets out research aims

and questions, and the methods used to answer these. The discussion and findings section begins in Chapter 4 with a more in-depth narrative of the policy implementation process relating to ART roll-out in Zambia and South Africa. This chapter describes the political and health systems context in which policy implementation took place. Chapter 5 offers an analysis of the implementation process in the two countries based on the insights gained from the implementation literature reviewed in Chapter 2. The sixth chapter deepens and expands this analysis through the application of network theory, while Chapter 7 focuses analysis on the sources of power that allowed these networks actors to influence policy implementation in Zambia and South Africa. The conclusion provides a brief synthesis of the main findings offered from each of the findings and discussion chapters focusing on implementation, networks and sources of power before drawing these insights together to conclude the study's contribution to the field of health policy analysis.

CHAPTER 2 - A LITERATURE REVIEW OF THE POLICY PROCESS

The development of the Zambian and South African governments' policies for the provision of anti-retroviral treatment suggests that these processes are political and dependent on local context, as well as international influences (Schneider 2002; de Waal 2006). As demonstrated briefly in the introduction, while South Africa had greater financial resources than Zambia initial treatment roll-out there was slower than in Zambia. Differences between roll-out existed not only between countries, but between different provinces in each country. In Zambia treatment was initially more accessible in urban than rural areas (Jones 2004), in South Africa great differences were reported in the numbers of patients initiated on treatment between provinces (Schneider, Coetzee et al. 2010).

These differences in roll-out of ART indicate complexities in policy making and implementation. They highlight the need for an analysis of policy processes to better understand how the policy to roll-out ART was implemented and to explain patterns of why policies appear more easily implemented in some areas than in others.

This chapter represents a review of the literature relevant to and used in this study. This study draws on insights of literature from different fields, including policy analysis and sociology as it aimed to understand the processes of implementing ART roll-out through the application of different conceptual frameworks. It was envisaged that this in turn would allow a contribution to the field of health policy analysis. The use of concepts, frameworks and theories from such diverse fields meant a systematic review of the entire literature was beyond the scope of this study.

The review started by examining the literature of the policy process before focusing in greater depth on literature on implementation. Once networks and power were

identified as important to understanding policy implementation through the review of the policy process literature, further focus was placed on these concepts. Where empirical studies from the field of health in low and middle income countries made use of these concepts they were included in this review.

In addition to the theoretical literature of the policy process, empirical literature relating to treatment roll-out in Zambia and South Africa was considered. As this body of literature is small and still emerging it is discussed in Chapter 4, which provides a narrative of treatment roll-out in each country. The study also drew on general, disease - specific literature about AIDS such as (de Waal 2006; Illife 2006) but did not review this, as this had limited focus on treatment roll-out.

Policy Analysis

Policy analysis focuses on understanding why policies are adopted, why they succeed and fail (Buse, Mays et al. 2005). It requires an understanding of the context in which policy is formulated, adopted and implemented and who the actors in these processes are (Walt 1994). Analysing a policy helps shed light on all these stages in the policy process and ultimately helps understand why and how change occurs.

The range of factors influencing the policy process include the policy content, the various actors that participate in the process, the environment in which policy is formulated and the process, formal or otherwise, that policy formulation and implementation take. Walt and Gilson (1994) conceptualised these factors as a 'policy triangle' wherein process, content and context are the spectrum within which the actors operate. These different components impact on the outcomes of the process, i.e. what policy is adopted and how it is implemented. Ultimately, the interaction between them will determine the way in which a policy achieves its objectives – in the

case of this study, the scaling-up of the provision of antiretroviral treatment to the populations of South Africa and Zambia.

Different approaches to analysing the interaction of these separate components[4] depend on theoretical approaches employed. Some theorists such as Kingdon (1984) and Jones (1999) focus on agenda-setting and the idea of actors as policy brokers or policy entrepreneurs. Others such as Grindle and Thomas (1991) analyse the policy process from a rational choice perspective, driven by the actions of actors who aim to maximise benefits to them. Yet others focus on networks between actors (Lewis 2005). Theories explaining the policy process differ in purpose and intent. Some are prescriptive guidelines for policy-making, on how to ensure its successful formation and implementation such as Pressman and Wildavsky (1973), whereas others contribute specifically to an academic debate and aim to provide frameworks that not only help understand but also research policy, for example the advocacy coalition model (Sabatier 2007).

Despite differences in approach and focus, many theorists of the policy process recognise the crucial role of individuals, and the varying degrees to which they are able to influence the policy process. How they exert power is essential to analysis and understanding of the policy process (Dahl and Lindblom 1963; Lipsky 1980; Kingdon 1984; Walt 1994; Walt and Gilson 1994).

[4] Conceptualisation of these components, such as actors, content, context etc, might also be slightly different or weighed in different ways depending on the respective theories consulted.

Theories of the policy process

A number of models aim to describe the policy process as a whole, and to identify why change occurs.[5] David Easton's (1965) 'black box' model describes a 'feedback' process where policy options, influences exerted by interest groups, and constraints of the political environment go into a 'black box' from which policy emerges that in turn determines future policy and demands. Diffusion theory offers a different approach that focuses on the way in which policy is communicated and adopted (Berry and Berry 2007).[6] Ideas or policies are diffused through different stages of the policy process. Change in policy occurs where 'innovators' or 'adopters' of a policy provide examples for others (Mintrom 1997). Sabatier's advocacy-coalition approach envisages policy as an iterative process, with a wide range of actors,[7] who form 'advocacy coalitions' (1999) that develop and implement policy within policy subsystems.

Policy change

Two other theories of policy change are the *rational –comprehensive model* by Simon (1961) and Lindblom's *incrementalist view* (1959). The *rational comprehensive model* suggests that decision-makers assess all evidence and policy options available and make a rational decision on the basis of comprehensive knowledge that ensures the best policy outcomes. Rational choice approaches centre on an analysis of leaders that hold formal authority and decision-making power, and the assumption that their

[5] This literature review has not attempted to summarise this huge body of knowledge. Useful reviews are Hogwood, B. W. and L. A. Gunn (1984). Policy analysis for the real world. Oxford, Oxford University Press, Grindle, M. S. and J. W. Thomas (1991). Public choices and policy change : the political economy of reform in developing countries. Baltimore, Johns Hopkins University Press, Parsons, W. (1995). Public Policy: an introduction to the theory and practice of policy analysis. Aldershot, Edward Elgar, Hill, M. J. and M. J. Hill (2005). The public policy process. Harlow, England ; New York, Pearson Longman.

[6] Rose's (1993) theory of policy learning, also highlights the process of adoption and how political actors or policymakers look to others (states, actors or contexts) to see how policy has been implemented there Rose, R. (1993). Lesson-drawing in Public Policy: A Guide to Learning Across Time and Space. London, Chatham House..

[7] These actors motivation may lie outside of their formal role or institutional affiliation in the process.

actions are motivated by rational self-interest (Sabatier 1999). Rational theory contends that once a policy is formulated, implementation follows in a 'natural' de-politicised process. Limitations of this approach include the fact that decisions are rarely made with perfect knowledge or in the absence of politics (Walt 1994). Simon himself acknowledges the limitations in aligning individuals' decisions with overall objectives by an institution (Hill 1997). Others have pointed to the fact that the rational model does not allow for associations between individuals, or the role of networks, impacting on the policy process (Lewis 2005).

Lindblom's theory of 'muddling through' describes a more incremental model (Buse, Mays et al. 2005) of policy change and decision-making, where policies change little by little and often as a result of the compromises between differing opinions and policy options (Lindblom 1959; Hill 1997).[8] The *incrementalist* approach describes a reality in which most policy change consists of small incremental changes achieved by 'muddling through', with some intermittent bursts of fundamental policy change driven by ideology or societal beliefs.[9] One of the challenges posed by *incrementalists* to rational theorists is that in the longer run incremental policy change is more rational, as it avoids, for example, reconsidering all past policy decisions, but builds on existing experiences (Dye 2001).[10]

Dror critiqued *incrementalism* as irrelevant to socially unstable societies where the need for policy change is urgent. Incremental policy according to Dror is inherently conservative and precludes more dramatic and necessary policy change (Dror 1983;

[8] Lindblom developed this initial theory to acknowledge the role of ideology, particularly in 'certain grand issues' underlying society Hill, M. J. (1997). The policy process : a reader. New York, Prentice Hall/Harvester Wheatsheaf..

[9] Baumgartner and Jones for example suggest that policies change little over long periods, and then suddenly undergo major change in their *punctuated equilibrium* model. Baumgartner, F. and B. D. Jones (1999). Punctuated-Equilibrium Theory. Theories of the Policy Process. P. A. Sabatier. Boulder, Colorado, Westview Press.

[10] an example of this might be the annual budget process in national parliaments.

Walt 1994).[11] Etzioni (1967) combined incremental and rational approaches in *the mixed scanning approach*, which builds on elements of both *incrementalism* and *rationalism.* Two different mechanisms are developed for decision-making: one for high order decisions and an incremental change for lower order policy change. Policies are scanned to ascertain which mechanism is applicable (Etzioni 1967).

Debates about rational and incremental policy formulation have been tested over the past decade by a specific interest in the extent to which evidence affects policies (Bowen and Zwi 2005). A rational view assumes all policies are made on the basis of evidence where it exists (Simon 1961). An incrementalist view would assume that some research may influence policymaking, but not always (Weiss 1980). Such scholars would argue that in reality issues and evidence are often contested and knowledge is considered within a politicised context. The South African government's refusal to acknowledge the link between HIV and AIDS, recommending 'African remedies and medicines' instead of anti-retroviral medicines as treatment highlights this (Schneider 2002). Studies which have specifically focused on how research findings in health reach the policy agenda (de Leeuw 2001; Shretta, Walt et al. 2001; Muggli and Hurt 2003; van Kerkhoff 2006) have argued that research and researchers influenced a given policy agenda in an incrementalist rather than rational way. What determined policies were the network linkages between players, consultation processes or resourcing of the policy process, and the interests of powerful players. This review suggests that rational approaches such as those of Simon (1961) describe the policy process as it *should* be, whereas Lindblom and others drawing on the incrementalist view (Lindblom 1959; Etzioni 1967) appear closer to the reality of policy-making as it is.

[11] Arguably, the history of ART roll-out in Zambia and South Africa has been one of 'big bursts' of policy changes, rather than 'incremental changes'.

Stages of the policy process

The *stages heuristic* model is one of the most enduring of the approaches that attempt to analyse the policy process (Walt, Shiffman et al. 2008). It explains policy as occurring through stages: agenda-setting, policy formulation and legitimation, implementation and evaluation (Sabatier 1999).[12] However, this approach has been criticised because it suggests clear boundaries between separate stages. This belies the reality of policy making, which is often more a muddling through, or an iterative process of policy loops, or policy cycles (Lindblom 1959; Walt 2004). Jann and Wegreich (Jones) in their critique of the stages heuristic model argue that the focus on complexities of the processes in each stage and between stages has led to a neglect of the 'bigger' questions, including questions on who has power.

Most of the literature rejects the linear notion of stages in the policy process and is critical of its reflection of reality and because it does not offer the possibility of causal relation between different stages (Sabatier 1999; Jann and Wegrich 2005). However, the different stages still provide one of the most tangible ways in which to describe and analyse elements of the policy process. Often writers draw on the stages heuristic model to provide theories which focus on particular aspects or stages of the process. Among many others, Kingdon (1984) emphasises how issues reach the policy agenda, Lipsky (1980) focuses on implementation and Simon (1961) on the policy formulation stage.

[12] Numbers of stages vary, Sabatier lists five (Sabatier 1999), Walt four (Walt 1994), Hogwood and Gunn (Hogwood and Gunn 1984) eight. The text follows the definitions most commonly used in literature to summarise different stages in policy processes. It concentrates on formulation and change, agenda-setting and implementation.

Agenda-setting

Much of the literature on policy processes in low and middle income countries focuses on how issues do or do not reach the attention of policymakers and the public, why an issue is considered a policy problem and how the policy agenda is set. Given the importance of these theories to policy analysis in low and middle income countries they are further reviewed here. John Kingdon's (1984) theory of agenda-setting conceptualises policy environments as a 'primeval policy soup', which consists of three streams which develop separately:[13] the problem stream (i.e. a particular policy problem that needs addressing), the policy stream (i.e. the policy solution), and the politics stream (political climate). When these three streams meet they create a 'window' for policy change to occur. [14] This means that if there is a problem, a feasible policy solution and the right political climate, policy changes.[15]

Similar to Kingdon's model, is that of (Hall 1975) who refers to three different components. *Legitimacy* – which means any given area is considered to be of legitimate government concern, *feasibility* – a feasible policy solution to such a problem is available; and finally a *support* stream, indicating political and public support on the issue. These three considerations will be weighed by the government to determine whether an issue reaches the political agenda.

[13] Kingdon draws in his theories on the earlier work developed by Cohen, March and Olsen, which also voiced a critique of rational decision-making following a step of linear stages, but rather speak of 'garbage can' of choices from which solutions emerge. 'In the garbage can model [...] a decision is an outcome or interpretation of severely independent streams [...].' Cohen, M. D., J. G. March, et al. (1972). "A Garbage Can Model of Organizational Choice." Administrative Science Quarterly **17**(1): 1-25.

[14] Kingdon's model includes policy entrepreneurs, actors that are willing to invest time, money, energy and reputation to promote a position. They play a crucial role in maximising the opportunity presented by a policy window. Kingdon, J. (1984). Agendas, Alternatives and Public Policies. Boston, Little, Brown.

[15] Kingdon's model has been criticised as too focused on the American context, disallowing for external influences Hill, M. J. and M. J. Hill (2005). The public policy process. Harlow, England ; New York, Pearson Longman.

A number of scholars in the field of health policy have applied and expanded theories such as Kingdon's to explain why issues including maternal health and TB have succeeded or failed to reach the policy agenda at certain times (Shiffman, Beer et al. 2002; Lush, Walt et al. 2003; Ogden, Walt et al. 2003; Shiffman and Smith 2008). Others have also focused on agenda-setting in health policy (Reich 1994; Klaudt 2000; Cairney 2007), including to better understand a renewed focus on health systems strengthening (Hafner and Shiffman 2009). Their work amongst other things shows the importance of a focusing event to allow health issues to reach the top of the agenda. What these models have in common is an element of chance in how policy change comes about, as well as a process that does not necessarily follow a rational process.

This study focuses on another area of the policy process – implementation.

Implementation

Little of the policy process literature focuses on implementation (Saetren 2005). This can be explained in part by the historic development of the discipline evolving from a rational view of policy processes, which regarded implementation as an administrative process devoid of politics (Hill 1997).[16] However evaluations suggest even the best, most technically sound policies often fall short of the original objectives when implemented (Pressman, Wildavsky et al. 1973; Mazmanian and Sabatier 1981; Sabatier 1997; Kettl 2000). Similarly the situation in Zambia and South Africa also demonstrates variations in implementation of the same policy that appear not to be explained by agenda-setting or policy formulation. It highlights the need for a better understanding of factors influencing implementation.

[16] Despite contested debate, a major shared insight of these theories is that implementation is as political as any other stage in the policy process Walker, L. and L. Gilson (2004). "'We are bitter but we are satisfied': nurses as street-level bureaucrats in South Africa." Social Science & Medicine **59**(6): 1251-1261.

Implementation literature has developed since the 1970s. Much of the discourse has focused around debates between 'top-down' and 'bottom-up' approaches, or attempts to synthesise the two. Initial contributors included Pressman, Wildavsky et al. (1973) and Hill (Schneider), who highlighted ways in which aims of policymakers were confused, undermined or converted during implementation. They showed an 'implementation gap', and following a 'rational approach' aimed to identify strategies that might overcome deficits in implementation, examining implementation from the top down (Hill and Hupe 2002). Hogwood and Gunn (Schneider) further outlined the rationale for why 'perfect implementation' is almost unattainable. They argued that many factors intervened to constrain the rational execution of policy, highlighting among other things, the effects of natural disasters, inadequate resourcing, imperfect communication and coordination, and the limits to political authority.

First generation implementation theory focused mainly on how to ensure perfect implementation of a particular policy (Pressman, Wildavsky et al. 1973; Goggin 1990), rather than on how to best analyse policy and to understand its implementation empirically. The main critique of top-down approaches is that by viewing the central decision-maker as the main unit of analysis it neglects other actors who actually put policy into practice. This leads top-down research to neglect the strategic initiatives generated by street level bureaucrats and neglects how their practices may skew or change policy during implementation (Lipsky 1980; Sabatier 1997). Criticism also focused on the limitations of a top-down approaches where there is more than one clear agency with authority, as is the case in many collaborative policy initiatives (Sabatier 1997). In addition, by taking policy formulation as starting point, top-down approaches neglect factors that might not have been evident during the formulation stage but emerge later as policy is transferred and implemented (Lipsky 1980; Matland 1995).

Following these 'first wave' theorists (Goggin 1990) implementation research began to take a different approach, focusing on local or 'bottom' level processes (Sabatier 1997). Michael Lipsky (1980) developed the concept of *street level bureaucrats*, outlining that frontline staff whose decisions and the routines they establish, the devices they invent to cope effectively *become* the public policies which they carry out. (Lipsky 1980). As the system within which these bureaucrats find themselves imposes imperfect conditions on them they cope through a downward adjustment of the policy. Lipsky argues that to understand public policy it is these bureaucrats whose behaviour we need to examine.

One of the main proponents of the bottom-up approach is Hjern (1981) who argued that policy implementation is not solely determined by organisations or programmes, but by *structures*. These structures or 'sub-systems' are more dynamic than organisations and consist of actors from the different organisations or programmes involved in the implementation of a specific policy. They tend not to be formally defined but form spontaneously. Hjern focused on these networks of actors from different organisations, their 'subsystem', and how this impacts on policy implementation.[17] According to Hjern, actors take a programme and amend it to fit the objectives of their organisation, thereby changing its content. As actors within a subsystem are from different organisations or programmes there is a certain degree of bargaining. For example, a government policy may be implemented by a range of different agencies that all have their own institutional agenda. Each agency will try to ensure that the policy implementation process best fits with its own objectives. (Hjern 1980; Hjern and Porter 1981). By analysing the interactions between different organisations through the perspective of actors, Hjern showed the limitations of a top-down approach. In

[17] Participation in these subsystems is self-selecting, informal and not only motivated by rationality (self-interest).

particular, he illuminated its failure to capture the policy changes and influence exerted by the implementers.

Bottom-up approaches are recognised to have weaknesses (Goggin 1990; Sabatier 1997). For example they may neglect an analysis of the more structural, underlying factors that can influence implementation by focusing on local level actors. In this critique, analysis of bottom level implementation may be constrained by its reliance on local knowledge. Others (Barrett and Fudge 1981) argued that policy continues to evolve so much during implementation that the division between implementation and formulation, and between 'top-downers' and 'bottom-uppers' is impossible to follow.

Sabatier (Schneider) concludes that both bottom-up and top-down approaches provide valuable insights and that different elements of the two models lend themselves to the analysis of different policies. Using elements from both approaches, Sabatier developed his *advocacy coalition framework.* This framework sees policy as a continuous process of learning and development in which implementation has a central role. Policy change mainly occurs through the interaction and learning between different *advocacy coalitions* of actors within a policy subsystem. Within such a subsystem it is the role of a *policy broker* to create a compromise between coalitions, which results in a policy output. Policy outputs then mediate structural factors and systemic conditions during implementation.[18] All these factors interact to determine the policy impact, which in turn feeds back and informs the views of advocacy coalitions,

[18] Structural factors include socio-economic conditions or the impact of other policy subsystem decisions that impact on the way in which a specific policy is implemented. Policy implementation will also be affected by the distribution of economic resources, fundamental values, and basic constitutional structures Sabatier, P., A. (1997). Top-down and bottom-up approaches to implementation research. The policy process : a reader
M. J. Hill. New York, Prentice Hall/Harvester Wheatsheaf: xii, 441 p..

who continue to develop and change the policy, learning from the impact achieved (Sabatier 2007).[19]

Susan Barrett (2004) agrees that it may not be helpful to always see the dialectic of top-down and bottom-up. She argues that within implementation processes there is a negotiation between the coercive or descriptive element of a policy which sets certain parameters for the implementation and the level of discretion available to those actually implementing the policy at 'street-level'.

A different approach to implementation is Matland's (1995) *ambiguity/conflict model.* Matland links successful implementation to a policy's level of ambiguity and the level of conflict it may cause during implementation (Matland 1995). However, he falls short of describing actual strategies to ensure successful implementation of a policy. He uses this typology to explain which theoretical models, such as bottom-up or top-down, are most valid in each of these situations.[20] While not offering a prescription on 'how to' ensure implementation Matland's model offers the fundamental insight that policy following its formulation may be contentious (causing conflict) or ambiguous, so that it can be applied or interpreted in different ways. Therefore, to understand the policy implementation phase, it is useful to be able to gauge the level of ambiguity and conflict of any policy and the bearing this may have on implementation. For example discussions about ART in South Africa prior to the implementation of scale-up were already much more contentious than in Zambia.

[19] In addition to this policy learning or development, the advocacy coalition also envisages policy change to occur due to 'external shocks'.

[20] Matland's model conceptualises policies as falling into one of the following categories: administrative, political, experimental and symbolic each category corresponds to or is defined by a policies' conflict and ambiguity (Matland 1995).

A separate body of scholarship relevant to implementation studies is that of policy diffusion. Diffusion literature focuses on how policies and policy ideas are diffused from the centre (Mintrom 1997; True and Mintrom 2001; Berry and Berry 2007) to local implementation. Some of the empirical studies done in this field in the US explore different ways in which States adopted federal policies and implemented different models of the same policies. Diffusion studies have focused more and explicitly on studying how policy ideas gain currency and are adopted. Yet, while not specifically mentioned in reviews of implementation studies (Goggin 1990; deLeon and deLion 2002; Barrett 2004; Saetren 2005), adopting one policy in a range of different ways or according to different models, described in the diffusion literature is also about policy implementation processes.

Other theories have focused more on the empirical elements of implementation. O'Toole (1993) developed a *contingency approach* focusing on structures of implementation. Structures in this approach refer to structures within and across organisations that make implementation possible. Like Hjern (1980) he explores collaboration between more than one agency or authority. For different actors not to conflict during implementation therefore means that every policy requires a specific structure for implementation (O'Toole 1993). However, O'Toole discovered when testing this approach[21] that even within relatively un-contentious policy there are a multiplicity of policy goals, each of which requires a different policy structure for implementation. For example, aims relating to policy process, such as greater participation of people living with HIV/AIDS, might require different structures to goals related to policy outputs, such as expanded access to treatment. Despite this limitation O'Toole offers a valuable insight into the importance of structure to policy implementation. This is particularly relevant where structures may determine influence

[21] He does so using on policy implementation of wastewater regulations in different states in the US, shifting implementation from a state governed grant system to a privatised process during the Reagan era. (O'Toole 1993).

and access to the policy process, for example through feedback and consultations with intended beneficiaries. O'Toole differs from Sabatier who also uses the vocabulary of sub-systems in his theory in that he refers to the actual structural set-up of the political system within which policy is implemented. For health policy this entails the actual structures of the health system responsible for implementation of policy and for policy making and review.

Goggin (1990) proposes a *communication model* for implementation. While his particular model rests narrowly on the US system its premise is applicable and may offer insights to policy implementation processes in other political systems. He argues that there is no single factor that can explain differences in implementation of the same policy across different settings, but rather that the implementation experience sets in place a feedback process where principals (policy makers or formulators) and agents (implementers or bureaucrats) transmit messages. As interpretation is a function of the context within which actors operate the interpretation of a message varies. This explains differences in the implementation of policy with communication as the 'glue' holding this model together. Goggin argues that by concentrating on communication and the context within which a policy message is received the model successfully synthesises top-down and bottom-up approaches.

Hanf and Scharpf (1978) are also concerned with empirical problems to implementation. They suggest that resource transfer and communication are amongst the most important mechanisms for implementation of interorganisational policies. They highlight how these exchanges (communication between actors and resource exchanges) enable networks of actors to form across different organisations that facilitate the implementation of policies.

Based on these theories how a policy is communicated seems of importance and a valuable unit of analysis, throwing light on both how a policy was intended from the 'top' down and how it was received, understood and implemented at the 'bottom'. Different interpretations of the same policy may depend on issues such as context and constraints within a district or locality, historic, political, cultural or economic. As policy implementation of ART at the district level for example depends partly on the behaviour of doctors, nurses and other health workers understanding 'how' a policy was communicated between them and the national level can help understand why implementation happened in a certain way.

Challenges to implementation research

Implementation research has concentrated largely on rich, Western countries. Following a review of implementation literature 1991-1998, Hill and Hupe (2002) concluded that there little known about implementation beyond the theories developed in the 1970s or in low and middle-income countries. This reinforced findings of O'Toole's earlier literature review, who observed a lack of well-developed theoretical dimensions (O'Toole Jr 2000). Others observed a decline in implementation studies (Lester and Goggin 1998; deLeon and deLion 2002; Barrett 2004); and Saetren's review detected an ethnocentric bias – the Western hemisphere accounts for close to 90 percent of all studies (Saetren 2005). He also noted that the differences in approaches to implementation taken by studies make it difficult for these to accumulate to a theoretical approach.

Grindle and Thomas' (1991) book provides a rare range of case studies focusing on policy reform in low-income countries that are systematically informed by theory. However, as this framework was developed at the beginning of the 1990s some of the observations about policy elites and the way they develop appear outdated. For

example policy elites within the state are the focus of their analysis with little attention devoted to non-state actors who have become so important and influential in the policy process, in particular processes concerning health in low and middle income countries (Buse, Hein et al. 2009).

While many studies that focus on implementation and test assumptions of the theoretical models refer to health and to a lesser extent, low and middle income countries, insights gained from these practical applications are largely not reflected in theories of the implementation process (Saetren 2005). Indeed, Gilson and Raphaely (2008) in a review of health policy analysis in middle and low income countries, published between 1994-2007, found 78 articles that focused policy implementation, but noted that the overall rigor and theoretical strength of papers was limited and many studies neglected the sub-national level where implementation occurs. This reinforces findings from Saetren's review that indicated that the research published on implementation was not coherent enough as a field to drive the development of implementation theory, or be considered as a cohesive body of evidence and research in one particular area.

The relative neglect of studies on implementation has been attributed to political changes introduced in the 1980s and 1990s, encapsulated by Thatcher and Reagan's 'rolling back of the state' (Hill and Hupe 2002). Implementation was perceived as part of the management of policy and it led to outsourcing of actual implementation (Barrett 2004). Where policymakers manage the policy process rather than actually implement it, structures and systems that govern the process become more important than different stages of the policy process. Jann and Wegrich (Jones) have argued that the whole field of policy research has shifted towards the interaction and organisational arrangements between state and society, as a result of these changes in

implementation research. They credit implementation research with challenging the domination of the very narrowly defined model of stages in the policy process.

With the reduced role of the state and an increase of non-state actors in the policy process attention began to re-focus on the mode of decision-making or governance.[22] Scholars returned to a focus on actors and networks in decision-making processes (Lewis 2005). Governance has become increasingly prominent in the analysis, understanding and theory of the policy process at the global or national level, which has carried the danger of a return to the neglect of the factors that affect actual implementation (Hill and Hupe 2009).

A further challenge to implementation research is that measuring implementation is complex. If focusing on policy outputs, it narrowly measures a few variables and is potentially blind to the complexities of the implementation process (Hill and Hupe 2002) or *why* a policy has achieved its goals (outputs) or has not. Most implementation research is negative in the sense that it fails to provide strategies for managing policy processes in a way that might secure successful implementation. (Hill and Hupe 2002; Saetren 2005).

The difference between implementation research focusing on process rather than outcome is significant. A study of nurses' perceptions of the implementation of free health care in South Africa following the 1994 transition found that while the overall policy was a success, satisfaction levels in front-line providers were very low. This dissatisfaction had a possible effect on patient care and on nurses leaving their profession or migrating, potentially creating future larger issues for the health care sector (Walker and Gilson 2004). Therefore while the implementation of South Africa's

[22] Governance is defined here as the 'rule of the game' or the framework that governs policy processes, as elaborated on in the more detailed discussion in this chapter below.

free health care policy was deemed a success when employing a (top-down), output-oriented analysis of implementation, a (bottom-up) analysis focusing on the process, revealed shortcomings and problems with the implementation of this policy.

Insights from the review of implementation literature

This review of the literature on policy implementation suggests: implementation is a political process and does not follow a rational, linear path. It is influenced by both structural factors such as organisations and the way they work, and agency – actors as individuals and parts of networks. Both top down and bottom-up approaches to analysing implementation of policy offer insights and need to be employed. The literature stresses the iterative nature of the policy process, including implementation as a changing process (Sabatier 1997).

Comparatively few studies have focused on implementation, yet there are many examples of policy failure despite the best intentions of those formulating its content, and seemingly sound, policy interventions for health (e.g. Schneider 2006). Of the studies that have been conducted, few have focused on low income countries (Saetren 2005). A review of health policy analysis literature focusing on low and middle-income countries found that 40 percent of papers focusing on implementation ignored the sub-national level where policy implementation takes place (Gilson and Raphaely 2008).

Many of the scholars writing in this field suggest that better understanding of implementation processes can directly assist in future policy design and making (Lester and Goggin 1998). This is particularly relevant in an era of greater global linkages, including in health (Lee 2003), which means that health policies and health

governance structures are often formulated, decided and financed at global level.[23] Implementation of these 'global' policies often has varied results, as the comparatively greater success by Zambia than South Africa in rolling-out ART attests. Similarly, evidence points to sub-national variations in implementation between provinces and districts (Schneider 2006a),[24] further highlighting the need for better understanding of implementation processes at sub-national level.

The challenge of different technical solutions, economic policies and health care reform in many countries in the global South is well documented. However, less attention has been paid to understanding the processes leading to successes and failures of implementation (Saetren 2005), highlighting the need for a greater focus of implementation research on process. Two important aspects of implementation highlighted by theory but rarely considered in detailed work on low and middle income countries are communication and structures, understood to include networks.

Theorists and empirical studies have demonstrated the centrality of *communication* (Goggin 1990, Hanf and Scharpf 1978) in understanding implementation processes at the same time as overcoming the limitations of an either top-down or 'bottom-up approach. While Hjern (1980) and O'Toole (1993) demonstrated the importance of *structures* through which policies are implemented, highlighting the importance of policy context. Matland's (1995) model iterated the need to assess a policy's ambiguity and potential for conflict, also showing the importance of the policy context as well as policy content on implementation.

[23] Examples include the WHO Framework for Tobacco Control, its' 3 by 5 Initiative, DOTS for TB control and programmes implemented through Global Health Initiatives Bennett, S., J. T. Boerma, et al. "Scaling up HIV/AIDS evaluation." The Lancet **367**(9504): 79-82..

[24] Schneider et al's (2006) comparative study of the implementation of DOTS for TB control and syndromic management for STI's provides further evidence.

Theories of implementation reviewed focus to a lesser degree on resources and by whom these are provided. In the policy processes relating to ART roll-out in low and middle income countries like Zambia and South Africa one of the key constraints and challenges to overcome is the scarcity of resources for policy implementation. Where *resources* are scarce the failure of particular policies is especially costly (Brinkerhoff 1996). This is particularly true in Zambia and South Africa, given the burden of disease and human suffering. Resources might only be available to a country for a limited amount of time, or future funding dependent on the ability to prove performance (Hanefeld 2007). Where policy initiatives fail, or impact appears negligible it is likely that the financial and political attention currently available for HIV/AIDS will shift to other health or development issues. Better knowledge and understanding of why policies succeed and why they fail is therefore doubly important. A possible explanation for the lack of focus on resources in implementation theory and research is that most of this field has mainly focused on implementation of government policy in developed countries where there are fewer resource constraints.

Despite these insights into implementation this review of the literature shows some clear gaps, which, if one is to understand implementation, are essential to pursue. One is the almost complete neglect of the notion of power, a concept central to the policy process (Walt 1994). While scholars suggest that actors and their influence are essential to understanding of the policy process, the review of the literature demonstrates there is little empirical work on sources and exercises of power, reiterating findings by Walt, Shiffman et al (2008).[25] Another neglected area in implementation is the notion of networks of actors (i.e. going beyond their influence as individuals), how they interact and through what networks (Hill and Hupe 2002) A

[25] A rare exception is Hyden, G. (2008). "After the Paris Declaration: Taking on the Issue of Power." Development Policy Review **26**(3): 259-274.

greater focus on sub-national implementation processes rather than outcomes is required to understand why policies succeed and why they fail.

Having recognised these lacunae, the rest of the chapter will explore briefly, approaches to power and networks, in order to assess how they may add value to an exploration of the policy implementation process.

Theories of power

Few health policy studies have explicitly addressed the notion of power (Walt, Shiffman et al. 2008), partly perhaps because it is a complex and often contested concept (Sadan 2004). Robert Dahl (1961), an early theorist of power described its pluralist nature. Pluralism contends that power is held by a number of different centres within society with no one group dominating. He also described the power exercised by individuals or entities to determine the actions of another (Dahl 1961). It is often considered a key feature of democracy and entails different centres of power or pressure groups that compete within society. In contrast elitist views of power, often associated with authoritarian regimes, suggest that power is concentrated in the hands of a few individuals or a particular group (Heywood 1999). Pluralist descriptions of the policy process have been criticised by Bachrach and Baratz (1971), who suggest it neglects the ability of some actors to prevent issues reaching the agenda. They introduced the notion of 'non-decision-making' as a further exercise of power (Bachrach and Baratz 1971).

Steven Lukes (1986) summarised these two 'dimensions' of power and added a third. Lukes critiqued Bachrach and Baratz as too focused on behaviour or non-behaviour. He argued that bias within the system, influences and sways decisions in ways that might be unconscious. This kind of power is unobservable if focusing purely on

behaviour of individuals and their conscious decision or non-decision-making. Such systemic bias, through, for example, the mass media manipulating people's tastes and political opinions or socialisation of people through the education system, means the political agenda can be controlled without decision-making (Lukes 1986). Lukes' analysis of the third dimension of power emphasises that interest is not always overt. Power can be exercised to further interest, which is neither declared nor executed through a decision or non-decision, by manipulation of the agenda or people's tastes and distastes (Lukes 2004).

These three dimensions of power help understand how influence is exerted and decisions are made throughout the policy process.[26] Lukes' second and third dimensions of power might serve to explain many of the health inequalities linked to poverty. Poor people's lack of access to the policy process means that their issues and concerns do not reach the agenda. The fact that they have no or little purchasing power means that pharmaceutical companies do not pursue research aimed at finding treatment and cure for those diseases which primarily affect the poor. Lack of knowledge about treatments or prevention and systemic socio economic inequalities mean that poor people might not be aware of their rights, including in relation to health. The third dimension of power also helps explain the systemic inequalities between rich and poor countries, and poor and rich parts of the population within one country.

Discourses of power have also focused on the power or 'agency', held by the individual, which developed from the tradition of the enlightenment thinkers such as Kant, versus the power of 'structure' of organisations proposed by Levi Strauss (Strauss 1977). Sen developed the concept of agency freedom to describe the ability

[26] Lukes in his later work also highlighted the connection between identity and power, which while not fully elaborated is similar to that of Bourdieu's social capital (Lukes 2004). Clegg (1989) also highlights the importance of organisation (including networks and alliances) to power.

of actors to pursue goals they set themselves (Sen 1981). Others have argued that it is false to separate agency and structure (Giddens 1984). For example, a powerful leader in an international organisation derives power from his or her reputation as well as that of the organisation, and leaders may require a platform to exert influence.

Sources of power

When seeking to better understand power and influence Bourdieu's forms of capital are helpful. Bourdieu (1983) recognises that power, which he sees as a type of 'capital' or 'agency', has different sources or can take different forms. Power is not only 'economic capital' – i.e. resources - and decision-making is not purely explained (by rational) pursuit of economic gains. Instead he argues that capital stems from other sources as well, which may be social or cultural. Social capital is defined as 'the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalised relationships of mutual acquaintance and recognition' (Bourdieu 1983) The volume of social capital possessed by given agents thus depends on the size of the network of connections they can effectively mobilise and on the volume of capital (economic, cultural or symbolic) they have. Cultural capital is a result of informal education and development of taste (Bourdieu 1986) and the capital gained from formal education processes. It can exist in three forms, the *embodied* state, which is in an internalised state of the mind e.g. tastes and intellectual preferences, in the form of cultural goods such as books called the *objectified* state and in the *institutionalised* state such as education and diplomas. Symbolic capital is where economic capital is transformed into symbolisms of power, for example that of a title in nobility or of religious leader or the power associated with a high office such as a Presidency or a tribal leader (Bourdieu 1977; Bourdieu 1989).[27]

[27] Bourdieu's description of different capitals at times overlaps or remains vague enough for different capitals to be interpreted in similar ways. However, for this study these have therefore been defined

What Bourdieu describes is of significance in two ways. His concept of 'capitals' is a form of power not only founded in an actor's wealth, or control over economic resources. It is therefore possible to employ Bourdieu's typology to explain sources of power of actors who do not have 'formal' access in the policy process, but who may nevertheless influence it. One example would be the power of civil society to push HIV/AIDS onto the government's agenda in South Africa (Schneider 2002).

Bourdieu's concept of capitals is also useful because he explicitly links social capital to *interconnectedness* – to the networks a person is part of and the position within such networks (Bourdieu 1983). This provides an interesting lens for analysing policy processes where the interaction of individual and institutional agency is key, as are the connections between actors and networks across different levels, such as district, provincial and national. Bourdieu's theory of capital allows both a structuralist and agency perspective of power. He recognises that individuals are important, and recognises their institutional associations as a source of power. The significance of networks in the policy process has been highlighted in analysis and case studies described below. However, Bourdieu's main contribution in this context is his fundamental insight that membership of a network, and the number of connections of the individual actor, constitutes a source of power. This helps to explain influence on the policy process by actors who might be lacking education (cultural capital), economic resources, or other determinants of power within the social hierarchy or policy process.

Social capital has not only been described by Bourdieu and there is a growing body of literature drawing on this concept. It dates back to work by Hanifan (1916) who

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further in Chapter 3 below.Smart, A. (1993). "Gifts, Bribes, and *Guanxi:* A Reconsideration of Bourdieu's Social Capital " Cultural Anthropology **8**(3): 388-408.

analysed relationships between community and schooling of children (Hanifan 1916). It has also been applied in the field of health, including by social epidemiologists such as (Berkman and Syme 1979) and others (Pronyk, Harpham et al. 2008) to explain its effect on health outcomes.

The value of Bourdieu's capitals for policy analysis (rather than studies or theories linking social capital to policy outcomes) lies in the explicit link between capital and influence or power, and in the acknowledgement of different sources of influence or capitals.

Earlier than Bourdieu, Weber described three sources of authority; traditional authority stemming from customs and traditions; charismatic authority which describes the personal quality of a leader or a person's appeal; and legal rational authority which describes the power linked to an office, for example the Ministry of Health or the bureaucratic power throughout the health systems structure (Weber 1948). This last source of authority 'rational-legal' linked to the state and office is not as clearly defined in Bourdieu's concept of capitals. However, this brief comparison demonstrates the extent to which Bourdieu's capitals allow for understanding a wider range of factors as sources of actors' power than Weber. For example power rooted in social and cultural capital is not captured in Weber's theoretical framework. These are particularly valuable to analysing policy processes for health, where technical knowledge of health workers at all levels acts as a source of power (Lee and Goodman 2002; Buse, Mays et al. 2005), and where networks appear increasingly important (Lewis 2006).

Networks and the policy process

Making policy, formulating decisions, setting the agenda and implementing policy, are all processes dependent on individuals. Many of the most pervasive theories of the policy process describe how 'policy brokers' or 'entrepreneurs' shape and influence policies at different stages of the process (Kingdon 1984; Goddard 2009). However, many scholars demonstrated that linkages and networks (Lee and Goodman 2002; Lush, Walt et al. 2003; Lewis 2006) between individual actors are important to understanding policy processes (Hay 1992; Marsh 1998; Thatcher 1998), including to better understanding implementation (Sabatier 2007). However, network studies and networks have in the past not focused on implementation (Hill and Hupe 2009).

Most individuals are part of organisations, and formal and informal groups, which enable and facilitate their participation and influence in policy processes. These organisations and groups often form overlapping networks, with individuals being members of more than one network. Hanf and Scharp (1978) emphasise how different organisational affiliations and the communication and resource exchanges between these implementation networks influence actual policy implementation. It is therefore important to place individuals within their networks, to define these networks and to better understand how they influence the policy process.

Over the past decade or more many have claimed that the authority of the state bureaucracy in policy-making has been eroded and a greater number of non-state actors have gained influence in policy processes, (Skok 1995; de Leeuw 2001). While there is considerable debate about the extent to which the role of the state has diminished, for example (Mann 1997), there is wide acceptance that policy processes have extended to include many more non-state actors at both national and global levels (Reineke 1999). From the 1980s onwards policy communities increasingly

included non-governmental organisations, and their participation in national and international policy processes has been increasingly formalised (Buse and Walt 2000). In the field of global health an increase of state and non-state actors has been observed (Hein, Bartsch et al. 2007; Walt, Spicer et al. 2009), with a greater number and importance of linkages between them (Lee and Goodman 2002; Lewis 2006; Grebe 2008). Trends in expanded communication and travel have led to trans-national networks gaining greater prominence (Walt 1994; Finnemore and Sikkink 1998; Lee 2003). The increasing number and interlinkages between actors at all levels, and the greater complexities of policy processes associated with globalisation means the study of networks is an increasingly important part of any policy analysis (Marsh 1998).

Network definitions

Terminology used to describe networks in policy processes is often confused and definitions have been used loosely (Thatcher 1998; Buse, Mays et al. 2005).[28] Despite ambiguities, network characteristics and different types of networks are identified in the literature and some consensus exists. *Network* is a general term applied to clusters of actors, as individuals and organisations.[29] The network idea in policy captures the phenomenon of shared decision-making and the way in which organisations exchange resources to achieve their goals (Marsh 1998). *Issue networks* encompass a range of interests, fluctuating interaction, limited consensus and unequal power relationships (Marsh 1998). These are broader and less focused on a specific policy process than on a more narrowly defined policy goal. They are often focused on agenda-setting aiming primarily to push particular issues onto the

[28] Born in part out of the increasing specialisation by groups of actors involved in a particular area of policy formulation, initial concepts developed described 'issue networks' by US social scientists, and 'policy communities' by academics in the UK. (Thatcher 1998). Theorists have also described 'iron triangles' relationships between legislature, executive and interest groups (Lowi (1969) in Marsh 1997).
[29] For example Scott, J. (2000). Social network analysis : a handbook. London, SAGE.

policy agenda. Climate change activism or campaigning on violence against women can be seen as examples of issue networks bringing together a range of organisations that lobby to ensure an issue of their concern is addressed through policy. *Policy networks* can be national or global Walt, Lush et al (2004) define the latter based on Reineke (1999) as: '...alliances of government agencies, international organisations, corporations and elements of civil society that join together to achieve what none can accomplish on their own'. Sabatier's (Schneider) *advocacy coalitions* are similar but go further and describe actors from a variety of public and private organisations 'who share a set of normative and causal beliefs on core policy issues', and who seek to manipulate the policy process to change.

Policy communities are a type of network: a group of people working within a particular policy area, or sub-system such as health or malaria with further sub communities within these (Buse, Mays et al. 2005).[30] These are different to *epistemic communities*, which are narrower, based on technical, expert knowledge in a particular subject area. Haas defines these as 'a network of professionals with recognised expertise and competence in a particular domain and an authoritative claim to policy relevant knowledge within that domain or issue area' (Haas 1992). They often have a self-identity and a common allegiance, possibly through a shared educational or professional background, which may impact on the policy process at various stages (Lee and Goodman 2002). Policymakers, organisations and individuals working together on responses to HIV/AIDS might for example be described as a *policy community*, whereas a UN reference group on epidemiology might be described as an *epistemic community*. This contrasts for example with an *issue network*, which may describe all actors working to change the law on a particular issue.

[30] Within each policy area exist further sub communities.

In addition to policy networks, policy communities, epistemic communities and issue networks, social networks (Wasserman and Faust 1994) have been a focus of research on participation and social movements (Snow 2004).[31] Social networks and movements are based on social or informal linkages between people not in relation to their organisational affiliation or professional position (Tilly 2004). They form part of disciplines of sociology and development and social networks research represents a large body of literature which covers quantitative mapping of individuals and their networks amongst other things (Wasserman and Faust 1994). Social movement theory and research while focused on linkages between individuals does not focus on actors of networks based on their involvement in a specific policy process. A social network approach is therefore distinct from the discipline of policy analysis to which this study belongs.

Focus of network studies

Marsh (1998) describes the development of network theory amongst American, British and European social scientists. The US school evolved from Lowi's 'iron triangle' (Lowi 1979), which sees the policy process as consisting of stable relatively exclusive relationships between the legislature, executive and individuals representing particular interests -mainly business interest - and focuses on the micro level relationship between individuals (Buse, Mays et al. 2005). In contrast, the British school places an emphasis on structural relationships between institutions, and differences between policy communities and issue networks. Other European studies focus on the inter-organisational elements of networks and look at individuals' behaviour within these, drawing on organisational and management theory (Hanf and Scharpf 1978; Hjern 1980).

[31] It is important to emphasise that networks examined in theories of the policy process are not the same as social networks and relations, such as kinship, which are often explored in anthropology.

Different theorists have provided different insights. These include Rhodes (1990) who identified four dimensions of networks: membership, integration, resources and power relations between individual members (Rhodes 1990). Marsh and Rhodes (1992) subsequently developed a network model, which concluded that all networks are structures of resource dependency; that the structure of networks affects policy outcomes; and that if the structure of a network changes it can result in policy changes.

Some scholars have explicitly noted the relationship between networks and power. For example, Smith (1993) argues that networks may enhance the power of various groups by collaborating and linking with others (Smith 1993). He states 'power is something that develops within relationships between groups and state actors, and a policy network is frequently a mechanism for enhancing mutual power rather than taking power from one or the other'. This point resonates with Bourdieu's social capital, where power resides in the ability to mobilize and engage with others on particular issues.

Daubjerg and Marsh (Daujbjorg 1992) highlight the importance of a focus on 'macro level' as it helps understand the why people join networks. Hay notes that all membership of networks is in some sense strategic; at a minimum it makes sense to join a network on some level (Hay 1992).

Just as network studies tend to neglect the policy process, so studies and theories of the policy process tend to neglect networks (Skok 1995). A review of implementation literature demonstrates limited focus on networks (Hill and Hupe 2009). Some, including Hjern (1980) have considered the role of linkages or networks between actors from different organisations or institutions responsible for implementation.

However, this research has not focused explicitly on investigating how these linkages or network characteristics influence policy implementation processes.

Networks analysis in health policy

A review of the literature revealed some studies on networks' influence on health but largely at the international level (Lee and Goodman 2002), or between international and national jurisdictions (Walt, Lush et al 2004; Grebe 2008). A number of scholars have pointed to the influence of epistemic communities in the formulation of international health policies (Haas 1992; Lee and Goodman 2002; Walt, Lush et al. 2004). The increased need for policy coordination at the trans-national level precipitates a greater need for common 'technical' information and solutions to respond to global threats, such as for example global warming or infectious disease (Haas 1992).[32] Lee and Goodman (2002) describe the elitist nature of epistemic communities at international level. Policy analysis for health in practice often draws on stakeholder analysis, but only by implication examines networks (Brugha and Varvasovszky 2000; Lee and Goodman 2002; Walt, Lush et al. 2004; Schneider, Gilson et al. 2006). Others, including Lewis (2006) have shown the importance of professional networks at regional or local level (Kwait, Valente et al. 2001; Geffen 2009). A rare study in South Africa shows the impact of national and sub national networks in implementation and how, in the case of STI management this led to successful implementation, but in the case of TB policy did not (Schneider, Gilson et al. 2006). De Leeuw (2001) reflects on the methodological challenges of using a network lens for health policy analysis, including the challenges and labour intensity in the analysis of data. There are few empirical studies focusing on the roles of networks

[32] Despite the technical nature of expertise, studies focusing on epistemic communities in the developed world found no lessening in controversy or what might be described as 'high politics, due to the involvement of epistemic communities Haas, P. M. (1992). "Introduction: Epistemic Communities and International Policy Coordination." International Organization **46**(1): 1-35..

in implementation across national, provincial and district levels. The review by Gilson and Raphaely (2008) does not list network approaches as frameworks used in health policy analysis, confirming an absence of network research. It reiterates observations by (Walt, Shiffman et al. 2008) that there are only few empirical studies in health in low and middle income countries that use network analysis.

Limitations of network approaches

In the past network approaches have often focused on trying to understand the structure and dichotomy of networks rather than broader questions relating to their legitimacy and governance (Hay 1992). The study of networks has often concentrated on a network at one moment in time, rather than studying the evolution and demise of networks, or their successes or failures over time. Such approaches have been criticised for their focus on internal network characteristics, to the neglect of the context in which they form and their impact on policy outcomes (Hay 1992, Smith 1993, Thatcher 1998). Smith (1993) for example has highlighted that while the study of pressure groups has been seen as central to understanding the policy process it has focused on the structure, resources and make-up of groups, instead of their linkages to the state.

Daubjerg and Marsh (Marsh 1992) emphasise the limitations of networks in providing a complete explanation for policy outcomes: they argue that network analysis has to be integrated with state theory to better understand policy outcomes. They undertake to develop a model to explain how certain types of networks correspond with the state's characteristics. So, for example tight policy communities tend to emerge where the state is in an intermediate position of strength, as it cannot 'do' policy without some actors, yet has the power to exclude others. However, while this does successfully link certain types of networks to certain types of states and thereby breaks from the

narrow focus on internal network characteristics it still fails to examine how networks interact with the policy process to better understand how they affect policy outcomes.

Others have tried to add to existing theory through a focus on 'the dialectical nature of the relationship between the networks as structures and the actions of agents who occupy positions' (Marsh and Rhodes 1992; Marsh 1998). In the context of health, specifically ART roll-out, it is then possible to see networks in a 'social context' of globalisation, where there is an increasing number of actors both national and international, state and non-state involved in the provision and policy relating to health.

In summary, this review of network literature suggests that by focusing on internal dynamics, including structure, membership, resources and power relations between members, it is possible to throw light on how networks function and affect the policy process (Marsh and Rhodes 1992).

The review also shows very limited research examining networks of actors at sub-national level, since focus has mostly been on national or international networks. This study addresses this gap. It draws on the insight that a comparative analysis of networks' effects in different contexts help distinguish between contextual factors and network influence and compares the role of networks in policy implementation processes in two countries. In addition given the relationship between networks and how power is exercised and disseminated throughout the policy process (Smith 1993) network analysis adds to understanding of power within the policy implementation process gained from an analysis of individual actors' powers. As the research specifically focuses on national to sub-national implementation processes networks are particularly useful as a unit of analysis, as the study of networks provides a meso level of analysis in the policy process, which is otherwise hard to examine (Marsh

1998). The study also contributes knowledge to the role of networks in implementation processes, an area of investigation that has received limited attention so far.

The changing spectrum of health policy analysis

Policy processes and their analysis have changed since the 1990s. An increase in numbers of (non-state) actors in the policy process linked to processes of globalisation have led to a perception of a diminished role for the state in decision-making (Rosenau 1995). This has been accompanied by a switch of focus to 'governance' of the policy process from a focus on 'government' (Hill and Hupe 2002; Hajer and Wagenaar 2003) and to looking at multiple policy processes rather than focusing largely on public policymaking, in which the state is the central actor.

Some scholars in the field of international health (e.g. (Fidler 2004; Kickbusch 2005; Lee, Koivusalo et al. 2009), focus on governance of health explicitly, others such as Walt (2009), (Bennett, Boerma et al. 2006) have analysed and described the increase in numbers of actors, the new strategies and networks through which they engage in global health. Despite differences in approach all agree that the field has been characterised by an increasing number of actors (state and non-state) working on global health issues or crises, including HIV/AIDS, through a range of new strategies. These include global public private partnerships and global health initiatives (Walt and Buse 2000; Hein et al 2007; Kickbusch 2005).

Global health initiatives (GHIs) have become one of the main vehicles for the provision of development assistance for health and have been important to the policy process analysed in this thesis (Buse and Walt 2000; Bennett, Boerma et al. 2006; MaximisingPositiveSynergies 2009). The three largest GHIs - the US Presidential Emergency Plan for AIDS Relief (PEPFAR), the Global Fund to Fight HIV TB and

Malaria and the World Bank Multi-country AIDS Programme (MAP) – together provided two/thirds of all external funding for HIV/AIDS in low-income countries from 2006 onwards (Bennett, Boerma et al. 2006; MaximisingPositiveSynergies 2009). The level and extent of funding provided by GHIs was evident in Zambia and South Africa, where PEPFAR for example provided USD 270 million and 590 million respectively in 2008 (OGAC 2008), while the Global Fund has also provided more than four hundred million USD for HIV interventions in Zambia alone since 2002 (GFATM 2009).[33]

While nomenclature is difficult, GHIs are often partnerships including the public, private and civil society sectors. They tend to focus on specific diseases or health issues, work at the country level, implementing a particular strategy across a number of countries often in partnership with civil society (Brugha 2008). Yet as comparatively new actors in global health, evidence about GHIs impact at national and sub-national level is limited (MaximisingPositiveSynergies 2009).

Governance itself is a contested term, and subject to considerable discourse in the field of international relations (Held 1995; Rosenau 1995). Those policy analysts of global health who have engaged with governance discourses have offered a variety of definitions of the term (Hein, Bartsch et al. 2007; Buse, Hein et al. 2009; Lee K 2009). These differ in detail and complexity but have two commonalities; they all understand governance to be about the 'rules of the game' described as 'structure' or 'regimes', and about the increase in actors (see also the review by Hill and Hupe (2002) of definitions of globalisation).

As a result policy analysis has broadened to reflect the changed reality of the policy process and analysis includes a focus on how governance structures affect the policy

[33] For a full breakdown of funding received per country per year, please see tables 4.2 and 4.5 in Chapter 4.

process (e.g. Shiffman and Smith 2007). Health policy analysis in low and middle income countries has also changed over the past two decades. Where initially it focused mainly on the state and state centred processes, since the 2000s it has increasingly considered the role of non state actors in these processes (Walt, Shiffman et al. 2008; Walt, Spicer et al. 2009).

The need for multi-level analysis

A weakness of the literature reviewed was the limited policy analysis of linkages between global governance and its effect on implementation processes at national to sub-national level. A feature of 'governance' era research and policy processes has been the greater attention to multiple layers or levels of the policy process (Hill and Hupe 2002). Some policy analysis focuses on how the different layers or levels influence policy processes for example on the role of international actors in national policy processes or of a particular actor such as the World Bank in national policy processes (Lush, Walt et al. 2003; Harrison 2004; Walt, Lush et al. 2004; Grebe 2008). However, there are limited examples of studies focusing on sub-national level especially in middle and low income countries. A rare, recent exception explored donor coordination at sub-national level in Zambia by (Sundewall, Forsberg et al. 2009) and specifically discussed the absence of other research at the sub-national level. This review of the implementation literature, of empirical studies of health policy and of implementation at sub-national, indicates that while the process of conceptualising and investigating the effects of the changes in global governance on sub-national implementation in low and middle income countries has begun, it is still in its infancy. Hill and Hupe in the 2009 updated edition of their book on policy implementation make the link to governance, as have others (Jann and Wegrich 2005). However, this review confirms greater empirical evidence is needed, to in turn further drive the development of theory that helps better conceptualise the implementation processes in low and

middle income countries in the era of changed global governance. Judging from these most recent publications, this conceptualisation – implementation processes in the era of governance - may be the beginning of a further wave of implementation research and theory.

As an 'intuitively comprehensible metaphor' (Adam and Kriesi 2007) in the policy process, networks and linkages between actors have emerged as concepts to grasp the phenomenon of a greater number of actors working within different institutions often in very different locations on the same policy process. Network approaches have increasingly been used to understand and analyse policy processes in the current era (for example (Daujbjorg 1992; Marsh 1998; Hajer and Wagenaar 2003), although they are a comparatively new unit of analysis. Networks or social movements have also been particularly acknowledged as important in AIDS activism (Mbali 2005; Grebe 2008).

Conclusion

A review of the literature explores the value of policy analysis (including for health), the need for further research on and better understanding of implementation within the policy process as a comparatively neglected field of analysis where greater knowledge will contribute not only to theory development but also assist programmes and policy makers in practice. A review of the literature on implementation highlights the relevance of a renewed focus on the field of implementation in the context of the era of global governance (Hill and Hupe 2009).

Based on the review of the literature in this chapter a number of gaps in knowledge with regard to low and middle-income countries were identified. Firstly, there is little empirical knowledge about how policy is communicated, what structures are central for

implementation, how country contexts and level of policy conflict affects implementation. Added to these aspects, resources – especially given the importance of donor funding in ART roll-out – were clearly critical in implementation. In addition, sub-national health policy implementation processes are under researched.

Second, actors and their linkages are clearly central to the policy process, with an increasing number of actors active at all levels. The literature review highlighted the relative neglect in understanding of how networks affect implementation. Networks are a particularly useful unit of analysis to understand multi-level processes and therefore especially suited to the analysis of national to sub-national implementation.

Third, how actors influence policy was not often explicitly addressed. The review of literature on the policy process demonstrates that power is acknowledged as a fundamental concept underlying how the policy agenda is set, how policy is formulated and how it is implemented, yet, it is often neglected in empirical studies that analyse the policy process. By focusing explicitly on actors, their networks and how their power allows them influence on policy implementation this study ensures it remains central to data collection and analysis, and will add to understanding on exercises and sources of power of actors in the policy process.

Reviews, synthesis and reflections on the field of health policy analysis by (Gilson and Raphaely 2008) and (Walt, Shiffman et al. 2008) point to the need for rigorous application of frameworks of analysis, and the value to be gained by applying other social science theory to empirical research. This study builds on these reflections through the development and application of a framework for analysis set out in the following chapter that draws on the theoretical approaches reviewed and addresses the gaps in knowledge identified to ensure empirical findings can contribute to the theoretical discourse.

CHAPTER 3 - STUDY FRAMEWORK

The review of the literature of the policy process in the proceeding chapter identified key areas that require further study to address gaps in current knowledge. Based on insights gained from the literature the following discussion develops the study framework, formulates study aims and questions that guided the research, before setting out the methodology used to answer these.

The study

This thesis focuses on the most neglected area of the policy process – implementation - in a low and a middle income country. To better understand how the changes at the global level in governance of health affect national and sub-national implementation of policy it examines the role of actors and their networks in policy implementation processes relating to ART roll-out in Zambia and South Africa. A study focus on all actors and their networks reveals the extent to which state and non state actors are linked and the influence they have on how policy relating to the ART scale-up was implemented in the two countries. Bourdieu's notion of power is used to explore this influence.

The study focuses on processes of national to sub-national implementation to understand 'how' policy is implemented rather than a narrow focus on policy outcomes to assess success or failure. The focus on process rather than outputs facilitates an understanding of the complexities of factors that contribute to policy implementation and that determine both how a policy is implemented and how policy implementation links to other parts of the policy process. This draws on insights from Sabatier, who as one of the few theorists of the policy process links implementation to other parts of the policy process rather than viewing it as an endpoint of policy (Sabatier 1997). It is also

informed by Hill and Hupe's (2002) hypothesis that policy implementation research in the past has often focused on outputs which has limited understanding of the complexities of the processes of implementation and contributed to limitations in the field.

This study does not assume policy implementation to follow either an exclusively top-down or bottom-up process. It rather seeks to establish which factors from bottom-up and top-down perspectives impact on the implementation of policy and it draws on theoretical insights from both top-down (Pressman, Wildavsky et al. 1973) and bottom-up approaches (Lipsky 1980) to implementation. It views implementation as a continuous process (Grindle and Thomas 1991; Sabatier 2007).

To better conceptualise the way in which national to district level policy transfer occurs, drawing on insights of empirical implementation theory (Hanf and Scharpf 1978; Goggin 1990; O'Toole 1993), three component parts of policy implementation will be explored: communication, the structures for implementation and resourcing of the policy. While a discussion of implementation literature has identified shortcomings of different conceptual frameworks, models and approaches[34], the literature review showed they offer insights for the analysis and study of the policy implementation processes in Zambia and South Africa. Key insights gained from the literature review and how these inform the framework for this study are summarised in the table 3.1 below.

[34] The differences between models, frameworks, approaches and theories are not always clearly accentuated in the literature (Sabatier 1999). This study refers the category by which a model, framework, theory or approach is described by its author, rather than follow one definition throughout. For example Sabatier (2007) refers to the advocacy coalitions as a framework, whereas Baumgartner and Hones (1999) refer to 'punctuated equilibrium' as a theory.

Table 3.1: Overview of the study framework and its sources in literature

Implementation element	Source	Aspect/element relevant for this study	Method
Communication	Goggin (1990,1998) Matland (1995)	Communication of policies and guidelines to health workers. Communication of policies and guidelines to general public. Memos, Personal communication, Media announcements, Social Mobilisation, Level of politicisation.	Media analysis Document review, (memos; national plans) Interviews.
Structures	O'Toole (1993, 2000) Hjern (1981)	Provincial bodies, Ad hoc committees, Health system structure, Actual facilities, Policy making bodies within the health system.	Interviews, Document review, Secondary literature.
Resources	O'Toole (1993) Lipsky (1980)	Financial (for projects, laboratories, medicines etc.) Capacity, Knowledge (data, etc).	Interviews, Document review.
Networks	Sabatier (Schneider) Hjern (1981) Lewis (Jones)	Who people know/work with How often they meet Where they meet (distance of relationship)	Name generator, Interviews.
Power	Bourdieu (1983, 1989) Weber (1948)	Actors and networks considered powerful. Actions or reasons why they were considered powerful or to have influenced. Sources of actors' power.	Name generator, Interviews.

This study focuses on the implementation processes relating to ART roll-out drawing on a range of insights different theories have to offer, as summarised in the table here. To understand top-down and bottom-up perspectives on implementation a methodology was devised to capture different perspectives on the policy process. A list of initial actors was generated top-down at the national level in each country, but interviews were then conducted from the bottom up to capture different views.

As set out in table 3.1 above, an analysis of 'communication' entailed the way in which the policy was announced and communicated to health workers at all levels and to

patients. It included aspects such as training, government and other memos, and personal communication as well as media announcements. It also included treatment related advocacy and social mobilisation activities recalled by interviewees or covered in the media.

'Structures' in the research and analysis of findings focused on the actual structures of the policy process and the health system, such as provincial health management teams, or comprehensive care management and treatment committees (but also the actual health facilities) in South Africa and Zambia. It included committees, regular meetings and organisational structure through which the implementation process was managed. The analysis of findings highlights where the public sector structures collaborate with other organisations, such as NGOs, to form committees or structures that were important to the roll-out of ART. Research therefore examines the extent to which the infrastructure in Zambia and South Africa fitted the implementation of the roll-out in the two countries, drawing on O'Toole's insights (1993).

'Resources' in study design and analysis referred to the necessary economic resources required to implement ART scale-up, including financing of training, guidelines resources for meetings but also the actual medication, and requisite laboratory equipment. The main sources of information were from interviews. However, this was triangulated where possible drawing on budget, national health accounts, and some of the secondary literature examining specifically the flows of donor funding in Zambia and South Africa (such as for example (Ooman, Bernstein et al. 2008)).

Power of actors and their networks

Research focused on networks of actors and their power in policy implementation, examining network linkages between actors to ascertain their influence on policy

implementation processes. To better understand actors' power, the sources in which it is rooted and the ways in which it is exercised, a framework was developed to guide interviews and analyse findings. This framework used as its starting points the insights of (Bourdieu 1983) who argues power has its origins in different 'capitals': economic, cultural, symbolic, and social capital, as described in the table below.

Table 3.2 Actors' sources of power – a framework for analysing sources of power in this study

Sources of Power	Definitions for this study
Legal authority (formal power, government)[35]	Government authority, formal authority vested in actors by law, the policy or the public sector. This includes all DoH and MoH staff in both countries charged with the implementation of the policy.
Social capital (Bourdieu 1983)	Power derived from networks, access to other actors and relationships. Social capital may be utilised both horizontally (at one level) and vertically through linkages between national, provincial and district level individuals and networks. This may be one characteristic of civil society.
Economic capital (Bourdieu 1983)	Influence and power derived from financial resources, or the power to influence the distribution of financial resources. This may be characteristic of donors and funders, including GHIs such as PEPFAR.
Cultural capital (Bourdieu 1983)	Power is shared through formal and informal education: university & school qualifications, universities attended, extra courses undertaken, language facility, ability to write, tastes developed. The dimension of this capital might help to explain the importance of knowledge seen by some groups as evidence-based evaluations of the policy.
Symbolic capital (Bourdieu 1983)	Rituals and traditions reinforcing and resulting from other forms of capital listed above also defer power and influence. For this study symbolic power was interpreted as norms and traditions that might be otherwise hard to conceptualise. For example the power of bureaucratic norms, norms in the community that impact on implementation or authority of a traditional healer or a political leader

Bourdieu' s theory of capitals was selected following the review of literature on power, as understanding of different actors' sources of power was particularly pertinent for

[35] This type of authority is taken from Max Weber described as 'rational-legal authority Weber, M. (1948). From Max Weber: essays in sociology. London, Routledge and Kegan Paul.

analysis of their role in policy implementation processes. However, the literature review suggests that governments are an important player in policy processes, and though governments may get power from economic and other capitals, government actors also have power through their legal authority. Therefore legal rational authority from Weber's theories of power (1948) was added to the typology developed here. Weber describes legal rational authority as the formal power of the state, which is not explicitly captured in Bourdieu's capitals.

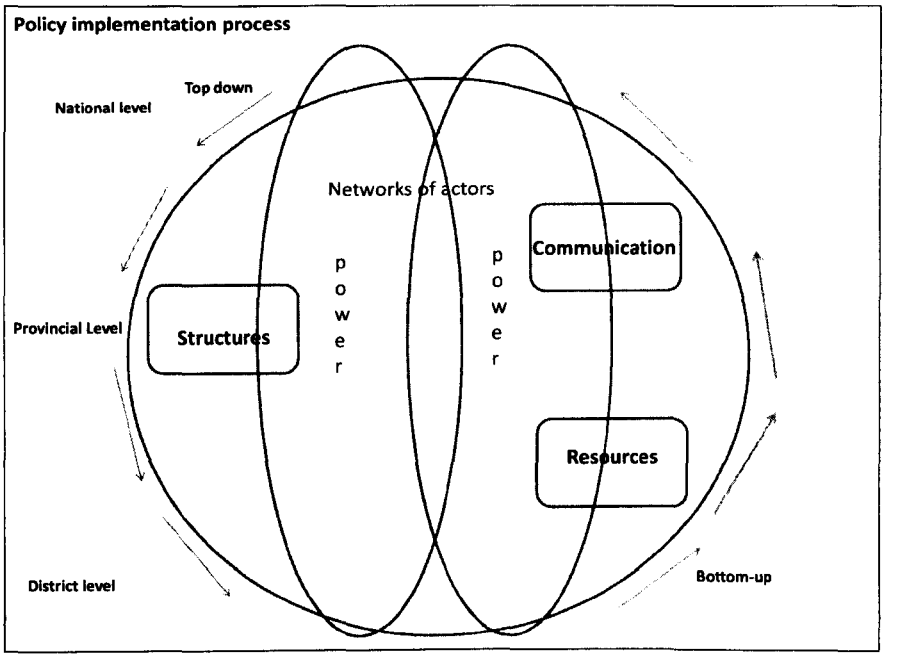
Networks

Bourdieu's typology is particularly fitting for this research as it explicitly acknowledges the social linkages and networks of an actor as a source of power - social capital. So investigating the different sources of power of actors engaged in the policy implementation processes relating to ART roll-out in Zambia and South Africa using this typology helps analyse the extent to which networks of actors were influential within these processes.

Study framework

Based on the literature of the policy process reviewed, and the gap in research focusing on implementation, the study analyses the national to district level policy implementation process in relation to ART roll-out in Zambia and South Africa. It draws on a range of conceptual frameworks relevant to understanding elements of the implementation process rather than use one single framework or holistic theoretical model. The diagram below illustrates the frameworks and concepts used.

Diagram 3.1 Framework for researching policy implementation process



The study framework conceptualises implementation processes as both top-down and bottom-up. As explained above implementation processes are defined as consisting of *communication*, including social mobilisation and advocacy around treatment roll-out. *Structures* which are defined as the actual physical and administrative structures of the health system, including clinics and hospitals, as well as ART Committees and AIDS Task Forces at all levels of the health system. Finally, *resources* which refer to all resources required for the roll-out, including manuals, medication, laboratory equipment, furniture etc., as well as health workers and their training. All three elements of implementation are criss-crossed by networks of actors who communicate, share resources and participate in structures. Power is shown separately because it is assumed to have an effect on the extent to which actors influence the policy processes through communication, structures and resources.

Comparing Zambia and South Africa

The comparison of Zambia and South Africa is useful given the commonalities and differences in the countries' socio – economic, political and epidemiological context, their responses to HIV/AIDS and the differences in implementation of ART roll-out.

Table 3.3: Country context comparing Zambia and South Africa

	Zambia	South Africa
Population size*	11.8 million	49 million
GDP per capita (PPP)*	$1,500	$10,100
Infant mortality*	101. deaths/1,000 live births	44. deaths/1,000 live births
Human Development Index**	129	164
Life expectancy at birth**	44.5 years	51.5 years
HIV/AIDS prevalence (2008)	14.3%^	18.2%^^
ART coverage in Sept 2006***	34%	18%
ART Coverage in April 2009*^, *^*	50%	50%
ART programme percentage government funded 2006 ^*, ^**	9%	99%

Source: *CIA World Factbook Figures 2009, **UNDP Human Development Index 2009, ^Zambia DHS Survey, ^^UNAIDS 2008; ***UNAIDS 2007; *^NAC Zambia, *^*DoH South Africa, speech by Minister Hogan in Feb 2009, ^*Garg 2009, ^**SA Treasury 2008.

Table 3.3 above summarises indicators for some of the contextual factors.

Both countries have a generalised adult prevalence of HIV; both had undergone a series of health sector reforms during the 1990s and had introduced ART in the public sector. On the other hand South Africa had much greater resources than Zambia and there were also differences in the health system, history and the political system and policy processes between the two countries, which are further elaborated on in the following Chapter 4, which made the comparison particularly compelling. However, the main rationale for the comparison relates to the ART coverage, figures are provided for September 2006 when the study was conceptualised, and for April 2009 when it was completed. They demonstrate that at the time research was conceived in 2006,

South Africa was lagging behind Zambia in expansion of its ART programme, despite greater capacity and economic resources. It was this seeming contradiction that provided the rationale for comparing the two countries.

Research aims

The study's overall aim was to identify factors that influence implementation of policy by comparing national to district level implementation of policy guiding ART roll-out in Zambia and South Africa.

Specific objectives were:

- To understand different factors affecting policy implementation, including those relating to policy communication, resourcing and the structures and mechanisms through which policy is implemented.
- To better understand the power of actors and their networks on policy implementation processes, by analysing the different sources and forms of power and influence of these networks, and ways in which these are manifest throughout policy implementation.
- To contribute to the field of implementation studies by using a multi-methods approach that draws on insights from bottom –up and top-down theories and fosters new understanding into processes of implementation.

To fulfil these research objectives the following key research questions were developed to guide data collection for the study.

Key research questions

1. How was policy relating to the scale-up of ART in Zambia and South Africa implemented?
2. How was it communicated, through what structures did implementation happen, and how was it resourced?
3. How did implementation processes link to other stages in the policy process, i.e. did lessons learnt from implementation inform policy formulation, was it top-down or bottom-up?
4. Who were the key actors in these processes and what was the source of their power and influence over the implementation process?
5. What level of power were networks of actors able to exert over the policy implementation process, and what was their role in these processes?
6. Does the analysis of the national to sub-national policy implementation process reveal broader lessons about the spectrum of health policy in the era of global health?

Methods

This is a qualitative study, which sought to answer study aims and objectives through semi-structured interviews with actors involved in ART roll-out in Zambia and South Africa. Focus was on national level, one province and two districts in each country, to assess national – to – provincial - to - district level implementation and the iterative processes between these levels.

On the basis of the research aims and key questions an interview guide was developed (see Annex 2), which was reviewed and adapted in each country in consultation with an in-country academic advisor. Key informant interviews were conducted in both countries to gain an overall understanding of the process and a narrative history of how ART was rolled out and introduced. Interviews tended to focus on specific themes where these emerged as important in a particular area. For example, in Zambia a controversy around hospitals continuing to charge for clinical investigations relating to ART, despite the government's policy of cessation of fees for this treatment, served as a case study to explore power and the top-down nature of the policy process.

The study also relied on a document review. The policy process and recent history of ART roll-out in both countries is only partly formally documented, although more materials and documentation exist in South Africa. In addition to the academic literature, the study drew on country level reports, evaluations, media reports and the actual policy documents and communication materials relating to ART roll-out obtained during the field work. The study did not aim to undertake a systematic media analysis, but rather drew on newspaper reports from archives and the internet in both countries to gain a full picture on specific events.

The research did not attempt to assess implementation outcomes, but rather to ascertain how implementation occurs, to establish factors for policy success or failure. It therefore makes reference to secondary country-level data of ART policy implementation outcomes,[36] for example the number of people on treatment in different districts.[37]

[36] Data was be drawn from the UNAIDS country office, the Ministry of Health and from the health management in the districts and provinces selected for study.
[37] This is just one example. Other implementation outcome indicators could include issues such as adherence, mortality rates in patients, or concerns relating to equity, such as how many women, how

Study sites (see Annex 1 for a map of both countries and sites marked)

Rationale for the comparison between Zambia and South Africa has been discussed, Southern Africa was selected as it is the centre of the global pandemic (UNAIDS 2006) and both Zambia and South Africa were hard hit by the epidemic. In addition, the author had previous research experience in both countries, which facilitated access to hard to reach national policymakers.

Study sites in both countries were purposefully selected. In Zambia national level research focused on the actors in the capital Lusaka, while provincial research was conducted in Copperbelt province, and in Kitwe and Ndola at the district level. Both Kitwe and Ndola are large urban centres, characterised by the copper mining industry (Ferguson 1999). Site selection in Zambia was conducted in collaboration with a local academic advisor; district selection was based on where there were a range of different models for ART service delivery in the public sector. In addition, Ndola district is home to Zambia's second-largest hospital, Ndola Central Hospital, (NCH), which was one of the pilot sites for the initial roll-out of treatment in 2002. Interviews with actors involved in the programmes helped gain additional insight into the process of ART roll-out over time.

In South Africa the study focus was on national actors most of whom were based in Johannesburg, Pretoria, and to a lesser extent in Cape Town. Provincial research was in the Eastern Cape Province in one district, OR Tambo, and two sub-districts King Sabata Dalindyebo (KSD) and Quakeni.[38] The Eastern Cape Province was selected based on a review with key advisors and academics in South Africa to avoid over-

many people of certain ethnic identity or of low economic status are receiving treatment. While some of these issues are expected to emerge as problems in the health facilities examined, which will then be studied to assess why particular failures occurred, research on implementation outcomes would have require large scale quantitative data collection, beyond the scope of this studies

[38] Overall the Eastern Cape has seven districts.

research on HIV in particular provinces. OR Tambo is one of the poorest districts in South Africa (Day, Barron et al. 2008), and was selected on the assumption that some of the challenges faced by patients in accessing services are similar to those in Zambia given the comparatively similar resource constraints.[39] The province selection in South Africa and the Eastern Cape's characteristics are further explored in Chapter 4.

Following an initial visit and review of the methodology with the in-country advisors, the focus was on two Local Service Areas (LSAs) or sub-districts within OR Tambo district, as the sub-districts are equivalent in population size to a district in Zambia.[40] They also represent, as the districts in Zambia, the bottom layer of health system administration. The two sub-districts were selected out of seven within OR Tambo district, to include the district centre and largest town in the area: Mthatha in the sub-district King Sabata Dalindyebo (KSD), and Lusikisiki in the second sub-district – Quakeni. Lusikisiki was the area where the first treatment programme in the Eastern Cape had been implemented through Medecins Sans Frontieres (MSF). It was envisaged research findings there would be particularly valuable in terms of the insights on the role of networks of actors and to assess this as a 'bottom-up' implementation. Quakeni is very rural and offered a contrast to the urban programme in Mthatha. Together the two sub-districts selected offered a range of different models for the delivery of ART within the public sector (e.g. nurse led with initiation at clinics, or referral systems with treatment literacy counsellors and hospital initiation). They were selected, as in Zambia, to ensure that findings were as applicable and transferable as possible to other areas of the country.

[39] Actors at community level in South Africa highlighted challenges to accessing services being transport and food, both of which were key factors in Zambia as well.

[40] In Kitwe and Ndola population according to the 2000 Census was around 350,000 people (GRZ 2000) while population in the OR Tambo as a whole was 1.8 million in 2007/08 Day, D., P. Barron, et al., Eds. (2008). District Health Barometer 2007/08. Durban.

Data collection

In Zambia the researcher was linked to Zambart (Zambia AIDS related TB Project), where the academic advisor for the study was based.[41] Research in Zambia was conducted in collaboration with a research 'twin', a Zambian social scientist based at Zambart who collaborated on data collection. In South Africa the researcher was based at the Health Economics Unit at the University of Cape Town, where the co-supervisor for this thesis Prof Lucy Gilson is based. In addition, in the Eastern Cape the researcher collaborated and received support from a local research centre of the South African Medical Research Council in OR Tambo District (Mthatha town).

Field work was conducted in Zambia between August to December 2007, with follow-up visits in August 2008 and February 2009, and data collection was in South Africa took place from January to June 2008, with a follow-up visit in April 2009.

Recruitment of interview participants

An in-country advisory panel was convened consisting of a treatment activist, a researcher or academic with research experience in the focus province or districts, a representative of a donor agency (Zambia) and a further academic (Jones). Interviewees were identified using the 'name generator method' (Lewis 2006). The initial group of in-country academic advisors was asked to nominate influential actors in ART at national, provincial[42] and district level. These actors were in turn asked to nominate further possible interviewees, based on the following criteria at the national,

[41] Dr Virginia Bond, who is also a Lecturer in the Health Policy Unit.

[42] Key informants were asked to only nominate provincial interviewees for Copperbelt Province and Eastern Cape. These were in some cases unknown to national stakeholders, who therefore were requested to indicate where they know of organisations working in support of ART roll-out in these provinces. The organisations were then contacted to be interviewed at national level with a view to identifying relevant provincial and district level interviewees.

provincial and district level: formal or informal influence on the policy process relating to ART roll-out, particularly on policy implementation. Actors nominated were asked to consider actors in all aspects of the policy process, including government, civil society, health care providers, multilateral and bilateral donors. The process was continued until saturation point was reached, i.e. the same actors got nominated again. This process generated the list of interviewees. Following the initial nominations the process overlapped with the actual requests for interviews and the interviewing process as actors were asked to score or nominate others at the beginning of their interview.

During the interview each interviewee was asked to allocate a score between 1 and 5 to each person they had nominated. The range of 1-5 was an indication of their perception of that person's influences, with one being the least powerful and five the most powerful. The number of nominations and 'power score' received by individual actors helped identify individuals who had been of particular influence within the policy process. While actors were always willing to name others they had considered influential or powerful, in some cases they were uncomfortable ranking nominees. Once interviewees had nominated actors this list was used to probe further into why individuals were considered powerful, and if the interviewee had linkages to the persons they nominated. This included questions on where they had met or interacted to better understand the role of networks and their sources of power, according to Bourdieu's capitals.

Interview process and content

Research in both countries began at national level, with the name generator method, to create a list of people to be interviewed at all levels. A few initial key informant interviews helped gain insights on the overall policy process relating to ART and the

history of the scale-up. Often national actors would only be able to nominate one or two district or provincial level actors and a full list of interviewees at those levels only emerged following the first visit to each district. Interviews were then conducted from the bottom-up (from district level, to provincial, to national level). Following the district and provincial level research some initial analysis of the data was undertaken so that during interviews with national stakeholders, policy perceptions of district and provincial level actors could be tested.

Interviews covered the interviewees' perceptions of the implementation process. They focused on communication, structures and resources for implementation (see Annex 2 for the interview guide). Where challenges were reported, questions focused on where these occurred, if, how and by whom these were fed back to provincial and national level, and how and by whom they were resolved. Interviews also focused specifically on the role of global health initiatives to better understand their role in the policy implementation process. To understand the formal and informal linkages between actors, interviewees were asked to name who they worked with in the implementation of ART roll-out. This was done with the help of a network diagram (see Annex 5) (Wallmann 1984). The diagram or circles helped place the actor interviewed within their network and to understand their proximity to other actors in the policy process. Interviewees were asked to think of themselves as being at the centre of the diagram, in the middle of the circle, and then asked to explain who they worked with most closely i.e. who would be in the circle next to them, and who was a step further removed in the next layer. Each circle represented a layer or level of proximity. The diagram was not used during all interviewed and less so in South Africa than in Zambia but was introduced where interviewees found it difficult to understand network ideas or to describe in the abstract who they worked with most closely.

Interviews were conducted in English by the study author. There was no language barrier and all actors interviewed spoke fluent English. Where written consent was granted interviews were recorded and then later transcribed by the candidate and her research twin in Zambia. A total of 89 interviews were conducted in Zambia, and 65 interviews in South Africa (see Annexes 8 and 9 for a breakdown of interviews according to level – district, provincial and national – and according to actor category).

Ethical approval for the research was granted by the ethics committee of the University of Zambia, and the London School of Hygiene and Tropical Medicine. The study was also approved by the Ministry of Health in Zambia. In South Africa ethical approval was granted by Walter Sisulu University in the Eastern Cape, and the Provincial Research Committee. Following completion of data collection and the initial analysis of findings draft findings were fed back to policymakers in both countries.

In Zambia this was through a presentation to the Ministry of Health, the ethics committee and actors interviewed in Zambia in August 2008 through presentations in Lusaka and the focus province. Draft findings were submitted to ethics committees in both countries in August 2008 and March 2009 respectively. Draft findings on GHIs and networks in South Africa were presented for triangulation to delegates at the 4th South African National AIDS Conference in Durban in April 2009. All actors interviewed in South Africa were contacted via e-mail prior to the conference and invited to attend this presentation of findings, or offered an electronic version of the draft findings for the information.

Draft findings were further presented and triangulated in a publication on the impact of Global Health Initiatives in South Africa and Zambia for the Evidence for Action Consortium, and a peer-reviewed publication presenting findings of GHI's impact on human resources for health in Zambia in February 2009. Draft findings of overall

research were also presented at a conference at the University of East Anglia in May 2009 which focused on the social and cultural impact of ART. Comments and feedback provided on the publications and presentations informed the analysis of findings and helped ensure that findings presented here are triangulated.

To fulfil the ethical requirements of the study protocol, where quotes from actors are included in the text some of the actors' background is provided, e.g. *Clinician, Cape Town*, to contextualise the quote, but no unique identifier, such as a number or Clinician 1 is given, in order to maintain the anonymity of interviewees.

Analysis

Following data collection all interviews were transcribed and analysed using the framework set out here. Interview content was thematically analysed to better understand 'how' policy implementation processes had taken place (Silverman 2000; Green and Browne 2005). Analysis of all interviews transcribed and notes taken focused on power, networks, and implementation.

Strengths and weaknesses

The study's strength lies in the comparison of two countries with significant contextual and situational similarities affecting ART roll-out, as well as relevant differences that allows a test of the impact of specific factors, such as donors or the level of civil society mobilisation on implementation (Yin 2003). The framework developed to analyse sources and exercise of power and the study of networks' applied in both countries facilitated comparability of data. The application of this framework to these

two countries allowed for potential extrapolation of findings from this comparison to broader conclusions about factors governing policy implementation processes.[43]

As the study relied on perceptions of actors, these may in some cases be inaccurate or not reflective of events, actors' knowledge may have been limited or influenced by the interactions with the interviewer (Miller and Glassner 2004). To account for this the study triangulated actors' observations at all levels and compared description of events with available documentation in academic and grey literature, and media reports. The study recognised that interviews themselves are symbolic interactions that influence descriptions and findings (Miller and Glassner 2004). However, acknowledging the impact of the interview as interaction, data was reviewed with this in mind and the analysis explicitly referred to findings that may have emerged from this interaction (Green and Thorogood 2004). The social distance between interviewees and interviewer (European) assisted in generating observation about the policy process that may not be disclosed to someone from a similar background (Miller and Glassner 2004).

Focus on one province in each country means study findings may be limited in the extent to which differences in implementation of ART roll-out in each country were due to specificity of a province rather than the more generalised findings about factors governing implementation processes. However, this was initially envisaged to be more of a constraint than finally materialised, as many actors shared and compared their own province or districts to others, situating them within the context in both countries. In addition the intensive focus and time spent in both countries allowed for in-depth interaction with many researchers working on similar issues across different areas of

[43] Detailed understanding of qualitative interactions of network members for example, will provide new insights and knowledge on how networks influence the policy process. A gap identified in the literature Thatcher, M. (1998). "The Development of Policy Network Analyses: From Modest Origins to Overarching Frameworks." Journal of Theoretical Politics **10**(4): 389-416.

the country. This provided the candidate with insights on limitations and transferability of the data collected, which were further reviewed and triangulated in consultation with the in-country academic advisor and considered in the analysis of findings.

The concentration on two districts or sub-districts in each country meant that information and knowledge gained was in-depth, and understanding and analysis of the interviewees' perceptions and study findings were sensitive to context and culture. This proved vital in the analysis of power, and also revealed insights not envisaged prior to the data collection. The insight gained and value of the comparative analysis is further elaborated in the study conclusion.

In sum the weaknesses of comparing two different countries and their roll-out of ART were outweighed by the gains of drawing comparisons across a wider group of settings. This study thus contributes to knowledge in a number of ways. Firstly, it provides insights into little understood processes national to sub-national implementation. Secondly, it explicitly examining how power of actors and their networks influence policy implementation processes. Through the empirical application of theories of power it adds greater understanding on the use of these concepts in practice. Thirdly this thesis provides better understanding of why actors and their networks are able to influence implementation, specifically in relation to how networks interact with the policy process. Finally, it provides further knowledge on policy implementation processes especially in relation to communication, structures and resources.

CHAPTER 4 – SCALING UP ART IN ZAMBIA AND SOUTH AFRICA: A NARRATIVE OF THE POLICY PROCESS IN EACH COUNTRY

This chapter provides a narrative of anti-retroviral treatment roll-out in Zambia and South Africa. It also provides background information on the health system's context in each country to help better understand the structures through which services were delivered and that of the overall national responses to HIV/AIDS through which policy was implemented.

Even after 30 years of the epidemic policy processes relating to the roll-out of ART in Zambia and in South Africa are not clearly documented and the research for this policy analysis involved unfolding the story of 'how' policy was developed, why decisions were made and implemented in a certain way. While there is some academic and grey literature on HIV/AIDS particularly in South Africa (e.g. (Schneider 2002; Nattrass 2004; Mbali 2005; Schneider 2006a; Grebe 2008; Cullinan and Thoms 2009), there is less on the policy process and the actual events remain undocumented especially in Zambia.

ART roll-out Zambia – power and Global Health Initiatives

In June 2002, Levy Mwanawasa, president of Zambia announced the government's plans to provide antiretroviral treatment for 10,000 people (Bwalya 2006). At the time Zambia did not have resources from external funders for the provision of ART and the medication had previously been available only in the private sector.

There is little accessible documentation of processes leading up to the President's announcement. However, several actors interviewed who were involved in the planning for the early ART programmes in Zambia were able to corroborate events

and considerations that contributed to this policy decision. According to Zambian clinicians, planning for the provision of ART started as early 1999 as when the impact of ART treatment began to become apparent in the North. Two specific projects were repeatedly referred to as important. The first was the workplace based programme started by the UN in 2000, in which UN organisations in Zambia provided ARVs to its staff through the private sector. Secondly, Zambia was one of eight focus countries for a UNICEF/WHO pilot looking at short-course azidothymidine (AZT) for the prevention of mother to child transmission. These programmes were important as they were first steps to establishing the feasibility of providing ART in Zambia, and as they provided Zambians with the experience of managing treatment programmes. Many of the clinicians interviewed also referred to the first national training in 2002 for clinicians as a further key event.

Treatment roll-out began in the countries' two largest hospitals, the University Teaching Hospital (UTH) in the capital Lusaka and in Ndola Central Hospital (NCH) as two six-month pilot programmes to establish an evidence base. The initial programmes were set up towards the end of 2002 but were hampered by difficulties and an absence of guidelines. Each of the two pilot sites followed their own protocol for implementation.

> When the Government of Zambia announced it would avail treatment for 10,000 people, we were very curious to see who would those people be. None of the members that we knew had access to it. [...] Drugs were accessible to those with links to where the drugs were coming from, that means the government.
>
> *Activist, living with HIV, Lusaka, Zambia*

Given the problems, UTH and NCH initially had treatment programmes of only a few hundred people by mid 2003 when the known level of needs was hundreds of thousands. Problems included unstable drug supply chains and issues around the

selection of patients eligible for treatment given the large number of people who qualified. Interviewees observed this quickly led to calls of corruption or favouritism. According to clinicians working on the treatment programmes at the time two factors were important. Firstly, when treatment was introduced in the public sector it was with a cost-sharing fee of 40,000 Kwatcha per patient per month (between 8-10 USD) which put treatment beyond the reach of many of the patients requiring it (Jones 2004). As ARVs were not free doctors felt they had a duty to ensure that patients chosen for treatment would be able to pay for treatment continuously. One of the clinicians in charge of a pilot programme recounted that they primarily chose patients who were civil servants as their salary was guaranteed. However, he also admitted that doctors and staff working in the hospital, in need for treatment, were keen to enrol as part of the pilot programmes. Secondly, given the problems with supply chains of the actual medication, doctors working on the programme in 2002/3 initially kept numbers low to allow them to build up stocks for the patients they were enrolling onto the programme.

One of the doctors who had been part of the pilot programme in Ndola described how they had initially had cautious quotas and how this changed after a training for ART in Lusaka when he and his colleagues understood that there was additional medication available.

> Once we got back, we just started enrolling patients, because we knew once we had put them on they could not deny the treatment.
>
> *Clinician, part of NCH pilot*

A year later, by mid – 2004 numbers of people on treatment were reported to be between 6000-13,000 nationally (Hampande 2004). While there were still challenges to rolling-out treatment and it was only available to a limited number, Zambia had successfully applied for two rounds of funding from the Global Fund, including for the

large scale-up of ART in the public sector. The country had also been named one of fifteen original focus countries for President Bush's PEPFAR initiative.

In July 2004, Zambia was one of the countries named in the MTCT+ Programme announced at the Bangkok AIDS Conference, which meant mothers accessing AZT for PMTCT would receive ARVs as part of a pilot to study issues around adherence. At the same time, one of the US funded organisations implementing PEPFAR (called PEPFAR implementers see Textbox 4.1 below) the Centre for infectious Disease Research Zambia (CIDRZ), was preparing to support ART roll-out in the public sector and working with the District Health Management Team in Lusaka to start scaling up ART. The MTCT+ programme and the collaboration with CIDRZ included the provision of free treatment in four clinics in Lusaka. The removal of fees in these four clinics created a massive demand and pressure on the government to eventually remove all user fees for ART. When in July 2005 the President announced the provision of free ART for all Zambians (Bwalya 2006) this was, according to most actors interviewed, expected and a reflection of the amount of external support received from donors at that time. Following the removal of fees in 2005 scale-up of ART in Zambia accelerated, as can be seen in the figures of people accessing treatment in the table below.

Table 4.1: Number of people receiving ART in Zambia 2004-2009

Year	No of people receiving ART
2004	13,000
2005	39,351
2006	80,030
2007	149,199
2009 (Feb)	200,000

Source: Data for 2004 is from the Post Newspaper, data for 2009 personal communication with NAC, all other data from Zambia UNGASS Country Report 2008.

Financing the roll-out

The data in Table 4.1 above supports the observations of actors who described the great speed with which ART was rolled out following 2004. Actors also concurred with accounts in recent literature (Ndubani 2008) that this was as a direct result of the increase in resources particularly from PEPFAR and the Global Fund. The figures involved were substantial, with around 85 percent of HIV/AIDS public sector resources funded through GHIs (GHIN 2010 forthcoming), while figures from an analysis of national health accounts in 2006 put this even higher at 91 percent (MaximisingPositiveSynergies 2009).

Table 4.2: Funding by PEPFAR, the Global Fund and World Bank Multi-country AIDS Programme (MAP) from 2002 – 2008 for HIV/AIDS programmes in Zambia[44],[45]

	PEPFAR*	Global Fund**	World Bank MAP
2003		90 million	42 million (over five years)
2004	$81.6 million		
2005	$130.1 million	$236 million	
2006	$149 million		
2007	$216 million		
2008	$269.2 million	$129 million	
2009	$266.3 million		

***2009 presents appropriated levels not actual expenditure. ** Represents only funding for HIV/AIDS.**

The initial story of treatment roll-out in Zambia in 2002 to 2004 was one of ingenuity and commitment of a small number of Zambian actors who coped with resource constraints. Following 2004 when the large expanse of numbers of patients on treatment took place across the nine provinces roll-out appeared more driven or fuelled by the resources of the global health initiatives (GHIs).

[44] Figures for PEPFAR are provided from 2004, when funding started.

[45] Table constructed from sources http://www.pepfar.gov/countries/zambia/index.htm, http://www.pepfar.gov/countries/southafrica/index.htm; http://web.worldbank.org/external/projects/main?pagePK=64283627&piPK=64290415&theSitePK=40941&menuPK=228424&Projectid=P003248; http://www.theglobalfund.org/programs/country/?countryid=ZAM&lang=en; http://www.theglobalfund.org/programs/portfolio/?CountryId=SAF&Component=HIV/AIDS&lang=en.

Textbox 4.1 'PEPFAR implementers'

One type of organisation linked to GHIs emerged as important to the analysis of ART roll-out in both countries. These were organisations supporting the roll-out of ART, with funding from PEPFAR, termed 'PEPFAR implementers' in the following discussion. The PEPFAR programme was primarily implemented through the following US agencies: the Department of State, U.S. Agency for International Development (USAID), the Department of Defence, the Department of Commerce, the Department of Health and Human Services, and the Peace Corps. These in turn awarded contracts to so called 'prime partners' (businesses, NGOs, academic institutions or government departments), some of whom provided further sub-grants to 'sub-partners' (PEPFAR 2009). The US agencies, prime and sub partners implemented PEPFAR activities in the recipient countries.

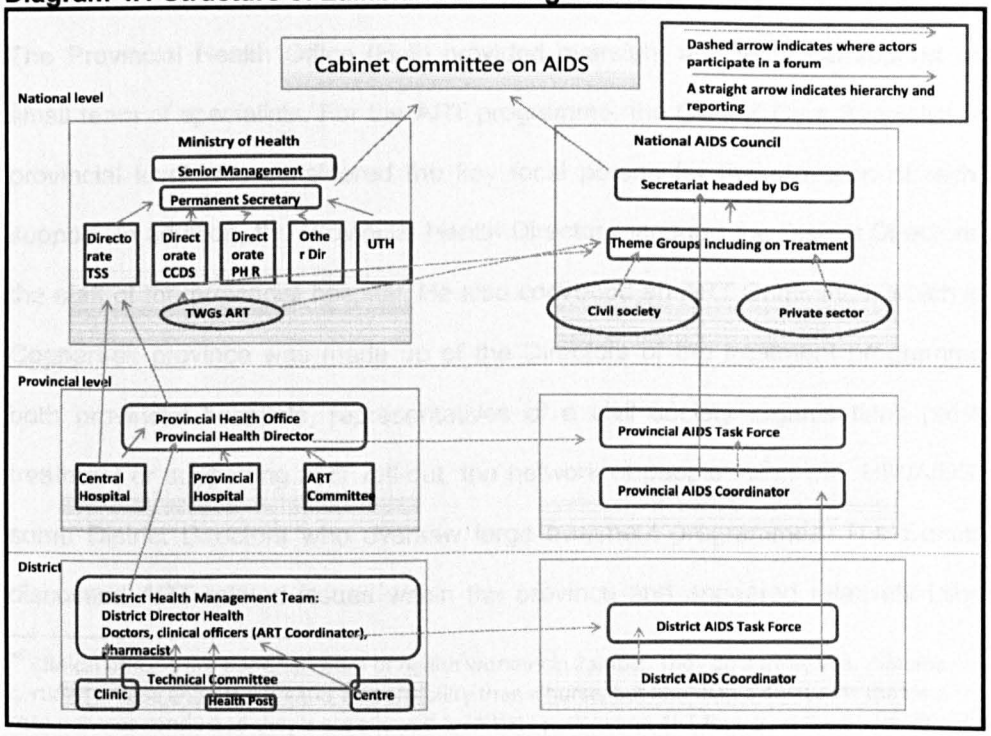
The vast majority of resources designated for a country were provided through the US agencies and its partners and only very little to government and public sector institutions in recipient countries (Ooman 2008). Some of the prime and sub partners were local nongovernmental or academic institutions. An analysis of prime partners in South Africa for 2007 revealed that while there were some local recipients and some non US based international NGOs the vast majority were US headquartered organisations. There were three PEPFAR implementers supporting ART roll-out in Zambia at the time data was collected. Even though these had the status of a local NGO they were all affiliated to US based academic institutions and NGOs, and their senior management was employed directly by those. For the purpose of this discussion all of these actors are referred to as PEPFAR implementers.

The structure of the health system and the response to HIV/AIDS

At the beginning of the 1990s Zambia underwent a series of health systems reforms as part of its restructuring for debt relief. Health was one of the areas to be decentralised, which led to the creation of health boards at district, provincial and central level. However, in 2005 the structure of the Central Board of Health (CBOH) was dissolved and recentralised as it was deemed duplicate (GHIN 2010 forthcoming). At the time of data collection, many of the actors spoke of the politics surrounding the dissolution of the CBOH but all suggested that this had not resulted in a change in services.

The Diagram 4.1 below outlines the Zambian ART programme within the health system and the national response to HIV/AIDS outside the clinical sector as well as the linkages between the two.

Diagram 4.1 Structure of Zambian ART Programme



The diagram indicates the hierarchical way in which actors report to their superiors. It also emphasises limited interaction between the overall response to HIV/AIDS and the clinical interventions such as the ART programme, which is run by the Ministry of Health.

At the district level, clinics, health centres and health posts were managed and staffed by doctors, clinical officers,[46] pharmacists and nurses that formed part of the District Health Management Team (DHMT), which was managed by the District Director Health (DDH), who was a doctor and reported to the Provincial Health Director (PHD). At the district level clinical issues, including the monitoring of the ART programme were discussed at the Technical Meeting which took place once a week, and involved all clinical staff. There was also an ARV Coordinator appointed at district level who was a clinical officer and whose main function was to coordinate activities relating to ART in addition to his or her normal clinical duties.

The Provincial Health Office (Hall) provided oversight and technical support with a small team of specialists. For the ART programme, the Clinical Care Specialist at the provincial level was considered the key focal person for the provision of technical support. In addition, the Provincial Health Director managed the District Directors and the staff of the provincial hospital. He also convened an ART Committee, which in the Copperbelt province was made up of the Directors of the treatment programmes in both provincial hospitals, representatives of a civil society organisations providing treatment or supporting ART roll-out, the network of people living with HIV/AIDS and some District Directors who oversaw large treatment programmes. The Committee discussed ART related issues within the province and appeared relatively informal.

[46] Clinical officers are a special cadre of health workers in Zambia. They do a three year diploma certified course and have greater responsibility than a nurse, but less than a doctor. At the time research was conducted they were allowed to initiate patients on ART though in the clinics visited this did not happen in practice. Clinicians interviewed said this was as they lacked confidence and sufficient training to initiate patients.

While it was supposed to meet on a quarterly basis it was unclear how often such meetings were convened in reality, with actors recalling the last meeting had happened more than six months ago.

In addition to oversight and technical support the province also acted as a conduit of information, policy and resources from national to district level and from district to national level for reporting. Its sole responsibility in terms of the provision of services was for the provincial hospital. Actual implementation and delivery of health services took place at the district level. For example, staff were 'posted' to the district and managed there unless they were specifically fulfilling one of the technical support functions at the provincial office. However, district actors communicated with the national level via the province, demonstrating the hierarchical and centralised nature of the health system.

At national level the Ministry of Health was organised around Directorates. The Directors of each unit reported to the Permanent Secretary (PS) and jointly with the PS, Deputy Minister and Minister made up the senior management of the Ministry of Health. The Minister himself reported to Cabinet, and the PS also reported to the Cabinet Committee on AIDS that oversaw the response to HIV in Zambia generally. While Directorates such as human resources and procurement clearly formed an integral part of the health systems management and were essential for the implementation of services, including for ART, three Directorates and their Directors were repeatedly named as important by all actors interviewed, and appeared actively engaged in implementing the roll-out. These were the 1) Directorate of Public Health and Research, which was responsible for special initiatives including the ART programme and the coordination of all external partners and donors, including the Global Fund and PEPFAR implementers; 2) the Directorate of Technical Services and Support which managed all provincial health offices and all hospital directors in the

country and was closely involved in the supervision of policy implementation in each province; and 3) the Directorate for Diagnostic Services and Supplies which was responsible for health facilities and services, including the laboratories and the quality of care. This Directorate hosted the post of National ART Coordinator who was responsible for coordinating the national treatment programme. The post holder also coordinated the informal working groups on different aspects of ART roll-out. While many of the members of these working groups were similar to those who took part in the treatment working group hosted by the National AIDS Council (see also Diagram 4.1 above), actors repeatedly explained that the working groups convened by the Ministry of Health were the place where challenges in the actual implementation were resolved. Interviews with a number of participants also corroborated findings that the changes in first line regimen from a stavudine to a tenofovir based regimen in 2007 were initiated and mainly discussed and decided there. The working groups at the Ministry of Health were mentioned as particularly important in the coordination of different implementing agencies of partners and Global Health Initiatives.

> Very little happens in the Ministry of Health without the consent of the Permanent Secretary.
>
> *Director, PEPFAR implementer, Lusaka.*

Interviews with actors either employed by the Ministry of Health at all levels, or interacting with the Ministry of Health at national or provincial level confirmed that the Permanent Secretary in the Ministry of Health was the key person in terms of changing implementation of a policy or determining how a policy is implemented in practice.

Beyond the health system

While this Ministry of Health structure described was primarily responsible for the implementation and actual delivery of ART services, there were further structures or committees at all levels relevant to the policy implementation process in Zambia also set out in Diagram 2 above. As described in the national HIV policy (GRZ 2005) and the National Strategic Framework 2006-2010 (Zambia 2006), the national response to HIV/AIDS in Zambia was coordinated through the National AIDS Council (NAC), which was created by an act of parliament in 2000. NAC reported directly to the Cabinet Committee on HIV/AIDS. Resources for responses to HIV/AIDS in particular external resources for treatment related activities were channelled or coordinated with the Ministry of Health, or in the case of Zambia's World Bank grant, through the Ministry of Finance. This meant that while the NAC was supposed to be independent from the Ministry of Health, in particular in relation to treatment roll-out, it had limited authority over the Ministry of Health. While it coordinated activities it did not provide the resources for any of these, limiting its authority.

Similarly, at district and provincial level the AIDS Task Forces coordinated activities but had limited resources to actually conduct activities and at the time data was collected they were mainly financed through a grant provided by UNDP. Specifically UNDP funded UN Volunteers from within Zambia to act as District AIDS Coordinators (DACAs) and facilitate this structure at sub-national level. In addition funding was available for coordination of activities at district level through the ZANARA project (funded by the World Bank). The DACAs in turn reported to the Provincial AIDS Coordinator (PACA) who coordinated the Provincial AIDS Task Force (PATF), which was comprised of different actors at provincial level, including the Provincial Health

Director. The PACA in turn reported to the NAC at national level and occasionally participated in national level activities.

In addition to the NAC structure the DATF, DACAs, PATFs and PACAs were intended to link to local government structures to ensure the multi- sectoral response. In Zambia these were called the District Development Community Committee (DDCC) and the Provincial Development Community Committee (PDCC), which were instituted in the era of President Chiluba following 1990, with District Commissioners as formal heads of these structures which were the equivalent to a mayor in many countries. The District Commissioner was mainly a ceremonial post with few resources and little power attached to its office, but he was formally hosting the DATFs. In addition while the DDCC and the PDCC existed at district and provincial level, there was no national equivalent, and while reports were sent to the Office of the President the exact function of this structure has remained unclear. Some Zambians interviewed joked about it as 'empty' and while that may reflect a personal view, no actor interviewed reported these structures as powerful, nor did they have legal authority with bearing on health or a budget attached.

As evident from the description above, the different structures of the response to HIV and the implementation of ART roll-out only overlapped marginally. The ART Coordinator from the DHMT, who was a clinical officer or a nurse, was represented on the DATF and occasionally the DHMT convened so called 'stakeholder meetings' where civil society actors were invited. However, actors working in the provision of clinical services, including the ART Coordinators at the district level and the DACAs in both focus districts confirmed that meetings and interactions tended not to focus on issues relating to the quality or coverage of the actual ART service; collaboration tended to be around events such as World AIDS Day.

At provincial level the Provincial Health Director participated in the Provincial AIDS Task Force[47], but this was mainly a body for the coordination of activities and fundraising at provincial level with no budget. ART related issues at the provincial level were confined exclusively to the ART Committee.

At national level while the membership of the technical working group (TWG) on treatment at the National AIDS Council and the ad hoc technical working groups on aspects relating to ART at the Ministry of Health were very similar, the NAC body was clearly more formal. It was for example the body tasked formally with drawing up the National Treatment Guidelines. However, interviews with the ART Coordinator at national level and the Clinical Directors of the main global health initiative implementers that support treatment roll-out in Zambia indicated that challenges and changes to implementation of the treatment programme were resolved and discussed much more in the TWGs at the Ministry of Health. Staff responsible for the treatment programme at national level stated that the management of the programme would be impossible without the ad hoc working groups, while the TWG at the NAC was seen as a more as a policy formulation body.

The impact of this structure in the response to HIV on various aspects of the process will be analysed further in the following chapter on implementation. This brief description of the response to HIV/AIDS in Zambia highlights two features that were central to the implementation processes examined later. Firstly, the centralised nature of the health system dominated the ART roll-out, including through the coordination of GHIs and donors. The second was the comparative disconnect between the MoH and the National AIDS Council in the actual implementation and delivery of ART.

[47] Apart from a brief period when the PATF had been chaired by a District Director of Health, discussed further below.

Examining the history of scale-up in Zambia has demonstrated the different phases of the policy process: initial commitment from within the Zambia government followed by the influx of very large amounts of donor funding, mainly through GHIs that accelerated and enabled further ART roll-out. The discussion of the health systems structure in Zambia shows its relatively centralised nature, and the extent to which the ART programme was separate and not fully integrated with other less medicalised responses to HIV coordinated by the National AIDS Council. Discussion now focuses on South Africa's history and system.

ART roll-out in South Africa - of networks, trust and 'Dobermans'

The narrative of ART roll-out in South Africa is very different to Zambia's, in terms of context, policy process and from a research perspective. The politics of HIV/AIDS in South Africa has attracted a great deal of interest and scholars have analysed both the HIV epidemic in South Africa (Nattrass 2004), the politics surrounding the introduction of ART and President Mbeki's denialism (Schneider 2002; Gevisser 2007; Nattrass 2008; Cullinan and Thoms 2009), activism (Friedman and Mottiar 2005; Mbali 2005; Grebe 2008; Oinas and Jungar 2008), and the effect of AIDS on different aspects of South African society (Posel, Kahn et al. 2007; Steinberg 2008).

There is also an extensive body of literature that examines different aspects of the South African treatment programme including the clinical outcomes of the treatment programme (Boulle, Van Cutsem et al. 2010), the cost of rolling out treatment (Cleary S. M., McIntyre et al. 2008) and health systems aspects of the roiling out treatment (Schneider, Gilson et al. 2006; Schneider 2006a; Cleary, Boulle et al. 2008; Schneider, Coetzee et al. 2010).

Despite the rich HIV/AIDS literature, the actual events and policy processes relating to ART roll-out in South Africa were found to be surprisingly un-documented during the research. What emerged from the narrative of the different actors interviewed was a story of many different pieces of a puzzle with individual actors often only aware of a small part of the bigger story. The policy process was partly unclear because initially, in the face of government resistance to ART roll-out, clinicians had to conceal their treatment programmes or conduct these 'under the radar', as one of the interviewees said. Even after the policy to provide ART had been approved by government it appeared as though officials were still stalling and policy processes were often shrouded in secrecy. These two factors make it comparatively difficult to gain a clear sense of the narrative of ART roll-out. The level of secrecy and sense of conspiracy around the treatment programme that emerged from the interviews with actors engaged in implementing treatment roll-out corroborates similar accounts published (for example in Cullinan and Thoms 2009).

However, in interviews and the analysis of the data obtained during the research it became clear that the history of events helped explain the way in which ART was implemented including geographic patterns of where ART implementation was faster than in other places.

The policy decision to roll-out ART was taken by the South African Cabinet in November 2003 when the Operational Plan to expand ART was approved (RSA 2003). This marked a watershed moment in the response to HIV but was comparatively late for a country of South Africa's resources and the scale of its HIV epidemic – an estimated 5 million people were living with the virus in the country at that time. Prior to this date the South African government had actively prohibited the implementation of ART roll-out. Despite the change in policy, according to overwhelming majority of actors interviewed the government continued to actively

hinder implementation of ART scale-up after 2003, despite the policy decision. This corroborates accounts in the literature, including a study that modelled the loss of lives between 2000-2005 in South Africa based on the government's reluctance to expand ART (Chigwedere, George Seage et al. 2008), which estimated that 330,000 lives were lost due to government inaction during that time.

The 2003 Cabinet decision followed a report by a joint Treasury and Ministry of Health Team that conducted a costing exercise (with assistance from the Clinton Foundation) to assess the feasibility of providing ART in the public sector (Team 2003). Simultaneously South African activists and their international collaborators demonstrated the feasibility of rolling out treatment in the public sector, and advocated for public sector provision of ART. The Joint Task Force of the Treasury and the Ministry of Health was described by many as an important step in the policy formulation process, and also as indicator of the commitment by Treasury officials to the roll-out of treatment. Once the report was scheduled and accepted by the Cabinet in August 2003 a policy regarding rolling out treatment was only a matter of time.

However, despite the slow process in the policy decision on ART, treatment was being provided in a number of ways despite the attempts to obstruct such programmes by the South African government. There were three ways in which ART was provided through the public sector prior to the Cabinet decision in 2003. Firstly, clinicians with patients eligible for ARVs would refer them to private clinics or in some cases charities or individual sponsors, to ensure their survival by purchasing medication in the private sector. Secondly, clinicians could request individual patients to be initiated on ARVs as experimental treatment. This required each patient's record to be faxed to the Medical Research Council for approval to be put on the medication. While not documented in the literature, a number of public sector clinicians interviewed for this study described

this as a way in which they had been able to provide treatment for individuals prior to the government roll-out.[48]

Thirdly and perhaps most significantly for the policy formulation and the implementation was the provision of ART in the public sector by the Department of Health in the Western Cape Province from 2002 onwards, in partnership with the non-governmental organisation Medecins Sans Frontieres (MSF) and the University of Cape Town (UCT). The treatment programme began in a township – Khayelitsha- just outside of Cape Town (Coetzee, Hildebrand et al. 2004).

The Western Cape had a history of advancing its HIV programme beyond the national framework, implementing a Prevention of Mother to Child Treatment (PMTCT) Programme as early as 1998. With a comparatively strong infrastructure including for health *[see table 4.3 below]* it had the structural requirements in place as a province to roll-out treatment. While there was negative public publicity against the Khayelitsha treatment programme including allegations that MSF was trying to poison patients, the programme was not stopped by the national Department of Health (DoH). This was partly due to the strong networks between implementers, activists and the provincial DoH which are examined in greater detail in Chapter 6 of this thesis. The treatment programme in Khayelitsha was important as it helped create an evidence base of the effectiveness and feasibility of providing ART in South Africa. It also helped to dispel many of the myths surrounding ARVs within the community, as people saw patients on ARVs become better and surviving. This proved particularly important in South Africa given the confusion around the efficacy of the medication. Its relevance to the policy processes examined here is further explored in the analysis and discussion in Chapters 5 and 6.

[48] (Oppenheimer and Bayer 2007) in their book of testimonies of South African clinicians powerfully describe the stress on clinicians unable to provide treatment and the various avenues they sought to relieve that.

The table constructed by Nattrass in 2006 and reproduced here below provides a snapshot of the differences between provinces in terms of their ART roll-out at one point in time. However, in addition to the variations in terms of treatment coverage the data also documents the differences in per capita expenditure on health, the number of doctors per population and the per capita income of the population. The table below has these for the Eastern Cape, which formed the focus of this research and the Western Cape, where the Khayelitsha treatment programme was implemented. It shows the marked differences between the two provinces not just in treatment roll-out but also in the basic indicators for health systems, such as number of doctors and per capita spending on health.

Table 4.3: ART Roll-out in the South African provinces*

	Date of Rollout Start	HIV Prevalence in 2005 from ASSA 2003 (%)	Share of the Total Population (%)	Doctors per 100,000 Uninsured Persons (in 2005	GDP per capita (R in 2003)	Per Capita Govt Health Spending (R per Uninsured Person in 2004-05)	Percent of Total HAART Coverage (At End of 2005)	Percent of Operational Plan Target (At End of 2005)
EC**	05/04	9.5	14.2	17	12,185	873	21.8	37
FS	05/04	13.7	6	32	21,437	1193	21	19
GT	04/04	14.3	20.1	42	36,913	1179	29.6	49
KZN	04/04	15.6	20.7	27	18,528	1017	20	16
LP	08/04	6.7	12	14	12,040	829	27.3	12
MP	08/04	13.3	7.0	19	20,499	774	20.9	14
NC	07/04	6.5	1.9	38	24,922	1238	32.3	49
NW	06/04	12.5	8	13	17,198	767	24.5	52
WC	05/01	5	10.3	55	30,628	1433	55.7	138
Total		11.0	100	28	22,569	1014	25.2	29

This table is adapted from *Nattrass, N. (2006) JAIDS Vol 43, No 5.*
** EC is Eastern Cape, FS the Free State, GT is Gauteng, KZN is KwaZulu Natal, LP is Limpopo, MP Mpumalanga, NC the Northern Cape, NW North West Province, WC is the Western Cape.

Following the adoption of the Operational Plan by Cabinet in 2003 actors reported slow implementation of treatment roll-out. For example, the national ART guidelines and the strategic plan for the implementation of ART were not published until 2004. Conflict between the government and civil society continued, as activists were trying to hold the government to account over the treatment targets published as part of the

Operational Plan, and as the table above indicates implementation varied widely between provinces.

Roll out began to accelerate following the approval of the second National Strategy Plan in 2007 (as evident from Table 4.4 below) which had been drafted with input of civil society, by March 2008 between 400,000 people were accessing treatment in the public sector. In September 2008 following President Mbeki ceding his post to Kgalema Mothlantle, Baraba Hogan became Minister of Health, and by February 2009 government figures indicated that 700,000 patients were accessing ARVs in the public sector.

Table 4.4: Number of people accessing ART in the public sector in South Africa 2004-2009

Year	No of people receiving ART in South Africa
2004	29,000
2005	113,375
2006	239244
2007	408,218
2009 (Feb)	700,000

Sources: 2004, figures is from the Joint Civil Society Monitoring Forum Website http://www.jcsmf.org.za/?q=node/28. 2005, 2006, 2007 figures are from Makubalo, L. DOH (November 2007) cited in TAC (2008) Chairperson's Report Into The Next Decade, 2009 is from a speech by then Minister of Health Barbara Hogan 9 February 2009.

The period prior to 2008 was shaped by the challenges early implementers had to overcome. Obstacles and initial delays included a lack of resources and support, and a very slow process by the national DoH to accredit facilities for the provision of ART. As policy development on treatment by the government was reluctant, it was often implementers who pushed policy development or led to new advances in the treatment programme.

One of the striking features of the large, innovative treatment programmes in the public sector that initiated a large number of patients despite the obstacles was that these often were in relatively remote areas where clinicians were able to implement programmes without interference. Often networked with treatment activists they trusted the 'early implementers' were extremely committed to treatment roll-out and proud of their clinical programmes. One of the clinicians interviewed for this study described himself and others like him as 'dobermans' – a breed of intelligent, alert, and loyal guard dogs - ferociously protecting their ART programmes.

Table 4.5: PEPFAR and Global Fund funding for South Africa 2004-09

	PEPFAR*	Global Fund**
2004	$89.3 million	$66million
2005	$148.2 million	
2006	$221.5 million	
2007	$397.8 million	$55million
2008	$590.9 million	
2009	$546.3 million	

*** funding for 09 is appropriated only. ** Global Fund only indicates grants signed and disbursed a grant was approved in 2009 but the grant agreement had not been signed by the time the study was concluded.**

While Global Health Initiatives, in particular PEPFAR provided very large amounts of funding to South Africa, see Table 4.5 above, their impact was markedly less than that observed in Zambia. One area where impact was observed was through the provision of funding for the large-scale treatment programmes linked to academic institutions that were classified as operational research programmes and could scale up ART faster than other public sector facilities (see Chapter 5). While figures on the percentage of funding from GHIs to public sector roll-out in South Africa vary they were markedly less than in Zambia, where 80-90 percent of funding was provided by external donors (see Table 4.2 above).[49] In the accounts of actors provided during the interviews GHIs were not often mentioned as determining factors in treatment roll-out,

[49] According to the South African Treasury in 2008, 99 % of public sector funding was from the government. According to Johnson (2008) the figure is 90%. However, Nattrass (2006) in 2005 found that around half of all patients accessing ART in the public sector were doing so with some form assistance from NGOs or international funders.

and certainly not to the extent that they drove ART scale-up in Zambia. This was partly due to the initial refusal by the Minister of Health to collaborate with or accept funding for ART programmes (Johnson 2008).

This short history of the ART roll-out in South Africa highlights how implementation was defined by high politics and conflict between a government reluctant to roll out ART, and clinicians and civil society networks pushing for faster implementation. In this story, further analysis of data will highlight networks of actors, trust between these, their history and the zeal or 'Doberman like' quality amongst the early implementers.

Health systems structure in South Africa for ART roll-out

> Authority for implementing all national legislation within the functional areas listed in Schedule 4 and 5 (which includes health care) except where the Constitution or an Act of Parliament provides otherwise.
>
> *Constitution of the Republic of South Africa [ART 125. 2(b)]*

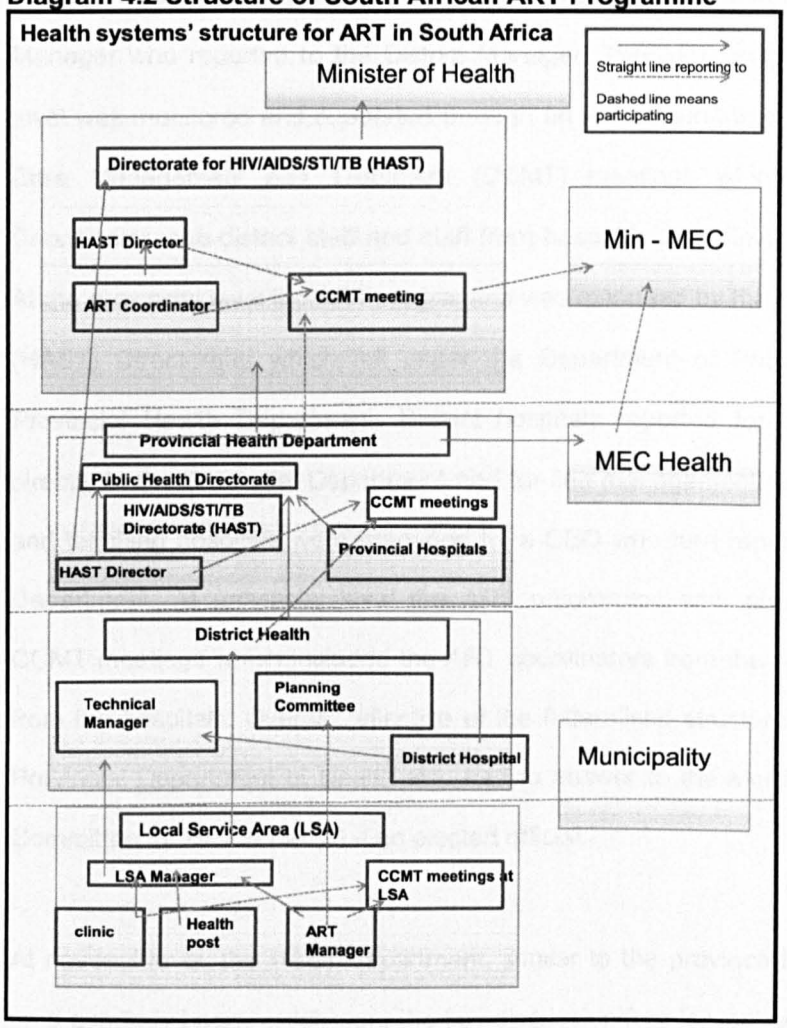
The South African health system's structure was different to the Zambian one, as the country is federal republic of provinces and health was decentralised under the South African constitution to provincial responsibility, as the Constitution states (see quote above).

This had implications for the administrative and the financing arrangements of the treatment programmes,[50] as each province had its own independently elected executive, including a designated member of the executive (MEC) for health. However, the health systems structure was relatively new. The apartheid period which saw a segregated health system being implemented until 1994, left the health system

[50] This also helps explain great variations between the provinces in terms of the implementation outcomes between provinces, including numbers of people on treatment. However this study focuses not on the outcomes but on trying to understand the process of treatment roll-out from national to district level.

underfunded and dysfunctional in large parts of the country with inequalities that persist and shape the provision of services until this day. The transition in 1994 also meant a complete change in the structure and administration of health (Coovadia, Jewkes et al. 2009), with the attempt to integrate what had been separate health systems (Price 1986).

Diagram 4.2 Structure of South African ART Programme*



*This reflects the structure at the time of data collection in 2008, and the sub-national structure reflects that found in the Eastern Cape.

As evident from the diagram, the South African health system was more complex with a greater number of layers than the Zambian system. The equivalent to a district in Zambia, or the bottom unit of the administrative structure of the Department of Health in the Eastern Cape was a Local Service Area (LSA), or sub-district, which had the same function as the DHMT in Zambia. It was responsible for managing clinics, health posts and staff working within these. The sub-district was managed by a sub-district Manager who reported to the District Manager. The ART programme at sub-district level was monitored and supported through an ART Coordinator and Comprehensive Care Management and Treatment (CCMT) meetings which included the ART Coordinator, sub-district staff and staff from hospitals and clinics within a sub-district. At the provincial level the ART programme was managed by the HIV/AIDS STI and TB (HAST) Directorate, which fell under the Department of Public Health within the Provincial Health Department. District hospitals reported for clinical management directly to the Provincial Department and for line management to the District. Tertiary and teaching hospitals were managed by a CEO who turn reported to the Provincial Department. At provincial level the ART programme was also monitored through CCMT meetings which included the ART coordinators from the sub-district levels and from the hospitals. Overall, reflective of the federalised structure of South Africa, the Provincial Department of Health also had to answer to the Member of the Executive Committee for Health (MEC) – an elected official.

At national level, the HAST department, similar to the province had CCMT meetings on a quarterly basis, which were the key discussion fora for technical issues in relation to the ART programme. The CCMT meetings consisted of national actors and representatives from each province and monitored province's performance. In addition to the CCMT meetings at national level, and of greater importance in the policy formulation process, were the Min-MEC meetings, which comprised officials from the national Department of Health, the Minister and the Health MEC's from provinces.

According to actors interviewed these were vital for the policy implementation and discussions surrounding implementation between the national department and the provinces.

Conclusion

ART roll-out in South Africa was characterised by high politics and conflict. The challenges and resistance by government meant that networks between actors were of great importance to scaling-up treatment. In Zambia, ART roll-out expanded rapidly once Global Health Initiatives began to provide resources to support, knowledge and consensus of Zambian physicians committed to treating people living with HIV/AIDS.

An overview of the different health system's structure in each country highlights elements that were important to roll-out in each context. The health system in Zambia appeared top-down and hierarchical under much greater control of the national Ministry of Health compared to the devolved power sharing of provinces in South Africa. These differences between the national DoH, the provincial, elected officials and provincial and district level staff were more attenuated, and allowed for more flexibility in the implementation. In Zambia ART roll-out was largely technical. In South Africa it was highly politicised. The structures and narrative set out in this chapter provide the backdrop to the analysis of implementation processes, the role of networks and their power in these processes discussed in the following chapters.

CHAPTER 5 – IMPLEMENTATION

Introduction

This chapter examines aspects of implementation that were identified in the study framework – communication, structure and resources - drawn from a review of the literature. It is the first of three analytical chapters, each of which examines the narrative of treatment roll-out described previously. The following discussion looks at how policy for ART roll-out was communicated for implementation, the structures through which it was implemented and how it was resourced in both countries. Before exploring these three aspects in detail, contextual factors especially in South Africa are discussed, as are the different 'modes' of how ART was rolled out implemented at the district and facility level in Zambia and South Africa.

The study tried to understand the implementation process in both countries as comprehensively as possible, drawing on interview data, published and grey literature. Rather than to examine one specific policy document it looked at a composite of official, state guidelines, policy documents and announcements with regard to ARV roll-out to fully understand policy guiding the implementation of activities relating to the roll-out. In Zambia this encompassed the original announcement to scale-up treatment in 2002 by the President (Bwalya 2006), the National Strategic Frameworks 2001-2005, and 2006-2010; the draft National Treatment Guidelines from 2005 that were finalised in 2007; and the first and second national ART Scale-up Plans 2004-06 and 2006-08. All of these were produced by the Ministry of Health. In South Africa the policy implementation process followed from the original Cabinet Decision endorsing the Joint Treasury and Health Task Team Report on ART in August 2003; the

November 2003 Operational Plan; the 2004 Treatment Guidelines; and the National Strategic Plan 2006-11, all of which were published by the Department of Health.

Findings and discussion

The implementation of ART roll-out has been exceptional compared to other health policies in both countries. Actors interviewed in the health sector in Zambia stressed that over the past five years HIV/AIDS, and specifically the scale-up of ART, had taken a huge percent of time and attention of health workers. Generally, HIV and responses to it feature high in attention across the political landscape in Zambia. For example, it was mentioned frequently in speeches and public debates. This was unlike other health issues such as malaria or Hepatitis B, which have received comparatively less 'public' attention. In South Africa, HIV/AIDS exceptionalism has been precipitated on the one hand by the effect it has had on the country overall as over 5 million South Africans were living with HIV (UNAIDS 2008). On the other hand President Mbeki's denialism made treatment for AIDS an issue of 'high politics' (Schneider 2002), one of the defining issues of his presidency and South African politics over the past ten years (Gevisser 2007).

To better understand the implementation processes this chapter first explores some of the variations - defined here as modes - in implementation of ART roll-out observed in the study districts in Zambia and South Africa before examining the role of context. The discussion on context mainly focuses on South Africa as the politics there were complex and important to understanding ART roll-out, whereas the contextual factors in Zambia to a large part related more to systemic constraints which are explored in the discussion on resources.

Modes[51] of policy implementation

The roll-out of ART was implemented in many different ways - and there were several avenues – public and private - through which it was possible to access ARVs in Zambia and South Africa. All complied with the overall policy and policy makers would not have seen them as violating national policy. However, clinical practice varied considerably between the districts where research was conducted. Interviews and visits to different health facilities revealed differences in how often patients were seen for follow-up appointments, how soon they were initiated on to ART, and where they collected their medication. This differed even within the same district in both countries.

For example, in one study district in Zambia there were several different modes for accessing treatment in the public sector. In one area people requiring treatment could access medication through a community based organisation (CBO) which would escort patients to a particular clinic. While this was the same treatment programme as those visiting the clinic on their own, the patient going through the CBO identified it as their treatment access. This identification was important, as the CBO was able to assist with the costs of transport, or other factors that may otherwise have prevented access. The patient experience, including aspects of support and care people living with HIV received, was entirely shaped by the CBO and differed greatly from that of those accessing the public sector programme without such assistance. While this study did not specifically assess health outcomes and secondary data on these was not available for the specific sites studied, from observation during data collection and interviews it seemed unlikely that many of the people accessing ART with the CBOs assistance would have been able to do so or achieve as good treatment outcomes without the organizations' help.

[51] The term 'modes' is used here in the discussion to refer to different forms or mechanisms through which patients were able to access treatment, as these were informal the term 'modes' was used rather than 'models' as the author felt that model implied a more formal arrangement.

Other modes within the same district included an NGO-supported public sector clinic where patients accessing ARVs were additionally provided with food aid and further support. These extra elements were only available in this clinic not in others. In addition, one of the PEPFAR implementers was providing resources to a private mining hospital to ensure treatment would be available for free to all members within that community. Yet, as the hospital normally only catered for miners and their families, knowledge that it was possible to access treatment at this site for the wider community was limited.

These examples demonstrate how despite uniform policy guidelines, policy implementation varied and relied on many different elements determined at the district or facility level, which contributed to the ultimate outcomes of policy implementation i.e. whether patients would be able to overcome challenges to accessing treatment, adhere to treatment and have good health outcomes. These different avenues into the treatment programme that were visible at the district level were invisible to policymakers at national level. Their description of the treatment programme was much simpler, suggesting a more uniform model. It was only by following a bottom-up perspective that differences in access emerged, underlining the value of a bottom-up perspective.

Similarly, in South Africa within one of the sub-districts where research was conducted, interviews revealed that the modes for patient management on ART, including when and how often patients were able to collect their medication differed between clinics. Many innovative modes in health service provision of ART in resource poor settings were developed by clinicians implementing treatment programmes in rural hospitals. For example in Madwaleni (Cooke and Wilkinson 2006), where the ART programme relied heavily on treatment counselors and support groups, and the

programme in Tugela Ferry (Gandhi, Moll et al. 2006) that included follow-up of patients by volunteers in the community. These were within the parameters of the policy guideline which emphasised treatment as part of a package that included the importance of nutrition and exercise, but relied on doctor-initiated treatment. Treatment programmes complied with this policy directive but varied in how they operationalised their programmes.

These different modes of implementing ART roll-out demonstrate interpretation and innovation of policy by implementers in both countries. They show that even when policy directives are followed by implementers a certain level of adaption or interpretation is inevitable when applying and implementing a policy guideline in practice to a specific clinical or other setting. It confirms insights by Barrett (2004) that interpretation of a policy by implementers is crucial to achieving policy outcomes and successful implementation of public policy. This is significant in two ways: first, it demonstrates that policy implementation will always vary slightly even where a policy is not changed or obstructed during implementation, as evident from the data collected where different modes for accessing ART were visible even in Zambia where ART roll-out was un-contentious. Second, it shows the importance of focusing on both bottom-up and top-down perspectives in implementation research as these different modes were only visible and had been generated at the bottom/district level.

Context

As described in Chapter 4 the policy environment for ART differed between the two countries. Zambian national policy was supportive, eager to expand roll-out, South Africa was very different and this section elaborates on the hostile environment within which ART was implemented.

Implementation ahead of policy in South Africa

> They started too late. If they had tried to slander us earlier, maybe they would have been successful, but by the time they were doing it people were already getting better and they were happy to give interviews and show how much better they felt on ART.
>
> *Clinician, Khayelitsha, South Africa, describing rolling out ART there.*

In South Africa implementation of ART was happening before it became official policy, providing an example of a policy initiated from the bottom.

The Western Cape Province ART programme was highly influential in changing government policy on ART according to national actors involved in treatment roll-out. In comparison to other provinces, the Western Cape had the greatest health systems capacity, with the highest number of public sector doctors and the best health facilities (HST 2009) (see Table 4.3, Chapter 4). In addition, until 2005 the Province was not governed by the ANC[52], which meant it had greater scope for independent policy-making and implementation. In 2001 the charity *Medecins Sans Frontieres (MSF)* started providing ART to adults in four clinics in the Khayelitsha township outside Cape Town, with the full knowledge and in cooperation with the Western Cape's Department of Health. MSF had originally intended to implement an ART programme in Gauteng Province but encountered government resistance there. Through personal networks the medical director of MSF at the time formed linkages with the Western Cape Department of Health. The Department of Health was already providing AZT for the prevention of mother to child transmission in defiance of national policy. The Infectious Diseases Unit at the University of Cape Town was also involved in the monitoring and evaluation of programmes. Through this collaboration, it was possible to implement the adult ART programme in Khayelitsha as an operational research programme and to

[52] The African National Congress is the majority party in South Africa and the dominant force in South African politics (Gevisser 2007).

document and eventually publish the lessons from the ART programme there (Coetzee, Hildebrand et al. 2004).[53]

According to many actors interviewed in both countries, the documented success of treatment provision in Khayelitsha (Coetzee, Boulle et al. 2004; Coetzee, Hildebrand et al. 2004) was important in adding to a global evidence base that demonstrated the feasibility and efficacy of ART provision in resource poor settings. The national government could not stop the implementation of the operational research programme but attacked MSF and its treatment programme in the media. A member of the MSF team at the time described press reports and quotes from government spokespeople claiming MSF was trying to poison people in Khayelitsha. These attempts by the government did not work as the success of treatment was already visible, as indicated in the quote above.

Interviewees also emphasised the role of the provincial Department of Health in the Western Cape, in pushing for consideration of ART by the joint Treasury and Department of Health Task Team in the Cape Town Parliament as outlined in Chapter 4. Many actors described this report as the pre-requisite step to get the Cabinet's agreement on the provision of ART in 2003.

Two aspects of the Western Cape pilot shed light on the implementation process. First, was the power invested in the provincial Department of Health vis-a-vis the national department. While the Western Cape's pilot was clearly against national government policy, the national Department of Health's political position and interest at the time, they were unable to halt implementation. Respondents from the Western Cape DoH said this was a battle of political tactics, but also a test case for the

[53] Documentation and impact of evidence generated through the Khayelitsha treatment programme was in two phases. Initially through media reports, reports and sharing of experiences by MSF and TAC, and later through the publication of findings in academic journals.

Constitution which endowed provinces with powers of implementation in health. Second, knowledge gained from the pilot programme strengthened the authority of the implementers. The evidence from Khayelitsha was perceived by actors interviewed to have informed treatment programmes globally and in South Africa. However, those involved in the implementation in the Western Cape reported that they had not been consulted or invited to share their lessons with the national DoH because the issue of ART was too political for the DoH to openly draw on or acknowledge the influence of the Khayelitsha programme. Nevertheless, most interviewees felt that the information from the pilot studies was crucial to the eventual turnaround in HIV/AIDS policy. It demonstrated both the medical and health systems feasibility of rolling-out ART and the ability to implement policy despite national DoH opposition. Reasons for this are further explored in this and in the following chapter.

Reluctant implementation in South Africa from 2003 onwards

> If you look at the targets set by national, they have their own way of seeing. People here, at the grassroots they want treatment. We go beyond the targets of national, we cannot just deny people treatment and say, no we have reached our target. We have already [one month into the annual plan] exceeded the target we were given by national.
>
> *Nurse, Quakeni subdistrict, South Africa*

Even once the Cabinet had taken the decision to roll-out ART and the Operational Plan had been approved in October 2003, the government appeared reluctant to implement it. This was expressed through many delays and complications in accreditation and tender processes relating to ART, not to external constraints. An example of this was the tendering process for the anti-retroviral medication. Actors involved in or monitoring government procurement suggested that the process was slow and did not follow the 'normal' procedures of a government tendering process for medicines. Interviewees felt strongly that this was a result of the political controversy

surrounding ART. At the time of data collection in 2008, a new ARV tendering process was underway as the first contract had lapsed and analysts were again describing a similar convoluted process leading to delays.

Further delay to the roll-out was caused by the accreditation process. Department of Health guidelines specified that sites had to be assessed by a national accreditation team before they were designated an ART site, and could dispense medication. Only one team from the national department of health covered the whole of South Africa. This delayed the ability for many hospitals and clinics to provide ARVs and was mentioned by many actors interviewed as a tactic to delay treatment roll-out. It corroborates findings by others who have described this practice as 'implicit rationing' (Jacobs, Schneider et al. 2008). In one district, interviewees suggested that the delay had led to people dying while on the waiting list for treatment. While accreditation of health facilities is an important part of the quality control for treatment programmes, in Zambia formal accreditation through the Ministry of Health team was done once facilities were already providing ART to their patients to not delay the provision of treatment.

Interviewees also pointed out that the Department of Health set low treatment targets, which limited incentives for health workers to scale up rapidly. Facility and provincial staff interviewed during data collection confirmed that targets had already been met two months into the implementation period of the annual plan as they were low, as evident from the quote above. This suggested a practice where treatment targets may actually have been used to 'control' or slow the implementation of ART roll-out rather than to provide an incentive for a more rapid scale-up. These findings from the Eastern Cape presented here are similar to those observed by another study in the Free State, a different South African Province (Jacobs, Schneider et al. 2008).

Systems constraints in Zambia

> I cannot go directly to the province, I report to the Manager Planning and Development, and through her to the Director [District Director Health], and through the Director to the province.
>
> *District health worker, explaining his relation with the Provincial Health Office*

Context in Zambia by comparison was less complex and much less politicised. Its dominant features as set out in Chapter 4 were as a result of resource constraints and the influence of external funding. A further contextual factor of importance for the discussion of implementation processes was the 'hierarchical' and top-down nature of the processes in Zambia. One of the ways in which the hierarchy's impact on the policy process was manifest was the difficulty actors had in relating to people who were not their peers in formal policy fora. An example of this was in the Copperbelt province where the provincial health director had not participated in the Provincial AIDS Task Force (PATF) when this was chaired by a district director of health. One interviewee explained how the provincial director could not have attended meetings chaired by someone who was below his rank. It suggests that this culture of hierarchy in some cases proved an obstacle to policy implementation. It may also have been one of the reasons why comparatively informal bodies, such as the technical working groups at the Ministry of Health, and the provincial ART committee in the Copperbelt were seen by actors interviewed as so important and successful in facilitating policy implementation of ART roll-out. As informal bodies, these circumvented the hierarchy of the more formal policy process.

Some of the anthropological literature on Zambia touches on this hierarchy in descriptions of the country's history and Zambians' perception of their own identity as peaceful (Ferguson 2006). However, these do not completely capture this characteristic observed during data collection where actors appeared reluctant to challenge authority and had great respect for anyone perceived to be in authority due

to the office held, education or age. Interviewees were asked if there had been protests or social mobilization in relation to ART roll-out and a number of actors described Zambians as 'docile' in their responses as to why there had not been more conflict between people living with HIV/AIDS and the government at the time when the initial roll-out was limited to a small number of people in 2003/04. It may be the absence of conflict and of challenges to authority, possibly the result of the absence of conflicts in Zambia's history (Crehan 1997)[54], which describes this most accurately.

Having examined the policy environment as the context within which ART was implemented in two countries, this chapter now turns to the three areas identified as central to implementation: communication, structures and resources.

Communication

> 'A [government] circular was brought by the sister-in –charge that the ARVs were now free. We also heard it on the television and the radio.'
>
> *Treatment counselor, Copperbelt, Zambia, on how they heard user fees for ART were removed*

> 'You have overweight nurses explaining to patients that can only afford two meals a day about exercise and nutrition before they can go onto treatment; it's like a sad joke.'
>
> *Doctor, Johannesburg, South Africa explaining the DoH Comprehensive Care Management and Treatment (CCMT) framework for HIV, which emphasizes exercise and nutrition.*

Research focused on all aspects of communication of the policy: communication to patients, which included all social mobilisation activities, and communication of the actual policy to the staff and implementers within the health sector.

In Zambia, communication of policy guidelines to implementers was through training, announcements in meetings, the publication of clinical guidelines and formally through memos sent to all health facilities by the Permanent Secretary (PS) in the Ministry of

[54] While Zambia saw some conflict in its struggle for independence from the British in 1964 the country has not been involved in armed conflict since and has limited experience of civil conflict (Ferguson 1999)

Health. Typically a memo from the PS would start the process of implementation to announce a policy change and further communication, including guidelines, would follow. During the research actors were specifically probed about new treatment guidelines and where they had first heard about ARVs being made available in the public sector. Implementers referred to either their district or clinic meetings where announcements had been made, followed up by technical publications such as treatment guidelines. Faster, more direct policy guidance came in form of short memos from the PS. Often the MoH follow-up communication, guidelines, and training were supported through donor agencies, NGOs or local PEPFAR implementers, a sign of the extent to which MoH relied on these actors for implementation.

At the time of data collection from mid 2007 onwards, Zambia was implementing revised ART treatment guidelines, which had been formalised in May that year. During the interviewing process this was specifically mentioned to better understand how policy guidelines had been communicated. At the district and facility level, actors referred to having heard about the policy in a memo from the PS. This was followed by training activities and workshops briefing staff on the new treatment guidelines from a local PEPFAR implementing organisation in the focus province. The actual policy documents (a brochure and a leaflet) issued by the Ministry of Health of Health in 2007 and produced with funding from PEPFAR, were also identified as sources of information by actors interviewed. While the dissemination of full guidelines and information appeared to take some time it seemed to work well.

In Zambia, the government ran community radio programmes on ART, and a number of community mobilisation activities through Neighbourhood Health Committees. These were voluntary bodies, linked to each health facility that provided a link between the community and health system. Interviewees recalled some NGOs had conducted information or social mobilisation campaigns in some of the focus areas. Many of the

actors interviewed in Zambia, including health workers also recalled hearing about treatment and the availability of treatment through the media.

In South Africa, communication was less clearly government-led. Policy changes in the ART programme were communicated through policy directives from the national Department of Health to provincial health directorates through the quarterly Comprehensive Care, Management and Treatment (CCMT) meetings, and the 'MIN-MEC', where provincial health ministers met with the national Minister for Health and national officials. From the provincial level it was further communicated to district and sub-district managers during monthly and quarterly meetings. Provincial health directorates also communicated this to the hospital CEOs and superintendents.

The South African health system covers a larger area and population as set out in Table 3.3, Chapter 3 and implementers were further removed from national policy actors. Health workers in South Africa heard confusing public messages and negative publicity around ART reported in the South African media (Jacobs and Johnson 2007). This included the Minister of Health's public championing of garlic, lemon juice, African potato and beetroot to treat AIDS, and frequent coverage of HIV dissenters' views (Cullinan and Thoms 2009). These messages created a sense of uncertainty or unease around ART, which was evident during the interview process with actors at facility and sub-district level. It often appeared that workers did not want to be seen as being too keen to prioritise the ART programme.

This differed greatly from Zambia where optimism and enthusiasm was apparent amongst health staff interviewed, while many of the implementers at facility level in the public sector in South Africa appeared depressed or less enthusiastic. This was particularly the case where there was no active civil society or limited support from NGOs to health workers. Although subjective, this difference between implementers in

Zambia and South Africa was palpable. In Zambia nurses interviewed said explicitly that all health sector staff wanted to work in the ART clinic, as it was seen as the place with most opportunities for career development. By contrast, in South Africa nurses appeared to be defensive, pointing out that they were following the treatment protocol of not just initiating patients on ART, but also educating them on nutrition and the importance of physical exercise. Most of the DoH staff interviewed at province, district and sub-district level began the interview by correcting the study title, which was phrased as 'implementation of ART roll-out', pointing out that in South Africa the research should more accurately refer to Comprehensive Care Management and Treatment (CCMT) Programme, as the focus of their treatment programme was not just on the anti-retroviral medication but wider management of HIV. The official communication to patients around ART in South Africa, aside from media reporting on the politics of AIDS, appeared to have been mainly limited to posters. The posters and materials placed ARVs clearly within the 'CCMT framework' which included an emphasis on healthy nutrition and exercise.

> Mbeki's ideas on AIDS were always complicated and never clearly articulated. By the time they filtered down to provincial ANC strongholds such as the Eastern Cape, they had become a cocktail of nativism, ersatz ideology and anti-imperialism: the drugs are toxic; the West is dumping poisons on Africa; the problem is poverty and ARVs cannot help someone with an empty stomach.
>
> *Steinberg (2008), pp. 91f.*

Patients and sub-district actors interviewed for the study in South Africa had almost exclusively received communication and information about the clinical effects of ART through NGOs mostly through the Treatment Action Campaign. In one of the sub-districts where TAC had not been as active, information was lacking and health workers reported that many misconceptions of ART amongst patients persisted. While this is anecdotal evidence it was a stark contrast to the way health workers in Zambia spoke of patient's perceptions and understanding of ART. Steinberg (2008), whose

book focuses on the personal experiences of the HIV epidemic by a young man in one of the sub-districts that was also the focus for this study, portrays the levels of misconception that remained surrounding antiretroviral treatment as summarized in the quote above. In Zambia, in the study focus districts interviewees also described how one of the challenges had been initial fears surrounding ART, relating to these being toxic and their possible side effects. However, the public sector treatment programme there had worked together with traditional healers to attempt to dispel these myths in the community.

These contrasting examples of how policy surrounding ART was communicated and how this in turn impacted on implementation in Zambia and South Africa demonstrate the importance of the level of conflict surrounding a policy to how it is communicated, and ultimately its implementation. This echoes insights from Matland's (1995) conflict - ambiguity model which contends that the level of conflict surrounding a policy impacts on its implementation.

How policy is communicated might impact on the provision of ART

The problem of patients presenting late when already ill and with a very low CD 4 count[55] has emerged as a key clinical challenge in many of the heavily affected resource-poor countries in the global South (Hallett, Gregson et al. 2008; SAJHIVMED 2009). Further, there is a growing body of evidence to suggest that earlier initiation of patients on treatment reduces mortality (Kitahata, Gange et al. 2009). The comparatively slow policy implementation and the confusing and conflicting messages

[55] CD4 count refers to the number of white blood cells per cubic millilitres blood. As the HI Virus attacked the bodies CD4 cells this is one of the main measures for a patients health status, a lower CD4 count means a persons immunity is compromised and they are more susceptible to an AIDS defining opportunistic infection such as TB. The CD4 cell count serves as one of the main indicators of a positive persons health, including for determining when to initiate patients on anti-retroviral treatment. WHO (2006). Antiretroviral therapy for HIV infection in adults and adolescents. Geneva.

around ART in South Africa may have contributed to people accessing treatment very late in South Africa. Also the time between diagnosis, testing and receiving medicines differed in each country. In South Africa the period between a patient presenting at a facility and being eligible for treatment was reported by health workers interviewed as three to four weeks, which compared with about one week in Zambia. While these findings are particular to their context they still indicate that the reluctance surrounding ART by the South African government, permeated through the health system resulting in a delay of treatment for patients.

The presentation of patients with a low CD4 count in a context where treatment was limited also led to an informal system of rationing. Nurses in South Africa reported that where they perceived there were more patients in need of treatment than medication available, they would tell patients to wait longer before starting ART, even if their CD4 count was just below the 200 mark (which was the level treatment guidelines set for initiating patients on treatment). Instead nurses would prioritise patients with an even lower CD4 count. This practice emerged in interviews with two of the sisters-in charge of the ART clinics at district level in South Africa and was confirmed as a concern by some observers at national level.

Policy learning - implementation as part of a cyclical policy process

ART scale-up in resource-constrained environments, such as Zambia and South Africa, took place with limited knowledge of what would 'work'. Therefore in both countries different models of implementation were essential to learning and developing best practice in service delivery. In Zambia, the government dealt with this by keeping the treatment guidelines in draft form over a number of years, so that they could be updated and adjusted. National interviewees mentioned this as an explicit strategy to enable lessons learnt to be incorporated into the final document, which was finally published in May 2007.

In South Africa, in the absence of government initiative it was clinicians, NGOs and academic centres which tried to ensure learning from practice. Many of the early implementing clinicians documented the different models for ART service delivery and different ways of dealing with particular constraints. In addition, a number of meetings, from 2003 through to 2007, organised by actors like the Centre for Health Policy at the University of Witwatersrand, or the Nelson Mandela Foundation encouraged sharing knowledge and best practice in implementing ART roll-out. While not organised by the Department of Health, a number of actors described how these meetings had been important in informing policy development relating to ART specifically the National Strategic Framework in South Africa (SANAC 2007). While academic papers appeared later, two papers documenting these experiences were perceived as important to ART roll-out globally: One was the 2004 paper in AIDS (Coetzee, Hildebrand et al. 2004), which drew on the lessons from Khayelitsha and was the first to document the efficacy and feasibility of ARVs in a South African context; the other was 2007 paper which documented the treatment programme in Lusikisiki (Bedelu, Ford et al. 2007). While it was not officially acknowledged by the Department of Health that these experiences informed development of government guidelines, clinicians interviewed and involved in the development of policy confirmed that they drew on these examples.

The annual partners meeting organised by PEPFAR implementers and the Ministry of Health in Zambia from 2005 onwards served a similar purpose. Different implementers and organisations presented the challenges they faced and the strategies devised to overcome these. The technical working groups organised by the Ministry of Health and the National AIDS Council in Zambia also played a crucial role in learning from implementation. A number of interviewees mentioned that the change from stavudine to tenofovir in first line regimen in Zambia was negotiated and decided largely based on the shared experiences discussed at the implementers meeting and between the

various different actors who were part of the informal working groups at the Ministry of Health on treatment.

The differences in how these policy learning processes took place confirmed the reluctance of the DoH in South Africa compared to the enthusiasm of the Zambian Ministry of Health, where the government encouraged and organised the learning process but had to rely on external partners for funding. This contrasts with South Africa where networks' of actors were sharing knowledge to increase the evidence base and push for roll-out *in spite* of the government. It also shows an aspect of bottom-up processes of implementation in both countries, and how these experiences from the bottom-up linked into a cycle of continuous policy development.

Structures

South Africa has a decentralised political system where provinces have comparatively greater constitutional authority for health than Zambia. Although health in Zambia was 'decentralised' during the early 1990s (Bossert, Chitah et al. 2003; Gilson, Doherty et al. 2003) to award greater autonomy to districts, this was reversed in 2005 and this research suggested the health system was more centralised than South Africa, as discussed in Chapter 4.[56]

A big difference in the implementation of ART roll-out in Zambia and South Africa's public sector was the management of doctors. In Zambia all clinicians, including doctors in a district or a province, were managed by the District Director of Health or the Provincial Health Director respectively, who in turn reported directly to the Director

[56] This may be due to the overall political system being more centralized in Zambia than in South Africa or the different nature of the reforms. However, this study did not specifically set out to understand these factors. At the time the research was conducted Zambia had just undergone a second wave of reform which saw the recentralisation of many 'decentralised' elements of the health system. Specifically, in 2005 the government dissolved the health boards, which had been a central tenant of these reforms.

of Technical Services in the National Ministry of Health. This system required all administration to be done by doctors as there was no division between clinical management of disease and other aspects of the health system. As a consequence the entire administration of the ART programme (and all other health services) in Zambia was managed by the doctors who were also engaged in the day to day provision of health care. In South Africa, administration was often the responsibility of a separate cadre of public health managers.

As in South Africa, by contrast, staff in the administration at district, provincial and national level in the Department of Health tended to be nurses. However, even where they were doctors, staff responsible for the management of the health system appeared less involved in the clinical management of the services. For hospitals, clinical management in South Africa lay with the Medical Superintendent who oversaw the management of doctors of affiliated clinics (clinics were managed as satellites through hospitals in South Africa). The medical superintendent of a hospital reported to his or her Chief Executive Officer (CEO) an administrative post that supervised all other aspects of managing the hospital and in turn linked to policy structures within the DoH. This meant that doctors providing clinical services in South Africa were further removed, and less directly involved in the policy process relating to ART than in Zambia. In South Africa a hospital would be run relatively clinically autonomous from the Department of Health, including its clinics with only the CEO engaging with the Department of Health, so that the clinical programmes were much less directly controlled by the DoH administration. Overall the service provision in South Africa was much less centralised than in Zambia, with potentially greater autonomy in the clinical running of services.

The comparatively greater clinical autonomy of hospitals in South Africa, especially where these were in rural areas and physically distant from the Department of Health's

structure, allowed implementation and rapid scale-up where dedicated individuals were willing. It provided the conditions for the treatment programmes described earlier (in Chapter 4), which were run by individual clinicians ('dobermans'). In Zambia the very close centralised management of all clinicians further strengthened the networks between them and allowed the rapid sharing of knowledge and resources around ART, which in turn was essential to enabling roll-out within such a resource constrained environment. One of the impacts of these structural differences was that in South Africa, implementation depended more on individuals and their interest in the policy, where this was low it was easy to deflect or delay execution of policy. Thus the structure of the ART scale-up was very different in each country, but the characteristics were an important factor in explaining how implementation took place.

Resources

As already indicated in Chapter 4 there were major differences in resources available for public sector ART roll-out: government per capita expenditure on health was $26 (PPP) in Zambia, and $364 (PPP) in South Africa in 2006 (UNDP 2009). This study did not seek to analyse financial flows or other quantitative measures such as national health accounts, focus was on understanding the role of resources in policy implementation processes and how resources or the lack thereof influenced the processes examined.

Recent studies have examined these resource flows and financing of HIV/AIDS using economic analysis. For Zambia, this includes a study by Garg et al (2009) which showed that while the overall funding for HIV in Zambia rose between 2002-2006, the government share of this decreased from 19% in 2002 to 9% in 2006, confirming the qualitative findings from this study that GHIs were responsible for the vast majority of funding, but also raising concerns that these funds displaced domestic resources

(Garg 18 July 2009). An analysis of funding for the treatment programme in South Africa by Nattrass (2006) found that more than half of all patients were accessing treatment in the public sector in 2005 through programmes where a financial contribution by an external partner was made. A study by Johnson (2008) which focused on the political economy of donor – government relationship in South Africa, referred to DoH statements indicating that 90% of the public sector treatment programme was government funded. In interviews conducted for this study, officials of the Treasury confirmed that they provided all resources for the public sector programme as set out in the National Strategic Plan. A likely explanation for these differences in figures between different studies is that Nattrass examined treatment programmes as a whole, i.e. including the additional support provided by donors and GHIs, whereas, as Johnson points out, PEPFAR does not provide resources to the government in South Africa. Hence the Treasury's statement that they finance the public sector programme completely, as they do not consider the additional services and support provided by other donors and NGOs captured by Nattrass. Regardless of the exact percentages involved, the key insight from this literature confirms findings from this study that the South African treatment programme relied to a much lesser extent on external resources than the programme in Zambia.

At the same time there were significant similarities in challenges to implementation. The districts selected in South Africa had resource constraints that were in many ways similar to those in Zambia, and the challenges faced by patients in accessing ART were similar across both countries. Constraints in capacity at the sub-national level dominated policy execution in both countries.

Constraints in capacity

The availability of physical resources such as medicines was not the only obstacle to implementation from national to district level. In both countries national level actors and observers of the process described how some of the policy instruments devised at national level were too complex for implementers at district and provincial level.

In South Africa, actors involved in the financing and costing of ART services at national level explained that some provinces lacked the capacity to use and translate the different formulas used to calculate treatment need and the cost of medication required. This was corroborated by the provinces' apparent inability to make full use of the financing instruments available for ART funding (Odendahl 2007). Specifically, few provinces had made full use of the *conditional grants* which provided additional funds for ART from the national treasury. Part of the requirement to access conditional grants was an annual business plan. The weaknesses in these documents and provinces' inability to submit these on time in the correct format were also cited by actors working at national level as an indication of the lack of capacity by provinces.[57]

The inequalities within the health system in South Africa between individual provinces can be explained by the legacy of apartheid (Laurel Baldwin-Ragaven and 1999; Coovadia, Jewkes et al. 2009). The Eastern Cape had a history of problems with its administrative capacity as a result of its historic underfunding (Price 1986). This led in 2000 to the province being taken under management by the national government to address some of its constraints. During the research this lack of capacity within the administration at provincial and district level was repeatedly described as a challenge

[57] Subsequent to the data collection, this weakness in financial planning in relation to ART was highlighted dramatically, when provinces in ran out of funding in the last quarter of 08/09. The Free State province as a result stopped dispensing ART at the beginning of 2009, the subsequent protest drew attention to the issue of poor financial planning for ART programmes by provinces.

by the clinicians implementing ART programmes. Limited awareness and capacity by staff within district and provincial administration structures to engage with the national processes was also observed during interview. For example, actors had limited awareness of national policy documents when specifically probed.

Health systems capacity

> 'There are many barriers - despite ARVs being available they are not as easily accessible as you may think. If you look at the infrastructure for the dissemination it is mainly along the main roads and railway lines. If you look at the health workers that are knowledgeable in ART, there are very few in the country. If you look at the number of trained counsellors, all those factors actually have a bearing on how treatment is actually rolled out'
>
> *PLWHA Activist, Lusaka, Zambia*

> 'We do not have the nuts and bolts in place due to a long standing underfunding of the health system'
>
> *Health systems analyst, South Africa*

Health systems capacity in both countries was weak at district and facility level. Zambia had limited capacity in health services as a result of public resource constraints. Health centres visited for this research often lacked the most basic medication such as pain killers, and patients in some parts of the country had to travel distances of more than 100 miles to access a health post that was staffed by a nurse. These systems constraints, including the absence of laboratory equipment and human resources, were the main obstacles to the implementation of ART roll-out in Zambia according to many interviewees. Resources for the ART programme were mainly provided through Global Health Initiatives. Medicines were financed with resources from the Global Fund, but when ART was initially introduced no additional investment in health systems capacity was made, neither for the health workforce, laboratories or facilities. In the study districts the bulk of additional resources were provided through a PEPFAR implementer, the Zambian Prevention Control and Treatment Programme (ZPCT). Support was not in financial transfers to the public sector but by ZPCT

implementing activities, such as training staff, communicating new treatment protocols and providing reagents. During interviews actors were probed specifically on who they would look to, to resolve problems they faced in the running of the ART programme. District level health workers faced daily resource constraints in all aspects of their work and almost all said they looked to ZPCT rather than the government to resolve these problems.

The health systems constraints in the Eastern Cape province were similar to those faced in Zambia, including low service coverage and challenges in access to services for patients (HST 2009). For example, retaining pharmacists and doctors at district or sub-district level was perceived as challenging in both countries. In addition, doctors interviewed described that the absence of a functioning primary health care system meant that many of the health problems that could have been dealt with at primary facilities were coming to hospitals, stretching their resources.

'Coping strategies bottom-up implementation in South Africa

In both countries the research suggests that staff at facility or district level developed strategies to overcome the constraints they faced, providing further evidence of bottom-up policy implementation. These were very practical and addressed problems in implementation but rarely were mentioned in discussions or policy guidelines at national level. Three examples in South Africa are described below illustrate ways in which 'frontline staff' learned to cope and translate policy directives into reality despite the lack of resources. None was sustainable in the long run, but each action helped cope with a particular situation.

The main town in OR Tambo district in South Africa, Mthatha, had a medical complex encompassing both Mthatha General Hospital (UGH) a regional hospital, and Nelson

Mandela Hospital (NMH) which is a tertiary teaching hospital. The CEO and Medical Superintendent respectively reported directly to the Provincial Director of Health. NMH was comparatively well resourced and an impressive building, which looked on par with other hospitals in big urban centres in South Africa. In contrast UGH was typical of a rural hospital in South Africa's poorer provinces. As the ART programme was meant to follow a primary health care approach a decision was made to have the ART clinic within the UGH complex. However, no additional doctor was made available, effectively paralysing the ART programme. To allow the treatment programme to go ahead, the Head of Internal Medicine at the Nelson Mandela Hospital went to UGH to initiate patients on treatment once she had completed her work at NMH.

In another case, a consultant physician at NMH provided free treatment to patients without resources in his private practice. This was known by the nurses and staff in the clinic at UGH, who sometimes referred patients to his clinic when faced with challenges in the public sector clinic. One community activist in Mthatha described how, with the help of a local doctor her organisation had procured Nevirapine as early as 1999 and made it available to women requiring treatment in one clinic.

Sometimes coping strategies were inventive. One doctor working in the regional hospital in Lusikisiki described that prior to 2003 they had maintained more than one hundred patients on treatment, by faxing individual patient histories to the Medical Control Council in Cape Town, requesting permission to treat patients with ART as operational research.

Coping strategies in Zambia- bottom-up strategies for sustainability

As in South Africa, Zambian implementers at the district level reported an array of activities to overcome the challenges they identified. For example, most of 51

clinicians interviewed in Zambia mentioned that procuring reagents for CD4 count machines were a particular challenge. Many hospital and clinics in Zambia were charging patients varying amounts at different times in order to have a small reserve of money to allow them to purchase reagents on the market. The charging for investigations was also partly a result of the government announcing and providing free ARVs but providing no additional resources required, such as chest Xrays, sputum sample containers or CD4count machines, to clinics and hospitals for policy implementation.

In addition, where patients were accessing treatment in the public sector with the assistance of an NGO or CBO, for example through the Catholic Diocese of Ndola's home-based care programme, the hospital continued charging organisations for patient's investigations where the patient was perceived to be accessing with the support of this organization. This resulted in considerable confusion amongst actors interviewed, as some organisations were paying for services, when others were not.

The charges for investigations became a contentious issue in 2006/07 and were raised by the network of people living with HIV/AIDS and other civil society organisations and actors. Actors interviewed at national level in the Ministry of Health were aware of hospital charging patient. To end this practice the PS had issued a further policy memo in 2007 stating that free ARVs included investigations. As a result, at the time of data collection all actors interviewed at district level were very keen to stress that this practice had stopped.

This example demonstrates how district level implementers were trying to cover or retain some autonomy over budgets in case funding was short or delayed in the future. This illustrates the bottom-up strategies implementers developed in response to the constraints they faced and to achieve policy outcomes. It also demonstrates the 'top-

down' power of the Ministry of Health who was able to stop the bottom-up strategy of charging for investigations as soon as national policymakers ordered this.

Actors interviewed described other tactics employed when ART was rolled-out initially during 2002/3. Hospitals, particularly in one of the pilot sites had rationed treatment due to concerns about drug supplies as there had been problems with ensuring continued drug supply. While there was some criticism at the time about who was receiving rationed drugs, it appeared that this system had allowed the hospital to ensure drug supplies even when the government had run out of the required ART medications.

There were other examples of bottom-up implementation of ART roll-out which illustrated the power of individuals to overcome system incapacities. In one community a nurse had gone to a local mining hospital which provided treatment with PEPFAR funding and had demanded that her community be included in the free treatment programme. She was successful and within her community she was able to test patients and refer them to the hospital. Once initiated she then provided repeat medication. This particular model had allowed people living with HIV in her area to access treatment, who would have normally not been able to access the medication as the cost of transport for repeat medication would have been too high.

Similarly, a home based care organisation accessing remote areas throughout the Copperbelt Province, had collaborated with a PEPFAR implementer and the District Health Management Team. PEPFAR paid petrol and a lunch allowance to district doctors who then initiated patients who had been tested by the home based care organization on treatment in the community. The organisation also provided repeat prescriptions and on-going support and monitoring to those patients.

These are different examples of how implementers or frontline health managers, planners, doctors, nurses and community workers interpreted and implemented policy in ways that made sense to them. Resources and in the case of ART roll-out in the two countries the constraints on resources shaped the strategies by actors during implementation of policy. Where the environment was constrained either by resources or capacity, implementers developed different strategies to 'cope' or overcome these challenges and achieve policy outcomes. In South Africa, given the size, complexity and decentralisation of the health system it appeared that bottom-up strategies or implementation was sometimes possible without the national Department of Health being aware of it. This seemed less the case in Zambia where the national Ministry of Health was more closely aware of challenges in implementation and there was greater direct, top-down control by national policymakers throughout the health system, although even there policymakers at the centre were not aware of all the different modes by which ART roll-out was implemented. These findings again underline that even where implementation is top-down the initiative of implementers at the bottom remain important.

Conclusions

Research findings confirmed that implementation is context specific, affected by communication, the structures through which a policy is implemented and how it is resourced. Findings emphasise the value of a bottom-up perspective, even where policy implementation processes are mainly top-down, and findings show that individuals and their links with one another play an important part.

Context

While the insights from models and frameworks were helpful in explaining implementation analysis of findings indicated that the context in which policy implementation processes take place was a central factor. The contentiousness of ART policy in South Africa contrasted with the consensus and support for the scale-up of ART in Zambia. The different levels of consensus and contentiousness surrounding ART shaped implementation processes and the behavior of actors. A culture of hierarchy influenced policy implementation processes in Zambia, while the constitutional set – up in South Africa was important where the national DoH tried to control provincial departments speed in implementing ART roll-out. These different aspects of the context in each country influenced policy implementation processes. They point to the need to consider context when analysing or planning policy implementation.

Communication

Communication (Goggin 1990) was affected by the level of conflict (as set out in (Matland 1995) and helped understand implementation in Zambia and South Africa. For example, different enthusiasm by service providers implementing the policy in the two countries was partly the result of the way in which the policy had been communicated and the contentiousness that surrounded its introduction. In South Africa staff in clinics had a notable lack of enthusiasm for ART, which was opposite to the enthusiasm that characterised actors working on the ART programme at all levels in Zambia. While individual actors working at facility level in either country had received similar kinds of direct policy guidelines, mostly in form of memos, trainings and posters announcing the provision of ARVs and the new clinical protocols, their perceptions of the programme differed greatly between the two countries. These had

at least partly been shaped by messages and communication through the media and, in South Africa, by advocacy from civil society.

The level of social mobilisation and advocacy surrounding ART roll-out was far greater in South Africa than in Zambia and impacted more on policy implementation there. Activists such as the Treatment Action Campaign (TAC) were also important in communicating information about treatment to members of the public – i.e. to potential patients and to implementers. The level of advocacy and social mobilisation in South Africa and Zambia was directly related to the level of conflict surrounding the policy.

Structure

The health system's structure: the structure of the policy making bodies responsible for HIV/AIDS as well as the structure of the political system were important to shaping implementation in both countries, confirming O'Toole's (1993) insight that structure affects policy execution. The constitutional set up of autonomous provinces in South Africa allowed treatment programmes to advance despite government opposition. The greater decentralisation in the health system allowed clinicians with drive and determination to implement large treatment programmes, 'under the radar' or in spite of government reluctance. The great differences in speed and success of implementation of the ART roll-out between provinces in South Africa also demonstrated the importance of the political structure to provincial variations. In those provinces where political leadership had a level of independence from the ANC national leadership, as in the Western Cape, it became possible to roll-out ART despite opposition from the government.

Structure impacted on the ways in which policy was implemented in a number of ways. In Zambia's centralised system implementation was more top-down than in South

Africa. Policy-making under the direct control of the Senior Management in the Ministry of Health helped to more rapid implementation of policy once the decision to roll-out ART had been taken. It also enabled very immediate learning from implementation so that technical policy guidelines were adapted without much difficulty.

In addition, in terms of the communication and staffing, structure and clinical management of the health system, in Zambia facilities were 'closer' to the Ministry of Health than facilities at sub-district level in South Africa. 'Degrees of separation' in Zambia, (the number of actors a nurse or doctor in a district clinic was removed from a Director at Ministry of Health level) were less than in South Africa. In Zambia, there were only three actors in the hierarchy between a District Director Health and the Minister, whereas in South Africa there were more numerous layers between a sub-district Director and the Minister. This, paired with the greater clinical autonomy of hospitals or clinics, helped explain how structural aspects of the health system in South Africa allowed implementation of ART in South Africa as long as a committed clinician was willing to implement and oversee the programme in the site. Where such individuals did not exist, implementation was delayed.

Resources

Resources determined the capacity to implement ART roll-out and to facilitate policy processes leading to innovation and changes in implementation. This was particularly noticeable in Zambia because of the dependency by the government on external resources from PEPFAR and the Global Fund to shape and affect the implementation processes. Given the financial constraints, resources determined the speed of scale-up - how much medication could be provided, how many health facilities were able to provide treatment services and how many doctors, nurses and laboratory technicians could be trained. The provision of resources also allowed external actors, such as the

Global Fund and PEPFAR, to shape policy implementation processes and content, as they were able to pay for meetings, finance actors attendance or pay for communication in relation to specific aspects of treatment roll-out. This was particularly the case in Zambia.

Top-down and bottom-up - researching implementation

As the different strategies of implementers to overcome challenges demonstrate, analysis of policy implementation needs to include top-down and bottom-up perspectives to adequately capture the process (Sabatier 1993). In each country the actual policy guidelines about ART was operationalised in many different ways within the overall framework or parameters set at the top. Each policy environment appeared to allow for a certain amount of 'bottom-up' implementation. For example, modes of exact service delivery of ART were not set out in any of the policy documents allowing implementers to adapt or interpret and define these. These findings demonstrate that even where policy is issued and determined in a top-down manner, a certain level of bottom up' discretion in implementation is likely to take place, which means that to research implementation a bottom-up perspective is vital.

A mixture of top-down and bottom-up perspectives are not only important to implementation research. The findings confirmed the value of both approaches in the actual processes. Where the policy process becomes too heavily dominated by a top-down approach this may hinder effective implementation, as the obstruction of some policy bodies by the hierarchical culture in Zambia shows. ART roll-out processes in Zambia and South Africa therefore demonstrate the value of researching and of implementing policy in a top down and bottom up way.

In both Zambia and South Africa the actions of individuals were important to the implementation processes. While individuals' willingness to implement ART despite government reluctance was more important to bottom-up implementation in South Africa, the coping strategies devised by individual actors to overcome constraints in resources and health systems were of equal importance in both country contexts. Having established the importance of individual actors to in these implementation processes, the following chapter explores how the networks between them influenced policy processes relating to ART.

CHAPTER 6 – NETWORKS AND THE POLICY PROCESS: AVOIDING BABYLON

> The image of the policy network represents an intuitively comprehensible metaphor: regular communication and frequent exchange of information lead to the establishment of stable relationships between actors and to the coordination of their mutual interests. [...] However, this intuition does not lead us very far: the difficulties already begin with the definition of policy networks and end with the confusion created by the large number of authors who use this concept in widely different ways. In fact the network approach is hampered by a truly Babylonian conceptual chaos.
>
> *Adam and Kriesi (2007) The Network Approach*

This chapter examines the role of networks in the implementation of ART roll-out, a previously under-researched area of network studies (Hill and Hupe 2009). It further examines those networks between actors that emerged as being important in the analysis of implementation set out in the previous chapter. The term 'network' is used to refer to any type of link or relationship between actors, identified through the methods described in Chapter 3. To analyse networks identified during the research, this chapter draws on the definitions of variant types of networks described in the literature and reviewed in Chapter 2. As set out by Adam and Kriesi's quote above part of the challenge of network approaches has been the ambiguity in definitions and how these have been applied. To try and avoid confusion the following paragraph provides the definitions of different types of networks which will be applied.

Issue networks are loose alliances of actors or organisations who come together to pool their resources and work on an issue, to push it onto the policy agenda or to achieve a policy change, such as, for example in this study, the introduction of ART. Actors or organisations which form an issue network may come from different sections of society and have different motivations for joining an issue network (Marsh and Rhodes 1992; Walt, Lush et al. 2004) making these broad coalitions with diverse membership. For the purpose of this analysis issue networks are defined as excluding government actors as they are distinct from and contrast with *policy networks,* which

often refer to a loose alliance of different actors working on a policy issue, but include government actors. They are less consensual than *policy communities (Walt, Lush et al. 2004)*, a term used to describe all actors, including government working in a specific policy system, such as health, or a sub-system, for example malaria or ART. Within any given *policy community* there are often several actors forming a *core* who are of greater importance to and may have greater influence on the policy system or sub-system on which the community works *(Buse, Mays et al. 2005)*.

Policy communities differ from *epistemic communities* which are often defined as groups of experts in a particular field of enquiry, such as scientists, who share normative values. Existing research has also identified a *core* of actors within *epistemic communities* allowing further nuances in understanding these types of communities (Haas 1992).

This study focused on identifying and analysing networks of actors that were identified as important in the implementation of ART roll-out through interviews with actors in both countries. Interviewees were asked to nominate actors they considered important to ART roll-out, they were asked if they knew these actors, and if so, with whom they had worked most closely, and the origin of their relationship. In Zambia as actors struggled with the concept of a 'network' a diagram set out in Annex 5 was used to help clarify who interviewees worked with most closely. During the course of the interviews, actors were also probed to find out if they could identify specific networks and where they could, this was explored further. The initial analysis of findings then focused on linking actors using Microsoft Excel software to construct a table of who nominated who. This was done to establish what networks were identified and to triangulate actors' observations from the interviews.

For the further analysis of this data network definitions were applied to groups of actors or organisations identified as important in implementing ART roll-out through this method. The first section of this chapter describes the networks identified, their role in the implementation processes studied and it analyses these using the network types from the literature. The second section focuses on the characteristics of these networks, such as structure, membership, the origins of networks, and the types of linkages between members, to help to explain how networks were able to engage with policy implementation processes of ART roll-out. The study thus not only reviews the narrative of ART roll-out in Zambia and South Africa through a network lens, it also adds new knowledge to a neglected area in network research – that of their influence upon the policy process (Hay 1992, Smith 1993, Thatcher 1998). It draws on the link between implementation and networks which originated in Hjern and others' (1980) work on implementation that examined networks between actors in different organizations to understand how organizations collaborate to implement policy from a bottom-up perspective.

Findings and discussion

The description and analysis of the networks identified during the research are ordered according to where these networks were located – starting with district and sub-district level, before moving to provincial and national networks. This is for heuristic reasons as research and data collection examined these different levels in the policy process. Each country is discussed at each level.

Networks at district and sub-district level

Only in one of the study sub-districts in South Africa – Quakeni – was there a close integration between actors, including regular communication and joint planning between government and non-government actors. This was described by many interviewees as an anomaly, largely attributable to the fact the public treatment programme in the sub-district had been launched with the support of an international NGO, Medecins Sans Frontieres (MSF), and the delivery of public sector services continued to be supported by a range of NGOs, including HAACO, a network of treatment counselors. Even so public sector health managers in Quakeni described an initial reluctance to include civil society organisations in their discussions and regular sub-district level HIV/AIDS, STI and TB (HAST) meetings. In the second focus sub-district, public sector health workers in most treatment sites and at the sub-district level described little or no interaction in the day-to-day delivery of services with non government actors, including little representation of non government actors in HAST meetings at that level.

By contrast, Zambian district staff from the Ministry of Health said they were both aware of, and regularly interacted with, those non-governmental organisations providing support for the ART programme, or for HIV/AIDS. This can likely be explained by the size of the districts, which were comparatively smaller than even South Africa's sub-districts. There were also fewer fora (for example committees, training programmes and workshops) in South Africa for public sector workers to mix with non-government actors or organisations at sub-district level. The comparatively small pool of actors in Zambia meant that a district level workshop could incorporate most of the actors working on treatment within one district, whereas in South Africa the greater number of actors made that almost impossible. For example, while there were three PEPFAR implementers in Zambia nationally supporting the clinical

implementation of ART and two of those three were working in the focus province, the Copperbelt, in South Africa at the time of data collection there were approximately 35 such organisations in the Eastern Cape alone, and national actors were unable to provide the exact number of organizations supporting the roll-out in South Africa (PEPFAR 2009). [58] One study from 2008 reported PEPFAR working with approximately 300 organisations there (Johnson 2008).

However, despite the greater contact and more numerous links at district level between Ministry of Health and civil society in Zambia, these actors were considered far less influential than in South Africa (except for PEPFAR implementers described later). In Quakeni on the other hand, where civil society actors had 'forced' their way into these fora, they were considered powerful by sub-district DoH staff interviewed and more closely involved in the day-to-day implementation of the service. In Zambia while all actors working on HIV were known to the DHMT this did not translate necessarily into influence, suggesting that influence may depend on network type or characteristics.

> Issues are more resolved with ZPCT than with the province, because they are the ones who give us all the machines and they provide technical support.
>
> *District level health worker, Zambia*

One distinct group of non-government actors in Zambia were the PEPFAR implementing organizations, supporting treatment roll-out (see Textbox 4.1). In the study districts treatment support was mainly provided by one PEPFAR implementing

[58] This refers just to the organisations focusing on supporting the clinical services in relation to roll-out HIV and AIDS in the public sector. In both countries there were many more PEPFAR funded organisations working on support and care around treatment, but not focused on the provision of clinical services.

organization – the Zambia Prevention Care and Treatment project (ZPCT).[59] PEPFAR implementers did not necessarily participate in the policy fora (such as the DATF or stakeholder meetings held by the DHMT) where other non government actors linked to the public sector. However, they interacted with staff at the health facility and district level on a weekly basis because of their involvement in service provision. Through the resources they provided, such as laboratories or furniture for clinics, and ongoing clinical support by ZPCT staff to public sector clinics, they directly influenced the implementation of ART roll-out. Their collaboration with public sector health workers at district level was closer than that between any of the other non-government actors and the district health staff, but was separate from the fora intended to facilitate coordination between actors at this level.

ZPCT's internal communication was less hierarchical than that of the Ministry of Health, and as a result some public sector health workers described going to ZPCT when they wanted to affect change to their ART practice, rather than the DHMT. District level public health workers perceived it to be easier to resolve challenges or problems through collaboration with the PEPFAR implementer at their level that through the Ministry of Health structure. This was partly due to ZPCT having the resources to resolve a problem locally. It in turn led to PEPFAR implementers, in this case ZPCT, having an elevated status compared to other non government actors at the district level. They had easier access to Ministry of Health staff, and were viewed differently to other non- government actors by members of the DHMT, as was evident from interviews. Instead of a policy network, together with the public sector health workers they formed an exclusive policy community at the district level. This was reinforced by the fact that PEPFAR implementing staff at district level were clinicians and in many cases had previously worked in the public sector, in some cases within

[59] The other organisation, Catholic Relief Services, provided support to one private hospital in one of the focus districts, Kitwe, where its resources were to enable access to ART for public sector patients.

the same facilities or districts. This meant they could draw on preexisting personal networks at district and provincial level (Hanefeld and Musheke 2009).

> It has been problematic for us to coordinate PEPFAR funded NGOs because we do not even know who they are. This was raised as an issue of concern with PEPFAR itself: you are funding NGOs out there but you are not even informing the Department of Health.
>
> *Senior Official, Provincial DoH, Bisho, Eastern Cape, South Africa.*

In South Africa by comparison, few links existed between PEPFAR implementers and the DoH at either national or provincial level. In the implementation at sub-district level there appeared to be closer cooperation when organising the provision of services rather than in policy development or planning for implementation. However, this was on a case by case basis and less well integrated with overall implementation plans, than in Zambia. Given the greater number of PEPFAR implementers (and as a result a far greater number of individual actors) in South Africa, their relationships and ties with the DoH appeared less formalized and more ad hoc. In addition to the personal ties between actors, the closer collaboration between PEPFAR implementers and Ministry of Health as a policy community in Zambia was also due to all three PEPFAR implementers working at all administrative levels, i.e. district, provincial and national level. The policy community at district level in the Copperbelt between ZPCT and the Ministry of Health there for example was supported by a similar type of policy community (described below) between ZPCT and Ministry of Health staff at national level. As there were only three PEPFAR implementing organizations supporting ART roll-out this meant that these organizations could closely coordinate and integrate their support with the Ministry of Health at all levels.

This stands in contrast to South Africa where some PEPFAR implementers worked only in specific provinces and not at national level. As a result a national level

policymaker in the Department of Health (DoH) during the interviews appeared to be unaware of specific PEPFAR implementing organizations at provincial level, and in turn the PEPFAR implementers in the Eastern Cape had limited or no ties to the national DoH, and only few with the provincial DoH. This prevented the formation of the kind of policy communities found in Zambia, which jointly oversaw, planned and implemented the treatment roll-out from national to district level. Overall, the main reason for the closer network linkages between government and PEPFAR implementers in Zambia was the greater dependency by the government on these organisations for the implementation of treatment roll-out, than in South Africa.

The analysis of these networks of actors at district level in both countries revealed that in Zambia, the civil society actors and government working in each district examined formed a policy network. In contrast, in South Africa, only in the sub-district of Quakeni, was there a policy network of local Department of Health (DoH) and other actors, who repeatedly emphasised that this type of network was the exception to the wider pattern of DoH relationships with other actors. This working relationship between government and civil society in Zambia and conversely the lack of trust between these different actors in South Africa, given the high level of conflict between civil society actors and government, shows there were closer relationships in Zambia. It also shows how the formation of networks serves to integrate non- state actors into the policy implementation process. The policy community between district PEPFAR implementers and the District Health Management Teams (DHMT) in Zambia denotes an even closer working relationship between state and non-state actors blurring the boundaries between these actors in the processes of implementation and explaining how PEPFAR implementers were able to influence implementation of ART. An analysis of these network types confirms the thesis by others (Skok 1995) and de Leeuw (2001) who described the loss of sovereignty by the state to non-state actors. It also demonstrates how the developments in global public policy processes, including

for health, described for example by (Walt, Spicer et al 2009, Buse and Walt 2000, Reineke 1999) which have seen the greater inclusion of non-state actors (including through networks) affect implementation of policy at the district level.

Networks at provincial level

In Zambia there were few networks or organizations working at provincial level, and those that were, were similar to those at the district level. This was because implementation of policy took place at district level and staff management aside, planning for implementation or possible changes to policy were decided at national level (see also Chapter 4). As there were few government bodies important to ART roll-out at provincial level this was reflected by the absence of networks there.

The Nelson Mandela Foundation, Medecins Sans Frontieres (MSF), the Department of Health in the Eastern Cape: a policy community

In South Africa, on the other hand provincial networks between actors were important to the implementation. One example related to a further ART pilot programme in the Eastern Cape by an alliance between MSF/TAC,[60] the Nelson Mandela Foundation (NMF) and the DoH in the Eastern Cape. MSF was keen to replicate its treatment programme from Khayelitsha in a rural area to document the feasibility of ART there. The choice of Lusikisiki came about through a mix of formal and informal networks. MSF representatives met ex-President Nelson Mandela at an informal meeting to celebrate the birthday of TAC founder Zackie Achmat in 2002. Respondents said it was this briefing of Mandela that developed into an agreement between MSF and the

[60] In the Eastern Cape, as in the Western Cape, MSF built the treatment programme, strongly around the work of TAC and TAC's work was an integral part of MSF's treatment programme. Steinberg, J. (2008). Three Letter Plague. Johannesburg, Jonathan Ball. However, from interviews with actors the organizational arrangements appeared to be between MSF and the other actors in the policy community described, which is why the organizations are sometimes named together in this discussion.

Nelson Mandela Foundation that they would finance a MSF/TAC pilot in the Eastern Cape, the area of Mandela's birth.

> 'We did a lot of smoothing over, whenever there were challenges in the negotiations, it helped a lot that Madiba was involved'.
>
> *Staff member Nelson Mandela Foundation, South Africa*

The two organisations then negotiated with the provincial DoH in the Eastern Cape directly on where best to implement the programme, and drew on having Mandela's support, as was described by a NMF staff member set out above. At no point was the national DoH involved in these negotiations, which were taking place in early 2003, before the government made the decision to provide ART. In all interviews conducted in Lusikisiki there was evident pride among health staff in recounting Mandela's visit to the clinic there, to celebrate the provision of ART to the first patient on December 1st 2003. The NMF helped to facilitate what later became a policy community among MSF/TAC and specific actors from the DoH in the Eastern Cape, who had worked together to enable the pilot in Lusikisiki, (the main town in Quakeni sub-district).

Two further informal linkages between actors contributed to this programme. One was a social connection between DoH staff in the Western and the Eastern Cape who had attended the same secondary school and could therefore facilitate initial, informal conversations. The second was an informal link to the Treasury. According to officials involved, the Treasury report demonstrating the financial feasibility of ART in 2003 was crucial to eventually forcing the ART decision in the South African Cabinet. MSF staff who met President Mandela privately at his residence to discuss the Lusikisiki pilot recalled senior civil servants from the Treasury being present and Mandela questioning the financial feasibility of ART, unconvinced there really were insufficient funds to provide treatment. While this is incidental evidence, it points to strong social

linkages amongst some actors, including those within government. This policy community was working together in a way that was repeatedly described by actors interviewed as unusual, and made possible by specific individuals. The fact that this policy community was considered unusual and made possible through the involvement of specific individuals appeared symptomatic of some of the initial treatment programmes in South Africa. It also appeared similar to the programme in Khayelitsha described in Chapter 4.

Networks at national level

> 'We hear about something, normally from TAC as they have their people on the ground, and then mobilise'.
>
> *Treatment activist, Johannesburg, South Africa*

Research identified a number of networks important to ART roll-out at the national level in South Africa. The Treatment Action Campaign (TAC) was at the centre of many of these networks. TAC was the best known and most influential civil society organisation in South Africa (Schneider 2002; Nattrass 2004; Grebe 2008). At the time this research was conducted in 2008, it had more than 16,000 members (TAC 2008) nationally, with a budget of around $6 million USD for 2008 according to members of TAC leadership interviewed. The organisation had members and activities in every province. During interviews with actors, TAC's reach within all provinces emerged as a clear asset to the organisation and important to its role as a facilitator of networks. Yet despite having activities and branches in all provinces, the size of the country is such that TAC was not necessarily active in all health facilities.

A membership organization, TAC was organised with district chapters and members at community level, as well as an executive, which played an important part in policy processes and networks in relation to ART at the national level. While TAC's role in

policy processes at national level was highly visible and has been well documented (Schneider 2002; Oinas and Jungar 2008), TAC members also played active parts in the implementation of the ART programme at community/facility level, including through treatment literacy activities[61] (Steinberg 2008).

As an organisation with a strong presence at both health facilities and at national level, TAC was able to monitor implementation and where problems were observed elevate these from facility to national level in a very short time. TAC did this through its internal structure, where members frequently communicated by phone and e-mail, as well as through an effective media strategy (this element of TAC's strategy is discussed in Chapter 7). During interviews with many of the national non-government actors it became apparent they relied on TAC as a link and source of information to the community level.

TAC, AIDS Law Project, clinicians and academics: an issue network

> We have moved so far now that at times it is hard to think it was just five years ago that there were only a handful of HIV doctors, but with the assistance of people from MSF, the HIV Clinicians' Society and other clinicians in the Western Cape you had this explosion of HIV treatment which has actually been mainstreamed to a large extent. I think this is the responsibility of the power of TAC combined with inspired individuals.
>
> *National TAC Activist, South Africa*

While TAC was at the core of both the issue network trying to influence agenda-setting as well as the community involved in implementation, these networks extended to an issue network that included other civil society organisations, clinicians, academics and lawyers. Initially the core comprised a small circle of people who knew each other

[6161] Treatment literacy entails that both individuals and communities, understand what HIV drugs are, why they are needed and what they can and cannot do. Treatment literacy translates medical information about Antiretroviral Treatment (ART) into languages and formats that are accessible for everyone. It has been noted that providing comprehensive information and communication surrounding treatment is empowering to individuals and improved health outcomes including adherence and the monitoring of side effects. (HealthLink 2006)

well.[62] TAC led the mobilisation and advocacy around treatment access in 2002/03, and ultimately the court case against the government for the introduction of AZT for PMTCT (see Chapter 4), but as a result of its wide expert network was able to draw on other technical expertise and evidence. As the following analysis demonstrates each organization added a crucial part to the overall network. For example, the AIDS Law Project (ALP) provided the technical skills to enable TAC to take the South African government to court on a number of cases relating to aspects of access to anti-retroviral treatment. The leadership of the ALP had been involved in founding TAC in 1998 and the two organisations remained closely linked.

> 'I have seen our data and graphs used everywhere, at presentations and at conferences, wherever people have argued for the provision of ART in resource-poor settings.'
>
> *MSF employee, South Africa*

Expert clinicians, who were part of the TAC, were particularly important as their role was vital in promoting and implementing a policy that was essentially against the government's will. The clinicians could demonstrate through medical evidence that anti-retroviral treatment was effective and its provision feasible in South Africa. Expert clinicians spoke out against the government, including those who gave evidence during the court case against the government.

The clinicians who formed part of this network fell into two categories, clinicians primarily engaged in service provision and academics. Many worked with Medecins Sans Frontieres (MSF) which implemented the first public sector programme of ARVs in South Africa in the Western Cape from 2002 onwards collaborating with clinicians at the University of Cape Town (UCT). MSF worked closely with UCT to ensure the

[62] These actors are all now part of a number of more formalised networks, including the reconstituted South African National AIDS Council SANAC (2007). HIV&AIDS and STI Strategic Plan for South Africa 2007 -2011 (NSP). SANAC, Republic of South Africa., and the Joint Civil Society Monitoring Forum JCSMF (2006). Consensus Statement. Eighth Joint Civil Society Monitoring Forum , both discussed further below.

lessons learnt from their experiences were documented and could inform future interventions. A number of academic studies published in 2003 and subsequently e.g. (Coetzee, Boulle et al. 2004; Coetzee, Hildebrand et al. 2004), documented these experiences. These early clinical outcomes were key to building an evidence base for the feasibility of treatment in South Africa, and other low income settings.

Clinicians working within academic settings were not only important in the documentation of evidence, they were also amongst the first able to implement large scale treatment programmes, in spite of the government's continued resistance. These early treatment programmes were initially classified as operational research and rapidly expanded to treat thousands of patients with funding provided by external donors. For example, PEPFAR supported these programmes throughout 2004/5 when the government was slow to implement ART roll-out despite a policy to provide treatment being in place.

In addition to the clinicians who worked in an academic setting and with MSF, there was a small number of other 'early implementers' who began implementing ART roll-out as soon as the policy allowed in 2003. These clinicians (only five or six people) also had linkages to the other actors in this network through professional bodies such as the South African HIV Clinicians Society and the Rural Doctors Association.

In interviews, many national actors referred to the Rural Doctors Association, as being an organisation that provided a crucial link between the different early implementers of the ART programme in rural areas. The clinicians who belonged to the Rural Doctors' Association were important for the life saving treatment they provided and because they experimented with models of service delivery and care. This knowledge and their experience gained in ART delivery in remote rural settings was mentioned by several respondents as an important contribution to policy learning processes. While not part

of any formal government process, this epistemic community of clinicians disseminated their experiences through a series of academic conferences and by documenting best practice. The Association's contribution to the wider issue network was particularly relevant as many of the 'early implementers' of ARV programmes were doctors in comparatively remote rural areas. As identified in the previous chapters this geographical remoteness was one of the factors contributing to the policy space that enabled clinicians to move ahead with ART, in spite of a hostile policy environment.

The largest professional association of clinicians working on HIV in South Africa was the South African HIV Clinicians' Society (Bekker 2007), which had more than 12,500 members from both public and private sector. The SA HIV Clinicians Society was often referred to as a powerful actor, yet it was always acknowledged as being slightly less influential than TAC and other activist organisations. This was partly due to the organisation having a large membership of private practitioners, so it was associated to an extent with the commercial interests of that sector, limiting its influence in public policy.

Like TAC, the SA HIV Clinicians Society was organised as a decentralized membership organisation, but also participated in and had linkages to many other organisations and networks, including the government. Most of the 'early implementers', the clinicians in remote rural areas were members of the SA HIV Clinicians Society, as well as the Rural Doctors Association. The Society was a member of the Joint Civil Society Monitoring Forum (JCSMF) described below, and the Society's President (at the time this research was conducted) had signed an affidavit on behalf of TAC during the court case against the government. The ties between the national leadership of the Society, TAC and the AIDS Law Project (ALP) were close.

Despite these close ties with the activist community, especially at national level, there was a great difference in its membership. One senior clinician interviewed, for example, was clear in the desire to distance himself from TAC and other activist networks, citing his need to preserve a certain amount of impartiality. However, he was comfortable in confirming his membership of the HIV Clinicians' Society, which he differentiated as being an impartial body.

The SA HIV Clinicians' Society was involved in the development of government policy, and was consulted on both the original treatment guidelines, and the revision of the PMTCT guidelines. This meant that at national level, the Society had closer linkages with the DoH than the activist movements examined and was part of an epistemic community – of clinicians developing treatment guidelines- advising the government. This epistemic community was closed to other members of the issue network examined here. However, senior staff from within the Society still reported frustration at the lack of clarity in government consultation processes and the decision-making in relation to the government treatment guidelines.

The SA Clinicians Society was not only engaged in advocacy and policy development - its members were also the implementers of the roll-out. Like TAC, the Society could draw on expertise and access information about the roll-out at any given time. The Society was very active, even clinicians in the remotest parts of the Eastern Cape referred to their membership of the Society and to attending meetings and lectures. For example a clinician in Mthatha referred to meetings organised by the Society as the key forum where he updated himself with new information in relation to ARVs.

This network with a wide membership of TAC, ALP, clinicians and academic institutions, had the characteristic of an issue network, especially before 2004 when

ART roll-out was not happening in the public sector. It excluded government and was a broad umbrella for different organizations who came together to achieve policy change and implementation of ART. Different members provided a set of skills that enabled and accelerated social mobilisation and advocacy, legal expertise to challenge the government in court, clinical knowledge to implement and monitor treatment programmes, and the academic qualifications to document these experiences and form an evidence base that demonstrated the efficacy and feasibility of rolling out treatment. In addition to excluding government, a further characteristic was that unlike the other networks examined this issue network of activists while strongly linked to and concerned with implementation through research was also advocating for policy change, and was in conflict with the government. This was a different type of function or activity to that of the other policy communities in ART roll-out in Zambia or even in South Africa at district and provincial level, identified and analysed here.

Despite the exclusion of government, one of the clinicians/academics involved in the early treatment roll-out described how he and his colleagues from TAC would meet civil servants in the Department of Health for discussions on the ART roll-out early in the mornings to avoid their meetings being observed by the then Minister of Health Manto Tshabalala Msimang. This issue network of activists was therefore also part of a policy network which included some officials from the DoH. A number of DoH and MSF interviewees explained how difficult it was working in a 'denialist' policy environment. For example they said that while everyone was aware of the treatment programme in Khayelitsha this was not openly discussed in the DoH meetings, nor were the lessons learnt from Khayelitsha directly drawn upon in the development of the government's Operational Plan. These different layers of networks and relationships demonstrate the complexities of the policy process in South Africa that faced implementers of treatment.

Members in this network played different roles: TAC and ALP were crucial in setting the agenda for treatment access; others such as the clinicians in academia were able to prove ART feasibility through their operational research programmes. This in turn allowed activists to mobilise and push for treatment programmes on the basis of these findings. The 'evidence based advocacy' continued after 2008 when ART roll-out has rapidly accelerated. MSF and TAC continued to learn lessons from five years of implementation, promoting revision of policy where relevant. This was evident from the organisations' engagement over issues, such as health worker shortages, TB and HIV co-infections (MSF 2007). At the time of data collection the focus was on task-shifting, to allow nurses to start patients on ART to alleviate some of the pressure on doctors.

Joint Civil Society Monitoring Forum (JCSMF): from issue to policy network

> 'Actually during the JCSMF meeting we had all the skills in the room for South Africa to do a successful tendering process'.
>
> *JCSMF member, Cape Town, South Africa*

Many of the actors in the issue network described above joined the Joint Civil Society Monitoring Forum (JCSMF), which was set up in 2004 to monitor and verify government roll-out of ART independently. The founding members of the JCSMF[63] included many of the networks and organisations involved in the early treatment advocacy and provision, but broadened their membership to include additional actors, including further academics, service providers and NGOs. The JCSMF was referred to by a number of activists as having been particularly influential and helpful in terms of its expertise when the government was seen to be slow to accredit clinics to provide

[63] AIDS Law Project, Health Systems Trust, Centre for Health Policy, Institute for Democracy in SA, Open Democracy Advice Centre, Treatment Action Campaign, UCT School of Public Health & Family Medicine, Public Service Accountability Monitor & Médecins Sans Frontières

treatment. Even though the JCSMF expanded to include more than 80 people (from its original ten), it continued bringing together advocates and technical experts to examine aspects of ART provision.

At the time of data collection in 2008 the JCSMF had discussed the renewed tender process for ART but the government had not drawn on the expertise of the civil society organizations working on the issues. However, actors participating in the Forum noted that in January 2008, officials from the Department of Health participated in the JCSMF meetings for the first time, showing how the network had evolved from an issue to a policy network.

TAC, ALP, COSATU and SACC: an issue network

> 'We needed COSATU and SACC, as they were seen as more moderate and also such important actors. COSATU was slow initially in coming on board, but when they saw there was a lot happening with the TAC, they started to do something'.
>
> *TAC activist, Cape Town*

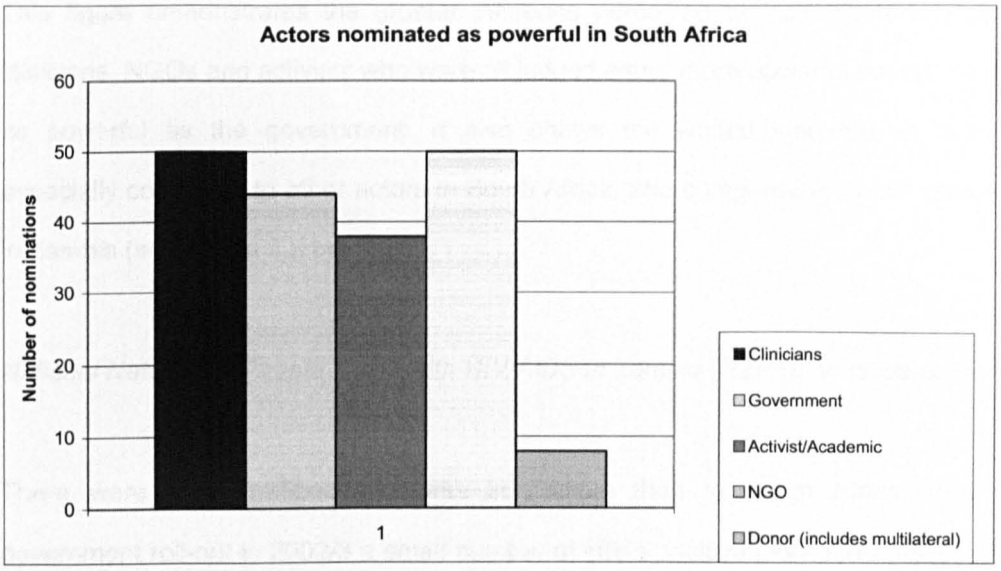
Two further organisations were important in exerting pressure on the government and collaborating in the advocacy around treatment access with the TAC and the ALP. One was the South African Council of Churches (SACC), the other the Congress of South African Trade Unions (COSATU), which had a close relationship with the ANC. COSATU was powerful not only because of its mass membership, but because of its political weight in South African history for moving from apartheid to democracy.

While COSATU and SACC were less involved in the initial networks, they were important allies for the treatment issue networks in terms of advocacy, through their reach and the different constituencies they represented.

SANAC: a policy network

The South African National AIDS Council was not named by respondents as an important body in the initial phase of the roll-out from 2003 onwards. According to actors interviewed, as a body dominated by the government SANAC was dysfunctional and lacked credibility with civil society. However, in 2006/2007 there was a change and easing in the government's stance on ART following the Minister Manto Tshabalala Msmiang's illness which led to her temporary absence from the post. During this interval the deputy minister Nozizwe Madlala Routledge reconstituted SANAC and worked with a broad coalition of civil society groups, including TAC and the ALP, on a revised National Strategic Plan (NSP) 2007-2011. The NSP process and the reconstituted SANAC were described with enthusiasm by many actors interviewed and represented a broad policy network where civil society and government actors interacted. It marked a change from the issue network which had to bring members together to advocate for policy change and ensure implementation but could rather focus on planning policy implementation. Its functions were closer to the policy networks and communities observed at district and national level in Zambia and the provincial level in South Africa. As was the case with the JCSMF this change in SANAC over time demonstrated how networks in the policy process change and evolve over time responding to the changes in the context. Issue networks of civil society were formed at the time of agenda setting when trying to change government policy and advocate for implementation, these then formed networks and communities with government agencies to plan and implement policy once policy had changed.

Figure 6.1: Actors nominated as powerful in South Africa[64]



The figure above highlights the actors nominated as powerful in policy implementation for treatment roll-out in South Africa. For ethical reasons governing the research protocol nominations were grouped into specific categories: clinicians, government, activist academic, NGO and donors.[65] Of individual organisations nominated TAC received by far the most nominations - 22 - with the next most nominations for an organisation being 11 for MSF. In addition, 12 further nominations were given to individual members of TAC, demonstrating the organisation's influence. Of the clinicians' nominated, which formed one of the largest single group of actors nominated, the vast majority were part of the issue network of agenda-setters and implementers described above and in many cases during interviews self-identified as activists.

[64] Figure 6.1 and 6.2 are intended to give an overall visual sense of what type of actors was considered powerful in the ART roll-out in each country, findings were further confirmed by and echo those from the content analysis of the interviews in both countries. Further explanation and detail on method for generating these and their limitations is provided in Annex 6 of this thesis.

[65] Actors could fit into multiple categories for some examples, activist and clinician, or government and clinician, or donor and clinician. 'Government' category refers to all individuals or parts of the health system nominated, for example if ' Department of Health' or 'Local Districts' were nominated these were all categorised as government.

This figure demonstrates the greater influence perceived by actors interviewed of clinicians, NGOs and activists who were all judged either more powerful than or almost as powerful as the government. It also shows the limited influence of donors, especially compared to other actors in South Africa, and compared to donor influence in Zambia (see Figure 6.2 below).

National Network of People Living with HIV/AIDS in Zambia (NZP+): an issue network

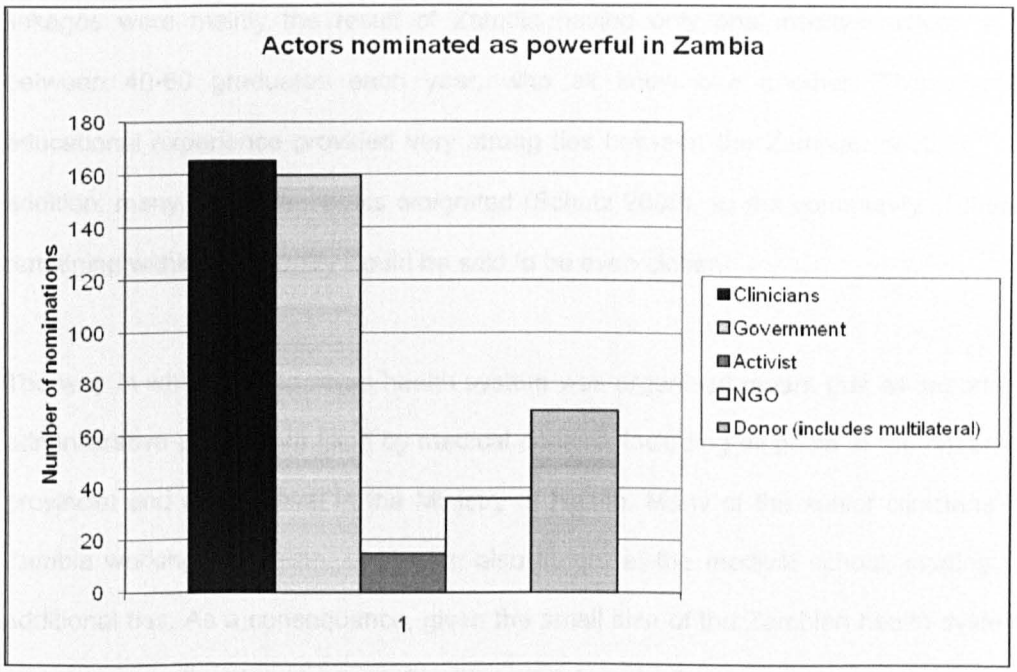
There were fewer national networks in Zambia than in South Africa. Prior to government roll-out in 2002/3 a small number of HIV - positive individuals, associated with the Network of People Living with HIV/AIDS in Zambia (NZP+) called for better access to treatment. However there were limited opportunities to raise this issue. Established during the late 1990s, the original function of NZP+ appeared focused on providing psycho-social support to its members. The organisation lacked the resources to organise large scale protests, or even to function routinely.

Sometimes known HIV positive individuals would be given a platform or invited to join a meeting or workshop. During interviews activist groups or NZP+ were rarely referred to as influential. In fact of all nominations, in Zambia 'activists' were by far the smallest category (see figure below). Some individuals who publicly declared their status early on, such as Winston Zulu, were seen as influential but overall the lack of influence of NZP+ reflected the comparatively low societal and economic status that members of this network had.

The lack of influence of activists did not only relate to the membership of NZP+ but also the lack of linkages between activists and clinicians, including at the Ministry of Health. While individual clinicians and activists sometimes knew each other, they did

not effectively link organisations such as NZP+ to government processes, limiting the role of activists in the policy process. This stands in contrasts to South Africa where the linkages between clinicians and activists were demonstrably stronger as the analysis of the issue networks there has revealed. The reasons for these differences in network membership are further discussed below. It also points to the comparatively greater influence of government and donors in Zambia compared to that of activists or NGOs. In total activists in Zambia received only 15 nominations compared to 160 received by government or individual government members.

Figure 6.2: Actors nominated as powerful in Zambia



NZP+ and its relatively limited influence offer a stark comparison to the power of TAC. TAC while not exclusively an organization of people living with HIV/AIDS was also a membership organization and a large proportion of its members were living with HIV/AIDS. Yet its networks with other organizations and the diverse membership with different skills allowed TAC to become more powerful than many other civil society actors, including the NZP+ in Zambia, which had a very homogenous membership and

as a result much less influence. These contrasting examples highlight how a greater number of network connection in South Africa made civil society, including PLWHA strong, whereas limited connections of PLWHA organizations meant these remained relatively weak in the policy process.

Zambian clinicians: an epistemic community

In Zambia the most coherent and tightly knit network or community in the roll- out was that of Zambian clinicians. While there was a Medical Association of Zambia, the tight linkages were mainly the result of Zambia having only one medical school, with between 40-60 graduates each year, who all knew one another. This shared educational experience provided very strong ties between the Zambian doctors.[66] In addition, many Zambian medics emigrated (Schatz 2008), so the community of those remaining within the country would be said to be even closer.

The way in which the Zambian health system was organised meant that all important administrative posts were filled by medical doctors, including all posts at the national, provincial and district level in the Ministry of Health. Many of the senior clinicians in Zambia working at Ministry of Health, also taught at the medical school, leading to additional ties. As a consequence, given the small size of the Zambian health system and the educational context, all Zambian clinicians in the country knew each other personally.

Even if clinicians left the public sector to join NGOs or other private sector bodies, bonds between individuals remained and expanded to include new organisations. Many clinicians initially working on ART in the public sector were recruited by PEPFAR

[66] The way in which shared educational experiences can instill a sense of community, is described in (for the case of Senegal) in Anderson, B. (1991). Imagined Communities: reflections on the origins of nationalism. London, Verso.

implementing agencies and other non government actors between 2005 -8. This was the main reason for the existence of tight policy community between these organisations and the Ministry of Health observed at district level.

The roll-out in Zambia was driven by the clinicians in the two phases set out in Chapter 4. Initial roll-out of ART was propagated by a small group, with support from the political leadership, including the President of Zambia, assistance from country level staff in WHO and UNICEF, and with the support of one US organisation, Jhiepo. In preparation for the two pilot ART programmes, training workshops were organised for clinicians. This initial team of trained clinicians (including nurses, laboratory technicians), became part of a team of national trainers. The team remained a strong network, which trained most of the clinicians working on the ART programme in clinics and hospitals throughout Zambia. The educational ties, formed prior to employment, and the training of clinicians from all facilities, meant that this network or community of clinicians was horizontal at national level, but also vertically including clinicians at all levels. Defined by its scientific knowledge and shared educational experience it fits the description of an epistemic community set out by Haas (1992).

Technical Working Groups (TWG) at the National AIDS Council (NAC) and Ministry of Health: a policy community

This epistemic community of clinicians that planned the introduction of ART in Zambia evolved over time. It changed and broadened during the 'second phase' of roll-out from 2004 onwards when more external actors and funding became available. At the time of data collection one policy community was most influential in terms of determining policy development and implementation of ART. The core of this policy community was formed by the Zambian clinicians who were members of the epistemic community described above. This was the group of ten or fifteen clinicians at national level who were members of the Treatment Working Group (TWG) at the National AIDS

Council (NAC). This policy community consisted exclusively of clinicians, almost all of whom worked for either the government, or a PEPFAR implementing agency. A few were drawn from the Global Fund-financed treatment provider (CHAZ – the Churches Health Association of Zambia) and other non-governmental actors. While the TWG at NAC was the formal policy making body tasked with the development of guidelines, a core of this policy community, consisting of a smaller number of clinicians, tended to meet in the ad hoc ART working group convened at the Ministry of Health. These two groups determined most of the policy guidelines for ART, and developed and executed plans for ART implementation. This group of actors discussed and agreed policy change, for example, changes in adult treatment regimen. While this policy community drew on information from implementation it only existed at national level and included only national actors.

The table below summarises the types of networks identified during the research and classified as different types during the analysis presented here.

Table 6.1: Types of networks in ART roll-out in Zambia and South Africa[67]

Type of Network	Zambia	South Africa
Issue network	1. NZP+ and civil society (vertical)	1. TAC/ALP/MSF/Academic Clinicians (vertical) 2. TAC/ALP/COSATU/SACC (vertical) 3. JCMSF until 2008 (horizontal)
Policy network	1. DHMT and civil society (horizontal)	1. DoH Quakeni, MSF, TAC (horizontal) 2. SANAC (horizontal) 3. JCMSF from 2008 (horizontal)
Policy community	1. DHMT and PEPFAR implementers (horizontal) 2. TWG NAC(horizontal) 3. TWG MoH (horizontal)	1. NMF, MSF/TAC, DoH EC (horizontal)
Epistemic community	1. Zambian Clinicians (vertical)	

Overall there were fewer networks, especially fewer issue networks, working on ART in Zambia than in South Africa. Networks that included civil society lacked influence

[67] The 'vertical' or 'horizontal' denotes where the network is, whether across levels or only at one level.

and ties to clinicians or the government. The most common type of network in Zambia were policy communities both at national and district level consisting of public sector clinicians and those working for PEPFAR implementers. This tight policy community implemented and formulated policy relating to ART. In contrast to in South Africa their activities did not include advocacy. This comparative analysis of the network types observed in Zambia and South Africa with specific focus on policy implementation suggests that policy communities (and where these overlap epistemic communities) are particularly relevant to implementation, to the actual translation of policy into services. However, in South Africa where the implementation was contentious and therefore required very strong advocacy activities issue networks were more prominent and important to furthering policy implementation. In the instance where the provincial DoH and non-government organizations including activists worked together they also formed a policy community. These contrasting findings from and within the different countries demonstrate that network types are determined by the policy context i.e. conflict in South Africa led to the establishment of issue networks, and greater consensus in Zambia meant policy communities were more prevalent. It also demonstrates networks change over time and their 'type' is not static.

Having identified types of networks in ART roll-out in both countries and their role in the implementation processes, the question arises as to what aspects of networks enabled them to take this role. For example, the combination of different skills and actors, as well as of linkages between national and district actors appears to have been of importance in South Africa compared to the tightly formed communities that supported treatment roll-out in Zambia. The following analysis focuses on what characteristics help explain how different types of networks were formed, and how they allowed networks to influence policy implementation processes. What was it about their structure, membership, context and history that explained their role in ART roll-out? Specifically, why were there strong networks with diverse membership in

South Africa and how did this structure and membership shape their engagement with policy implementation? Why were there fewer networks with civil society in Zambia and why was there such a close knit community of clinicians in Zambia? How did this enable or hinder implementation?

Answering these questions will provide insights for discussions on what this analysis of network types and characteristics reveal about the way in which certain types of networks or their characteristics influence the policy process and determine their role in these.

Network characteristics

Network structure

Analysis of findings demonstrated the importance of network structure to the role that networks played in the policy implementation process. In South Africa, clinicians, activists (at all levels), lawyers and academics formed networks across all levels, ranging from implementers to national level activists and policy makers, linking all stages of the policy process from implementation to agenda-setting.

In Zambia the vertical networks that stretched between national and sub-national levels included individual actors with horizontal network ties with other actors at their corresponding level, but not vertically between actors at the different levels across different organisations or networks.

> If I have a concern I raise it through the district office, I have to raise it there for it to go to someone else.
>
> *Community health worker in Zambia explaining who she communicates with.*

In contrast with South Africa, linkages between a community level activist and a national level clinician were not found in Zambia, as this community health worker explained in the quote above. Actors at district level in Zambia in all cases reported contacting their immediate superior within their organisation but they never had directly contacted an actor outside of their organization at provincial or national level.

In South Africa, networks were characterised by closer links between actors at all levels, particularly within the issue networks involving civil society and clinicians. This was mainly facilitated through TAC.

> Most of our cases [legal cases the ALP takes up] we actually get through community level TAC activists.
>
> *AIDS Law Project staff member*

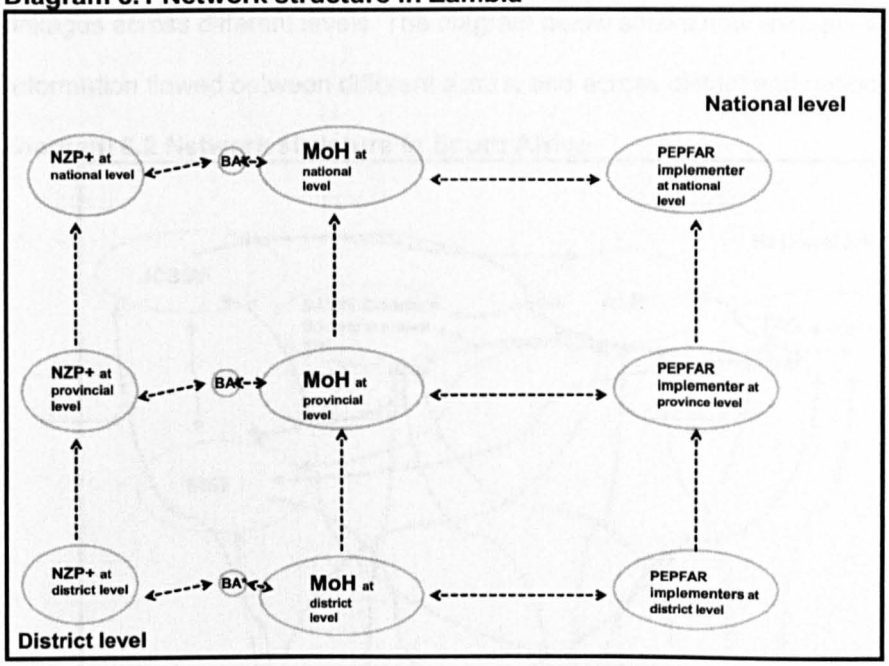
The organisation acted as a conduit of information for actors at sub-district level who said that to achieve operational or programmatic change they tended to approach TAC. Similarly, in reverse national level activists drew heavily on TACs membership at sub-district level for information on challenges in implementation. TAC appeared to provide the link between advocacy and implementation, and to assist the continuous policy development.

A national representative of TAC corroborated how the organization's internal structure enabled communication from the facility level to national level, allowing them to rapidly highlight problems in implementation rapidly and ensure they were raised at relevant national fora.

District or sub-district level activists in South Africa often referred to having spoken directly to someone at national level within their own networks or within linked organisations, or participated in provincial or national level activities. In contrast, no

district level activist interviewed in Zambia ever described such contacts: there vertical linkages between actors in their own organisation were more important, reflecting hierarchical structures where individuals at one level reported to someone at a higher level, who then engaged with or raised issues in policy fora at that level.[68]

Diagram 6.1 Network structure in Zambia



*Bridging actors

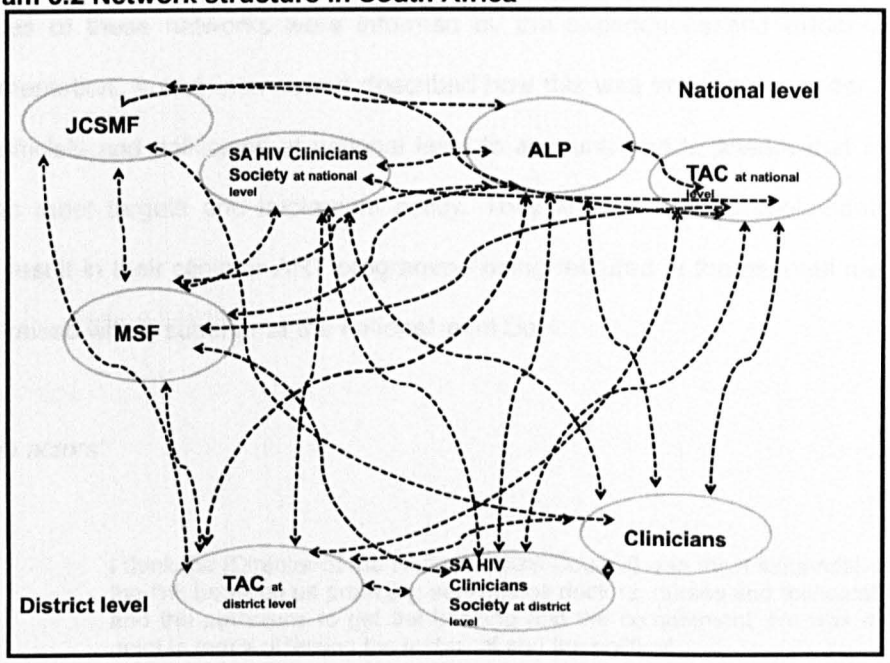
For example as set out in the diagram of networks across levels in Zambia above, PEPFAR implementers at district level would report a problem to their organizational colleagues at provincial and national level, who would then raise the issue with national actors from the Ministry of Health. Ministry of Health staff at the district level would tend to raise challenges with MoH at provincial level, and they in turn brought these to the attention of the MoH at national level (unless they felt a problem could be resolved with PEPFAR resources at the district level without having to inform their superiors, as previously described). Contact between these organizations and NZP+

[68] This links back to concept of 'traditional authority' as described by Weber and observed in the sources of power in Zambia [see chapter 7].

or other civil society activist networks took place mainly through individual 'bridge actors' who had linkages to different networks (see also discussion below). Even these tended to act as a bridge between actors at either district, province or national level, rather than bridging vertically across levels.

In comparison, networks between different actors in South Africa had a multitude of linkages across different levels. The diagram below shows how linkages and information flowed between different actors, and across district and national levels.

Diagram 6.2 Network structure in South Africa



The JCSMF and SANAC, unlike the other national networks involving TAC, ALP and clinicians, were only present at national level i.e. had horizontal ties with other actors at their level, but not vertically to district and provincial levels.[69] The other networks active at national level networks described links to actors across levels including at

[69] It was envisaged for SANAC to also have provincial and district aids councils. However, according to actors interviewed, at the time this research was conducted these structures were still being strengthened in the Eastern Cape and the study sub-districts. Where they existed, their focus was less on the ART roll-out, which was the responsibility of the Department of Health, and more on prevention and social mobilisation activities, such as World AIDS Day or condom distribution.

facility and sub-district. Issue networks of activists working on ART could draw on the wide membership of TAC and the SA HIV Clinicians' Society at facility level. The participation of these two organizations in particular enabled great vertical as well as horizontal integration of actors and organizations that were part of these networks, meaning that actors at grassroots and facility level were linked to national actors and vice versa. The vertical linkages of issue networks were crucial to their success: it meant implementation could be monitored and problems at facility level raised with national level policymakers. This ensured that the advocacy and agenda-setting activities of these networks were informed by the experiences and evidence from implementation. Actors interviewed described how this was important in order to hold DoH officials and politicians at national level to account, and to ensure that facilities tried to meet targets and implement policy. They knew failure to implement policy could result in their clinic or ART programme being featured in the national media, or being raised with a superior at the national level DoH.

'Bridge actors'

> I think the [Director of the National AIDS Council] was most influential. He was the link between us providing services as doctors, nurses and technical people and the politicians to get the backing and the commitment. He was the focal point in terms of linking the technical and the political.
>
> *Clinician at MoH, Lusaka, describing the power of the NAC Director.*

Networks in both countries relied on individuals who bridged the divide between two or more organisations or networks. Those individuals were very influential. Often networks originated from the initiative or an informal link between two individual actors, such as for example the policy community between the DoH in the Eastern Cape,

MSF/TAC and the NMF described above.[70] In both countries linkages between vertical networks appeared closer at national level, indicating greater coordination of activities between actors at national level. While fewer informal, social or ad hoc networks at sub-national level may be an unsurprising finding it had not been considered when planning policy implementation and translated into less coordination of activities at sub-national level.

Given that networks were far more vertically and horizontally integrated in South Africa, there were more actors with connections to multiple networks, than in Zambia. In Zambia networks tended to be more isolated with fewer bridge actors between (these are visualized in the network diagram as the connecting dots 'BA' between clinicians at the MoH and NZP+) that had linkages across different professional and organisational networks. This made links between networks dependent on a few individuals without whom no connection existed, whereas in South Africa the multiple connections of a greater number of actors meant networks were less dependent on individuals and appeared more 'institutional' or as networks of organizations.

Even where links between individual actors did not lead to the creation of new networks, these connections were important to explaining patterns of policy implementation across all levels. For example, often ART became available in certain clinics or hospitals where a link between a clinician working there and a donor agency existed. Particularly in Zambia, informal linkages between individuals and the initiative individuals took were crucial to determining which facility started the provision of treatment.

[70] This corroborates findings from the Lewis study, who found that actors bridging different networks to be particularly important to their network Lewis, J. (2006). "Being around and knowing the players: networks of influence in health policy." Social Science and Medicine **62**: 2125-2136.

Membership

Membership of networks in South Africa was more diverse than in Zambia, drawing on people with different areas of expertise. In Zambia networks tended to be dominated by actors from one group, such as clinicians or people living with HIV/AIDS which had linkages either vertically or horizontally. Vertical communication and linkages between actors in Zambia mainly took place within one organisation, so network membership tended to draw on individuals who had a similar identity or skill set. The tightly knit network of clinicians had a homogenous membership. This kind of tight epistemic community allowed the rapid sharing of knowledge about ART required by Zambian clinicians implementing treatment roll-out.

In South Africa, the extensive networks between different organisations provided different skill sets that were mutually complementary. This was crucial in allowing the 'early implementers' who started rolling out ART in advance of national policy or implementation schedules to provide evidence which TAC could base its advocacy on.

Evidence-based advocacy extended to scientific experts and clinicians themselves becoming advocates, and taking stands directly in denouncing the government's ART policy. According to actors interviewed and involved in the court cases brought by TAC against the South African government in relation to treatment, the close linkages between clinicians and activists were crucial to ensure that clinicians appeared as expert witnesses for civil society. The diversity and integration of networks in South Africa was needed given the conflict surrounding the introduction of ART. Actors came together as a result of being faced with a 'denialist' government that refused to introduce ART. This was not necessary in Zambia where treatment roll-out was led by the government. These findings further underline the conclusion that the type of

network formed in each country was in response to the policy context, as evident from the diverse coalition of skills found in the South African issue networks and the exclusive membership clinicians in epistemic and policy communities in Zambia.

> It is an interesting thing because it is a group of people who have come from different backgrounds but who have developed effective working methods, which I think is quite unique. Things happen very fast but there is a considerable level of consultation, not tied down in bureaucracy.
>
> *National activist, South Africa*

The diverse membership of networks in South Africa allowed these to effectively advocate for and implement ART roll-out. The networks offered mutual benefits that extended beyond implementers getting their issues raised in national policy processes. Also important was the fact that treatment programmes in South Africa, particularly those that succeeded in rural areas drew heavily on TAC's treatment literacy activities and counselors.

> I think it is the combination of that you need, TAC, always at the forefront of making demands and making the noise [...], but TAC would not be able to make the demands without the experiences on the ground, which show that it can be done and is being done well.
>
> *Programme Manager, South Africa.*

While TAC had a role in bringing many of these actors together at national level, the Joint Civil Society Monitoring Forum (JCSMF), which had been initiated by TAC members, was named in interviews as a key forum. A number of actors interviewed testified that the JCSMF was effective because it brought together expertise on most aspects relating to ART. For example, at the time of data collection the JCSMF was debating weaknesses in the government tendering process for public sector ARVs. The JCSMF discussed the technical details and made recommendations to the government, based on resolutions reached.

The membership size of some networks led to a 'strength in numbers' phenomenon, as for example the SA HIV Clinicians Society which was able to represent and influence a great number of physicians. However this did not emerge as a crucial factor in determining networks influence in the policy process. The skills of different members and their relevance to the specific policy process and implementation were the important aspects of the membership in determining the way in which networks engaged in the policy process.

'Country men and foreigners'

In the policy networks and communities in Zambia, and to a lesser extent in South Africa, there were differences in relation to the integration of external actors, specifically donor agencies and international NGOs. In Zambia the policy community of clinicians at national level with responsibility for policy formation and implementation of the ART Programme, evolved to include PEPFAR and Global Fund implementing agencies. These were an integral part of the treatment roll-out and of formulating and implementing policy. Despite close professional links they were not integrated into the social networks of Zambian doctors or other clinicians' associations. While a strong professional integration existed, it had not developed into the kinds of networks that Zambian clinicians shared with one another, or that were observed amongst civil society in South Africa where these were the result of a shared history of struggle (see below).

Given the networks between physicians trained in Zambia, it was hard to distinguish between professional or social ties amongst clinicians. There was, however, a definite limit to the social links between Zambian and non-Zambian clinicians, despite their close working relationships. Of the expatriate clinicians interviewed in Zambia, while many reported working closely with Zambian clinicians, these links were described as

purely professional. This dichotomy of nationals and non-nationals was not as pronounced in South Africa, as many of the actors working on treatment roll-out were South African and the influence of external funding for the treatment programme was limited compared to Zambia.

Origin of networks

In both countries certain networks predating the ART roll-out were referred to during interviews as having been important.

A history of networks of struggle in South Africa

> Previous links were very important, because we knew exactly who to go to. When the Joint Civil Society Monitoring Forum was started it was just ten or twelve people then who were already linked to each other.
>
> *SA clinician involved in founding the JCSMF*

In South Africa, following the death of Steven Biko in police custody in September 1977, many clinicians felt outraged at the compliance of South African police and doctors, who signed his death certificate.[71] As a direct result of the South African Medical and Dental Council's (SAMDC) failure to condemn Biko's death and the collusion of clinicians involved, 52 clinicians formed the National Medical and Dental Association (NAMDA) in December 1982. NAMDA was set up to counter the effects of apartheid on the health-care system (Archive 2008). Many of the clinicians interviewed and engaged in activism around the provision of ART previously had been members of NAMDA. They described NAMDA as the origin of their contact with other clinicians working on the provision of treatment.

[71] This history haunts in the South African medical profession to this day. The wall displays at the entrance of the Faculty of Health Sciences at the University of Cape Town, are covered in replicas of Biko's death certificate, written over in large letters is a quote by the School's founder reminding the medical professionals of their Hippocratic oath [London 1994]

> It is not so much like an active network, it is just that I know if someone from that time, like the head of a clinic, I know there will be no problem, it is a certain level of trust.
>
> *Health systems analyst, Cape Town.*

By the time HIV/AIDS and ART emerged as a political issue many in the South African medical profession had already developed an understanding of how politicised and open to abuse medicine potentially is. This meant there was a certain level of 'activist tradition' amongst doctors in South Africa which AIDS activists could draw on. Some of the South African clinicians involved in the first treatment programme in Khayelitsha, although it was run by MSF, were former NAMDA members, as were the early members of the JCSMF.

While less focused on NAMDA specifically, others have corroborated the strong linkages between the health professional activism and responses to HIV/AIDS, specifically the Treatment Action Campaign (Baldwin-Ragaven L, de Gruchy J et al. 1999; Laurel Baldwin-Ragaven and 1999; Mbali 2005; Oppenheimer and Bayer 2007).

Gay movement

> It comes from both traditions [gay liberation and anti-apartheid] but it [TAC] has never drawn directly from the tradition, the symbols of the direct association of the gay and lesbian movement. It has taken on the aspects, strategies and some of the symbols of the fight against apartheid and I think also that it has benefited from the fact that a number of us had a decade of experience of political organisation.
>
> *National activist, South Africa*

The history of the HIV epidemic in South Africa followed a pattern similar to the epidemic in North America, in that HIV was initially seen as a disease primarily affecting gay men (Oppenheimer and Bayer 2007). Some of the key and most visible HIV/AIDS activists in South Africa have their roots in the gay liberation movement.

Zackie Achmat, the founder of the Treatment Action Campaign, was previously the chairperson of the National Coalition of Gay and Lesbian Equality, as well as head of the AIDS Law Project. Similarly, Justice Edwin Cameron was a gay rights activist prior to setting up the AIDS Law Project. The personal background and history of some of the most prominent AIDS activists who have their roots in the gay liberation movement, together with the evolution of the gay movement into an ally of the anti-apartheid movement in the late 1980s and early 1990s has led to some associations of gay activism as a precursor to the treatment access movement in South Africa (Mbali 2005).

While this is certainly true of the individuals who formed such vital organisations as the TAC, the history of gay activism did not emerge strongly in the interviews conducted for this study. Actors interviewed placed greater emphasis on linkages and connections stemming from the anti-apartheid struggle than the gay rights movement.

While there could be a number of explanations for this, including the interview sample of this particular study, it seems fair to conclude that the differences seen in network clusters may stem from the genesis of the different actors: the organizations of 'agenda-setters' or advocates, such as the ALP, developed more from the gay liberation movement, while those primarily engaged in implementation are more closely linked to the medical profession and the tradition of 'activist doctors', such as NAMDA. While the AIDS movement in South Africa drew on both traditions (that can be summarised more broadly as a history of resistance) by focusing research on treatment and implementation, the history of medical activism emerges as particularly relevant to explain networks of treatment implementers. Treatment advocates appear likely to have been drawn equally from the tradition of gay activism. On the other hand a study focusing more closely on aspects of agenda-setting and AIDS advocacy might

have concluded the greater influence of the gay rights movement, as it would have focused on slightly different actors.

Examining the history helps further to understand why the treatment access movement may have chosen to draw more on the anti-apartheid movement than the gay liberation movement. The initial advocacy in the early 1990s was affected by the fact that at the time HIV/AIDS was primarily viewed as a gay disease not affecting the majority of the poor rural and urban population. This led to a slow response to HIV. It also carried the added stigma of being considered a 'gay disease'. To raise the importance of HIV/AIDS and treatment in South Africa, it was important for the disease to be accepted as affecting the general population. Oppenheimer and Bayer (2007) portray how the epidemic changed from one very much identified with gay men, to one affecting all South African, including poor black communities.

TAC was founded in 1998, at the time when the early anti-retrovirals had proven successful in North America and Europe, and when it was obvious the epidemic was affecting the whole of the South African population. Yet stigma surrounding the disease was still very high and some researchers have attributed the slow response by the government to prejudices against homosexuals (Nattrass 2004). This continued perception of HIV as primarily affecting gay men, hindered HIV responses and may have reinforced stigma. In light of this it was vital to ensure that the treatment access movement reflected the breadth of the epidemic, and avoided reinforcing a perception of HIV as primarily a concern for gay men.

Overall, while it is possible to link the activism of health professionals and of specific doctors to their activist past, including through networks such as NAMDA, the two specific traditions of medical activism and the gay liberation movement, should be seen as part of a wider context of struggle against the anti-apartheid regime. As in the

case of doctors through NAMDA, actors developed relationships of trust through the opposition to the apartheid regime. This history of conflict itself is relevant in considering the role of networks in policy implementation, in particular when comparing this to Zambia and is further discussed below.

A different history in Zambia

In Zambia, the networks identified in policy implementation of ART had very different origins. There was no history of recent struggle or resistance, and little politicisation of the medical profession over the past few decades. However, it is possible to describe two phases in the history of ART roll-out in Zambia, as reflected in two separate sets of network linkages. The first phase was dominated by a group of clinicians (the epistemic community), who with the assistance of the multilateral organisations (in particular WHO and UNICEF) facilitated a pilot rollout of ART in two cities – Ndola and Lusaka. They were all Zambian clinicians working in both public and private sectors. Clinicians who took the lead in implementing these two pilots were at the centre of the network in ART roll-out.

They were responding to a clear need observed in the general population. A number of individuals involved in the initial planning referred to having planned for an ART programme as early as 2000. The need for a public sector programme was particularly urgent in Zambia, where 80 percent of the population lives on less than one dollar a day (CIA 2008); this meant that the vast majority of people in need of treatment would require it to be provided through the public sector at very low or no cost.

The clinicians who worked on the initial training, and tried to develop the first protocols, were drawn from the most senior doctors of the country. They in turn drew on the (limited) skills and knowledge in terms of ART available in the country, so included

physicians already providing the medication in the private sector. One actor involved in this initial group, described how they contacted an organisation in South Africa which they knew to have expertise in the clinical aspects of ART and invited it to a training workshop. This group, conscious of the constraints imposed by their context, also sought technical assistance from WHO and UNICEF at the country level. These contacts later became important in securing the first grants for ART to Zambia. The limited number of clinicians with strong personal ties allowed for sharing of knowledge and experience. This was crucial to enabling the roll-out.

However, this community changed considerably in its membership with the rapid influx of donor agencies working on AIDS, which saw clinicians from other countries working for non-governmental organizations, especially PEPFAR implementers join the policy community analysed earlier in this chapter. Many of the clinicians involved in the original roll-out continued to work on these issues but they moved to donor agencies, in many cases to work for one of the different PEPFAR implementing agencies.[72]

> Previous links were very important. We knew exactly who to go to, when we started we were already linked to each other.
>
> *Clinician, Cape Town, South Africa.*

Examining the origins of networks identified in ART roll-out in both countries shows how these drew and emerged from the historic context in each country. The analysis of networks' history helps to further understand why networks formed, their characteristics, such as their membership, and ultimately their role in the policy implementation process. It demonstrates that origins or the history of networks, just as membership, structure and type, help further explain their specific role in policy

[72] Some of the Zambians who were heavily involved in the initial roll-out of treatment, and who have not begun working for a PEPFAR implementer are now less involved in the ART roll-out, and according to some of the interviewees have been 'sidelined'. Throughout the data collection it was fairly evident that with the introduction of donors the dynamics and motivations of some of the actors involved changed, as the ART Programme became a very lucrative area of work that allows for more international exposure and professional opportunities than any other part of the Zambian health system.

process. In both countries, despite the contrast in networks including in their history, the past appeared important to fostering trust between actors which later was critical to the functioning of networks themselves.

Social networks

> A lot of people who worked together are also quite good friends, so some of those networks overlap and sometimes I am not sure if it was through a social setting or not that I met someone.
>
> *National Activist, South Africa*

The findings also suggest a close overlap between 'social' links' of actors working together within the issue networks or communities researched. Individuals and their social links often appeared as the starting point of networks. In Zambia networks often formed between organizations which clinicians with predating social ties chose to join, ranging from public sector clinics to PEPFAR implementers. Where former colleagues moved to new organisations, social ties remained and often formed the basis for future organisational linkages.

In Zambia, social links were strongest amongst clinicians who had often shared accommodation during their studies, including amongst senior clinicians who had gained a post graduate qualification from the same institution abroad. For example, a range of senior clinicians had received post graduate training together in former East Germany, the UK or in the US. The fact that these bonds were formed at medical school, access to which is restricted, partly explains the limited networking of clinicians with activists or other civil society organisations. With more than 80% of the Zambian population living in poverty, access to tertiary education, including to the medical school is limited (CIA 2008). Students therefore already had a background that differed in social class from that of the members of the national network of people living with HIV/AIDS (NZP+). Social links between NZP+ members and medical doctors were

therefore unlikely. In South Africa similar inequalities existed within the country. Many of TACs members in rural areas or townships were from an underprivileged background. However, greater opposition to treatment roll-out by the government, and the history of struggle meant that actors from very diverse backgrounds came together to pool resources to overcome adversity and jointly achieve policy implementation.

Findings suggest the difference in social class was one of the reasons for the comparatively weaker integration of networks of clinicians and activists or civil society in Zambia. The history of struggle against apartheid that had cut across social class meant more socially diverse and integrated networks were possible in South Africa.

Kinship

> [There were] two coexisting 'imagined communities': that of Zambia, the modern state of which people were citizens; and that of the locally rooted 'community of kin.' Not that people saw themselves as having to choose between being either Zambian citizens or members of a kin group.[...] There were certain needs – access to land, help in times of trouble, for instance- that people expected to meet through the reciprocal obligations of kinship.
>
> *Kate Crehan (Schneider), 'Imagining the State' in The Fractured Community*

> They were providing treatment there earlier, it is because they are the President's cousins.
>
> *District health worker, Zambia*

One type of tie between actors that was observed during research of the Zambian treatment roll-out was 'kinship'[73]. Some actors interviewed referred to knowing people, or working with people as they were 'tribal cousins'. This extended in some cases to explaining where treatment had been provided, as politicians or people with linkages

[73] 'Kinship' is a term widely used in anthropology and biology to classify groups or connections either based on social categories or on relationships traced through genitor and genetrix. At its most basic it describes an affinity between people, and has often been used to describe and study patterns in ethnography. The term itself is contested and subject of its own discourse in the academic literature. See for example Read, D. W. (2001). "Formal analysis of kinship terminologies and its relationship to what constitutes kinship." Anthropological Theory 1(2): 239-267.

to politicians used these to ensure treatment was provided in their area. Interviewees described that there was often pressure from members of parliament and politicians to prioritise 'their' districts or particular clinics. These ties appeared of much greater importance in the implementation processes of ART in Zambia than South Africa. Observers interviewed in Zambia commented that this kind of personal patronage was a feature of the political process. Individual linkages and ties between people from the same geographic area (who would describe one another as tribal cousins) were used to influence implementation processes and where implementation happened. Kate Crehan (1996), an anthropologist who has worked in the North of Zambia developed the concept of dual 'imagined communities', as quoted above, where kin had a level of responsibility to one another in issues of day-to-day survival. This captures the description by actors interviewed for this study well.

The role of networks in coordination

The analysis so far has concentrated on networks identified during the research in Zambia and South Africa, their role in the policy implementation of ART and how network characteristics help understand the way in which they engage in policy processes. The following discusses aspects of implementation processes in the two countries where the comparison between the different contexts demonstrated how the absence of networks between specific actors affected coordination between partners in implementation of ART roll-out.

Integration of clinical and other actors in responses to HIV at sub-national level was identified as limited in Chapters 4 and 5. Chief amongst the reasons was that the fora at district level tend to be either clinical, or non-clinical. For example in Zambia the

treatment, management and care meeting at the district was for clinical staff only, as were the HAST meetings at the district level, in South Africa. These meetings focused on clinical, technical aspects in both countries and were attended almost exclusively by public sector health workers and managers.

The fora aimed at bringing different actors – clinical and non-clinical - together, such as DATFs or DACs to discuss 'policy', tended to be very different in terms of their membership and issues addressed. They focused either around events, such as World AIDS Day, or discuss a particular challenge, such as a shortage of condoms. While linkages to treatment programmes and clinicians are envisaged in practice this tended not to be the case given their existing workload, and the wide range of stakeholders. Technical issues relating to ART tended not to be discussed. This was evident in findings of networks at district level in Zambia, where ZPCT, the main PEPFAR implementer in the province, reported not participating in the DATF meetings.

As a consequence, the different external organisations, such as PEPFAR implementers, supporting the ART roll-out tend to coordinate bilaterally with the government at the district level. This led to a lack of coordination between the different organisations supporting government treatment roll-out, especially between those who support clinical aspects and those that for example provided care and support in communities for people living with HIV/AIDS. In Zambia, it was obvious during the data collection that the different organizations supporting ART roll-out, such as PEPFAR implementers and other non-governmental organisations, were struggling to coordinate at sub-national level despite close coordination at national level. Coordination between actors happened via the national offices of organizations and actors working at provincial or district offices of different non-governmental organizations were not aware of one another's programmes during interviews. Specifically, in the Copperbelt province the office of ZNAN, one of the Principal

Recipients of Global Fund funding, was providing support and small grants to community based organizations. These were for treatment and prevention activities. However, the provincial office of ZNAN had no contact, did not coordinate and was unaware of the work done by ZPCT the main PEPFAR implementer for treatment in the Copperbelt, as the two organizations did not meet in any of the coordination fora. By contrast ZPCT were aware of and coordinating their programmes with other PEPFAR funded NGOs working on prevention in the province. This was further aggravated by the structure of vertical networks in Zambia, which meant people reported within their own organisational hierarchy and awaited top down decisions rather than having the authority delegated from national to the provincial office to enter into partnerships at that level. These findings demonstrate the importance of networks to policy implementation, and the failure by coordination bodies such as DATFs aimed at creating networks between different actors for better coordination of their services, to build links between prevention and treatment activities.

The lack of integration between the various fora at the sub-national level also led to a relative disconnect at the implementation level between the clinical treatment programmes and prevention activities, observed during the research and described by actors during interviews. Treatment interventions were distinct from prevention and implemented by either the government, one of the three PEPFAR implementing agencies, or CHAZ (the Global Fund Principal Recipient for treatment). These organisations were heavily dominated by clinicians, with few network ties beyond the national level to other kinds of organisations working on HIV/AIDS. This lack of network linkages between clinicians and other non-governmental actors in the HIV response at sub-national level offers an explanation for the lack of integration of prevention and treatment activities in Zambia.

> There is very little coordination here in the province. We had one meeting here last year, but after that there was nothing, so if you asked me how many PEPFAR partners are here, in all honesty, I don't know.
>
> *Provincial Director, PEPFAR implementing NGO Eastern Cape, South Africa*

In South Africa, there appeared to be an even greater lack of coordination in the activities of external actors including PEPFAR implementers[74] at sub-national level, partly as there were many more organisations and these were less integrated into the public sector programme.

Similarly, the DoH had been dissatisfied with the lack of coordination and demanded PEPFAR implementers in the Eastern Cape coordinate their activities better. Unlike Zambia where the government was dependent to a greater degree on PEPFAR implementers and therefore also took a more proactive role in the coordination of these, in South Africa the DoH appeared not to actively coordinate their engagement as the treatment programme there was not relying on PEPFAR resources.

This exposed the absence of networks between the many different PEPFAR implementing agencies providing treatment in South Africa, and between these organisations and the Department of Health. Actors involved in PEPFAR coordination at all levels echoed this as a concern. Nationally, there was an annual meeting of all the relevant organisations (e.g. treatment, or prevention, or care), and efforts were made at that level to ensure integration through a US inter-agency mechanism which brought all US agencies implementing PEPFAR in South Africa together. Yet at sub-national level it was evident that this coordination did not exist. In Zambia where there was a much smaller number of PEPFAR implementers, the clinicians working for PEPFAR were mainly recruited from the Zambian health system and knew each other

[74] Focus here is particularly on PEPFAR implementers, and there was only one other non PEPFAR funded non government treatment supporter in the Eastern Cape (MSF sought close integration with the public sector).

on a personal basis, coordination of activities was much easier and the policy communities described above existed. In South Africa, where the pool of medical graduates is much larger this was not the case, and evidence from PEPFAR implementers interviewed for this research suggests these organisation were also attracting clinicians from outside South Africa.

However, integration between treatment and prevention appeared less of a problem during the research in South Africa where the issue networks linked activists and clinicians at all levels.

The analysis of instances in the implementation processes of ART roll-out where a lack of coordination was observed or described by actors interviewed, such as between PEPFAR implementers at sub-national level in South Africa, between PEPFAR implementers and other organizations at sub-national level in Zambia, and between treatment and prevention activities in Zambia, reveals that this matches instances where there are no networks or links between actors were weak. It underlines the importance of networks to the policy implementation in both countries and demonstrates the difficulty of attempts to foster such networks through the creation of specific structures such as the DATFs and DACs.

Conclusion

The exploration of roles of networks involved in implementation provided valuable and contrasting insights. A number of conclusions can be drawn from the analysis:

Network types respond to the context

Findings again corroborated the importance of timing and context, networks in South Africa tended to be issue networks of non-government actors that had a diverse membership and could draw on the different skills of their members. Combining the technical expertise, capacity to mobilise and knowledge of implementation of ART roll-out in even remote communities meant that networks had the ability to force the government to change and adopt policy. It allowed them to implement in advance of, or as soon as the policy decision was made. Activists' ability to rapidly draw on evidence from actual implementation of ART roll-out was crucial to their success in holding the government to account and to ensure the roll-out of ART despite its reluctance. The networks had to exclude government actors as its aim was to try and change government policy and practice on ART. Networks also linked implementation with agenda-setting and advocacy activities at different stages of the policy process, and succeeded in changing government policy.

By comparison policy communities in Zambia made it possible to use the resources of and jointly implement programmes with PEPFAR implementers, and for the core of Zambian clinicians to initially pilot ART with limited knowledge and funding. The homogenous membership of the policy and epistemic communities in Zambia were shaped by the social context of Zambian society, where limited access to education resulted in a small professional elite to which the clinicians belong.

Where policy is relatively uncontentious, policy communities seem the type of network concerned mostly with implementation because they allow government and non-government actors to work together to implement policy through stable relationships within a policy sub system. While South Africa had high levels of conflict which required issue networks to advocate for and implement ART roll-out, where conflict was resolved as in the Eastern Cape and during the reconstituted SANAC, policy communities and networks also formed and were part of policy design and implementation.

The tight policy communities in Zambia confirmed insights from Daubjerg's (1992) model who argues that network types depend on the state. He argues that policy communities form in states with intermediate strength, as they rely on other actors for policy implementation (see Chapter 2). This fits the scenario in Zambia where the state did not have sufficient financial resources to implement ART scale-up on its own and as a result formed policy communities with PEPFAR implementers that enabled joint policy implementation.

Networks change over time

The different networks types, issue networks and policy communities, responded to the immediate need of the respective country context. Networks were also not static, but changed over time, responding to changes in context. For example the Zambian epistemic community of clinicians formed the core of the policy communities with donors required to jointly implement ART scale-up. Even more dramatic were the changes from the issue networks in South Africa needed to set the agenda and affect policy change on ART to policy networks and communities where activists and government worked together to ensure ART roll-out.

Networks extend participation in the policy process

Networks were illustrative of the greater number of non-state actors involved in both agenda-setting and policy implementation, confirming insights from network literature (such as (Reineke 1999)) and from the literature on global health policy (Buse and Walt 2000; Walt, Spicer et al. 2009) which document the increase in new actors, especially non state actors, in health policy processes. What analysis of networks in ART roll-out in Zambia and South Africa added was new insights on how these actors engage in policy processes, including at the district level. In the case of PEPFAR implementers in Zambia it demonstrates how these actors became an integral part of public policy implementation. They portrayed joint decision making and a blurring of boundaries between state and non-state actors. It created a dependency by the Zambian government on these actors to implement ART roll-out. Findings from this analysis confirm the observations of others (Skok 1995; de Leeuw 2001; Seckinelgin 2008) who have noted that an increase in the number of these actors and greater participation of non-state actors in the policy process has also seen a reduction in the sovereignty of the state, including in the provision of health services (Kickbusch 2000).

Network structure and membership affect the policy process

Findings suggest that the more diverse the membership, the greater number of skills that could be mobilised, the greater the strength of the networks. This was clear in comparing the two countries. In Zambia networks were mainly made up of actors from similar backgrounds (i.e. either clinicians or activists), whereas networks in South Africa had linkages between actors across levels (district, provincial and national) and with many different skills, which allowed for rapid sharing of information and lessons learnt. For example, the structure and information flow between different levels that networks enabled was crucial to allowing TAC and its allies' to elevate the problems in ART implementation. Where information was shared within the vertical professional

networks of clinicians in Zambia it also contributed to policy learning and changes in further implementation.

In addition to the diverse membership (in terms of location and profession of actors), networks of activists in South Africa appeared to be less hierarchical than Zambia. The non-hierarchical structure of networks in South Africa allowed networks to maximise the benefit of different members' skills (or capitals) and helped them exchange information. By comparison the greater disconnect in Zambia between clinicians and NZP+, or other civil society networks meant that ART roll-out was seen more as a clinical programme in Zambia than in South Africa. The more integrated a network was in terms of its structure, whether it had a diverse or narrow membership, the greater was its ability to influence policy implementation processes. It highlights the importance of understanding the internal structure of networks when analyzing their role in the policy process, echoing Marsh and Rhodes' (1992) work on network dimensions, which emphasized the importance of membership, integration, resources and power relations between network members. Findings demonstrate that diverse membership, greater horizontal and vertical integration and less hierarchical power relationships strengthen networks.

Shared origins and history instill trust networks require

The differences in number of networks, their structure, membership and their consequent influence on policy implementation were a result of the different country context and respective history. Networks in South Africa drew on a shared history of struggle mainly from the anti-apartheid movement and to a lesser extent from the gay liberation movement. This was the basis for trust amongst network members, which enabled the kind of civil disobedience the treatment access movement displayed. Of great importance to their influence in South Africa, were the close linkages between

clinicians and activists. These were the direct result of the recent political history of the South African medical profession. The ties resulting from shared educational experience provided the strongest network links in Zambia.

The analysis of networks' origins and history shows how they shaped network characteristics, such as structure and membership. The underlying and enabling factor of networks which the analysis of their origins highlighted was the trust built between actors which was essential to network functioning and their influence in policy processes.

Individuals as bridges between networks

In Zambia, actors' vertical ties were within one organisation or sector, with only a few actors to 'bridge' the gap between clinicians and activists. Actors from organisations or networks tended to interact with others at their equivalent level - district, provincial or national through a series of policy fora.

Networks between organizations grew out of social or personal ties between actors, while the creation of fora aimed at enhancing coordination between actors was less successful in creating networks. For example the informal links between Zambian clinicians and between clinicians and activists in South Africa were important to those networks and a personal connection contributed to forming the policy community between MSF, the Nelson Mandela Foundation and the DoH in the Eastern Cape. Overall individual actors were important to network formation and to facilitating these.

Networks and the stages heuristic

Analysis and conclusions in Chapter 5 demonstrated linkages between implementation of policy and other stages of the policy process, including further policy development

and agenda-setting. Issue networks in South Africa used the evidence base from implementation to force the government adoption and implementation of ART there. In Zambia, the policy community between PEPFAR implementers and MoH used its experiences from implementation to further develop policy on ART as evident from the processes leading to the development of the new treatment guidelines. In both countries networks provided the link between implementation, policy development and agenda setting even if in very different ways. This demonstrates how network analysis helps understand the connections between different stages of the policy process and could assist further studies and development of theory on how they are linked.

By using the lens of networks, this study has shown how the policy process is iterative, messy and does not fall neatly into the stages heuristic – because networks evolved and were involved in both agenda-setting as issue networks, but also in implementation as policy communities. This means critics are right and these stages are overlapping and 'looped' processes. It also confirms network analysis as a key tool for understanding health policy processes.

Analysis of the characteristics of networks especially the combination of different skills through the diverse membership in South Africa has already provided insights why these networks were so powerful in policy implementation there. To better understand how they were able to exert such influence, the analysis in the following chapter concentrates on actors' and networks' sources of power.

CHAPTER 7 – POWER AND THE IMPLEMENTATION PROCESS

> The structure of the distribution of the different types and subtypes of capital at a given moment in time represents the immanent structure of the social world. i.e., the set of constraints inscribed in the very reality of that world, which govern its functioning in a durable way, determining chances of success for practices. It is in fact impossible to account for the structure and functioning of the social world unless one reintroduces capital in all its forms and not solely in the one form recognized by economic theory.
>
> *Pierre Bourdieu (1986), The Forms of Capital*

The analysis of findings has indicated that implementation of ART roll-out in Zambia and South Africa was a complex process and that networks and linkages between actors played an important role in determining *how* treatment roll-out was implemented. However, findings so far have only touched lightly on the question of *why* those networks have influence in the policy process. Findings in the proceeding chapter already indicated that it is not the size of network membership alone that determined their influence. This chapter focuses on sources of networks' and actors' power and influence in the implementation processes studied.[75]

The findings presented here are based on the analysis of data collected. In interviews actors were asked to rank individuals and organizations they considered to have been influential. Actors were also probed about their nominations and were asked about who they resorted to in order to resolve problems faced during implementation. Findings were analysed using the study framework outlined in Chapter 3, developed from the review of the literature on power in Chapter 2, which examines origins of power based on concepts of different capitals by Bourdieu (1983), with additional resort to the concept of rational-legal authority by Weber (1948).

[75] The study does not concern itself or try and get insight into forms of power, such as domination versus persuasion, soft versus hard power etc. {Dye, 2001 #92}

Analysis of data was done in three parts: firstly interviews were analysed to establish groups of actors who were named by interviewees as powerful such as, for example, clinicians. Interviews were then studied to ascertain reasons interviewees had cited for considering someone powerful. In the case of clinicians for example, interview responses included references to someone having a technical skill, having published evidence, having knowledge and being able to treat patients who otherwise had no access to treatment, education, and authority based on experience and academic titles. Mostly interviewees referred to someone as powerful due to their actions, such as 'treating someone', 'publishing or documenting something' or 'providing a skill'. These are examples of 'exercises of power' by actors named as influential. However, some of the responses referred to actors' sources of power, which enabled them to take the actions or 'exercise' that made them powerful, in the case of clinicians this was their knowledge and education. As the third step in the analysis, all interview responses and content were reviewed to understand not only the actions that led to actors being considered powerful, but also their sources of their power. The typology of power based on Bourdieu's concept of cultural, symbolic, economic and social capital, and of Weber's rational-legal authority, which describe the different sources of individuals' power, was applied to interpret and analyse responses by interviewees to ultimately ascertain why actors' and their networks were considered powerful. Findings from this analysis for each different 'source' or capital of actors' power, are discussed and presented in this chapter, (see also Annex 7). The application of this typology based on Bourdieu and Weber also allows new insights into sources of power and the relationship between different sources of power.

Findings are structured according to the different sources of power identified. Analysis focused on the different aspects or 'expressions' of each capital and of rational legal authority comparing and contrasting findings from both countries, before a more general discussion and conclusion on insights gained from this analysis of sources of

power in policy implementation processes. Cultural and symbolic capital are discussed first: these capitals were found to have similar expressions in both countries. The discussion then moves on to rational legal authority, economic and social capital which offer a greater contrast in findings between the two countries. Based on the analysis of these different sources of power the concept of individual agency, touched upon in the review of the literature is then reintroduced to further, better interpret data collected.

Findings and discussion

Cultural capital

> Dr X and Dr Y, their word carries authority because they have a lot of knowledge.
>
> *Clinician, Copperbelt, Zambia*

> [These people] from MSF and the HIV Clinicians' Society, they have been good advocates but they have also had very good technical roots to draw on.
>
> *Academic, Western Cape Province, South Africa*

Cultural capital is closely linked to both formal and informal education. It is derived amongst other things from the degrees and academic titles earned by an individual, which according to Bourdieu marks the transformation of the cost (economic capital) of an education into a different kind of transferable, usable and durable capital, i.e. the cultural capital of academic titles which provide people with power and authority (Bourdieu 1983, 1986). This form of capital was evident in many interviewees' description of power, authority and influence, especially in relation to clinicians. It was particularly important in Zambia, which has fewer medical doctors and graduates than South Africa. The 'reverence' with which actors' spoke of clinicians and others with academic titles in Zambia was greater than in South Africa.

However, cultural capital also heightened the influence of non-government actors in the South African implementation processes of ART. According to the analysis of interviews it enabled the treatment programmes classed as operational research and run by clinicians affiliated to universities (Chapters 4 and 5) to go ahead, as only the scientific academic institutions could conduct such research and thus implement these programmes. In addition, actors interviewed repeatedly referred to the importance of working with universities or individuals based in academic institutions, as their position and qualification gave the evidence of the effectiveness of ARVs in a South African context greater authority. This was crucial, for example, during the court case by the TAC against the government and extended to monitoring the challenges in ART roll-out. An academic who was part of the JCSMF described during an interview how often press releases following meetings were published in her name or with supportive quotes from her as she was seen to be impartial due to her being an academic rather than an activist.

Cultural capital increased with age and experience, especially in Zambia. Older, more senior doctors with more years of professional experience or further education, such as a Masters or a PhD, were considered as more influential by their peers than younger doctors. Clinicians who had received further training and qualifications abroad tended to be highly regarded and often held ministerial positions or worked for multilateral agencies. This was less so in South Africa where opportunities for education, at home and abroad, were more frequent and there was a greater diversity of foreign clinicians amongst actors interviewed or discussed by interviewees. In addition, South Africa had a greater number of universities that were considered centres of excellence and working there often carried greater prestige than working for the DoH.

> X is influential, he has a lot of knowledge and people trust him to make the right decisions.
>
> *Clinician, Copperbelt, Zambia*

In addition to age and qualification, experience of ART also appeared to bestow cultural capital on actors. In both countries, those engaged in early research or clinical treatment programmes were seen to be particularly influential. For example, the clinicians involved in Zambia in the original pilot sites were considered more influential than clinicians who had only recently begun working on ART, based on their knowledge and clinical experience. Knowledge about a complex and highly relevant disease, and the clinical challenges to executing an ART programme gave actors influence in the policy implementation process. Similarly, WHO was described as a powerful organization because it provided authoritative clinical guidelines and technical knowledge.

In South Africa early implementing clinicians who had gained experience and developed innovative treatment programmes, or had great knowledge on different types of ARVs were also considered as influential. Similarly, the HIV Clinicians' Society could draw on its members' experiences and knowledge of clinical issues which provided it with cultural capital.

However, overall knowledge and specialist training on ART was much scarcer for clinicians in Zambia. It was repeatedly highlighted in interviews, and referred to more often than in South Africa as the source of someone's influence.

In both countries, a comparatively junior doctor with limited experience but responsible for the day to day running of the ART programme might have been described by his or her line manager or superior as more influential or powerful in terms of ART roll-out not due to the position held within the system but due to their knowledge of ART. The

amount of information held was also cited by actors at all levels, as a source of influence and power.

Even TAC was described by actors as powerful due to the information dissemination through its treatment literacy programmes. Many of the respondents interviewed at sub-district level, described how they knew TAC and became members through the organisation's treatment literacy work and considered TAC their main source of knowledge on ART.

The qualification and skills of advocates working for the AIDS Law Project were emphasised by actors as having been important in the court case against the South African government and to ensure the implementation of the ART programme.

> You know this is really most useful we discuss then the lawyers take it up X and his colleagues they know all these things about medicines and the international legal regulations.
>
> *Clinician, Cape Town, South Africa*

The quote above summarises the observations by many actors interviewed that the legal knowledge and qualifications provided huge cultural capital to civil society in South Africa, and acted as a source of its power. Especially as it allowed access to rational legal authority of the state, through the court case which forced the government to implement a PMTCT programme.

Actors were described as powerful not only for having knowledge, but also for their ability to pass it on and train others. Through their teaching actors were perceived to shape clinical practice. For example, clinicians involved in the national team of trainers that was set up in Zambia in 2002 to conduct training of health workers, including clinicians, nurses and laboratory workers, were seen to be particularly influential. This was even the case where 'trainers' were not in senior posts, but who were described

as being an 'authority' on ART. This broadens Bourdieu's definition of cultural capital to include the practice of passing knowledge on, while it confirms his view of academic titles and educational achievement as source of power. The ability to teach and to pass knowledge on acted as a source of power based on cultural capital that was not captured in the concept of cultural capital as set out by Bourdieu (see Chapter 2). It was distinct from the academic title or qualification which enabled a person to teach but relied precisely on the act of passing on knowledge. Bourdieu (1983) discusses the idea of transmission of cultural capital as crucial to the 'embodied' form cultural capital can take, such as in forming people's taste and minds and increasing their knowledge. However, his concept focuses more on the person acquiring knowledge rather than the didact.

Many interviewees acknowledged actors who coordinated ART programmes (from the national level down to facility level) as powerful, not due to the position held within the hierarchy but due to the amount of information they had about the day-to-day running of the programme. Having detailed information was seen as giving people influence and power as they were able to provide information to other actors that would in turn allow them to solve problems or implement programmes with greater success. For example the national ART coordinators in both countries became focal points and sources of information for others. As a consequence, they knew and had close contact with a great number of other actors in the ART roll-out, which in turn added to their social capital (see also discussion below).

This analysis of cultural capital and its different expressions helps explain how it provided power to actors who were able to influence policy implementation processes in Zambia and South Africa. It also sheds new light and provides an explanation as to why the policy and epistemic communities of clinicians were so important in Zambia. Their power was rooted in their cultural capital, their qualification as clinicians, their

knowledge of ART, their ability to train others and their coordination and information of the treatment programme.

Analysis of how cultural capital gave actors power also helps understand why activists and early implementers of ART in South Africa, including MSF's treatment programme in the Western Cape, had greater power by working with clinicians at academic centres, especially the University of Cape Town (UCT). They provided cultural capital which gave their evidence and the demands of activists an authority and sense of impartiality it would have otherwise lacked. The AIDS Law Project with its legal knowledge added further cultural capital that allowed the issue network to even challenge the government's own legal authority, and use the rational legal capital of the courts to prove the government's obligation to introduce treatment for the prevention of mother to child transmission. It adds further explanation for the broader issue network on ART observed in South Africa. Importantly, it shows how forming networks allowed different actors' to share different types of capital, thus adding and consolidating the incipient power of networks. This analysis shows that a network with one type of capital (clinicians' skills) is less strong than a network with several types.

Symbolic capital

> CHAZ (Churches Health Association Zambia), they are powerful as they are a Christian organization in a Christian country.
>
> *Policymaker, Copperbelt, Zambia*

> There is something like the loyalty to the throne, to the king to Mbeki, and the Presidency, a blind loyalty.
>
> *Clinician, Pretoria, South Africa*

Bourdieu uses the concept of symbolic capital to describe the power of religion and religious artifacts and leaders, and the use of titles denoting rank and status, such as

the office of the First Lady (Bourdieu 1989).[76] For the purpose of this analysis it helped explain the influence of religion and where the influence of an actor could not just be explained by their office (rational-legal) or other capitals. This included examples where people were described as *leaders* or praised for their *leadership* although this was not exclusively rooted in symbolic capital (see discussion below).

In Zambia symbolic capital helps understand why faith based organisations had influence beyond actual service provision. The Churches Health Association in Zambia (CHAZ) was responsible for all Zambian Mission hospitals - a third of the country's health care facilities - most of which served the remotest part of the population, especially the poorest. While the actual infrastructure of the mission hospitals (supported by government and part of the public health sector) was a source of power for CHAZ, as was the fact the organization became a Global Fund recipient, most actors interviewed referred to CHAZ as powerful due to its faith based origin rather than its economic resources.

The concept of symbolic capital also helps explain the influence of other traditional healers or authority figures who did not have rational legal authority due to their position, but who were nonetheless considered powerful. In Zambia, many people recounted a visit by Stephen Lewis, UN Special Envoy for AIDS in Africa at the time, when he called for the removal of all user fees relating to ART. While in no direct position of legal authority in relation to the provision of ART in Zambia, he was clearly regarded as someone whose word carried weight and could affect change.

People living with HIV/AIDS were also often described as being influential due to their symbolic capital. As people primarily affected by HIV, and the main intended

[76] Bourdieu discusses symbolic capital in Europe for example as a conversion of economic capital into titles of the nobility.

beneficiaries of public policy on ART, they were perceived to have inherent power in the processes relating to ART roll-out and the challenges this entailed. From interviews conducted with people openly living with HIV/AIDS it was apparent that their involvement, at least initially, in the policy processes had been marginal, and constraints remained on the extent of influence they were able to exert on implementation processes at the time data for this study was collected in 2007/08. Often the ability by PWHLA activists to influence policy implementation was through their networks, linkages and social mobilisation (the social capital discussed below). Suggesting that the symbolic capital of their HIV positive status alone did not suffice to provide influence but rather that it was the combination of capitals (such as social capital of networks) that allowed PLWHA activists to exert power on policy processes.

In addition, given the high HIV prevalence in both Zambia and South Africa many of the actors interviewed for their role in the policy process, unrelated to their disclosed HIV status, were HIV positive or directly affected by HIV. While this was in many cases not explicit, it was implicit during discussions and interviews. It is hard to quantify the impact of the personal experiences of the epidemic on actors in the policy process but it influenced their actions and behavior in the policy process. Bond (2010 forthcoming) describe the shared confidentiality or implicit understanding about an HIV positive status amongst Zambian clinicians and policymakers working on HIV and AIDS (Bond 2010 forthcoming). This underlines further that actors' HIV positive status, even where these are not activists or openly living with HIV, added to their influence and to how they may have been perceived by others in ART policy processes.

Symbolic capital in South Africa had another expression which was important to understanding actors' influence on the implementation of ART roll-out – the symbolic capital of actors from the anti-apartheid struggle. It was particularly important to understanding actors' roles in the context of South Africa's denialist government.

President Mbeki's personal stance had significant influence on the policy implementation process not only due to the rational legal authority of being head of the government. In Mbeki's case it has been argued that it was also due to the symbolic capital as the countries' second ANC president, born to parents who were veterans in the anti-apartheid struggle (Gevisser 2007). Schneider (2002) has demonstrated how policy around ART was the struggle between activists and Mbeki about who had legitimate access to, and control over, the political agenda in post-apartheid South Africa.

From this perspective it becomes easier to understand the loyalty of actors (e.g. public sector health workers) to Mbeki as the country's second ANC President, even where scientific evidence proved him wrong. Actors felt reluctant to speak out against an ANC President despite their disagreement with his position. The particular symbolic capital of the post-apartheid government also helps explain observations by a number of actors interviewed who described that TAC's use of civil disobedience tactics against the ANC regime was powerful, but equally difficult for people to accept as it was employing tactics from the anti-apartheid struggle against the government.

On the other hand, many of the actors involved in the early roll-out of ART could also draw on the symbolic capital of their anti-apartheid history to defy the government. It was possible to observe a sense of power some of the AIDS activists could command from having been involved in anti-apartheid struggles. This was in some cases clearly not purely based on the social capital, their official position or (in the case of clinicians) their medical knowledge, but rather their credentials from the struggle. For example the early implementation of ART in advance of national policy in the Western Cape, relied in part on the symbolic capital by a staff member of the Western Cape DoH who was described by many, and described himself, as being able to resist pressure from

the national ANC government due to his personal credibility as an activist from the struggle.

This source of power based on the actors' credibility from the anti-apartheid movement also helped to further explain the influence of some of the civil society networks identified as important to the roll-out in South Africa in the previous chapter. It reiterates the importance of the sense of trust resulting from the origin of networks and their membership described by actors, to their ability to implement and advocate for ART roll-out.

Having discussed how Bourdieu's concept of symbolic and cultural capital provided actors and their networks' with power in these policy processes across two countries the discussion now turns to power rooted in Weber's concept of rational legal authority which differed between the countries examined. Discussion concentrates on Zambia, before contrasting this with the findings from South Africa.

Rational legal authority

Weber's (1948) concept of rational legal authority was used to understand those cases in which an actor's authority, power or influence was due to their position or legal authority within the government system. This form of authority explains the power due to the legal or government framework which bestows someone's post or office within the government hierarchy with the responsibility for the implementation of a specific policy.

Rational legal authority in Zambia

The hierarchical nature of Zambian society was reflected in the interpretation of power many actors attached to government office and the formal structures. When

challenged or questioned directly about individuals' power, interviewees commonly referred to actors' positions within the hierarchy of the Ministry of Health or other organizations, as the example below illustrates.

> The Ministry of Health is most powerful of course, they own the facilities, we have a team of our directors to whom we report.
>
> *District ART Coordinator in Zambia explaining who has the most power*

As shown in the previous chapter and in Chapter 4 the Zambian health system and HIV response was hierarchical and top-down with actors from district not communicating directly with provincial actors, nor did provincial actors speak directly with national actors, other than through specific conduits - in most cases the District Directors for Health, or the Provincial Health Directors.

However, the Provincial ART Committee in Copperbelt province discussed in Chapter 4 did appear to work as a forum where problems relating to policy implementation were resolved. The ART Committee was not a formal body of the MoH and while it advised or coordinated the Province, it did not report to anyone at the national level. During the research no linkages could be found between this informal body and the corresponding informal technical working groups at national level, discussed in Chapter 4. The Committee itself had no rational legal authority, which may have contributed to it working as a genuine 'problem-solving body', as problems could be discussed in a relatively open and frank manner, instead of needing to 'present' a positive image to superiors. Both district and provincial actors within the formal hierarchy repeatedly mentioned when questioned about problem solving structures that they would deal with problems at their level, trying not to raise it or report it to their superiors. Actors both at the DHMT and at the PHO would refer to 'resolving things within', rather than trying to engage someone from the centre in solving a particular problem. This shows how the hierarchical structure at times actually complicated

policy processes and how in this context it was easier for actors to solve problems with others who had the same level of rational legal authority, rather than referring to someone with greater authority. The importance of rational legal authority in Zambia helps explain why informal bodies such as the technical working group at the Ministry of Health and the Provincial ART Committee were so important to resolving problems in implementation.

At the national level, amongst the Directors at the Ministry of Health, not all were perceived to have the same levels of influence and power. Those with greater financial resources, including the Directorate that acted as a gatekeeper to funders wishing to work in Zambia, were viewed as more influential. This was despite these having the same rational legal authority as other Directorates, which indicates the limits of this source of power, but also how these actors were able to benefit or draw on the economic capital of donors. This provides a further example of where multiple capitals added to the power of individual actors.

The most senior civil servant working on health, who had the legal rational authority to issue policy directives, was the Permanent Secretary (PS) within the Ministry of Health. His signature and formal endorsement was required on all policy documents in order for them to become officially acknowledged. The Directors, together with the PS and occasionally the Minister, formed the Senior Management Team (see Diagram 4.1, Chapter 4). According to senior civil servants this was the highest functioning body in the MoH, where issues relating to policy implementation, including operational issues were discussed.

Issues raised here could then be brought to the attention of the Cabinet Committee on AIDS, either by the Minister of Health, or by the Permanent Secretary. The Cabinet Committee and ultimately the President represented the highest policy-making body in

relation to HIV overall, including ART, with the highest rational-legal authority. The decision to remove user-fees relating to ART for example, was taken by the Cabinet Committee. However, according to actors interviewed, the Cabinet Committee was only involved in providing policy direction. Legal rational authority to ensure that decisions made in relation to ART by the Cabinet Committee on AIDS or the Minister were implemented, was with the Permanent Secretary in the Ministry of Health.

Legal - rational authority in South Africa

> Firstly, you have to understand our constitutional structure when it comes to health care is a fiscal federal system where health care at all levels, including policy, was made a concurrent function where both province and national had the competence to legislate. The second thing is the composition of power in the Western Cape, which was different to national. The electorate is divided equally so that we have coalitions; no one party has the majority.
>
> *Clinician, Western Cape, South Africa explaining the pilot programme there*

Rational legal authority is usually understood to be held by the government and the legality of the state bureaucracy (Weber 1948). However, in South Africa the ANC was by far the most powerful political party and internal party dynamics and power relations between different factions within the party were regarded as important as the formal position of office held by an individual actor.[77] These internal party dynamics added a layer of complexities when trying to understand the influence of individual actors who held office and their role within the ANC. This study did not specifically set out to interrogate the dynamics between the party and the government. However, the evidence indicated that in some cases rational legal authority in South Africa was held by party officials not necessarily government post holders. Actors repeatedly mentioned party dynamics as one the reasons why the controversial Minister of Health Manto Tshabalala Msimang had been retained in her post: one suggestion was that her husband Mensi Msimang was the ANC's party treasurer.

[77] Subsequent to the data collection for this study, President Mbeki had to resign from the office of the Presidency at the end of 2008 as he had lost influence over the ANC demonstrating the power of the party administration over its members regardless of their office. (2008). Mbeki fracas leaves messy political scene. Mail and Guardian online. Cape Town.

To understand rational legal authority in South Africa the most relevant aspect is the fact that health services are a responsibility of both the province and the national government, as indicated by the quote above. As described in Chapter 4 the authority of national government is partly devolved to the provinces, including the responsibility for policy implementation. The Constitution of South Africa sets out how the implementation of legislation including for health is matter of the province. Political leadership at the provincial level from the Premier and MEC for Health, as well as the provincial HAST Directorate is important as the implementation of ART roll-out in the Eastern Cape demonstrates, where MSF staff remembered, 'we had to get the ok from the Province' and 'we had to negotiate with the provincial department of health'.

The nine provinces of South Africa vary widely in terms of their health systems capacity, and in the effectiveness or successes with which they implemented different national programmes, such as ART (Table 4.3). It was often the provincial government that was judged as needing to improve its work and performance. Actors recounted in interviews how in some cases the national government chose to assert its authority by exerting pressure on the provincial MEC for Health. This tension between national and province, including variations between provinces suggest that implementation is strongly affected by contextual factors of capacity and leadership, which has also been suggested by Nattrass (2006) in her analysis of the differences in ART roll-out between different provinces.

While policy decisions and direction came from the national DoH, implementation of ART services rational legal authority lay with the province. Activists at provincial and district level confirmed that where they had concrete concerns with facilities in a district or at a particular hospital they lobbied and pressed the province, and only raised issues at national level when the province had failed to respond. Frequent examples

included shortages at clinic level of formulae milk for breast feeding HIV positive mothers who were part of the PMTCT programme. Several interviewees referred to occasions when activists would mobilize, organize a protest and as a result the district or province would resolve the problem.

Power based on rational legal authority in the implementation processes of ART roll-out was therefore not confined to one government source. As the provincial leadership was elected, it could be from a different party to the national government or the national Minister of Health– as was the case in the Western Cape. Actors interviewed considered this to have contributed to the ability to implement roll-out ahead of national policy in the province. Even where the national and provincial governments belonged to the ANC, as Premier and MEC for Health were elected it provided provinces with some level of political 'space' and leverage for implementation. According to actors interviewed this was only possible where the Premier and elected officials had some independent support base within the ANC, where this was the case provincial actors could exploit this policy space, as demonstrated in the analysis of implementation in Chapter 5, and in the quote below.

> I had a lot of protection from the Premier. When a senior person from the President came to talk to me about towing the line, one of the things he said was, do not think that your Premier is going to be able to protect you forever. Just having that perception that the Premier would be unhappy if they chopped my head off helped quite a lot.
>
> *Provincial DoH official rolling out ART.*

However, given the personal interest by President Mbeki in AIDS treatment, the national Department of Health tried to control implementation in several ways. The accreditation process of clinics through the national DoH, discussed in detail in Chapter 5, was frequently cited by actors interviewed as one a tactic by the DoH nationally to delay or stop the process of ART roll-out (Jacobs, Schneider et al. 2008).

Another way in which the national government was able to exert power on provincial ART roll-out was through financing. Each province in South Africa received funds according to a formula established by the Treasury in which the Province was allowed to spend autonomously on the implementation of national policies (1996). This was referred to as the 'equitable share', as it aimed to distribute national tax revenue in an equitable way between provinces. The equitable share made up the majority of the provincial budget, including for health and the provision of health services. As part of the South African government's response to HIV after 2001, the equitable share was increased but not ring-fenced for HIV. Provinces could therefore choose to spend the money on responses to ART or not. In practice this strategy by the national department of health did result in provinces not spending their increase in resources on the HIV programme (Nattrass 2004),[78] possibly as a way of showing loyalty to the President. It could be argued that where provinces chose not to increase their funding on HIV/AIDS that this was an example of the national government exercising power through non-decision-making, as described by Lukes as the 'second dimension of power' (Lukes 2004).

In addition to the equitable share there was a further mechanism that allowed the national government to be more prescriptive in how resources were spent. 'Conditional grants', which provinces could apply for and had to report on to the Treasury, were available for specific government initiatives, including the ART programme. A senior official at the Treasury explained the conditional grant as a way of ring-fencing to allow central government more control over the treatment programme. This was corroborated by another respondent from a provincial DoH who described the 'conditional grant' as 'a power instrument to shape service delivery'.

[78] Nattrass refers to evidence from KwaZulu Natal and the Eastern Cape provinces. However, interviewees at national level affecting voiced concern that this was the practice in several more provinces.

Finally, the national government tried to exert control over the implementation of ART roll-out through the national treatment guidelines. National actors working outside of the Department of Health complained about the lack of clarity and the delay in developing and revising clinical guidelines for ART. At the time research was conducted in 2008, many actors interviewed expressed their frustration that the clinical guidelines had not been updated since 2004 and reported they were out of date and no longer sufficient. While guidelines were developed in consultation with a group of expert clinicians from around the country, the process for this was not clear. One of the expert clinicians who participated in their development, who also had knowledge of the processes for determining the Essential Drug List, reported that the process for developing and reviewing the clinical guidelines for ART differed from procedures normally followed.

> The same measured process [of weighing pros and cons] did not happen, so I guess the HIV Directorate themselves made the final call on the treatment guidelines.
>
> *Clinician, South Africa*

The analysis of power based on rational legal authority in South Africa demonstrates this had a more complex impact on policy implementation processes than in Zambia, where rational-legal authority was more clearly aligned with the hierarchical political structure. This was due to two factors: the power of the ANC to determine who held office which bestowed rational legal authority, and the constitutional framework that split rational legal authority between provinces and national government. For example, the national Department of Health had the overall responsibility for health in the country but was unable to stop implementation of ART roll-out in the Western Cape.

Using the concept of rational legal authority provides a useful way to understand the patterns in policy implementation described and analysed in Chapter 5, and can be interpreted as the national government wrangling over rational legal authority with the

provinces. At the same time it also explains how early implementers could roll-out ART in some provinces in advance of and in contradiction to national policy.

This discussion now turns to further examine the role of power based on economic capital in Zambia and South Africa.

Economic capital

Economic capital refers to money and financial resources (Bourdieu 1983) and for this study has been interpreted to include technical capacity to facilitate or influence implementation as well, as this also relies on having financial resources. It includes not only the actual purchases of medicines, equipment or services, but also the resources required to finance a meeting, or facilitate costs of coordination such as phone calls, print leaflets or other communication materials required for a policy. Analysis of power rooted in economic capital shows economic capital provided actors in Zambia with comparatively greater power than in South Africa.

Economic capital in Zambia

> Donors and funders are as powerful as the Ministry of Health because they give us resources to do things.
>
> *District health worker, Copperbelt, Zambia*

Economic capital by non state actors has been an important factor in the roll-out of ART in Zambia. The amounts contributed by individual donors were substantial as indicated in Table 4. 2. By 2006, PEPFAR funding alone accounted for 63 percent of all government resources on HIV/AIDS (Ooman, Bernstein et al. 2007). A senior official involved in the ART roll-out in Zambia confirmed that only 10-15% of the

national treatment programme in 2008/09 would be financed through the government's resources with other donors contributing the rest.[79]

Given the level of resource dependence by the Zambian treatment programme, donors and their implementing agencies had power linked to their economic capital. Most of the 89 people interviewed during the research, when asked to name the most powerful actors in ART roll-out, named at least one donor by name, one of the agencies or organisations receiving funding from a donor, or one of the clinicians working for such an agency or organisation.

> It was when PEPFAR and the Global Fund were coming that ART really got onto the government agenda. [...] Things like, participation of PLWHA, and universal access to treatment were suddenly on the policy agenda. We suddenly saw the change which made ART available on a practical level.[80]
>
> *Activist, Lusaka, Zambia*

The power of donors through economic capital was clearly observable in the history of the roll-out of ART in Zambia, their influence was felt on service provision and the policy processes relating to the implementation of ART roll-out at all levels. Implementation really only accelerated after the Global Fund and PEPFAR resources had become available following 2003.

This power by GHIs to expand the roll-out of ART was reiterated at provincial and district level with many respondents specifically referring to PEPFAR or PEPFAR implementing agencies. A district level government employee noted:

[79] In subsequent interviews with Ministry of Health officials these were keen to point out that the government was trying to reduce the dependence on external capital and was year on year increasing the governments' share of financing for the ART programme.

[80] This quote also refers to the very clear perception that as treatment for HIV was extremely limited before the wider donor support. At the time there was considerable controversy within Zambia about who had access to medication, and feeling that poor Zambia's where completely excluded (Jones 2004).

> Before ZPCT [the PEPFAR implementer in Copperbelt province] came the drugs were not free and not available at district level.

Funders expanded access to ART through the direct provision of medicines or refurbishment of facilities and the provision of equipment required to scale-up access. The Global Fund provided resources to the Ministry of Health that enabled the purchase of the actual medication. PEPFAR provided reagents, refurbished laboratories, provided equipment, or built extensions to existing clinics. One actor at the district level observed that without this support the clinics 'would not have made the numbers [patients of ART]'. Similarly, a respondent working for a PEPFAR implementer shared his observation:

> Where there is no ZPCT they struggle, in the facilities there is no equipment, no training.

One respondent directly equated power to the ability to provide treatment to as many people as fast as possible:

> CIDRZ [one of the PEPFAR implementers] have managed to put the most people on [to ART] they are the most powerful.

Additional resources received by health facilities meant that patients may have perceived services to be of better quality, and better resourced. At the time of data collection, one of the PEPFAR implementers in Zambia was perceived by some to be providing better quality of care, and patients preferred clinics where they knew the organisation provided support. According to actors working for this particular PEPFAR implementer, this had led to conflict with the Ministry of Health who had been keen for the organisation to reduce their 'branding' of facilities to minimise patients' perception of these being non-government.

The economic power of donors' especially PEPFAR implementers was not limited to expansion and quality of services, but also included their ability to resolve problems

and to train public sector staff. In many health facilities visited during the data collection one of the most commonly described problems over the past year had been a lack of reagents (needed for the CD4 count machines) and other laboratory equipment required for the blood tests in order to initiate or monitor patients on ART. District-level respondents resolved the scarcity of reagents by approaching ZPCT which was able to provide them.

District actors also described the power of PEPFAR implementers that came from their ability to provide training and skills where these were lacking. A District Director of Health said that ZPCT was almost as powerful as the government in terms of resolving his problems faster and more easily than was possible for the MoH with fewer resources.

Many of the external resources from PEPFAR, the Global Fund, and other donors were provided by or through NGOs, such as the PEPFAR implementers, who gave technical support, rather than direct budget support in form of funding to the government, for example the Ministry of Health. At the district level, the PEPFAR funded organisations that supported the roll-out employed their own clinical staff who visited health facilities and provided technical support. This interaction was governed by a Memorandum of Understanding with the District, which essentially left the organisations free to enter and work in the clinics. As a result, PEPFAR implementers had detailed knowledge of problems and challenges in implementation. One government doctor working at the district level said that:

> ZPCT often knows the issues before me because they are in all the facilities, so they know before me when a programme needs attention.

At the provincial level, respondents highlighted that the entire provincial health office, with responsibility for all health facilities and services, had fewer staff than the

provincial office of ZPCT, the organisation receiving funding through PEPFAR to support the ART roll-out in the Copperbelt. Provincial capacity to support ART was thus less than that of the PEPFAR implementer. One of the organisations funded by PEPFAR had actually seconded a staff member into each Zambian Provincial Health Office to work on supporting the ART roll-out. The rationale for this was to build capacity at the PHO, and the post was meant to be partly integrated into the day-to-day running of the office. However, the post holders had an independent salary and budget to fund some systems' strengthening activities which made it difficult according to interviewees for the post holder to be seen as fully integrated and equal within the team. It blurred the distinction between the state and PEPFAR implementers as the seconded staff member was formally considered part of the PHO. These examples demonstrate how the capacity that could be purchased with economic capital gave significant power to PEPFAR implementers. It also shows how their economic capital gave them access to greater information and thus in turn increased their cultural capital.

The technical support to the day-to-day running of the clinical programme aside, a large proportion of support from the Global Fund and PEPFAR, was for policy learning, facilitating meetings to shape implementation and other parts of the policy process. An example of this was observed during the data collection. Given the pace and scale-up of ART to every facility, no real referral system of patients existed. Those seen in one clinic were not referred down – from a hospital to a clinic closer to their home- or between different clinics and hospitals as patients moved. As a result the monitoring of patients was difficult. To address this problem ZPCT began introducing a referral system during the data collection period. This action exemplified how policy implementation was shaped through the economic capital of a non-state actor. ZPCT, through their presence within the health facilities in the province, observed the need for a referral system, developed and designed it, trained district and provincial health

workers in its use and provided the forms. ZPCT was able to implement this referral system because they had the capacity and resources to train and facilitate the meetings required, as well as to finance the necessary forms. All the new system required was agreement from the Ministry of Health.

The study also found that policy implementation was often initiated by the external implementing organizations rather than the government. A PEPFAR organisation staff member explained that if they felt a new protocol or policy was needed, for example in relation to supply chain of drugs, they financed a meeting of all the necessary stakeholders, including Ministry of Health and other implementing partners as well as a technical consultant to draft the policy for the Ministry. Only at that point would it enter the more formal MoH policy making process.

These examples are interesting because they illustrate the 'blurring' of the responsibility for policy between the Ministry of Health and external partners. They demonstrate how the policy communities made up of PEPFAR implementers and Ministry of Health led to shared policy making and implementation, as does the secondment of staff by donor-funded organisations, such as the clinical care specialists to the PHO.

These examples also demonstrate the value of network analysis to better understand policy implementation processes in this context, since the 'blurring' of boundaries made joint decision-making implicit and not explicitly set out in policy documents or even Memorandum of Understandings between PEPFAR implementers and the Ministry of Health. This makes it difficult to pinpoint and fully understand these practices and their effect on policy implementation. An analysis of the different sources of power of these policy communities and their members explains how multiple capitals added to their influence, including the influence of different members. The

policy communities allowed PEPFAR implementers to retain their economic capital and use it to shape policy processes without transferring actual resources to the Ministry of Health, and gave them influence over policy implementation. Similarly, as a member of the forming of this policy community the Zambian Ministry of Health was able to benefit from the expertise and resources from the PEPFAR implementing organizations.

This picture is not restricted to Zambia. To 'roll out' social policy initiatives, international agencies often provide resources for policy consultation and formulation processes. Hein et al (2007) for example, documented how the early country proposals for the Global Fund were in many cases heavily influenced and developed by consultants from Geneva, paid for by the Global Fund, who facilitated the initial country coordination mechanisms and the proposal development. The example of 'blurring' observed during the research in Zambia and described in the literature, raise questions about their impact on sovereignty, responsibility for the provision of health care, and the ability to sustain services. Some of these implications for the policy process are explored below.

Economic capital and legal rational authority

> In terms of enhancing technical capacity of the clinics to respond to ART we are stronger [than the government] but you see the doctor or nurse cannot be punished because they do not follow our advice.
>
> *PEPFAR implementer, Copperbelt, Zambia describing his relation with the MoH*

From these findings for Zambia, the implementation of ART needed both economic capital and the rational- legal authority of the government. In terms of the day-to-day implementation, PEPFAR implementers still required the rational-legal authority of the state, pointing to the limitations of economic capital alone as a source of power.

National level representatives of external agencies supporting the roll-out were acutely aware that they required the permission and approval from the Permanent Secretary in the Ministry of Health before implementing activities. One clinician working for a PEPFAR implementer pointed out,

> Until the government decides to change something in terms of the treatment protocol we cannot do anything.

These statements highlight a clear need for some form of the legal-rational authority to create a framework within which economic capital can exert its power and influence. This need created a strong rationale for the formation of policy communities, which linked the economic capital of PEPFAR implementers to the rational authority of the state (in this case the MoH).

The data collected also suggest that the Zambian Ministry learned how best to use donors' economic capital to its advantage, and responded to the ways in which donors set their agenda, by allowing MoH policy processes to respond to donor priorities. The national treatment targets were an example of this:

> When you look at the breakdown of the targets, you will find it is what the partners have pledged... if they want to put 8000 people on treatment that means they have enough resources to sustain those people on treatment. So we adopt that as the target that is how the national target comes about.' 'They are very clear in terms of where they are going to be and where not... we [MoH] are called to discuss. They give us a list of which facilities they are going to support and where not. We pick those they do not go to and support there.
>
> *MoH official responsible for treatment roll-out*

This quote demonstrates how as a result of donors' economic capital, the speed of implementation and actual resources committed were determined by donors, mainly by the PEPFAR implementers. The Zambian Ministry of Health adapted its processes to make the most use of donor resources. While this flexible, opportunistic approach allowed Zambia to maximise resources in the short-term, it also resulted in a number

of overlapping policy regimes being implemented at the same time in an effort to ensure all resources were being used, with little consideration for longer-term planning or the impact of these funding sources. One Zambian clinician involved with the Global Fund's Country Coordinating Mechanism observed:

> If you are a beggar, it is difficult to say no, even if what you get is not so useful.

This analysis of the ART policy implementation processes in Zambia highlights how power based on economic capital, held by donors shaped the implementation of ART roll-out. Power was expressed through the direct provision of services, through the ability to extend and increase the quality of services, but also by having the ability to convene meetings and provide transport costs to actors to come together and address particular problems identified by the donors themselves. By being able to pay, actors with economic capital shaped the way in which a policy was implemented. In some cases the resourcing of policy processes or even of staff to implement the policy blurred the distinction between state and non state actors.

The evidence also shows the relation between power based on economic capital and that based on rational legal authority. One of the reasons for Zambia's successful rapid roll-out of ART despite health system's and resource constraints was the convergence of power rooted in different capitals. Donors were able to enter a policy environment in which the government with rational legal authority had created a context that was just waiting for someone with the economic capital to exercise their power. It was clearly the conversion of these two different types of power that allowed for the rapid expansion of the ART Programme between 2004-09. It demonstrates limitations of power based solely on economic capital, as this type of power still required the rational legal authority by the government and Ministry of Health to sanction policy, even where such policy had been shaped by donors. The policy

communities between actors representing these different 'capitals' started to impact on and change the policy implementation process in Zambia's ART roll-out, as PEPFAR implementers, such as ZPCT, could initiate and implement aspects of policy with limited engagement from the government.

Economic capital in South Africa

> While many of its neighbours have seen their health budgets dwarfed by foreign aid and their health policies in large measure determined by donor organizations, South Africa has sought to negotiate the tricky interface between self-help and dependence, partnership and paternalism. [...] While the country's response to the AIDS epidemic has been marred by controversy, confusion and policy inaction, it is also true that South Africa now boasts the world's largest public sector anti-retroviral treatment programme, one that is [largely] funded by government resources not donor funding.
>
> *Krista Johnson (2008), 'Between Self-Help and Dependence: Donor Funding and the Fight Against HIV/AIDS in South Africa'*

In South Africa much of the economic capital of actors in relation to ART roll-out was rooted in the same source as the rational legal authority of the national government, as the public sector treatment programme was almost entirely government funded. The independence of the South African government from donors, explored in a recent paper by Krista Johnson (2008) (above), meant that donors had comparatively less influence than in Zambia. This was confirmed by the limited number of actors who nominated donors as powerful in South Africa (Figure 6.1).[81]

In the Eastern Cape, there were numerous PEPFAR implementers supporting the treatment roll-out. However, their work was much less integrated into the public sector ART programme than in Zambia and during interviews they were rarely mentioned by public sector health workers and the provincial DoH as relevant to the public sector ART programme. At national level, the treasury official responsible for financing the

[81] However, this situation may be changing. Given the constraints on the health budget the Western Cape government has selected to 'allow' PEPFAR to fund a much greater number of HIV/AIDS programmes in 2010 than before (personal communication).

roll-out made it clear they did not even consider, or coordinate the financial resources provided by external funders in planning of the public sector roll-out.

However, external resources were vital before the government decided to roll-out ART itself. For example, the early adult treatment programmes by MSF both in Khayelitsha and in Lusikisiki were only possible because MSF had paid for the medication, as well as for extra support, such as expenses for the treatment counsellors and the TAC activities, seen as vital for the programmes' success. Similarly, further support for the adult ART Programme in the Western Cape ahead of government policy in Guguleto was provided by the Desmond Tutu Foundation. Several of the early large treatment programmes in South Africa were financed by PEPFAR. An example of this was the large treatment programme at Johannesburg Hospital, linked to the Wits School of Medicine. The qualitative findings from this study echo those of an analysis of funding sources of ART in 2005, which found that at the time almost half of all people receiving treatment were doing this at least partly through programmes supported by donor funding (Nattrass 2006).

External resources also provided economic capital to TAC and helped facilitate the issue network on treatment. One provincial level civil society organisation working on human rights summarized:

> To have influence, the way TAC has you need resources. TAC have money they can have the impact.

At the same time a senior member of TAC who highlighted the linkages with international actors, in particular emphasised their importance due to the funding they helped secure. Similarly to MSF's ability to finance the actual medication and to provide support at crucial moments in the roll-out, economic capital was significant in providing civil society with the power to implement and advocate.

Social capital

> The volume of the social capital possessed by a given agent thus depends on the size of network connections he can effectively mobilize and on the volume of capital (economic, cultural or symbolic) possessed in his own right by each of those to whom he is connected.
>
> *Pierre Bourdieu (1983), The Forms of Capital*

According to Bourdieu (1983) social capital refers to the number of linkages and networks or connections a person can draw upon, as set out in his definition above. For the purposes of this analysis, social capital was defined as membership of networks, groups or linkages to individual actors. In addition, all social mobilisation, or advocacy activities were defined as resulting from social capital as they were drawing on the connections and linkages individuals and their networks. Social capital was comparatively more important to ART implementation processes in South Africa than in Zambia.

Social capital in Zambia

Several HIV/AIDS activists from the national network of people living with HIV/AIDS, mentioned ties to advocates overseas had been important, not just in terms of the day-to-day implementation of their activities but as a way of 'energising' people by making them feel part of a larger, international solidarity movement.

In terms of advocacy and social mobilisation social capital seemed to have been most influential at district level: for example, one respondent described the two national networks of people living with HIV/AIDS as being able to ensure a renewed supply of reagents for the CD4 count machines by sending a letter to the hospital, which was copied to the Permanent Secretary of the Province. Others reported that advocacy had highlighted shortfalls in implementation that spurred the Ministry of Health into action.

This had been achieved through comments in the media. This type of advocacy by PLWHA built on both social and symbolic capital.

Another way in which actors' social capital allowed them to influence the implementation of ART roll-out was through membership of an organization or network, where actors would come together to increase their influence. For example the Zambian National AIDS Service Organisations Network (ZNAN) was described by respondents as particularly powerful because it was a membership organisation that could draw and act on behalf of all the different members. However these linkages also allowed the organisation to draw on or generate other forms of capital: such as knowledge of the issues on the ground and the ability to elevate such issues to policy level. ZNAN was an interesting example of how social capital, especially through networks, attracted or mobilised further capitals, as the organisation became one of the Global Fund principal recipients, providing it with significant economic capital.

Informal links between actors further strengthened networks as they increased information and access. For example, at the district level knowing about the availability of ART in some clinics provided an incentive to people to further extend or demand access where this was not previously available. As emerged from the analysis of networks in Zambia in the previous chapter, many actors reported liaising with someone at a higher level within their own organization, who would then raise the matter further, as power based on social capital. However, as these connections between actors were always linked to and remained within the hierarchy within which actors worked social capital did not appear to give actors' greater influence than their position within the MoH structure or organization. This was slightly different in the case of 'bridge actors' described, who facilitated links across the different sectors and were seen to have particular power, because of their ability to bring different networks or constituents together.

One particular link between actors that relates to the cultural capital and appeared particularly relevant in the implementation processes was the network of national trainers on ART, which consisted of doctors, nurses and laboratory technicians. Respondents frequently mentioned members of the team as influential, and able to share and generate information rapidly. However, as explored in the section on cultural capital this network, or community, was powerful mainly due to its cultural capital being formed by clinicians. These findings also confirm the ambiguity or overlap between some of Bourdieu's capitals noted in the literature (Smart 1993).

Social capital in South Africa

> When TAC leaders speak, people listen.
>
> *A national policymaker in South Africa*

How did the issue networks of the TAC, the AIDS Law Project, and 'activist clinicians' that emerged as so powerful in the findings of Chapter 6 exert such influence over government policy on anti-retrovirals? Many studies have examined the phenomenon of this movement (e.g. Schneider 2002), and most observers agree that the social mobilisation techniques of the TAC were crucial (Mbali 2005; Grebe 2008).

TAC was able to exercise power based on social capital in at least two ways. The first was upwards and outwards, pushing for policy change at the national level, through the linkages with clinicians and drawing on the networks of activism from the anti apartheid struggle. Part of the effectiveness of this advocacy had to do with the ways in which these networks linked to international civil society groups (Grebe 2008).
One provincial level actor said:

> They are a national organisation and they are internationally linked, they have access to the WHO and a lot of international donors.

A member of TAC's leadership added:

> If it was not for the international linkages we would not have the roll-out yet.

The second form of influence was downwards: TAC's ability to mobilise communities around treatment. The fact that TAC was a very large movement with more than a million members meant that at the district or sub-district level it was often considered the most powerful actor apart from the DoH. TAC mobilized communities, empowered these through its treatment literacy and activism, and thus changed the ways in which programmes were implemented. Actors at sub-district level described how TAC had pushed its way into the HAST meetings there due to its very effective advocacy, including its networks which allowed the organization to raise sub-district issues at national level, but was now considered part of the treatment programme there.

The large membership also provided TAC with power and influence through the knowledge of implementation that the organisation gained from being at the facility level. TAC was often better informed than the government about the actual status of implementation. As examined in the previous chapter, the organisation's structure and networks with other actors at national level meant that problems about local implementation could rapidly be elevated.

> When we have a problem we go to TAC and they resolve it.
>
> *Member of network of PLWHA, at sub-national level*

The fact that TAC members at sub-district level were often able to provoke a rapid reaction from national policymakers and the media in turn raised their influence and power amongst other actors at that level. In both sub-districts most actors interviewed

named TAC or its representatives as the most powerful actor next to the DoH. One representative at the sub-district office of another NGO reported that if they had a concern about any aspect of the treatment programme they would contact TAC.

The power of TAC and the issue network that operated between the organization, the AIDS Law Project, academics and clinicians, was mainly rooted in its ability to network across all levels. This enabled the flow of information, the knowledge of implementation in practice which gave their advocacy such authority. What made these networks possible were the historical, informal links between actors and the trust that these instilled amongst the activists.

> We already knew everyone who should be in the room, we all know each other and it was obvious who would be part of this.
>
> *Clinician, part of Khayelitsha treatment programme*
>
> We all knew each other from NAMDA.
>
> *Clinician, founding member of the JCSMF*

This provided crucial social capital to help with the implementation of ART roll-out, especially in the context of the government's objection to it. The networks that had developed between various different actors during the anti-apartheid movement meant that many of the people involved in defying the government on the issue of treatment already had trusted relationships established. The history of these relationships, meant actors could not only draw on social capital of the actual link but also the symbolic capital gained from the anti-apartheid movement and actors' cultural capital as clinicians.

Crucially, the social capital of TAC bringing all the different actors together allowed the different members of the issue networks, such as the ALP, MSF, TAC and the academic clinicians, to share their different sources of power, such as cultural and symbolic capital. Ultimately, this pooling of different sources of power made the South

African networks for ART so powerful. It also explains the value of a network within the policy process, as networks allow actors to join and share their different sources of power or 'capitals' and thus increase their overall power within the policy process.

One aspect which has emerged from the analysis of sources of power amongst the South African networks is the 'trust' between network members. Actors referred to trust as an important characteristic of networks and one that made networks stronger. Actors whose links dated back to the anti-apartheid struggle in particular referred to this notion of trust gained through collective action of defying government, and which made it easier to oppose Mbeki's government as well. Bourdieu writes about networks as exchange relationships which are endlessly reproduced between actors but does not refer to 'trust' explicitly, although some of his writing in relation to limitations of network membership appears to hint at similar ideas (Bourdieu 1983). However, findings from this research demonstrate that trust is an important function of social capital and a characteristic of networks that increases their power.

Having discussed the different capitals and rational-legal authority as sources of power to further explain actors' and their networks' influence in the policy implementation processes the analysis of data pointed to the need to further extend the typology of power developed in the study framework and applied for this thesis to account for a further 'source' of actor power not adequately captured in the typology of power used.

A missing capital

> 'I saw him being attacked by people, they were after him, he really showed that you can where there is a will'.
>
> *Clinician in the Western Cape, South Africa describing a provincial DoH official who had implemented the ART programme in advance of national policy*

The above analysis and discussion of findings highlights that a number of different capitals were required to influence policy implementation. In the analysis of interview data collected during the research, which focused on actors' perceptions of who was influential in the policy implementation process, and why actors were considered influential, a further source of power was identified, which had not been considered in the original typology of power developed for this study. This was *the agency* of particular actors which in many cases was an additional source of their power or influence.

Interviewees, when asked to explain why a person had been named powerful, responded with explanations that included notions that actors 'get things done', or they got 'personally involved'. This was not necessarily linked to the position of the individual actor nominated i.e. the rational legal authority of a person. At the time of conducting the research particular staff members at the Ministry of Health in Zambia were seen as more powerful or influential than others, not purely for their position (legal-rational authority), or the amount of information or knowledge of the issue (cultural capital), their control of resources (economic capital) or the linkages to informal and formal networks (social capital), but because they had taken it upon themselves to move things ahead and where known to be committed and personally driving policy.

For example, of the two 'most' respected clinicians in the responses to ART in Zambia, one was described as more influential than the other, not based on knowledge or economic capital, nor due their position in the hierarchy or their linkages to other actors, but purely for having taken more initiative, being 'more pushy' than the other.

At the facility level, in some cases particular clinicians were seen as especially powerful, nominated as more influential than their superiors, based on their personal commitment, interest and the effort they had invested in ensuring the scale up of ART.

In South Africa, the personal commitment by a small number of very well connected individuals was crucial. Their networks, knowledge, credentials and the funding they were able to attract, in some cases even the positions they held provided them with influence. They were recognised by many of the actors interviewed as exceptional and personally committed. At the provincial level in the Eastern Cape, one individual within the DoH was named by all actors, as having facilitated the establishment of the MSF treatment programme in Lusikisiki to go ahead. In some cases these individuals were directly compared to others who held similar or the same posts before or after them, where contextual factors were the same it was the personal quality or agency by the actor that was persistent and noted to have provided them with greater influence on the policy implementation process.

While other sources of power were required to allow them the ability to use this agency it was nonetheless an individual characteristic distinct from other sources of power. These two elements of requiring certain preconditions in which an individual can exert agency, is described in Sen's concept of agency freedom. Sen (1985) writes:

> A person's 'agency freedom' refers to what the person is free to do and achieve in pursuit of whatever goals or values he or she regards as important.

An example of agency was evident in the observations of actors who described the official from the Western Cape DoH responsible for the roll-out of ART in advance of national policy. Interviewees described the personal courage and agency of this individual but also recognized that his actions were possible only given the position he had within the health system, and the political constellation within the Western Cape that provided the freedom to use or exert agency. Sen's conception of agency freedom is particularly fitting as it captures both aspects of this power observed: agency and the freedom to exert it. The concept of agency freedom avoids the pitfall of the dichotomy of 'agency' and 'structure', which many discourses of power in the field of sociology have tended to concentrate on (Giddens 1984). It also captures the need for freedom to exert agency more explicitly than concepts such as charismatic power by Weber (1948) that also refers to individual's ability.

Conclusions

Based on the comparative analysis of power and its sources in the policy implementation processes relating to ART roll-out in Zambia and South Africa, certain characteristics about power in the policy process can be observed. Three conclusions are clear: context specificity, that power is rooted in multiple sources and the value of an analysis of power to understanding health policy processes.

Power is context-specific

It was possible to observe how sources of power, whether rational-legal, symbolic or cultural capital provided actors and their networks with the ability to influence policy implementation in both countries, and that these were strongly context specific. Perhaps the best example of the extent to which context is important was the description of the symbolic power of actors from the anti-apartheid struggle and how it affected this generation of policy makers and implementers in South Africa.

Another illustration of the importance of context was offered by the influence of donors in the ART roll-out in both countries. PEPFAR for example provided more resources to South Africa than to Zambia yet it was much less visible in the government treatment programme and its influence on government policy development and implementation was minimal compared to Zambia. Other, findings revealed the importance of the cultural and historic context. The lack of violent struggle in the countries' history created a context that meant Zambian civil society had little experience of conflict and aggressive advocacy with the government, and of forming networks between different groups of actors. The successful mobilisation by civil society, including clinicians, in South Africa on the other hand was related to the recent history of struggle in the country (Oppenheimer and Bayer 2007), including a sense that where policies are unjust, conflict and disobedience of policy is a legitimate and ethically right reaction.

In addition, certain capitals may be valued differently depending on their demand and supply within a specific context. This was evident from the influence PEPFAR implementers had on roll-out in Zambia where the government programme was dependent on their resources. The comparatively greater authority commanded by medical doctors or any person with a further or higher education in Zambia than in South Africa also reflected the limited access to education, and by extension cultural capital, there.

Power is rooted in more than one source

The analysis of findings from Zambia and South Africa demonstrates that often power of actors or organisations is not just rooted in one form of capital, rather different sources of capital add to the power of individuals and organisations.

In addition, once actors have power based on one capital it is easier to gain other forms of capital that add further to the influence or power of an actor. For example, the knowledge and cultural capital of the AIDS Law Project allowed the organisation to access power based on legal rational capital. In Zambia, it was much easier for clinicians to attract economic capital, or to have rational legal authority within the Ministry of Health structure. Table 7.1 below summarises some of the ways in which actors analysed within the policy implementation processes used their power rooted in one capital to mobilise another.

Table 7.1: Converting capitals

Original capital	Capital mobilized	Example
Symbolic capital	Social Capital	Networks of PLWHA.
Cultural capital	Economic capital	Doctors working for donors Knowledge attracting resources.
Cultural capital	Legal rational authority	Activists in South Africa forcing the government to implement or change policy.
Economic capital	Legal rational authority	PEPFAR and MoH in Zambia.
Social capital	Economic capital	TAC being able to attract large resources. Membership of an organization.
Social capital	Cultural capital	MSF generating evidence on ART roll-out through linkages between implementers and academic institutions.

There appeared to be a closer relationship between economic capital and legal rational authority (for example in terms of the policy communities between PEPFAR implementers and MoH clinicians in Zambia) and social and cultural capitals (for example TAC and academic clinicians in South Africa). This proximity of certain sources of power may be contextual, driven by a 'demand and supply', for example 'activist doctors' in South Africa, as well as what was scarce, given the limited supply of 'cultural capital' overall in Zambia, it may also have made it easier to gain access to economic capital there for those with medical knowledge and qualifications.

Having multiple sources of power, or capitals increases overall power.

Bringing together the economic capital of MSF, the cultural capital of the clinicians, with the social capital of the TAC, proved successful in pushing for the implementation of treatment roll-out in even the most remote areas of the Eastern Cape. Added to this was the symbolic capital of individual actors within these networks from their personal history in the anti-apartheid movement. Where the rational legal authority of the provincial office was added to this, as was the case in the Western Cape, the power of these networks was so great it allowed even the defiance of national policy. The findings from this analysis further explain the conclusions and insights gained in the previous chapter as they elucidate why networks with diverse membership and skills were so influential: they could draw on multiple sources of power that the different members offered.

Combining different capitals or sources of power which proved so important to overcoming the challenges to ART roll-out in both countries studied was identified in the analysis as a key function of networks and the reason why networks were so powerful in ART roll-out. This was the case for both the issue networks of activists, clinicians and academics in South Africa, as well as for the policy communities between PEPFAR implementers and MoH in Zambia, and for other networks discovered. Networks were powerful as they allowed actors to share their different sources of power. The increase in power through access to multiple capitals also helps explain why the symbolic capital of PLWHA alone was not enough to become powerful actors in the policy process. Where PLWHA came together with others, increasing social capital, gained knowledge and communicated (cultural capital) as in the case of TAC it became so powerful that it could affect changes to government policy on ART. This explains the contrast to NZP+ in Zambia which lacked these links.

Leadership

Leadership was an exercise of power linked to a range of different sources of power. For example, the Medical Director of ZPCT had been described as having given a lot of 'direction' based on his experience, whereas the Minister of Health and the President were often cited as having provided leadership, either due to their position or for having taken decisions and provided policy direction. Similarly, the 'doberman'-like early clinicians in South Africa were providing leadership at local level in implementing treatment roll-out there. These different examples cited as leadership were linked to different sources of power. In the case of the former 'direction' based on experience, this can be interpreted as power based on the cultural capital as explored. Whereas the source of power resulting from the leadership associated with high office is rooted in the symbolic power of that office. The President's leadership on AIDS in Zambia, for example, was powerful because he had spoken out as a president. Symbolic capital was often associated with political leadership where individuals have a great amount of symbolic power, either due to their office or for other reasons and by speaking out were able to influence policy and its implementation.

Power is essential to analyzing health policy implementation

The review of the literature in Chapter 2 found a limited number of studies focusing on and investigating power in the field of health policy analysis in low and middle income countries, highlighting a gap in the literature of health policy (Erasmus and Gilson 2008; Gilson and Raphaely 2008; Walt, Shiffman et al. 2008). This study adds new evidence on the different types and roles of power in policy implementation processes in two countries. It demonstrates the value of such analysis to understanding health policy processes.

The analysis of actors and their networks' sources of power has deepened the understanding of why they were able to influence and change policy and policy implementation. For example, analysis of findings revealed why networks were so powerful, not through the size of their membership but as they allow the sharing of different types of sources of power. This provides new insights into why issue networks of activists, clinicians, lawyers and academics were able to overturn government policy in South Africa.

The analysis of actors' and networks' sources of power also helped explain why networks formed in the first place. Policy communities in Zambia were the only way in which PEPFAR implementers and other donors could create the legal rational framework to implement their programmes, and they allowed the Zambian Ministry of Health to shape the way economic resources by PEPFAR implementers and others were used.

Analysis of these policy communities and their different sources of power provided a rationale for the community formation and also helped understand and clarify the 'joint' or 'blurred' decision-making between donors, specifically PEPFAR implementers and the Zambian government and state. This analysis demonstrates how PEPFAR implementers retained influence and power over the programs they supported and by extension the policy processes relating to ART roll-out. This level of influence over implementation and the development of new policy or policy adaptation from learning during implementation would not have been possible had they provided direct budget support or transfers to the Ministry of Health for these activities. It offers a possible explanation for and insight into the rationale followed by PEPFAR for providing support in such a way, rather than the general budget support provided by other funders.

CHAPTER 8 - SUMMARY AND CONCLUSIONS

Purpose and process

This study analysed health policy implementation processes relating to anti-retroviral treatment roll-out in two countries - Zambia and South Africa. The study aimed to identify factors that influence implementation of health policy by comparing national to district level implementation of policy guiding ART roll-out in Zambia and South Africa. This research examined the role of networks of actors in these processes, analysed the sources of power of actors and networks, and ways in which these are manifested throughout policy implementation processes. The study used a framework developed on the basis of a review of the literature (see Chapter 3).

Research aimed to understand the different factors affecting policy implementation, including those relating to communication, the structures through which policy was implemented and how it was resourced. The role of networks and their sources of power in the policy process was examined using a typology of power based on the literature drawing on theories of capital developed by Bourdieu (1983, 1986) and of rational legal authority by Weber (1948). These were some of the key dimensions for investigating implementation identified through the literature review. This typology of power and the framework shaped the tools for data collection and analysis of the different elements of treatment roll-out.

The study drew on a multi-methods approach that included insights from bottom –up and top down theories, with the aim to capture the implementation process from as many perspectives as possible. This way it was attempted to contribute to the body of knowledge as it relates to the research of policy implementation processes.

This chapter provides a synthesis of the main findings, based on the conclusions from the discussion chapters. It also discusses the limitations to the study and of the framework employed for the analysis. Following this synthesis the chapter expands on the contribution this study makes to the field of health policy analysis and the specific theories, models and frameworks from the literature it has drawn on. It also sets out the questions for further research in the area of network and implementation that emerged from the study findings.

A synthesis of major findings

The following section provides an overview of major findings from the each of the preceding discussion chapters of the thesis.

Implementation

Communication, structure, resourcing and the level of conflict surrounding a policy were confirmed as factors determining policy implementation. However, their relative influence and importance varied according to the context in which the policy was implemented. The high level of conflict surrounding the roll-out of ART and the way in which it was communicated influenced the perceptions of health care providers and the attention they gave to the treatment programme at sub-district level in South Africa, both of which affected implementation. At the same time the structure of the South African health system allowed committed individuals to implement ART roll-out from the bottom-up. In contrast, the structure of the Zambian health system and the commitment of the government meant that implementation was uncontentious and largely top-down. The lack of domestic resources for the programme meant it was influenced by external donors.

However, regardless of the context and contentiousness of a policy, findings from the district level in two countries demonstrated that even where a policy is implemented as intended its' execution varies across different localities. The same policy will be implemented through a variety of different 'modes' as implementers adapt or interpret guidelines during implementation and cope with constraints the policy environment imposes.

Findings and analysis confirmed the policy process as messy and iterative, underlining that implementation is neither the end point of the policy process nor that these processes fit into a distinct stages model. Research also confirmed the need to study sub-national processes to understand implementation.

Networks

The analysis of networks in these implementation processes provided a new narrative of ART implementation in both countries. Network types differed depending on, and seemed to respond to, the context in which they were formed. Issue networks of civil society combining activists and clinicians were crucial to rolling out treatment in South Africa, while epistemic and policy communities comprising clinicians and donors in Zambia helped overcome the countries' resources constraints. Networks were not static, where the policy context or process changed networks evolved with these changes, for example issue networks in South Africa changed to policy networks and communities to include government actors, once policy had developed. Networks extended the policy process in both countries to include a number of new and non-state actors, such as civil society organisations in South Africa and GHIs in Zambia. The analysis of links between actors also demonstrated the complexities of policy implementation processes, the many different layers of connections influencing implementation.

The structure and membership of networks was important to their role in the policy process. The varied skill sets of the members in South Africa's issue networks and their structure across different levels of the policy process from- health facility to national level - were crucial to their ability to change government policy. Similarly, network history and the origin of network ties were important to understanding their role. Especially in South Africa analysis of historic network ties from the anti-apartheid movement added insights as to how ART roll-out became possible there. These findings demonstrated the importance of trust, derived from a shared history or education, to the functioning of networks. Findings also highlighted the importance of individuals as facilitators of networks, as the examples of specific activists in South Africa and of 'bridge actors' in Zambia demonstrates.

Power

An analysis of networks' and actors' sources of power further explained their influence on policy implementation processes. Cultural capital gave power to clinicians in both countries, especially where these had experience of ART roll-out. The symbolic capital retained by activists from the anti-apartheid movement elucidated why the pilot programmes in South Africa's Western Cape and Eastern Cape provinces were able to go ahead despite opposition from the national Department of Health, but also why so many felt loyalty to President Mbeki despite disagreeing with his views on HIV. Analysing legal rational authority in Zambia explained the top-down roll-out given the centrally held power of the MoH. In South Africa, in contrast, the analysis helped understand how activists were able to exploit the ambiguity in provincial and national legal rational authority. This provided insight into the rationale of national financing mechanisms and the accreditation processes for ART as mechanisms through which the national government tried to assert its authority vis-a-vis the provinces. The

analysis of economic capital in Zambia demonstrated the level of influence of donors, in particular of PEPFAR implementers, in shaping implementation through financing of these processes despite the fact that these actors did not have rational legal authority over policy decision or implementation. However, it also demonstrated the limits of economic capital and the need for a policy framework created with the rational legal authority of the state. The relationship between these different sources of power explained why PEPFAR implementers and the Ministry of Health in Zambia formed policy communities, and why these were so powerful and important to the ART roll-out. Analysing sources of power also helped understand how the way in which PEPFAR provided its' funding for programmes allowed it to exert power over implementation processes. Social capital and the ability to mobilize it, manifested by the number of network connections between different actors, helped explain the power of TAC and its networks to affect policy change which eventually led to the introduction and implementation of a public sector ART programme in South Africa.

Most importantly findings demonstrated the importance of and the power gained from accessing multiple capitals. The analysis revealed how networks allow actors with different sources of power to share different types of capitals and, by combining their powers, to increase their influence even further. Findings thus contribute to our understanding of the importance of networks in the policy process. The study also analyses the relationship between different sources of capital and power of actors. Findings demonstrate that possession of one type of capital often facilitates access to other sources of influence. Analysing actors' sources of power demonstrated that 'leadership' a term often used to describe someone's power was rooted in many different sources of power. Finally testing the typology of power developed for this study demonstrated the power of individuals and the importance of their agency in exerting influence on policy processes, as a source of power not adequately captured

in the concepts of capitals used for this study. This allowed for revision and expansion of the study framework (discussed further below).

Limitations of the study

Methods

This study has several key limitations relating to its methods, choice of countries and policy process studied, and in relation to the frameworks used for the analysis. As discussed in the methods section, selection of one province and two districts or sub-districts in South Africa was purposive, and initial concern was in relation to transferability of data. However, data was triangulated through presentation of findings to and interaction with academics and programme implementers working in each country and differences proved less than originally imagined. Where differences between the study sites and others parts of the countries were observed this has been indicated throughout the thesis. While the comparative study allowed data from one country to be tested in another context (see section on comparative analysis below), this could have been extended if data from Zambia had been fully analysed before data collection began in South Africa, i.e. if the data collection had been timed differently.

A further limitation relates invariably to the choice of countries and transferability of findings to other contexts. However, the purposeful selection of Zambia and South Africa given their commonalities and difference as set out in Chapter 4, yielded rich and in-depth data as set out below. Given the constraints on time and resources for this study and the insights which this comparison of countries yielded, it seems unlikely that a different, feasible comparison could have provided greater insights.

ART exceptionalism – how transferable are findings?

As described in Chapter 5, the policy processes relating to roll-out of ART were exceptional in both countries although for different reasons. This has meant that some of the characteristics of implementation, such as the strong activist networks in South Africa, could arguably have been described as specific to this policy process. Similarly, the interests and resources of PEPFAR and the Global Fund that led to policy communities in Zambia were specific to processes of rolling out ART. According to actors interviewed it differed from other health policy processes that had received less attention of external actors. The analysis and presentation of findings has addressed this in the following way. Firstly, the thesis has at all times remained precise about the transferability of data and insights gained. While the donor interest and engagement in ART may make this different to some other health policies it provides an example of and illuminates policy processes and programmes that have received support and attention by external actors. This makes these findings highly relevant to many social policy processes in low and middle income countries that are donor funded and or initiated. In addition, the discussions in previous chapters have retained a clear distinction between the specific and the broader insights for health policy processes and the models, theories and frameworks of the policy process which this study has engaged with. For example, Chapter 6 provides a detailed analysis of the specificities of networks identified in the roll-out of treatment in Zambia and South Africa while at the same time highlighting lessons learnt for the wider role of networks in health policy processes. Finally, this summary and conclusion chapter extrapolates the insights from study findings for the wider field of health policy analysis.

Using multiple frameworks

One of the key limitations of this study has also been its greatest strength. The multi-methods framework developed for this study combines a number of analytical concepts of implementation, networks, and sources of power. This approach has allowed for this thesis to present a comprehensive account of ART roll-out in Zambia and South Africa, with different layers of analysis allowing a new understanding using a variety of analytical lenses. A challenge resulting from this application of multiple lenses has been in the analysis and presentation of findings as these could have been organised in many different ways. The final thesis presented here heuristically structures the analysis of findings and conclusions in a way that aimed to demonstrate both the value of each conceptual framework applied, as well as of their combination. In addition, the thesis structure retains some of narrative of ART roll-out in both countries. Despite these challenges the breadth of analytical tools applied has been of great value to understanding the differences in the implementation processes of ART roll-out in Zambia and South Africa and to providing new insights into their applicability for health policy analysis.

The study's contribution to new knowledge and health policy analysis

The findings from this study have provided new insights to the field of implementation studies, especially national - to sub-national level implementation, on the role of networks in the policy process and on network analysis as part of the discipline of health policy analysis. Analysis and findings have further added knowledge on how actor and network power shape health policy processes. Developing and testing the framework of power based on theories of Bourdieu and Weber has provided insight into how these different sources of power shape the policy process but also extended the understanding of these concepts by empirically applying them.

This thesis adds to a small body of recent work focusing specifically on GHIs impact on health systems and services at national and sub-national level (Ndubani 2008; Biesma, Brugha et al. 2009; MaximisingPositiveSynergies 2009). However, it is the only study that has explored their effects on the policy process at sub-national level rather than on services provision.

Each chapter has presented the specific findings that the analysis of data offered in relation to policy implementation processes, to the role of networks and to how sources of power helped explain networks and actors roles in policy implementation. The following section outlines and expands on the key contributions to the field of health policy analysis. It also draws attention to areas where the research findings presented her highlight areas where further research is needed.

Top down and bottom up implementation is central to the analysis of the policy process.

In both countries top-down and bottom-up perspectives were important to understanding the implementation process, although implementation was much more top-down in Zambia than in South Africa. This study therefore confirmed the importance of using both perspectives to examine implementation processes (Sabatier 1997; Hill and Hupe 2002). It demonstrated the importance of focusing on the sub-national level to understand implementation, as different models for accessing treatment within the same geographic area only became visible through the focus on district level implementation.

This study focused on the implementation of policies determining the scale-up of ART in the public sector of each country. Interviews and other data collection focused on

the actual challenges encountered in ART roll-out. However, despite this focus the iterative and muddled nature of policy processes closely linking implementation to policy change, further policy development and agenda-setting, emerged clearly. These findings confirmed the central role of implementation within the policy process (Sabatier 1997) and the limitations of the stages heuristic and rational theories (Simon 1961) in capturing the messy reality of the policy process. The study reiterates how the analysis of the policy process relies on understanding the dynamics of implementation and the role of implementation processes in shaping policy outcomes (Walt 1994, Walt and Gilson 1994), as demonstrated for example by findings of how communication of a policy impacted on patients in South Africa.

Further research on implementation in low and middle income countries

Further research is needed to better understand how implementation processes intersect with agenda setting, policy formulation and policy change. Given the importance of implementation to the policy process overall – as underlined by the study findings – further enquiry is needed.

In addition, the need for greater knowledge of implementation processes in low and middle income countries remains. Research findings from this study found that although the approaches for implementation developed based on studies conducted in the global North (mainly the US, UK and the Netherlands) worked well and are applicable it would advance the field of health policy in low and middle income countries to develop approaches and theories based on empirical studies from these countries.

The contribution of network analysis

Network analysis provided particularly valuable insights into understanding the link between policy implementation and other stages of the policy process, which other analytical approaches with a focus on individuals are unable to offer. The analysis of networks in South Africa revealed their importance in linking implementation to agenda-setting and policy change. In Zambia, networks were also crucial to the continuous policy development and learning from implementation. However, the insights and value of network analysis were not limited to understanding the 'position' of implementation in the overall policy process.

Networks also helped to better understand implementation between different levels and stages of the policy process, as networks evolved to fit different phases of the policy process in both countries. From the analysis of data it was evident that in many cases implementation, in particular across levels, was dependent on or shaped by networks. Epistemic and policy communities, and issue and policy networks were often vital to explaining how policy was communicated and resourced across these different levels. Without an analysis of networks this would not have been evident. In many ways networks served as a 'marker' which highlighted parts of the policy process which would have otherwise been invisible. The framework for this study revived the insight offered by some of the early bottom-up theorists of implementation such as (Hjern and Porter 1981) who examined the role of organisational networks as an analytical tool to investigate implementation. Study findings confirmed the relevance of network analysis to understanding policy implementation processes. The insights provided by the network analysis here demonstrate its value, including for a prospective policy analysis aiming to ascertain possible challenges or patterns in implementation. For example, based on the findings from Zambia, anyone developing a strategy to introduce a new health policy should base this on targeting 'bridge actors'

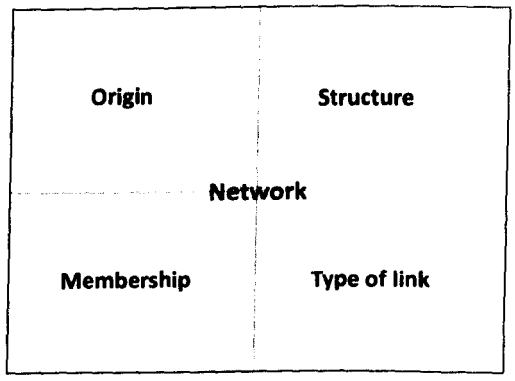
identified to gain broad support and ensure agreement of the core policy community of clinicians.

Network analysis has provided new insights on the role of new, non-state actors in global health portrayed in the literature (Lee, Koivusalo et al. 2009; Walt, Spicer et al. 2009) and how they integrate into the policy process. The analysis confirmed that networks expanded the policy process to include new actors (Reineke 1999) and the increased importance of networks in the policy process. In particular, the analysis of networks in policy implementation processes in this study has provided new insights on *how* non-state actors were integrated into or engaged with policy processes. Analysing the networks and communities formed between state and non - state actors helped understand how these actors participated, and the extent of their engagement in implementation. Network analysis helped in particular to explain the changing role of external and new actors in these policy processes. Identifying the policy communities between donors - mainly PEPFAR implementers - and the Ministry of Health in Zambia helped to conceptualise their practice, its effects and to understand better how they influence implementation at sub-national level. Network analysis in this case allowed for analysis of the impact of pivotal changes in global health at sub-national level. This is an area - the impact of global health actors on national and sub-national implementation of disease programmes - where empirical evidence has recently started to emerge but so far with limited frameworks for analysis. Studies have focused on the effects on health systems, specific aspects of health systems and services, such as supply chain management or human resources, or on the economic analysis of additional funding (Ooman, Bernstein et al. 2007; Biesma, Brugha et al. 2009; MaximisingPositiveSynergies 2009). Network analysis as conducted here provides one new approach to explaining and conceptualising this impact. This use of networks as an analytical tool echoes Marsh's (1998) general insight that network analysis is of increasing importance in the era of globalisation.

A framework for further network research

Network structure (density and integration), membership, the origins of network ties and the trust between actors that their links with one another enabled emerged as important in shaping the role of networks in the policy process. These characteristics helped explain their role in and ability to influence the policy implementation processes of ART roll-out. The characteristics identified as important to networks in this study provide a framework to conceptualise their' role in the policy process, as set out in the figure below.

Figure 8.1: Network framework



Given the overall study focus on analysing policy implementation processes and the limit to study remit and time, this thesis did not have the scope to further interrogate and test how each characteristic identified determined networks engagement in the policy process. However, these characteristics provide a framework for further research on the relationship between specific network characteristics and their ability to change or influence policy processes. This study and the insights gained represent a first contribution to better understanding of the role of networks in policy processes.

Research focused on members' characteristics, their skills and why they were influential it did not examine actors' motivations for joining networks, how these may influence their position within the network or shape the role of networks in the policy processes. This is an area of further enquiry that would yield further insight and findings on networks' role in policy implementation processes.

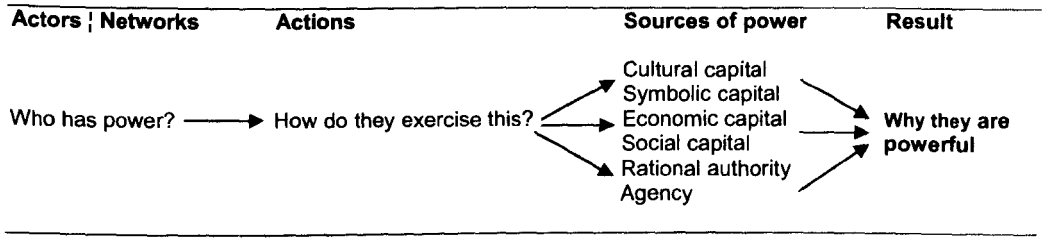
Researching power to understand health policy

This study confirms the importance of actors' and networks' power as central to health policy processes (Walt, Shiffman et al. 2008) and as an important unit for analysis (Erasmus and Gilson 2008). The thesis provides insights on how actors' and networks' sources of power allow them to influence policy implementation processes by developing and testing a typology of power. Analysis of these sources of power helped explain why networks and actors were powerful, for example in the case of civil society networks in South Africa. It also helped to further analyse aspects of implementation processes studied that would have otherwise remained unclear, such as how the political and health system's structure helped implementation ahead of government policy in South Africa, which was only understandable following the analysis of rational legal authority. The rationale behind policy communities between PEPFAR implementers and the Zambian Ministry of Health only fully emerged through the analysis that showed the relationship between power based on rational legal authority and on economic capital.

Applying this typology to two country contexts has provided further insights into the concepts studied and their interpretation in practice. This includes, for example, insights from study data of how cultural capital includes the ability to train and pass knowledge and education on. The centrality of agency – neglected in the original framework developed before the field work – was the most significant addition to

emerge from the collection and analysis of data. This framework developed and tested for this study, replicated here below, offers one way to analyse power of actors and networks in health policy.

Figure 8.2 A framework for analysing power in health policy processes



Researching power also held some lessons on how to investigate it in health policy processes. It confirmed the importance of observation described by Erasmus and Gilson (2008), but also of understanding contextual historical factors. For example power relations in South Africa were impossible to understand without the recent history of apartheid, while in Zambia the hierarchical nature of the policy process influenced actors' responses on power. To fully understand power, interview questions therefore at times tried to ascertain actor power indirectly, for example asking actors who they turned to overcome challenges and problems in their work.

Applying a multiple lens framework

The application of each of these frameworks helped analyse policy implementation processes of ART roll-out, and provided further insight on the concepts, theories and frameworks used, as set out above. However the frameworks also added to analysis through their joint application, in particular the combination of networks and analysis of their sources of power helped understand the policy implementation process to an extent that each framework was not able to when applied in isolation, confirming the value of a multiple lens framework observed by other empirical health policy analyses (Cairney 2007).

The value of a comparative policy analysis

The comparative analysis of policy implementation, of the role of networks and their sources of power within these processes, has been one of the main study strengths. The comparative analysis of these different contexts has provided additional insights in a number of ways.

Two case studies simply provided more data, and more examples that the analysis could draw on, which allowed for stronger conclusions and findings to be corroborated in two country settings, which makes study findings more transferable. For example findings on the role of individuals' importance as facilitators and bridge actors for networks were stronger as this emerged clearly from data in both countries, as were the findings on the power of clinicians due to the cultural capital from their education.

The comparative analysis provided further insights on theory, models and frameworks as they often showed variations of the same concepts when applied in different settings. For example, while communication was important to how policy was implemented in both countries, policy was communicated very differently – politicised and negative in South Africa, and more positive in Zambia – and as a result had very different effects on the processes studied. Study findings show that sources of power depended on context and to an extent on the demand and supply of a specific capital were only evident from the analysis of the different influence of clinicians (cultural capital) across the two countries, and the different influence of donors (economic capital). The different findings from the two countries on networks, power and on different elements of implementation were not in conflict, i.e. findings from one country did not invalidate the insights gained from findings in another but provided a richer

understanding of the concepts applied, including of challenges encountered in their application.

Better understanding of contextual factors

Perhaps the greatest benefit of the comparative analysis, which made many of the study findings in relation to theories and frameworks used possible, was the ability to gauge contextual factors. The comparative analysis of implementation processes in two countries made it possible to identify certain aspects of networks, implementation and power, and confirm their importance to understanding these processes. Factors such as communication and structure for implementation, and membership and origin of networks, were identified as important in both countries, however, their relative importance varied according to context. This context specificity has significant implications for the applicability of theories, frameworks and models in health policy analysis. It means that while insights from the literature hold true, for example Goggin's insight on communication and implementation (Lester and Goggin 1998), these need to adjust for and be flexible depending on the local context. Regardless of the framework used, findings from the analysis of networks, of implementation and of actors' and networks' sources of power all demonstrated the importance of context. This confirms insights from theories of the health policy process including Walt and Gilson (1994), theories of implementation, such as by Hogwood and Gunn (1984), as well as findings from other comparative empirical studies that have examined the role of contextual factors in policy implementation (Gilson, Doherty et al. 2003; Allen and Heald 2004; Parkhurst and Lush 2004). It also confirms the reflections on the applicability of policy analysis frameworks in the context of low and middle income countries by (Walt, Shiffman et al. 2008).

These findings are also relevant for policymakers. Given the strong evidence of how important specific context is to all aspects of the implementation process, context needs to be considered and analysed prior to implementation and policies and programmes need to be tailored accordingly. This is of particular relevance where specific interventions are initiated and designed at global level. This study focused on national and sub-national policy processes. However, the implementation processes studied - ART roll-out - were supported by international actors such as PEPFAR and the Global Fund whose programmes are governed by *one* framework or strategy mainly determined at the global level. The comparative study of these actors in two different countries showed how the implementation of their programmes differed in their effects in Zambia and South Africa as a result of the specific policy contexts. For example, the strong government commitment to rolling out ART paired with the great need for resources by the Zambian government meant that international actors such as PEPFAR and the Global Fund could rapidly roll-out their programmes and have significant influence over implementation. Similarly, in South Africa the lack of government dependence on donor funding and its reluctance to implement the ART programme meant the same actors had less influence, access and needed to form different partnerships for their programme. These findings indicate the need for global initiatives to tailor programmes to country contexts.

Health policy analysis in the era of global health

This thesis set out to better understand policy implementation processes of ART roll-out in two African countries. To contribute new knowledge on health policy implementation, including why seemingly inexplicable differences occur between countries and between policy intention and practice. When this study was conceived and designed Zambia's treatment roll-out was outpacing that of South Africa, a country with more resources and greater health systems capacity. The findings presented here

explain the complexities of these processes that led to these variations. They demonstrate the importance of analysing policy implementation processes to understand why health initiatives succeed and why they fail. Not only as implementation is an integral part of the overall policy process, as this study underlines, but it varies depending on many of the factors discussed in this thesis: structure, communication, resources, conflict, networks, the power of different actors and context.

Perhaps the most compelling part of the findings concerns the role of global health actors in these processes. This study provides new insights on their role and has bearing on many current disease specific initiatives that aim to support implementation of health policies and programmes around the world. The analysis of network types conducted has provided new understanding of how changes in global health, including the increase in global health actors, impact on national and sub-national policy implementation processes. Applying the methodological lens of network analysis demonstrated the repercussions of changes in global health architecture on implementation of health services at national and sub-national level, where policy communities between those actors and the state change government practice. Further research including at sub-national levels is needed to understand how changes in process due to new actors in global health analysed here affect health outcomes and specific aspects of the health system.

This study has demonstrated that further health policy analysis with a focus on implementation, on power and on networks of actors is needed to gain additional insight into these complex processes. A greater body of knowledge in this field is critical to successful planning and implementation of health programmes in low and middle income countries.

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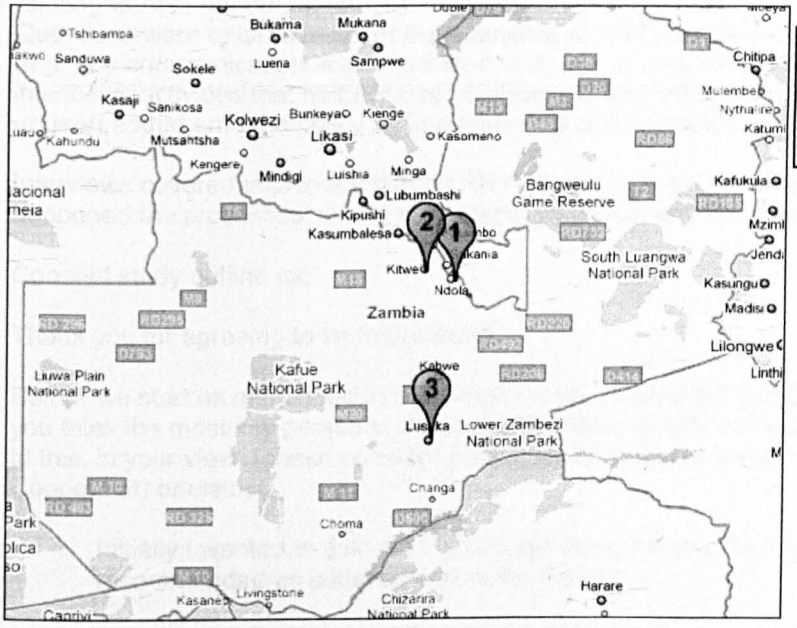
Annexes

Annex 1 - Map of study sites in both countries

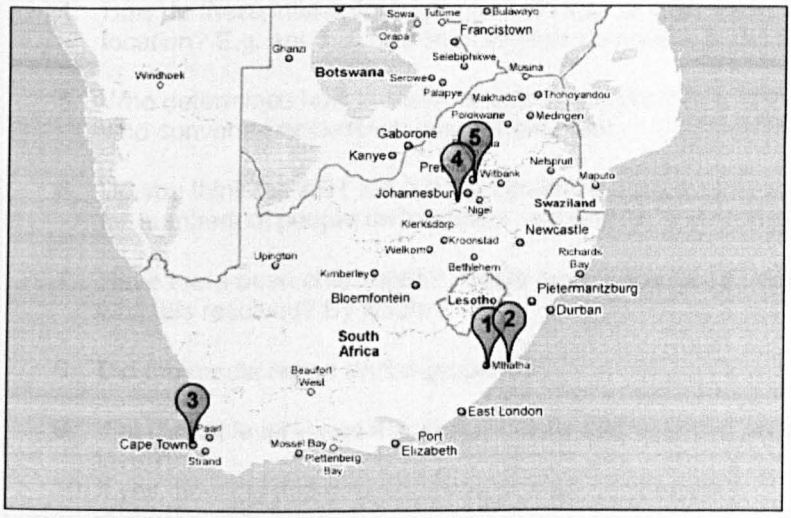
Map of Zambia



1. Ndola study district
2. Kitwe study district
3. Lusaka, capital

Source: scribblemaps.com

Map of South Africa



1. Mthata, sub-district KSD
2. Quakeni subdistrict
3. Cape Town
4. Johannesburg
5. Pretoria

Source: scribblemaps.com

Annex 2 - Interview guide

Initial key informant interviews in each country to define the exact policy documents relating to ART roll-out, to understand in case there was any roll-out before the Questions were tailored to cover the elements of ART roll-out outlined in the policy (e.g. any communication activities linked to it) and to understand better during the interviews activities that had not been foreseen in the policy but might have changed or been added onto the policy by implementers or other actors.

Interviews covered implementation of ART roll-out to help me understand how it happened the processes, where challenges emerged, and how these were resolved.

Consent study outline etc

Thank you for agreeing to be interviewed

Before we start as mentioned in my e-mail I was wondering if you could tell me who you think the most key people in the implementation of ART roll-out are. Who is crucial to this, in your view. Please consider people at all levels, national, province (in Copperbelt) or district.

1. Initially I wanted to ask you if you could describe your role a bit more. You were recommended as a key person in the roll-out.

2. How long have you been in this post? Education?
   Are you part of other networks, or commissions relating to HIV?

3. Who are the main people you liaise with in your work relating to ART roll-out?

4. How do these interactions happen? (Probe: where? What body, process, location? E.g. are they at district level or do people travel to province)

5. Who determines how these interactions happen? (e.g. if there is committee, who convenes determines membership etc)

6. Do you think the ART roll-out implementation process is working well? [probe for numbers of people on treatment, adherence and mortality]

7. Have there been challenges? Where have these been? What happened? How was this resolved? By whom?

8. Did the media report on the problem?

9. If at district level – was this problem ever addressed at provincial or national level?
10. If yes, how did that happen, through what mechanism?

Structures

11. Who is responsible in the health system at national, district, provincial level (ask as appropriate). What is the structure.

12. Who do you report to?

13. Is there a committee monitoring this? If so who does this include?

14. Has anything changed as a result of this M+E

15. If not, in what ways do you think civil society/donors impact on implementation?

16. Is this the same structure as for other health issues, or is it HIV specific? If different, in what ways, and do you know why?

17. If it has not come up already: How do you report challenges, problems, complaints? To whom?

Funding

18. Who funds your activities (relating to ART roll-out)? Who provides your medication, resources? (Depends on the person that I am asking)

19. Probe is this funding provided externally and only channeled to you, if so does the funder have influence?

20. Who do you report to? (DoH? And directly to funder?)

21. What is the funding for (extra activities, human resources, buildings etc)

22. Are there specific things you feel that you currently do not have the resources for that you think help better support the roll-out? (If so what?)

23. Is there a timeframe for the resources? i.e. are they likely to run out at some point in time?

Communication

24. If you think back can I ask when did you first hear about ART roll-out?

25. In your province/district/health facility how was the policy announced to staff in the health service

26. Was there any training relating to the introduction of ART? What kind? By whom?

27. How was it announced to general public?

28. By whom?

29. Were there posters, radio announcements, other media coverage – church, NGOs, indigenous or exogenous communication.

Social Mobilisation

30. Was there any advocacy around it? Protests? What were they about? By whom?

31. Did they change anything in terms of how the policy was rolled out?

32. If you feel that this policy had an impact, how? Was there a process or mechanism? What happened?

Networks

33. Are there support groups, networks of PLWHA? If so who funds them, who runs them, when did they begin?

34. If in district: Have they ever raised an issue or influenced policy at national level? Are they linked to a national or international structure? Has this helped in bringing these issues onto the agenda? Do you know how their membership is determined?

35. I would like to return a little to the people you mentioned at the beginning. Could I ask you to provide a score for each person you nominated with one being the least and five the highest power score?

36. Why do you consider these people particularly powerful? What is their position, their role?

37. Why do you consider... particularly influential, why had he/she power?

38. Do you know all of them personally? (check for each one individually)

39. How do you know them? Have you worked together in the past? (check for each one individually)

40. Where do you liaise?

41. Would you recommend anyone else it would be good to talk to here?

As mentioned at the beginning, I am looking in part at power and influence of different actors and networks and am asking people for nominations, just as I have you, to get a complete list of influential actors. So I might have some more follow-up questions once I have completed the first round of interviews with all actors. So would it be ok for me to contact you again for a follow-up interview in x weeks time?

Thanks, do you have any further questions for me at this point?

Annex 3 - Information Sheet

Implementation of ART roll-out in Zambia and South Africa
Principal Investigator: Johanna Hanefeld

Contact Details: **London School of Hygiene and Tropical Medicine;**
Keppel Street;
London WC 1; UK
Johanna.hanefeld@lshtm.ac.uk

In Zambia: **C/O ZAMBART Project**
UTH, Ridgeway Campus
Lusaka
Cell phone: 097 8319752

Key Informant Interviews

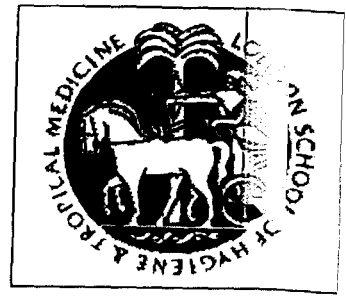
Information to Participant

My name is Johanna Hanefeld, I am a researcher from the London School of Hygiene and Tropical Medicine (LSHTM). This interview is part of my PhD research, which focuses on the policy implementation process relating to ART roll-out in Zambia and South Africa. It aims to better understand factors that support or hinder policy implementation at district level. I am interviewing policymakers and implementers at national, provincial and district level in both countries. This study is subject to the approval and oversight of the LSHTM's ethics committee and the ethics committees of the University of Zambia and the relevant academic bodies in South Africa.

I would very much appreciate your participation in this study. I would like to interview you to learn more about your observations of how ART roll-out has been implemented. The information you provide is strictly confidential and any views given will not be attributed or identifiable to you. The interview will take approximately one hour.

No quotations or other results arising from your participation in the study will be included, even anonymously, in reports about the study without your agreement. Participation is entirely voluntary and you do not have to answer any questions that you feel you do not want to. Also you may stop the interview at any time without having to give a reason. However, I hope that you will participate in this interview as your views are vital to this research. I may wish to quote or refer to your opinions anonymously. If you do not want to be quoted anonymously, please let me know. I might also wish to contact you again to follow-up on our discussion and observations. Please let me know if you do not want to be contacted again after the interview.

The study findings will be presented in my PhD thesis and submitted for peer-reviewed academic publications. Key findings may also be presented at academic conferences. If you are interested I will e-mail you a summary of key findings when they become available.



Annex 4 - Consent Form

Implementation of ART roll-out in Zambia and South Africa

Consent Form

Contact of Principal Investigator: Johanna Hanefeld
HPU, London School of Hygiene and Tropical Medicine; London WC1; UK
Johanna.Hanefeld@lshtm.ac.uk

In Zambia: c/o ZAMBART Project
Ridgeway Campus
University of Zambia
LUSAKA
Cell: 097 8319752

I AGREE TO BE INTERVIEWED yes / no

I DO/ DO NOT AGREE TO ANY QUOTATIONS OR ANY RESULTS ARISING FROM MY PARTICIPATON IN THE STUDY BEING INCLUDED, ANONYMOUSLY IN ANY REPORT RESULTING FROM IT. **[PLEASE CROSS OUT AS APPROPRIATE]**

I AGREE TO THE INTERVIEW BEING RECORDED yes/no

I AGREE TO BEING CONTACTED yes/no
FOR FOLLOW –UP

"I have understood the verbal explanation concerning this study and I understand what will be required of me and what will happen to me if I take part in it. My questions concerning this study have been answered by the researcher. I understand that at any time I may withdraw from this study without giving a reason. I agree to take part in this study."

Signature:

_____

Date:

_____

Position:

_____

Organisation:

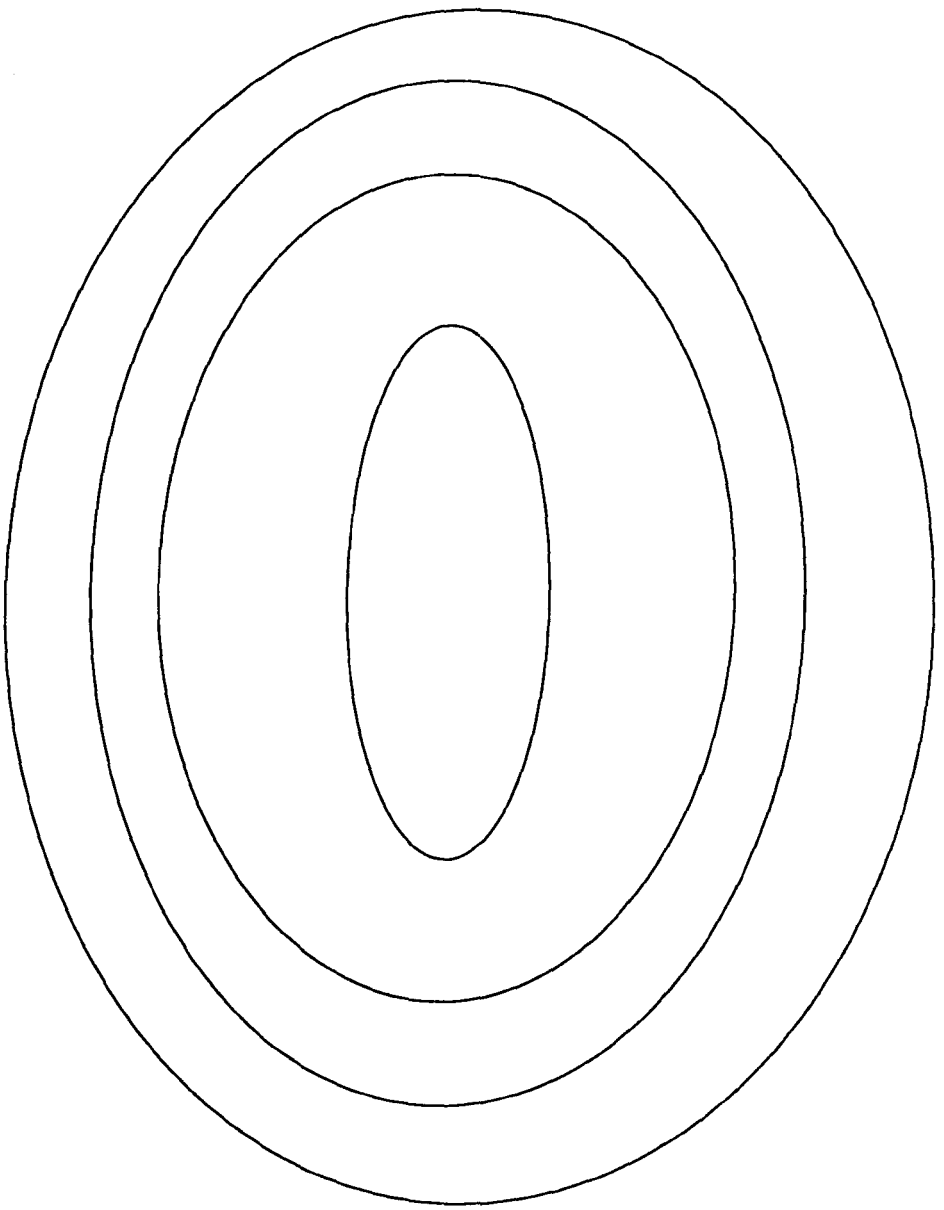
_____

Signature of the interviewer:

_____

Annex 5 – Network diagram used in Zambia

Adapted from Sandra Wallman (1984) Eight London Households Tavistock Publications: London.



Annex 6 - Further explanation on Figure 6.1 and 6.2 on power

Further explanation on Figure 6.1 and 6.2 of actor's nominated as powerful in Zambia and South Africa in Chapter 6.

As set out in the methods section Chapter 3, and in Chapter 6 actors interviewed were asked to score others individuals and organizations they considered as powerful during the interview process. Interviewees were then further questioned about their reasons and rationale for nominating individuals. To use and interpret the data and maintain anonymity actors were grouped according to the following categories: 'clinicians', 'government', 'activist', 'NGO' or 'donor' (which was here taken to include multilateral organizations). Where applicable actors were classified as falling into multiple categories for example, a clinician working for an NGO would be classified as both 'NGO' and 'clinician'.

In South Africa the category of activist was called activist/academic, as many of the 'activists' interviewed there were academics who were not clinicians, but for example health economists or social scientists, compared to none in Zambia. It therefore felt important to acknowledge this. These links between academics and activists were then further examined in Chapter 7. The tables in this annex below, provide the numerical value for each of the category and were used to generate the Figure 6.1 and 6.2 respectively.

Again as discussed in Chapter 3 in some cases actors refused to nominate or to score individuals and actors nominated a varying number of actors. Overall, asking interviewees' to quantify perceptions of who they considered more or less powerful yielded rich interview data and was useful as a 'tool' to enable a more detailed conversation about actors power. However, given the variations in responses these 'power scores' were used more of as a guide to give a sense of the overall power that these different groups of actors were perceived to have. Findings were triangulated with and confirmed by the actual content analysis of interview data, but the author acknowledges the limitations of this method and wishes to reiterate that the overall sense of who was powerful presented in the Figures is embedded and supported by the qualitative analysis.

Given these limitations further, more detailed and complex analysis and use of the 'power score' were not deemed feasible following initial analysis and consultation with the study advisors.

Actors nominated as powerful in South Africa

Clinician	50
Government	44
Activist/academic	38
NGO	50
Donor (includes multilateral)	8

Actors nominated as powerful in Zambia

Clinicians	165
Government	160
Activist	15
NGO	36
Donor (includes multilateral)	70

Annex 7 -Analysis of power in the interviews

Who has Power	**How is it exercised/forms**	**Source of power/definitions or 'expressions'**
Doctors Pharmacists Legal experts Treatment educators	Leadership: Influence Direction 'Instrumental' Political will Evidence; Publications Technical skills required to make implementation possible Having access to people otherwise barred Having knowledge to access other capitals	**Cultural capital** • Education • Having information • Experience relevant to the issue i.e. ART roll-out. • Seniority (e.g. someone who has been around for a long time) • Dedication • Authority • To train or teach someone
Church actors Anti-apartheid actors Presidents (or very high office) PLWHA Traditional Healers	[leadership as above] Having access to people Being able to start a process or 'open a door' Ability to influence people's opinion 'being listened to' Being able to defy Creating space politically	**Symbolic capital** • Power linked to office, standing. E.g. high office, or religious or ethical authority. • First lady, • Traditional healers • Religion, CHAZ • Ethical/Moral high ground • PLWHA • Charisma • Anti-apartheid struggle
Government State actors (DoH, MoH)	Implementation of policy through a	**Legal authority** Anything to do with the state hierarchy or

The courts The institutions Anyone who can access these	Policy documents Legislation Memos Guidelines Reports Decision-making Using the Court to get ARVs introduced	the outline of policy. • Government position • Policy requirement • Legal requirements • Reporting to/line managers • In SA position in ANC •
Individuals	Initiative/doing something Taking a decision	**Agency** 'just doing it' 'someone has power because they can do it'
Donors Civil servants linked to donors who act as the conduit for funding Activists and NGOs that can attract funding	Levers of resources • Providing resources • Convening a meeting through funding • Creating space (economically) • Increasing quality of services through resources • Being able to do things as resources are there • Being able to determine policy development or implementation due to having the resources to 'make things happen'	**Economic capital**
Civil society, Activist doctors Professional networks and associations Networks of people living	Networking • Linkages in terms of information flow • Policy suggestions	**Social Capital** Networks Formal Informal

People within an organisation Linkages to the media	• Advocacy • Social mobilisation • Linkages within your own organisations from district to national (vertical) • Linkages of actor across levels outside of one organisation e.g. national group of trainers (vertical) • Linkages in terms of membership of a policy fora such as DATF, or representation at meetings such as technical working groups (horizontal) • Linkages informal and political party ones (ANC)	Linkages between people Trust

Annex 8 - List of actors interviewed in Zambia

Summary:
National level 40 interviews
Provincial level 21 interviews [Copperbelt Province]
District level 27 interviews [Kitwe and Ndola]
89 interviews in total

One interview at district level was excluded as it seemed of no relevance to the study.

Category	Date	Which level
Donor	September 12th 2007	Provincial
NGO	September 13th 2007	Provincial
Clinician	September 13th 2007	District
Clinician	September 14th 2007	Provincial and national
Activist	September 14th 2007	District
Ministry of Health Clinician	September 14th 2007	District
Ministry of Health Clinician	September 19th 2007	District Province
Ministry of Health Clinician	September 19th 2007	District
Adherence Counselor	September 19th 2007	District
Clinician	September 19th 2007	District
NAC	September 19th 2007	District
NGO	September 19th 2007	District
MoH Clinician	September 20th	District
MoH Clinician	September 20th 2007	District
Clinician	September 20th 2007	Province/private
Activist	September 24th 2007	Province
NGO	September 21st 2007	District
NGO	September 21st 2007	District
NGO	September 25th 2007	Province
Clinician PEPFAR implementer	September 25th 2007	Province
MoH	September 26th	District

Clinician	2007	
MoH Clinician	September 27th 2007	District
NGO	September 27th 2007	District
NGO	September 27th 2007	Province
MoH Clinician	September 27th 2007	District
NAC	September 28, 2007	Province
NGO	September 28, 2007	Province
Clinician PEPFAR Implementer MoH	October 1st 2007	Province
NAC	October 1st 2007	District
Clinician PEPPFAR Implementer	October 1st 2007	Province
Clinician MoH	October 2nd 2007	Province
Clinician MoH	October 2nd 2007	District
Clinician MoH	October 2nd 2007	District
Clinician MoH	October 2 2007	Province
WB MAP/Donor	October 2 2007	Province
Clinician MoH	October 3rd 2007	Provincial
Clinician Multilateral/Donor	October 4th 2007	National
Clinician PEPFAR Implementer	October 8th 2007	National
Clinician PEPFAR implementer	Oct 9th 2007	National
Activist	October 10th 2007	National
Clinician PEPFAR implementer	October 10th 2007	National;
PEPFAR implementer	October 10th 2007	National
Clinician Multilateral Donor	October 1oth 2007	National
NAC	October 11th 2007	National
MoH Clinician	October 11th 2007	National
Clinician Activist	October 12th 2007	National;
Clinician	October 15th 2007	National

PEPFAR Implementers		
Clinician	October 15th 2007	National
Activist NGO	October 17th 2007	National
Global Fund PR Clinician	October 17th 2007	National
Clinician MoH	October 18th 2007	National
Clinician NGO	October 18th 2007	National
Clinician PEPFAR implementer	October 19th 2007	National
NAC	October 19th 2007	National
Multilateral	October 22nd	National
Clinician PEPFAR implementer	October 22nd 2007	National
NGO	October 24th 2007	National
PEPFAR implementer	October 25th 2007	National
AIDS Activist	October 25th 2007	National
PEPFAR implementer	October 26th 2007	National
Clinician MoH	October 31st 2007	National
Clinician PEPFAR implementer	November 1st 2007	National
Clinician MoH	November 1st 2007	National
Clinician MoH	November 12th	Province
Clinician MoH	November 13th	District
Global Fund Donor	November 14th	Province
Clinician MoH	November 14th	Province
Clinician MoH	November 15th	District
	November 15th	District
Clinical MoH	November 15th 2007	District
Clinician MoH	November 16th 2007	National
Clinician MoH	November 16th 2007	National
Media	November 19th 2007	National
Global Fund	November 19th 2007	National

PEPFAR implementer	November 21st 2007	
Clinician MoH	November 21st 2007	District
Clinician MoH FBO	November 22nd 2007	District
Clinician MoH	November 23rd 2007	District
NGO Traditional Healer	November 23rd 2007	Province
Clinician MoH	November 29th 2007	National
Clinician MoH	November 29th 2007	National
WB	November 30th 2007	National
Global Fund PR	December 4th 2007	National
Clinician PEPFAR implementer	Sept 5th 07	National
Clinician	Sept 3rd 07	National
Clinician PEPFAR implementer		National
NGO	Sept 3rd 07	National
PEPFAR implementer	November 28th 07	National

Annex 9 - List of people interviewed in South Africa

Summary
National level 28 interviews
Provincial level 18 interviews [Eastern Cape]
District level 2 interviews
Sub-district level 17 interviews [sub-district Quakeni and KSD]
65 actors interviewed in total

Category	Date	Which level
1. Activist	27/01/08	Provincial
2. Clinician PEPAR implementing	30/01/08	National
3. Academic	1/02/08	Provincial
4. Activist	4/1/08	National
5. Academic	5/02/08	National
6. Activist	06/02/08	Provincial
7. Clinician PEPFAR implementing	06/02/08	National
8. Clinician Academic	7/02/08	National
9. Clinician DoH	8/02/08	Provincial
10. Clinician Academic	8/2/08	National
11. NGO	12/02/08	National
12. Activist	13/02/08	National
13. Clinician NGO	13/02/08	National
14. Clinician	14/02/08	National
15. Donor	14/02/08	National
16. Clinician PEPFAR implementer Academic	15/02/08	National
17. Clinician PEPFAR implementer Academic	18/02/08	Provincial
18. Clinician DoH	18/02/08	Sub-district
19. SANAC	19/02/08	District
20. Clinician DoH	20/2/08	Sub-district
21. Clinician DoH	20/02/08	Provincial
22. Clinician DoH	20/02/08	District
23. Clinician DoH	20/02/08	Sub-district

24. Activist	20/02/08	Province
25. Clinician DoH	21/02/08	Provincial
26. NGO	21/02/08	Sub-district
27. NGO	21/02/08	Sub-district
28. Clinician DoH	21/02/08	Sub-district
29. Clinician DoH	22/02/08	Sub-district
30. Activist	25/02/08	Provincial
31. PEPFAR implementer	26/02/08	Provincial
32. Clinician PEPFAR implementer	26/02/08	Provincial
33. Clinician DoH	27/02/08	Provincial
34. Clinician DoH	27/02/08	Provincial
35. Activist	28/02/08	Provincial
36. NGO	28/02/08	Sub-district
37. SANAC	28/02/08	Provincial
38. Activist	3/03/08	National
39. Clinician Academic	4/03/08	National
40. Treasury	5/03/08	National
41. DoH	13/03/08	National
42. Clinician Academic	16/03/08	National
43. Clinician DoH	17/03/08	Sub-district
44. Clinician DoH	17/03/08	Provincial
45. Clinician DoH	18/03/08	Sub-district
46. Clinician DoH	18/03/08	Sub-district
47. Activist	18/03/08	Sub-district
48. Clinician PEPFAR implementer	18/03/08	Sub-district
49. Clinician DoH	19.03.08	Sub-district
50. Activist Counselor	19.03.08	Sub-district
51. Clinician DoH	20.03.08	Sub-district
52. PEPFAR implementer	26.03.08	Provincial
53. DoH	27.03.08	Provincial
54. Clinician PEPFAR implementer	1.04.08	Sub-district
55. Clinician Academic		National
Clinician PEPFAR implementer	22.04.08	National
56. Clinician	22.04.08	National

57. DoH	22.04.08	National
58. PEPFAR	22.04.08	National
59. NGO	23.04.08	National
60. NGO Activist	24.04.08	National
61. Activist	5/5/08	National
62. Clinician DoH	14/05/08	National
63. DoH		National
64. Clinician DoH	16/06/08	National

Annex 10 – An explanatory note on methods and personal story of the candidate

NB: This note seeks to further explain why methods were selected, and in particular how they were applied during data collection and analysis. It also provides some reflection on their application and the place of the researcher within the data collection and analysis process

How the methods were developed and created

As set out in the literature review in Chapter 2, power and networks were selected as particularly valuable and under researched areas in policy analysis. In addition, the reviews by study supervisors Gilson et al (2008) and Walt et al (2008) acknowledged these shortfalls in the literature. They noted the lack of strong theoretical frameworks in health policy analysis in low and middle income countries, which limited the development of a field of theory based on empirical studies. A similar finding had been made by a review of implementation literature which found that the relative lack of innovation in implementation theory was due to the weakness of applied empirical frameworks (Saetren 2005). I was thus clear, not only on the empirical problem I wanted to study (see personal motivation below), but also on the need for the research to be based on a strong theoretical framework that could be practically applied.

In my review of the literature of the health policy process I identified the 'name generator' approach by Lewis (2005) which combines an investigation of networks with a 'scoring' of actors' power. The review of the literature on power also identified Bourdieu (1983) as particularly useful in understanding the power of actors and networks rooted in more than one source, especially beyond economic or official position within a government hierarchy. Bourdieu's capitals seemed to lend themselves to empirical application. In addition, Bourdieu's 'bridging' the divide between agency and structure, which has dominated much of the debate on power (Giddens 1986), made his theory even more attractive.

Implementation had been identified early on in the development of the study as a particularly under-researched area of health policy processes. The different theories

and models of implementation described in the literature and reviewed for this study highlighted different 'themes' or elements to implementation, including communication (Googin 1990), structures and resources for implementation (O'Toole 1993), as well as levels of conflict of a policy to be implemented (Matland 1995). I selected communication, structures and resources as dimensions of implementation for investigation, given their prominence in the literature, but also because these resonated with my knowledge of the implementation of ART roll-out prior to the field work. I had worked in Zambia for a non-governmental organisation on HIV/AIDS between 2003-2005 and in 2006-7 participated in a study on HIV and human rights in South Africa where I had had the opportunity to interview many of those working in the HIV/AIDS field. Therefore my review of the literature and choice of theories, models and frameworks to inform the study was guided by some pre-existing knowledge of the policy processes and contexts studied.

This study belongs to the field of health policy analysis which emphasises the processes of policy formulation, agenda-setting and implementation (Walt 1994, Walt and Gilson 1996). This focus on the policy process, rather than outcomes, and the nature of power and the challenges observed by others in investigating and quantifying actor power in field work (Gilson and Erasmus 2008), meant that qualitative methods - in particular in-depth interviews - were identified as the most appropriate tool for data collection. My previous experience in conducting research through qualitative methods, had been based on taking a number of formal courses on qualitative research methods during my previous degrees, which I revisited during the first year of the PhD when I took the course module 'Principles of Social Research'. This explored a range of different principles for social research in the context of work on health and prepared me for choosing and applying the methodology during field work. It included exercises such as practice interviews, and designing of questionnaires. In addition, the relevant body of theory on qualitative research methods for health, such as Silverman (2008), Miller and Glasner (2004), Yin (2003), Green and Thorogood (2004) were

reviewed. Having identified the theoretical underpinnings of the study, I then worked, under the guidance of my supervisors to further develop and 'fine –tune' the methods for this study prior to field work in each country.

As an initial step, based on the themes within the framework (communication, structures, resources, networks and power), I identified what aspects of each element were relevant for this study, and what method would be used to research each. This process is summarised in Table 3.1. on page 60 of this thesis.

Further, Bourdieu's capitals were reviewed and defined for the study (as summarised in Table 3.2 on page 62). It was through this process of thinking through the different capitals in the context of the policy processes studied that I identified Bourdieu's capitals as lacking a clear enough definition of power related to an actor's position within government hierarchy, which is why Weber's concept of rational-legal authority was added to the framework on power used for this study.

These definitions of different elements of the study process were discussed and reviewed in consultation with study supervisors and revisited following the field work in the data analysis phase. Chapters 5, 6 and 7 of the thesis examine in-depth findings and knowledge gained through application of the study framework, including how these definitions developed and where additions to the framework were made based on knowledge gained from the data and analysis (e.g. the concept of agency freedom by Sen in Chapter 7).

In addition, in the development and preparation for the data collection I thought further about how to identify networks and the power of actors through the application of Lewis' name generator. I identified two key tools to assist in data collection. One was to form an in-country advisory committee in each country that would assist in starting the process of generating names (as well as review the study framework, interview guide and provide an entry to hard-to-reach policy makers). The second was to create an excel spreadsheet, on which could be added, after each interview, the names and scores that interviewees gave for those they considered to be powerful within ART

implementation processes. It was envisaged that this would serve as a tool to identify networks and provide an easily accessible and manageable way of visualising who was considered particularly powerful during the data analysis stage.

Following this process of defining and adapting the theories used for the study framework for the data collection, an interview guide for the data collection was developed covering the areas of implementation (communication, structures and resources), networks and power (see Annex 2).

Working with the methods

At the beginning of field work in each country an in-country advisory committee meeting was held to review the methods, in particular the interview guide, and to start the name generator process i.e. to develop an initial list of actors considered powerful and for interview.

Following the initial list of actors generated, I started contacting actors nominated at national level to arrange for an initial interview and to ask for nominations of actors at provincial and district level. Many actors at national level in both countries were unable to name more than one or two district and provincial level actors in each country. Therefore following a brief initial period of contact and request for nominations at national level, I travelled to the focus districts in each country to complete the name generator process in tandem with conducting actual interviews. Most interviews at district and provincial level were completed before moving back to the national level to conduct interviews with national actors. However, where actors at district and provincial level were unavailable during the initial visits to the districts, I made arrangements for follow-up visits to each district to ensure as comprehensive an interview sample as possible. In Zambia I was fortunate to have a Zambian researcher to work with me. We were able to share observations and lessons learned from the interviews.

During the interviews (as set out in Chapter 3) I tried to shape the narrative and content around certain events or challenges in implementation that had occurred in each district. These were identified in the initial district level interviews and then used in the further interview process to probe and test specific aspects of the study. For example, in the Copperbelt Province, Zambia, the charging for clinical investigations emerged early in the interviewing process as a challenge. Asking actors about who helped and assisted them in overcoming the resource constraints and why and how they had stopped charging for investigation demonstrated the economic power of PEPFAR implementers and the top-down nature of process, shaped by the central rational legal authority of the Permanent Secretary in the Ministry of Health.

In Zambia I drew on the network diagram included in Annex 5, to assess actors 'distance' and relationship with others. Actors placed themselves in the middle circle, and then indicated their relationship to others by marking which most closely characterised their relationship by distance. The network diagram was used more in Zambia and less in South Africa where interviewees were more comfortable with the abstract notion of distance in networks and of network membership. I also asked interviewees to score those they considered to be powerful on a range of 1-5, 5 being most powerful. As with the network diagram of circles, this was less useful in South Africa than in Zambia. In South Africa many actors engaged in roll-out were uncomfortable with the notion of attaching a specific 'numerical' value to someone's contribution to rolling-out ART, or ranking actors as more or less powerful in achieving treatment.

As data collection progressed I entered power scores and nominations of actors on a daily basis to the Excel sheet described above. Interviews were recorded on a digital recorder and I transcribed interviews as soon as possible after they had taken place.

In addition to the Excel sheet I maintained a table listing each actor interviewed by name, job title and date of interview. This was to avoid confusion in managing data, including transcripts and during the analysis. It also crucially allowed identification of

the level at which actors worked, which was important to the analysis of implementation from national to province to district level. An anonymised version of this table is included in the thesis (see Annex 9).

Analysis of data collected

Thematic review of the interviews

Following the return from the field work to London I completed the transcription of the interviews. Once all interviews were transcribed, their content was analysed using the study framework. For the process of analysis all interviews were printed and read. Interviews were thematically analysed according to power, networks and the three elements of implementation. For each aspect all interviews were read again and relevant content highlighted in a different colour with a marker pen.[82] Interview content that referred to specific aspects of policy process, for example, referring to how implementation was communicated, were initially entered as entire quotes into a table. These tables were not reproduced in the thesis to retain anonymity of actors interviewed. Throughout this analysis the level (national, provincial and district) at which actors were situated was considered to draw observations on the different levels of the implementation process.

[82] I had initially considered using Nvivo software for this thematic analysis but in discussion with study supervisors decided against this, as it was deemed that for a study of this breadth, it was worth becoming extremely familiar with the interview data, and that more might be gleaned through careful analysis by hand. Tables and spreadsheets were used systematically to organise perceptions, themes and links between actors. .

Power and network analysis

For the analysis of power, thematic analysis further concentrated on each different capital, these are summarised in the table in Annex 7. Through this analysis it was possible to revisit and test the definitions, enabling the other findings and conclusions on power that are set out in Chapter 7.analysis was the iterative process of working with and applying the framework to the data. Continuous working with the data yielded rich insights especially in relation to the way sources of power were conceived and the different ways actors expressed these in relation to Bourdieu's capitals.

The data from interviews was triangulated with the nominations and power scores summarised in the Excel sheet of actors' nominations. These were compared with the findings from the thematic analysis of interviews. As not all interviewees provided a 'power score' for actors that were nominated, following consultation with study supervisors, the power score was not used in the final analysis. In addition, to retain anonymity of actors interviewed, all actors entered by name into the Excel sheet were categorised, as for example, activists or clinicians as further set out in Annex 8.

Reflection on the role of the researcher in the interviewing process

I conducted all interviews myself, as well as conducting all the analysis and writing up of findings. I was able to draw on previous research experience in both countries which enabled easier access to policymakers in both countries. In Zambia, I lived and worked on HIV/AIDS (although not on treatment) for an international non-governmental organisation. The focus of my work was on research and policy across the Southern African region, including in South Africa. However, working on HIV and living in Lusaka I knew many others working on HIV in Zambia at the time. In addition, during the first year of my PhD (2007), I researched and authored a report for Amnesty International on HIV/AIDS, women and sexual violence in South Africa ('"*I am at the lowest end of all*" - *Rural women living with HIV face human rights abuses in South Africa*', Report AI Index Number AFR 53/001/2008) which included interviews with

national level policymakers, academics and activists, and field work in communities in Mpumalanga and KwaZulu Natal provinces.

I found that a combination of past experience in the country and being linked to an international academic institution, gave me access to policymakers in both countries, and enabled them to speak more freely and share observations they may not have shared with someone who was, or had been part of the policy process.[83] I also felt that interviewees respected the link to an international academic institution, and trusted that findings would be treated confidentially. At the same time I was aware that in many cases, especially where the roll-out of ART was dependent on external funding, actors were keen to portray the roll-out in a positive light, which may have influenced the interview content. However, given the length of stay in each country (five months) and the number of interviews conducted, as well as informal contact with actors working on ART roll-out in each country I felt this was less of a problem than initially envisaged. I was able to draw on many different sources (eg newspapers, academics involved in research) to check and assess what I had been told. In Zambia, having a Zambian researcher attached to me during the fieldwork, meant that I had another observer with whom to discuss what we were being told.

I felt that building trust amongst policymakers and actors at all levels of the policy process was essential, but only in conjunction with remaining objective myself. I made a conscious effort to triangulate data at all points through informal discussions with my supervisors in each country during data collection, and again following the collection of data when I presented my initial findings to other researchers and to actors interviewed in both countries. Building a rapport with policymakers involved keeping appointments and timing and promises made to individuals. In many cases I had to re-schedule appointments with policymakers as often as seven times, before an interview was possible and sometimes waited for hours. I felt patience was important in building

[83] This confirms insights by Miller and Glasner (2004) about the 'outsider' status in conducting interviews.

trust and respect with interviewees as it showed my level of commitment to the research. In both countries I ensured that policymakers received transcripts of the interview where requested, and also papers or presentations on the subject. My findings were presented for scrutiny in a number of settings (meetings, conferences, seminars), which was a useful way of triangulating the work.

When I arrived in Zambia in 2003, providing antiretroviral treatment to even half the population there seemed like a fantastically bold proposition. Death of siblings, parents and children was an everyday occurrence in my circle of friends. Then during 2004 things started to change rapidly in Zambia, with ever more people accessing treatment. There was a sense of hope in Lusaka that was almost tangible and unlike anything I have ever experienced before or since. At the same time attending many AIDS conferences and regional meetings, I observed the anger and frustration of South Africans who saw friends and family dying, despite available resources, due to the government's unwillingness to implement. I wanted to understand better the policy processes governing these realities.

In conclusion, I would say that personal commitment to the research was borne out of my own experience in Zambia and South Africa. I wanted to examine ART roll-out in Zambia and South Africa because I had been in the region from 2003-2005 and had observed keenly the discussions and debates about ART rollout. I was also intensely interested in policy analysis that focused on implementation - including at district level – because in the end policies are only likely to achieve their objectives if they are effectively implemented. The experiences in Zambia and South Africa led to a strong commitment and sense of responsibility towards undertaking this research and documenting these processes accurately.