AN EVALUATION OF THE IMPLEMENTATION OF THE ANTIRETROVIRAL TREATMENT POLICY IN AMATHOLE DISTRICT MUNICIPALITY OF THE EASTERN CAPE

By

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DECLARATION

I, Sigilizwe Tinkili Moko, hereby declare that this mini-dissertation submitted to the University of Fort Hare for the Degree of Maters in Public Administration has never been previously submitted by me for a degree purpose at this or any other university, that this is my own work in design and execution and that all material contained therein has been duly acknowledged.

Signed .....

Date .....

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ABSTRACT

The aim of this study was to evaluate the implementation of the government policy regarding antiretroviral therapy to all qualifying HIV positive people in public health facilities at the Amathole Health District of the Eastern Cape Province. There has never been a detailed research study conducted in the Amathole Health District regarding the subject in question. *The Constitution of the Republic of South Africa* in Chapter Two, Section twenty-seven, prescribes that the State must make access to health, food and security a reality. Hence the provision of antiretroviral therapy to HIV positive people acts as a response to constitutional imperatives of guaranteeing fundamental human rights.

The literature review explored extensively on the models used in implementing antiretroviral therapy programmes globally. From those tested models elsewhere, it was evident that South Africa has one of the best models in implementing HIV/AIDS treatment programmes notwithstanding some challenges cited in the study. This evaluation of the antiretroviral therapy implementation assisted in the establishment of the real facts about successful access of treatment to deserving communities. It became clear from the study that providing universal, effective and sustainable access to antiretroviral treatment in South Africa requires a broader advocacy agenda encompassing the development of health care systems and the generation of much larger resources for the health sector.

The results to the study were received through answers from questionnaires developed and distributed to health facilities where antiretroviral therapy programme was implemented. All respondents were employees of the Department of Health at the Amathole District. In the main, the findings of the study in Chapter four proved the hypothesis to be indeed true in that the implementation of antiretroviral therapy in the Amathole Health District does currently face some challenges that make ART inaccessible to the HIV positive patients.

The process of initiating patients on ARVs is very intensive and places additional burden on already immune-compromised patient. Therefore, it is essential that the pre-ARV assessment phase is streamlined and devolved to primary health care. A united and integrated response that is informed by sound scientific knowledge and supported by strong leadership is essential for mobilizing resources to address the challenges in the health system to scale up and sustain the response to HIV and AIDS.

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CHAPTER ONE
INTRODUCTION AND GENERAL ORIENTATION

1.1 Introduction and Background

This study is about reviewing the implementation of the antiretroviral treatment policy in the Amathole District in the Eastern Cape Province. It will briefly give a background about the policy on implementation of antiretroviral treatment. The problem statement will be articulated briefly and accompanied by the significance of the study.

The objectives of the study are explicitly communicated, and followed by research questions which triggered the intention to conduct the study. This research study provides scope and delineation of the study, literature review and methodology.

The coordinated public policy response to HIV/Aids began in 1992, with the formation of National AIDS Coordinating Committee of South Africa (NACOSA). The National structures in all provinces had been developed and adopted. In all provinces, HIV/AIDS Coordinators were appointed at provincial, district and sub-district level. Progress in implementing the NACOSA plan was assessed in 1997 by the South Africa National STI and HIV/AIDS Review. This review identified major strengths in the response to date, but also highlighted areas for substantial strengthening and improvement.

Building on this review, and on an extensive consultation process, government launched its five-year Strategic Plan for HIV and AIDS in 2000. This plan provided the framework within which interventions geared towards initiating and executing a comprehensive response to the epidemic are undertaken.

In 2002, based on the recommendations of the review the cabinet reiterated its commitment to the Strategic Plan 2000-2005. The South African government monitored the implementation progress and embarks upon new measures to strengthen the campaign as follows:

- The introduction of Nevarapine to pregnant mothers to prevent mother-to-child transmission; and

- ❖ Release of the comprehensive protocols for sexual assault, including post-exposure prophylaxis with antiretroviral drugs.

In July 2002 government established a Joint Health and Treasury Task Team (JHTTT) to investigate issues relating to the financing of an enhanced response to HIV and AIDS, based on the Strategic Plan as further elaborated in the 17th April 2002 Cabinet statement and the subsequent Cabinet statements of 9 October 2002 and 19 March 2003.

Subsequent to the investigation by the JHTTT, a decision was made that a comprehensive HIV and AIDS Care, Management and Treatment for South Africa to be developed.

1.2 Problem Statement

The Amathole Health District is the third populated district out of the six districts and one Metropolitan Municipality in the Eastern Cape Province. This district consists of seven local municipalities of which seventy percent (71%) is very rural and poor. It is estimated that seventy-five percent (65%) of the health facilities is dilapidated and poses seriously infrastructural challenges. It has the highest prevalence of HIV (32%) in the province and 60% of tuberculosis cases (ANC Annual Survey, 2006:8).

Due to the rural nature of the district, many health facilities encounter several challenges or difficulties. These challenges are characterized by huge shortage of Nurses, Doctors and Allied Health professionals. As a result of poor health infrastructure, many health professionals choose to work in well resourced urban areas.

In terms of the Comprehensive, Care, Management and Treatment for HIV and AIDS strategic framework (CCMT), all institutions providing antiretroviral drugs should be accredited and once accredited, the facilities must meet all the necessary requirements.

In the Amathole Health Districts, there is only ten percent of the health facilities accredited as a result of huge infrastructural backlogs and shortages of qualified professionals.

By 2006, more than 200 000 people had accessed antiretroviral therapy (ART) through South Africa's public health care systems (van Rensberg et al., 2006:i). There are very important questions to be asked of these rapidly emerging, large-scale treatment programmes.

Antiretroviral therapy was first provided in October 2003 and by the end of August 2006 2190 people were currently on treatment, including 110 children. All people testing positive are strongly encouraged to come to the clinic every two months(World Health Organization stages I & II) or monthly (WHO stage III IV) for clinical examination, family planning, and group support services (Medecins Sans Frontiers, 2006:8).

The ART national protocol requires that HIV positive people that to take CD4 count and if is below 200 they must be put on treatment, and also requires that CD4 count and viral load be done at baseline then every six months (Medecins Sans Frontiers, 2006:8). The Word Health Organization is promoting a radical departure from traditional models that depend on specialist personnel. Instead, task shifting is promoted to enable nurses to prescribe and dispense antiretroviral therapy and engage community workers to deliver a wide range of services.

It is the result of this perspective that the research felt it necessary to investigate how the Amathole District implements antiretroviral therapy in relationship with World Health Organization and South African HIV/AIDS Comprehensive Plan. This study also attempts to investigate and respond to the number of questions raised by van Rensberg and Schneider in paragraph three and four of this problem statement. The following questions form the central thrust of the study:

- What are the problems related to the implementation of ARVs?
- How best can the Department of Health implement ARVs programme in public health institutions?
- What are the results of the ARVs implementation review?

1.3 Objectives of the Study

Given the status of the public health system, the proposed study aims to examine the policy implementation of antiretroviral drugs as proposed in the Comprehensive, Care,

Management and Treatment (CCMT) of HIV/AIDS policy framework. The specific objectives of the study are to:

- Analyze and evaluate the ARV and CCMT policy framework implementation regarding antiretroviral therapy;
- Assess the Department of Health definite responses to the antiretroviral therapy implementation in the Amathole Health District;
- To assess the impact of the ARVs implementation in the public health facilities; and
- To recommend possible solutions in expediting ARVs implementation.

1.4 Hypothesis

The implementation of antiretroviral therapy in the Amathole Health District is facing some challenges that make ART inaccessible to the HIV positive patients.

1.5 Significance of the Study

The review of the implementation of antiretroviral treatment assists in the establishment of the real facts about successful access of treatment to the deserving communities. Providing universal, effective and sustainable access to ART in South Africa requires a broader advocacy agenda encompassing the development of health care systems and the generation of much larger resources for the health sector (McCoy, 2006:1). Presently, health care delivery in South Africa is characterized by patchwork of poorly co-ordinated and governed public, NGO and private services, a situation which contributes to the undermining the national stewardship and coherent health planning (McCoy, 2006:1).

The implementation of ART in the Amathole District in the Eastern Cape is characterized by pitfalls which hamper the rapid expansion of ART in the province. These pitfalls are resource deficit, fragmented health care system and the HIV/AIDS juggernaut (McCoy, 2006:1).

The study will assists in reviewing the pace at which the antiretroviral therapy programme of the government responds to the public needs. The results of the study will assist the Department of Health to measure the level at which ARVs has been implemented.

1.6. Outline of the study

The study is outlined as follows:

Chapter one: Introduction and General Orientation

It outlines the background to the problem and establishes the problem state why the research study is being conducted. The research or study importance is outlined and followed by the development of clearly defined researched objectives and questions.

Chapter two: Literature Review

Literature review is a critical synthesis of exiting research and not an open-ended, long-winded description of who said what. It is different to a theoretical and conceptual. It is essentially reviews all the relevant literature that one can find on the topic. Literature review also provides a critical analysis of the literature available and identifies the gaps in the literature in relations to the topic.

Chapter three: Research Design and Methodology

Research approach and method explain the research that has been selected for this study. It also explains why the approach chosen is appropriate for the investigation. It explains and describes the research method within the quantitative research approach.

Chapter four: Data Analysis

Report the findings according to the developed categories. It ensures that research questions are answered. Report the main findings verbally, in paragraph form and discuss them under central themes or categories, including graphics, e.g., tables, charts and graphs, etc., to help to explain the findings.

Chapter five: Conclusions and Recommendations

This chapter focuses on the interpretation and speculation on and discussion that have been reached. The discussion relates to research aims and questions, literature review and conceptual and theoretical framework. Also logical conclusions are drawn from the data that were interpreted, recommend ways or strategies to change or resolve the problem are given. The recommendations are realistic and achievable.

1.7. Conclusion

The implementation of antiretroviral therapy forms the genesis of improving health to all South Africans. The World Health Organization in 2002 has prioritized the provision of antiretroviral therapy to three million by 2005. The denial by the South African government to provide antiretroviral therapy to needy fellow citizens has painted a bad picture about the country to the whole world.

In South Africa, out of five million people infected by HIV, only seven hundred and eighty thousand (780 000) people currently are enrolled on antiretroviral therapy programme. There is still a huge number of people needing antiretroviral therapy who do not access it, and this is due to various challenges such as poor infrastructure, lack of qualified personnel to run the programme and inadequate programme financing. The acceleration of the implementation of the antiretroviral therapy programme will help people infected with HIV to access HIV drugs, thus improve their health status.

CHAPTER TWO
LITERATURE REVIEW

2.0 Introduction

The literature review presented in this chapter provides a platform where the researcher explores views from different authors on the subject of public policy. The main aim of the literature review was to give evidence of other relevant work conducted about the subject under discussion. The United Nations in 2000, endorsed a world known programme called Millennium Development Goals which sought to bring the attention of all nations and peoples of the globe about the urgency to address underdevelopment and ill-health. The proper implementation of the antiretroviral therapy programme will ensure that many lives are saved.

2.1 Theoretical foundations for review and public policy

Ranney (1968:7) defines policy as a declaration and implementation of intent. Baker et al., (1975:12-15) further define policy as a mechanism employed to realize societal goals and allocate resources. Public policy in a more explicit language is an action or inaction of the government and when there is a problem and such problems for accomplishment of some purpose or goal (Akindele, 2004:173). Siegel et al., (1977:109) once argued thus: "public policies are shaped (or made) when government or comparable authorities decide whether or not to alter aspects of community life."

They further argue that "policies are public to the extent that they involve governmental or quasi-governmental decision making and determine the interest of the community". Policy making implies that government must make choices to do one thing rather than another or to do anything at all (Akindele et al., 2004:174). Arising from the definition of public policy, policy is a course of action or inaction intended to accomplish some ends.

Hogwood and Dunn (1984: 23-24) define public policy as follows:

> [A] series of patterns of related decisions to which many circumstances and personal, group and organizational influences have contributed. The policy-making process involves many subprocesses and may extend over a considerable period of time. The aims or purposes underlying a policy are usually identifiable at a relatively early stage in the process but these may change over time and, in some cases, may be defined only

> retrospectively. The outcome of policies requires to be studied and, where appropriate, compared and contrasted with the policy-makers` intentions ... policy requires an understanding of behaviour, especially behaviour involving interaction within and among organizational relationships. For a policy to be regarded as a "public policy" it must to some degree have been generated or at least processed within the framework of governmental procedures, influences and organizations.

2.2 Theoretical Frameworks of Public Policy

In the discussion thus far, much has been made of the argument that public policy-making can be viewed as a process that describes the interaction between various policy-making stages. As with definitions, grand theories of policy-making do not exist. Distinguished scholars have remarked that policies are jellylike in nature (Moharir, 1986:15). Hanekom (1987:8) states that all (public) policies are future orientated, usually aimed at the promotion of the general welfare of society rather than a societal group, and take place within the framework of legally instituted public bodies such as legislatures or government departments.

This evolution tendency of policy is further illustrated by Widavsky (1979:16) who observes that public policies are not eternal truths, but rather hypotheses subject to alteration and to the devising of new (and better) ones until these in turn are proved unsatisfactorily. The theories of policy and policy-making have also been closely associated with political paradigms (ideologies), in which political values play an important role (Cloete et al., 2004:26).

Cloete (2004:27), hold the view that policy-making exercises of the mid-1990s require participation and public choice, which involve direct representation, empowerment and active decision-making. They further continue to suggest that (2004:27) if development is defined as the capacity to make rational choices, the participatory nature of policy processes is clearly of primary importance. The theoretical foundations of policy-making are underpinned under the following perspectives:

- *Systems theory*. In brief, it states that public policy-making can be viewed as a phenomenon with four main aspects: societal pressures (defined as needs and demands) determine the political issues of the day, evolving to problem status, which feed or provide inputs into the 'black box' of problem processing and intra-

governmental decision-making processes. Once these processes have led to decisions on the creation of public strategies/responses, the latter become policy outputs that are subsequently implemented in society through the organs and different levels of the state. As these policy outputs impact on society, new needs or imperatives may arise, engendering a reappraisal of some policies and issues, which in the final instance may be fed back into the input stage at the start. The main contribution of the systems model is that it assists understanding of the complexities of the process of decision-making. It lacks, to put it bluntly, the public administrator's fixation with political institutions, forcing the analyst to take processes into account. There are, however, some criticisms levelled against the approach. Mainly, the systems model can be interpreted as being too contrived a projection of the way systems work in practice. For example, policy-makers themselves may be the source of demands, and the policy-making process is not as neatly organized as the model implies – it is a complex, elaborate, continuous and flexible process. The systems model is, however, ideal for explicating the multivariant nature of the process, particularly in qualitative analyses (Fourie, 2005).

- Pluralism (Dahl, 1982:77) is an outflow of industrial and post-industrial, Western societies which have liberal constitutions and a clear separation between the powers. Pluralists maintain that power in liberal democracies has become fractured; that it is not and should not be centred in the organs of the state. In fact, they contend that governmental agencies constitute but one of myriad of interest and pressure groups that might influence the manner in which politics is conducted. At the level of public policy-making, these theorists view society and its power relations as being made up like a jigsaw puzzle. There is no single group, individual or agency that controls all the power resources in society (pecuniary, knowledge-based, status, and so on). Instead, in the modern state, power has become diffuse and is unequally spread out across the plain of politics. Critics of the pluralist perspective point out that this approach seems to be so fixated on group interaction that it does not pay sufficient attention to the actual issues that are processed and why such issues are different across sectors and countries – the pluralists are silent on how interests interact to produce policies.

- ❖ Public choice theory. Its logic is as follows: within a society where there is a plurality of demands on the state, a political marketplace develops in which interest groups vie for their specific positions and issues to be placed on the public policy agenda. Concomitantly, the public sphere/government becomes the target of an 'issue popularity contest'. In democratic societies, the state has to respond to these issues in such a manner that the majority of interest/ pressure groups approve of the state's policy agenda. This places the state in a powerful, yet paradoxical position: on the one hand, the state is the object of interest groups' requests for policy action; on the other, the state has to respond adequately enough to ensure that demands are met and needs are satisfied (Dahl, 1982:79).

The list of policy-making theoretical frameworks is exhaustive; therefore, it cannot be exhausted in this discussion. This discussion puts into perspectives the premise from which this research study is underpinned.

2.3 Policy agenda-setting

The policy process normally starts when a policy issue or problem is identified by one or more stakeholders in society, who feel that the actions of the government detrimentally affect them or another segment of society (Cloete et al., 2004:97). It is further articulated that "the society then mobilize support to persuade policy-makers to do something in order to change the status quo in their favour".

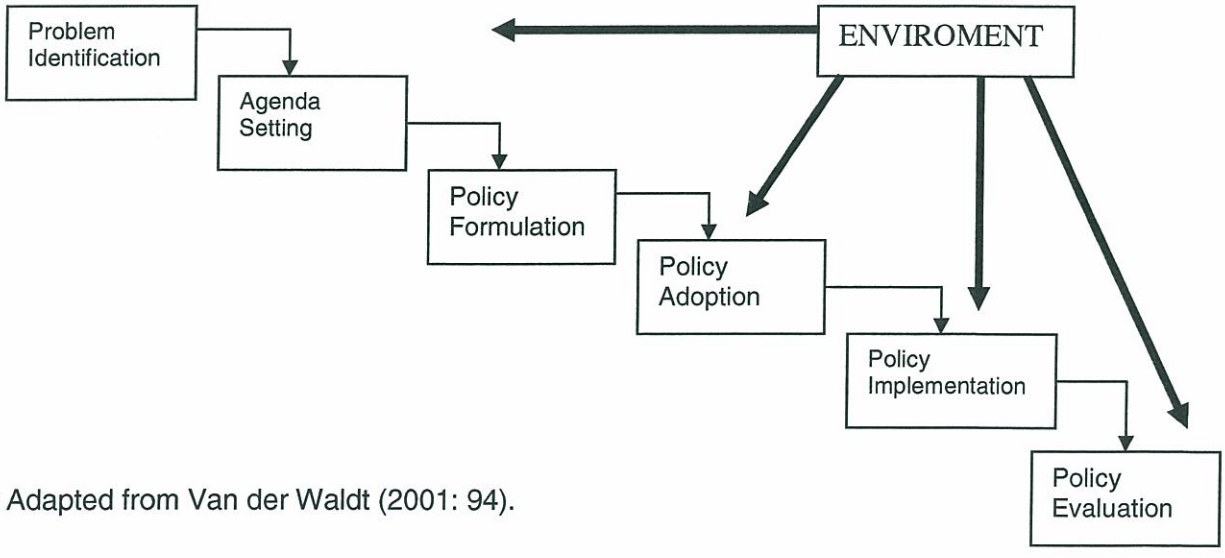
2.4 Policy making Process

Before turning to the section dealing with theoretical perspectives *vis-à-vis* public policy-making, it is necessary to differentiate explicitly among the various stages of policy-making. Such a differentiation is helpful in that public policy analysts tend to refer to or apply these stages in their models without necessarily clarifying their use, or explicitly stating how one stage follows on another (or not). This discussion will be contextualized by focusing on the policy environment – that vague arena where the boundaries between public and private interface to produce the societal variables that determine the need for (and indeed response to) policy. Most theorists view the policy process as a series of stages. This is important, since the different values and perspectives brought

to bear on each phase of the policy process can determine the definition of the issue at that point. For instance, as mentioned previously, the debate in South Africa on the causal links between HIV and AIDS on the one hand, and poverty and AIDS on the other, may constitute what Heineman *et al.*, call a 'wicked problem', on which there is no consensus whether a problem exists. This has significant implications not only during the problem identification and agenda-setting stage, but also for the appropriate drafting of a public policy response, and eventual evaluation and systemic feedback. This process, or series of stages, should be contextualized within a policy environment; they do not occur within a socio-political vacuum) (Fourie, 2005).

According to Anderson (2003), the policy environment in its broadest sense includes factors such as natural resources, demographic variables such as population size, race and age distribution, spatial location, political culture, the regime type of the state in question, social structure, class system, other nations, geopolitical position and the economic system. He points out that a state's political culture and the socio-economic conditions will have a significant impact on what are deemed to be important societal issues. The basic stages in the policy process approach, which will be reviewed individually below, and are illustrated in Figure I..

Figure 1.2. Policy-making stages



Source: Adapted from Van der Waldt (2001: 94).

Problem identification

Problem identification is probably the most under-valued stage in the policy-making process. Normally grouped with agenda-setting, many analysts ignore this phase in its entirety. Upon reviewing the definition of policy early in the chapter, it is clear that policy-making always occurs in response to a societal ill – it aims at purposefully solving/changing something. The implication is that some issue in society has to be identified for amendment or improvement. If there were nothing to solve, policy responses would not be necessary. Parsons makes a related point, noting that the genesis of a policy necessarily involves the recognition of a problem. However, not all troubling issues in society constitute problems to be addressed via public policy-making. For instance, HIV and AIDS prevalence might be an issue, but it does not in itself equal an addressable problem. Rather, the actual problem might be the impact of the disease on the economy, in response to which government could design a policy (Fourie, 2005). The diagram above illustrates explicitly the mechanisms on how policy is formulated, implemented, monitored and evaluated.

The accurate definition of the problem is therefore of paramount importance in terms of the drafting of an appropriate policy response. In order to qualify as a public problem, an issue has first to be deemed unsatisfactory by a significant group in the public domain, and second to be something that can be addressed by government action – if there is no solution to such an issue, no policy would bring about any change and the attempted drafting of such a policy would therefore be a waste of time. Fourie (2005) concludes that problem identification is further complicated by the fact that one person's problem may not be another's problem. Furthermore, conditions that are treated as public problems at one point in history may not be perceived as such by a government 20 years later. For instance, the South African government had detailed policy responses to the 'problem' of sexual mixing among the races in 1980; this problem has become a non-issue in contemporary, democratic South Africa. What is crucial in examining what becomes a problem is to see how the very formulation of something as a problem is itself a political act. In other words, this is not a problem-solving exercise in the normal sense: it is a problem-defining exercise, which is itself a political act. Problems and the perception thereof can, therefore, change over time. The important point here is that

public policy analysis cannot offer solutions to problems when there is no general agreement on what the problems are twenty-six. But who should decide when sufficient consensus has been established on the definition of a public problem? In addition to underlining the inherently political nature of problem identification, this question brings the issue of values to the fore. As Hogwood and Gunn state, "there is no such thing as neutral analysis". Twenty-seven Values (moral, ethical, political, historical, and so on) are not universal – especially not in a country that is as sociologically heterogeneous as South Africa.

2.5 Policy formulation and its reasons for formulation

The governments indulge into policy formulation driven by the desired to achieve certain goals or objectives. According to Akindele (2004:175), the following are six major reasons why government formulates public policy:

(a) Policy making is a problem solving phenomenon. That is to say, government formulates policies in order to provide solution to problems;
(b) Government formulates policy in order to accelerate economic development. If planning is part of policy making, and logically policy making is an instrument of economic development;
(c) Government formulates policies in order to make for the continuity in the public administration. It is believed that government comes, government goes but public administration remains forever;
(d) Government formulates policy in the interest of the public rather than the government. Government formulates policy in order to better the conditions of the populace;
(e) Government initiates policy in order to render administration easy. The administrative functions (like planning, organizing, staffing, co-ordinating and budgeting) all combined, are instruments of public policy making; and
(f) Government formulates policy for their own selfish ends. Government's survival depends on the effective initiation and implementation of public policies.

Once an issue has become a problem, and the problem has made it onto the public policy agenda, it is incumbent upon the government to strategize an appropriate response to that public problem. A response, one should add, could be positive (leading

to action: planning, drafting and eventual implementation of a new or amended public policy) or negative (inaction – maintaining the status quo). In the actual process of policy design, the technocrats who write the policy need to have an understanding of the problem that would enable them to delineate clearly the overall mission, broadly-stated goals and prioritized objectives of the draft policy or policies. Note the plural here – a cogent strategy would be the conceptualization of two or more alternative policy responses, giving the decision-makers a choice as to which policy to implement. In making that choice, these officials would be taking into account the policy environment and the input from various policy entrepreneurs in society. The final choice of policy would take into account the constraints posed to every alternative – and the government needs to decide which policy alternative would, in their opinion, have the most fortuitous outcome and outputs. It is important to note that the entire process is iterative; in other words, one stage of the policy formulation process may not neatly follow on any previous stage: the process may be interrupted, with novel variables impacting on the outcome of the policy formulations at the end (Fourie, 2005:109). Important in this regard is the impact of scenario planning, forecasting and cost-benefit analysis in general. Based on the above, the policy decision-makers will decide on their preferred policy alternative. The criteria applied in this last process (which may, in turn, be fed back into the policy formulation for purposes of policy refinement) would then be measured in terms of envisaged effectiveness (Is the policy able to solve the problem?), efficiency (How much effort will this require?), adequacy (Are societal needs met?), equity (Are these needs met across the board?), responsiveness (Are those most affected by the problem shielded from any negative future impacts?) and appropriateness (Are the assumptions underlying the policy's objectives tenable?) (Fourie, 2005:35).

2.6 Policy Adoption

This is the stage during which a selected policy, once formulated, is legitimized and formalized. Policy adoption, therefore, has direct correlates with decision-making – who decides on any specific policy alternative, what are the variables that impact on that decision-maker, and so on. Clearly, public policy adoption means political support from the powers-that-be – the government. The latter may adopt a policy and sell it to the public and various individual stakeholders through command, persuasion and bargaining Fourie, 2005).

2.7 Policy Implementation

This stage of the policy-making process entails the translation of decisions into action. It is, therefore, distinctly political in nature – dealing directly with the questions of who implements policy, where, when and how. The success of this stage is dependent upon a myriad of variables: the correct definition of the original problem, the accurate identification of causal links, just determination of realistic objectives, and so on – all having an impact on whether or not deviations might occur during the implementation stage. Given the interconnected and co-dependent nature of this and other stages, it becomes difficult – due to the iterative nature of the policy-making process referred to above – to know exactly where the policy implementation phase commences or concludes.

A common theory on policy implementation still has to be constructed (Cloete, 2004:165). They further said (2004:165) that a survey of the literature shows that there is already remarkable convergence on the critical explanatory variables identified by scholars of policy implementation. Moreover, researchers working in a number of different areas (e.g., environment, population, health and crime prevention) have consistently identified the same or similar variables, as have scholars working in countries at various stages of economic development. According to Cloete et al., (2004:165), there are five interlinked variables, also known as the 5-C protocol, are:

- The **content** of the policy itself – what it sets out to do (i.e., goals); how directly it relates to the issue (i.e., Casual theory); how it aims to solve the perceived problem (i.e., methods).
- The nature of the institutional **context** – the corridor (often structured as standard operating procedures) through which policy must travel, and by whose boundaries it is limited, in the process of implementation.
- The **commitment** of those entrusted with carrying out the implementation at various levels to the goals, causal theory, and methods of the policy.
- The administrative **capacity** of implementers to carry out the changes desired of them.

- The support of **clients** and **coalitions** whose interests are enhanced or threatened by the policy, and the strategies they employ in strengthening or deflecting its implementation.

2.8 Policy Evaluation

Policy evaluation is in essence no different from any other evaluation (Cloete et al., 2004:210). At its most basic level, policy evaluation is learning about the consequences (both positive and negative) of public policy. In other words, it is an assessment of all the policy's effects, including its impact on the target situation or group, on situations and groups other than the target (spillover effects), on future as well as immediate conditions, direct costs, in terms of resources devoted to the policy, and indirect costs, including loss of opportunities to do other things. Cloete et al., (2004:211) suggest different definitions of the concept "evaluation" in the following manner:

- Evaluation determines the value or effectiveness of an activity for the purpose of decision-making;
- Policy evaluation is learning about the consequences of public policy (i.e., policy impact, which includes all the policies` effects) on real-world conditions; and
- Programme evaluation consists of the systematic description and judgments of programmes and, to the extent feasible, systematic assessment of the extent to which they have the intended results.

2.9 Reasons for Evaluation

Policy evaluation or assessment is normally undertaken for one or more of the following reasons (Sharifz, 1998:820; and Posavac & Carey, 1980:8):

- To measure progress towards the achievement of policy objectives;
- To learn lessons for the project/programme for future policy review, redesign or implementation strategies;
- To test the feasibility of an assumption, principle, model, theory, proposal or strategy;
- To provide political or financial accountability;
- To advocate a cause better; and
- For public relations purposes.

A carefully planned and executed impact evaluation can produce the following practical benefits (Valadez, 1994:52):

- ❖ It will provide a precise assessment of the nature and extent of the impacts that can be expected and hence planners identify the projects likely to produce the best return on the resources invested;
- ❖ It can show that the observed changes were not due to the project (but to external factors) and thus avoid investment in projects that are unlikely to produce the desired benefits; and
- ❖ It can assess the factors that contributing to project impact and help planners improve project design.

Cloete et al., (2004:57) postulate that the aim of policy analysis has been to provide policy-makers with information that could be used to exercise reasoned judgment in finding solutions to policy intricacies. Thus policy analysis has a fundamental, practical modus operandi originating in the applied social sciences. Below are the approaches to policy analysis:

Analytical Approaches	**Analytical focus**	**Analytical instruments**
Policy content analysis	Interpretation of policy content	Judicial practice Administrative law
	Comparative policy analysis	Correlation of policy content
Policy systems analysis	Policy behavioural studies	Influence & decisions of shareholders & stakeholders
	Policy institutional studies	Role of institutions & related organizations
Policy issue analysis	Policy problem structuring	Structure of the nature of policy problems
	Policy recommendation (advocacy)	Determining & forecasting policy solutions
Policy outcome analysis	Policy monitoring	The outcome of policy action
	Policy impact evaluation	The value of policy actions
Policy values analysis	Community values & general morality or moral guidelines	Values & ethical considerations supporting specific policy choices and/or

		actions

Cloete, F., & Wissink, H. (2004:71). *Approaches to Policy Analysis*

According to Akindele (2004:176), there are three major alternatives of grounds against which a given policy can be evaluated. These grounds are:

(i) Against the promises of such policy;

(ii) Against the best known alternatives; and

(iii) Against the absence of a policy.

There are quite a number of scholars who have studied various aspects of public policy. They have agreed on a certain number of criteria. These criteria include efficiency, effectiveness, and impact analysis, feasibility, adequacy, appropriateness, net benefits, compliance, equality, public participation, freedom, predictability and procedural fairness.

The policy on the implementation of antiretroviral therapy will be reviewed following the well established public policy scholarly policy analysis and evaluation. Antiretroviral therapy policy was developed in the interests of the public rather than the government.

The chronic shortage of health care workers is recognized as a major bottleneck to scaling up antiretroviral therapy, and this has the biggest impact in rural areas where the human resource crisis is most acute. There is a need to develop innovative, effective delivery models, particularly for rural areas with weak health system (Medicins Sans Frontieres, 2006:1). The HIV/AIDS programme in Lusikisiki, a partnership between Medicins sans Frontieres (MSF) and the Department of Health of the Eastern Cape, has managed to achieve universal access to antiretroviral therapy in one of the most under-resourced and disadvantaged areas of South Africa without compromising on equity (Medicins Sans Frontieres, 2006:1).

The study in Lusikisiki had 2,200 people receiving antiretroviral therapy, which represents universal coverage of the need in 2005. The study further asserts that "to achieve this rapid scale up in the face of a chronic shortage of health staff, a model of care was developed along three lines: task shifting to mobilize existing human resources; the creation of additional capacity through the establishment of new posts (in

particular adherence counselling) and a strong community engagement to support the health system; and concerted efforts to improve clinic infrastructure."

2.10 Factors Influencing the Sustainability and Feasibility of Effective Antiretroviral Treatment Programs in Resource-limited Settings: A review of the literature with a focus on Malawi, Botswana, Brazil, Haiti, Ghana, South Africa and Uganda

The devastating impact of AIDS in the world - especially in sub-Saharan Africa - has led to an unprecedented global effort to ensure access to antiretroviral (ARV) medicines to treat the disease in every country where HIV is a threat. While the World Health Organization (WHO) goal of ensuring access to antiretroviral treatment (ART) for 3 million people by end 2005 was not achieved, an estimated 1.3 million people, who would not otherwise have been treated, now have access to ART.

This literature review aims to increase understanding of the requirements for introducing and scaling up provision of ART as part of comprehensive HIV/AIDS programmes in resource-poor countries.

The review provides an overview of experience and lessons learned with regard to:

- The feasibility of ART in resource-poor settings; and
- The different approaches being taken to delivery of ART.

The review is based on published literature, interviews with key informants, web searches and country information. It also draws on a review 'Providing ART in Southern Africa', conducted by the Health Systems Trust in 2004.

2.10.1 Feasibility and impact of ART in resource-poor settings

Pilot studies have demonstrated the clinical feasibility and effectiveness of highly active antiretroviral therapy (HAART) in a range of resource-poor settings, including Haiti, Brazil, Botswana, South Africa and Uganda.

The impact of HAART in reducing mortality in resource poor settings is variable. There are impressive results from Brazil, where universal access to treatment has reduced HIV-related mortality by 50% since 1996. Improvements in survival rates have also

been reported from Mozambique, South Africa and India. However, in some African studies, mortality has been higher and this is attributed to late stage of presentation for treatment.

Universal provision of ART has also had a positive impact on health service expenditure. A fourfold decrease in HIV-related hospitalizations as a result of the introduction of HAART has ensured that the Brazilian government has realized net savings as a result of its ARV program (Ministry of Health Brazil, 2001:201). In 1996, deaths due to AIDS in Sao Paulo City, Brazil (which treats almost 50% of the country's HIV-infected patients) decreased for the first time and have continued to decrease subsequently (Caminada et al., 2002:66).

In countries where governments have continued to support prevention programs, there has been no reported increase in unsafe behaviour. A study that was done in Cote d'Ivoire, that compared people who had access to HAART with those who did not, found that unprotected sex was associated with not being on HAART treatment with, and concluded that fears that access to ART may result in irresponsible sexual behaviour were not supported by the data. The MSF programme in Khayelitsha, South Africa has reported increased uptake of HIV testing and counselling and increased condom use following the introduction of ART.

2.10.2 Approaches to delivery of ART

a) National plans and strategies

Ministries of Health in countries such as Brazil, Mozambique, Malawi, Botswana, South Africa and Kenya have developed national strategic plans for the scaling up of ART. Others, such as Uganda, have focused on service delivery and access to ART, rather than on strategic planning.

Experience in Brazil, Malawi and Botswana indicates that setting clear goals and targets to support priorities for scale-up is critical; integrating ART programming into national HIV/AIDS strategic plans is important; ensuring that the scale-up strategy is consistent and integrated with the existing health system and wider health sector plans; as well as implementing review processes led by multi-sectoral national AIDS councils or committees.

In a review of national HIV strategic plans in five sub-Saharan African countries (*Alban A, 2002, Priorities of AIDS interventions in Africa: Principles and practice in five countries. EASE International*) highlighted a number of weaknesses in national plans and the priority setting process: priorities are unrealistic in terms of resource allocation; priority setting is not based on cost or cost-effectiveness considerations; and the balance between prevention and care is often determined randomly. The key issue facing policy makers is not whether to include ART as part of the care package, but determining the balance of resource allocation between prevention and care interventions and between care interventions.

b) Models of delivery

Approaches adopted by the public sector in most countries represent one, or a combination of, three 'models': provincial and regional hospital delivery, district level delivery, and community clinic or community based delivery. Other key ARV providers are the private sector, through company schemes and private health care facilities and physicians, and the non-governmental organization (NGO) sector, through international, national and local organizations, including mission hospitals and faith-based networks. Different countries have shown that scaling up care and treatment programs is best achieved through collaboration and coordination between a mix of service providers, including the public sector, private medical providers, private companies, non-governmental organizations and community-based approaches. Service delivery approaches need to be appropriate to the national context, the health system and the existing mix of providers.

The Family Health International ART pilot site in Mombasa, has multiple entry points to care and treatment, fostering collaboration between public and private health facilities, NGOs and communities. The Centre for Disease Control (CDC) project, supporting provision of ART to adults living in the Kibera slums of Nairobi, follows the community clinic approach, offering treatment as a component of comprehensive services through a local clinic and community-based organizations. The Mission for Essential Drugs and Supplies (MEDS) is supporting over 40 faith-based hospitals to provide ART. Treatment in Kenya is also available through private physicians, industry and employers.

c) Public health sector

Most countries, especially in sub-Saharan Africa, are taking a phased approach to the introduction or scale up of ART through the public sector, starting initially with provision through selected provincial or regional hospitals. For example, Botswana, the first African country to offer ART through the public health system, is rolling out the program through hospitals.

Nigeria started a pilot ARV programme in January 2002 through 25 treatment centres based in Federal tertiary hospitals across the country. Senegal is scaling up from pilot programs to a national ART program, using major hospitals as the entry point for ARVs. In Ghana, ARVs were made available initially through the two main teaching hospitals.

Countries that took a district approach to delivery include Brazil, Lesotho, Mozambique, Rwanda, and Zambia. Brazil's national treatment program delivers care and treatment through a decentralized network of 900 facilities (*WHO/UNAIDS, 2003. Workshop on strategic information for ART programs. 30th June-2nd July 2003. www.who.int/hiv/ strategic/mt300703/en/Presentations).* In Mozambique and South Africa, ART is available through integrated health system, which will provide diagnosis, prevention, treatment and care, links to VCT and Prevention of Mother To Child Transmission (PMTCT) services, day hospitals for specialized HIV/AIDS care and treatment, home based care, and referral to social and clinical services (Republic of Mozambique, 2003).

d) Non-government and community organizations

In some countries, international, national and local NGOs are at the forefront of providing ARV treatment, through small pilot schemes and community programs. MSF, for example, is running pilot programs in 9 countries in Africa, including Cameroon, Malawi, Mozambique and South Africa, and in Asia and Latin America. Other NGOs providing ART in Africa include the AIDS Healthcare Foundation with clinics in South Africa and Uganda, the Joint Clinical Research Centre in Uganda, the Lighthouse Trust in Malawi, and the Pangaea Foundation in Rwanda and South Africa.

It is generally accepted and agreed that "Non-Governmental Organizations working in and with communities and those focusing on a health problems, e.g., tuberculosis, cancer, have the ability to achieve results and mobilize energy and voluntarism in a manner that is difficult for formal health services to match" (Buch, 2000:87). Buch (2000:92) posits that the energy talked about, seems to be dissipating in our society, with people waiting for government to do things for them. It is suggested that the Health Department needs to intervene to create an enabling environment for NGOs, facilitate the emergence of local NGOs and provide seed funding in hitherto unserved areas (Buch, 2000:92). The use of NGOs in delivery of health care is one of the most effective and efficient means in realizing better health all. NGOs develop a pool of human resources which can bridge the gap which is left by migration of health workers to developed world.

Experience has shown that it is essential that national NGOs and community based organisations (CBOs) must be involved in providing care and support services and, in some cases, prescribing ARVs, are well informed about ART, and receive training and information to enable them to deliver ART and educate communities effectively. Faith-based networks are also playing an increasing role. Mission hospitals are major providers of health care in many sub-Saharan African countries, and in Kenya, for example, mission hospitals have emerged as one of the main sources of ART, with around 40 hospitals providing ARVs.

Community-based models are being considered in some settings. A small ART programme in a poor rural community in Haiti, documented by Farmer (2002), is an example of a community approach model that provided directly observed therapy (DOT) with HAART to about 60 patients, resulting in dramatic improvements. In Uganda, TASO is working with CDC to develop a pilot model in rural communities.

e) Private sector

ART treatment through the private sector is expensive, ranging from $300 a year in Zambia to $130 a month in Tanzania. Whilst one study in Kenya found that private physician prescribing was consistent with international standards, another study, in Uganda, found that drug regimens and the frequency of monitoring varied considerably.

Determining the extent to which industry and employers are providing ARVs is difficult, mainly due to issues of confidentiality and reluctance on the part of employees to inform their employer of their HIV status because of concerns about the impact on their job security and career prospects. However, a growing number of private companies, mostly large enterprises and multinational, are starting to provide ART to their employees and, in some cases, spouses and children. Multinationals providing ARVs as part of comprehensive HIV/AIDS care programs include drinks manufacturers and breweries such as Coca-Cola and Heineken, car manufacturers such as Daimler-Chrysler and Ford, and mining companies such as Anglo American. Larger national enterprises in Africa providing ART include mining companies in South Africa and Botswana, and electricity generating companies in South Africa and Cote d'Ivoire.

In South Africa, local subsidiaries of German auto giants DaimlerChrysler, BMW and Volkswagen have set up major HIV/AIDS programmes, encouraging voluntary testing of employees and offering support and treatment to those infected. DaimlerChrysler South Africa, whose motto is "HIV/AIDS is Everybody's Business", spends about three million rand (US$420,000) annually to provide ART to the estimated nine percent of its workforce already infected. The company employs about 6,000 people and retrenched workers receive ART for two years following retrenchment. Volkswagen South Africa, with an estimated workforce infection rate of six percent, has a similar programme (*Journ-AIDS*, 2004).

There is evidence from sub-Saharan African companies that indicates that the ARV program has yielded some cost saving for companies, although studies suggest that affordability is more important than cost saving in influencing the decision to provide ART. At the same time as some companies are expanding treatment access, there is also a trend among private sector firms in Africa to shift the burden to households and to government, through practices including pre-employment screening and restructuring and reducing employee benefits.

2.11 Implementation of ARVs in Haiti

In Haiti, a pilot HAART provision programme in a remote rural area has initiated 120 patients on triple therapy since 1998 using generic and donated ARVs. In this programme, apart from simple baseline blood tests, no other laboratory monitoring is

performed and patients are monitored using symptoms and clinical signs. All patients are assigned a treatment supporter who ensures adherence. By April 2002, no drug related deaths had been recorded (Farmer et al., 2001:98). The implementation of HIV and AIDS prevention and treatment strategy does not only need huge resources but it needs commitment and political will in minimizing and preventing new infections and holding HIV progression to AIDS. South Africa should be emulating and learning best practices from the country like Haiti.

2.12 Brazil and Universal Access to ARVs

Brazil was the first developing county to provide ARVs on a large scale to its citizens. After a change to its constitution in 1996, the Brazilian government has guaranteed universal, free access to ARVs to those who need them. Currently, the programme treats 133 000 patients (Texiera et al., 2002:133)). In 1996, deaths due to AIDS in Sao Paulo City (which treats almost 50% of the country's HIV-infected patients) decreased for the first time and have continued to decrease subsequently (Caminada et al., 2002:66). Taxiera et al., (2002:129) contend that mortality due to AIDS has reduced by 60%-80% after the introduction of ARVs.

Brazil has its own treatment guidelines and it appears that the provision of HAART in Brazil has not resulted in an increase in new HIV infections. Condom use by individual patients is reported to have increased after initiation of HAART compared to prior to starting ARVs (Barosso et al., 2002:196). Amazingly, despite successes in treating HIV, the Brazilian TB control programme has not received similar attention and preliminary reports from Rio suggest an increase in new cases of TB in HIV-infected people.

One of the major successes of the Brazilian programme has been generic ARV manufacture to bring prices down. ARV prices on average have dropped by 72.5% (Ministry of Health Brazil, 2001:189). The report by the Ministry of Health (2001:210) continues to explore that Brazilian government uses two strategies to achieve lower drug prices:

1. *Local generic production.* The government upgraded existing drug production facilities to make generic versions of ARVs that had not been patented in Brazil.
2. *Price negotiation.* The manufacturing base allows estimation of the cost to Brazil of manufacturing its own version of ARVs. Using this price and the threat of

compulsory licensing, negotiations are entered into with pharmaceutical companies on discounted prices for ARVs.

2.13 Antiretroviral Programme in Botswana

In 2001, the president of Botswana publicly committed his country of 1.6 million people with the highest adult HIV seroprevalence in the world, to an ARV therapy programme (URL:http://www.gov.bw/government/ministry_of_health.html). It is estimated that nationwide about 110 000 people would currently required treatment (Darkoh-Ampem et al., 2002:59). The programme enrolled its first patient in January 2002 and by September 2002, 1 600 People Living With HIV (PWLH) had been started on HAART, far less than originally expected.

Botswana is one of the countries in the Southern African Development Community (SADC) that has shown much commitment to the fight against HIV and AIDS. ARV programme was rolled out to all public health care facilities. In the subsequent chapter, special emphasis will be to describe on how this study is going to be conducted.

A fourfold decrease in HIV-related hospitalizations, as a result of the introduction of HAART, has ensured that the Brazilian government has realized net savings as a result of its ARV programme (Ministry of Health Brazil, 2001:201). Brazil being a developing country like South Africa has shown much commitment and mobilization of resources in an attempt to stem the tide of HIV and AIDS.

2.14 Malawi HIV/AIDS Antiretroviral Programme

Of more than 110,000 people enrolled onto treatment, 69% was still alive and on Antiretroviral Therapy, while 22% had dropped out or died. Two-thirds (66%) of the deaths occurred within three months of initiation (Schneider et al., 2007:14). The researchers observed that operational research on the defaulters in one region found that half had in fact died, and that another 10% were still on treatment at another site.

Table 1: Outcomes (cumulative analysis) in Malawi, end June 2007

Outcome	Number	%
Enrolled on ART	110,057	
Alive on ART	76,166	69%
Dead	12,992	12%
Defaulted	10,583	10%
Stopped ART	472	<1%
Transferred-out	9,862	9%

Sources: Makombe: *The national scale-up of ART in Malawi: Challenges and successes.*

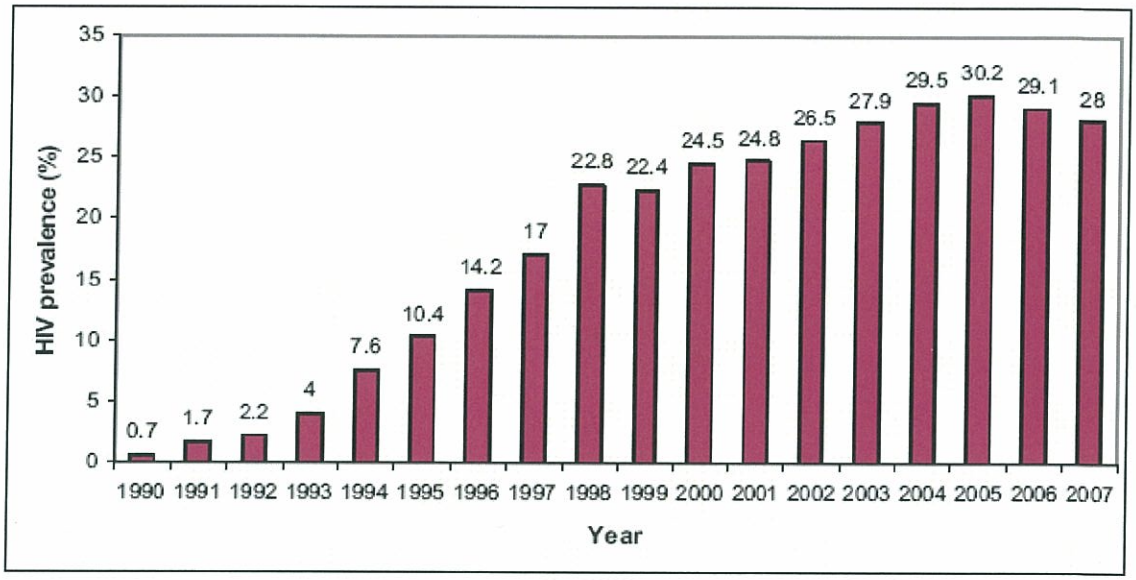
The implementation of ART in Malawi showed significant improvement in HIV positive people on the ART programme. This calls for increased effort in accrediting new sites for ART programme.

2.15 Comprehensive Care Management and Treatment of HIV & AIDS in South Africa

Since early 1990s HIV/AIDS have continued to present a challenge to public health in South Africa. Preventive measures against new infections of HIV are reported to be more cost effective than treatment and care of people living with HIV and AIDS, but have failed as there are approximately five (5) million people currently living with HIV in South Africa (Martinson et al., 2002:206). The Actuarial Society of South Africa (ASSA) estimated that the total number of people living with HIV in South Africa in 2005 was 2.5 million. They further estimated that 520 000 of those South Africans who had AIDS were not receiving the required treatment, while approximately 124 000 were receiving treatment across both the private and public sectors (Stewart et al., 2007:286). According to the UNAIDS, the life expectancy rate in South Africa will be reduced by about 18 years as compared to a no-AIDS scenario in the year 2000 – 2005 (UNAIDS, 2002:201). By 2005, it has been estimated that almost 60% of all deaths in South Africa will be due to HIV/AIDS (UNAIDS, 2002:175).

Estimates of HIV prevalence in South Africa are mainly based on surveillance among pregnant women attending sentinel antenatal clinics (ANC). The 2007 national HIV prevalence estimate stands at 28.0%. This represents a possible 1.1% reduction in HIV prevalence from 2006 to 2007. When the 2005 and 2007 HIV estimates are compared, we observe a statistically significant decline in HIV prevalence.

Figure 2: National HIV prevalence trends among antenatal clinic attendees, South Africa, 1990 to 2007.



When 2006 and 2007 estimates are compared, the findings show that provincial estimates generally showed reduction, e.g., KwaZulu-Natal, Limpopo, Western Cape and Eastern Cape. Other provinces remained relatively stable. However, two provinces, Free State and Northern Cape show signs of increase.

Table 2: Provincial HIV prevalence estimates among antenatal clinic attendees, South Africa, 2005 – 2007

Province	HIV pos. 95% CI 2005	HIV pos. 95% CI 2006	HIV pos. 95% CI 2007
KwaZulu-Natal	39.1 (36.8 - 41.4)	39.1 (37.5 - 40.7)	37.4 (35.0 - 39.8)
Mpumalanga	34.8 (31.0 - 38.5)	32.1 (29.8 - 34.4)	32.0 (29.2 – 34.9)
Free State	30.3 (26.9 - 33.6)	31.1 (29.2 - 33.1)	33.5 (28.3 - 39.1)
Gauteng	32.4 (30.6 - 34.3)	30.8 (29.6 - 32.1)	30.3 (29.9 – 32.8)
North West	31.8 (28.4 - 35.2)	29.0 (26.9 - 31.1)	29.0 (24.8 – 33.5)
Eastern Cape	29.5 (26.4 - 32.5)	28.6 (26.8 - 30.4)	26.0 (24.0 - 28.1)
Limpopo	21.5 (18.5 - 24.6)	20.6 (18.9 - 22.3)	18.5 (16.7- 20.4)
Northern Cape	18.5 (14.6 - 22.4)	15.6 (12.7 - 18.5)	16.1 (13.9 – 18.7)
Western Cape	15.7 (11.3 - 20.1)	15.1 (11.6 - 18.7)	12.6 (10.1 – 15.6)
National	**30.2 (29.1 - 31.2)**	**29.1 (28.3 - 29.9)**	**28.0 (26.9 – 29.1)**

Control of HIV in South Africa involves multi-sectoral approaches involving government, research and academic institutions, civil society, non-governmental organisations, community based organisations and the private sector working together against the health and social consequence of HIV/AIDS, in the implementation of the South African National Strategic Plan 2007 - 2011.

As the devastating effects of the epidemic were felt in South Africa, in 2003 the country began to develop comprehensive HIV/AIDS strategies, which include ART. In November 2003, the South African government released their "Operational Plan for Comprehensive HIV and AIDS Care and Treatment". The plan focuses on providing comprehensive HIV/AIDS care including ART in at least 53 sites (one per health district) within 12 months. As of January 2004, sites for rollout were being evaluated for preparedness and selection.

According to Kaiser Family Foundation (2002:156), antiretroviral drugs have revolutionalised the treatment of HIV/AIDS, converting a uniformly fatal infection to a treatable, chronic disease. Specifically, three-drug combinations of ARVs – known as Triple Therapy or Highly Active Antiretroviral Therapy (HAART) - have had major impacts on HIV-related deaths and illness in settings where these drugs are widely available.

To date, there are 192 sites nation-wide. All 53 districts now have home/community based care programs, provided by Community Care-Givers (National Department of Health: 2006/07 – 2008/09). It must be also noted that by 2005 "77% of public health facilities were offering Prevention of Mother To Child Transmission services (PMTCT). Also by December 2005, 88% of public health facilities were providing Voluntary Counselling by 2005 "77% of public health facilities was offering Prevention of Mother to Child transmission services (PMTCT)". In addition, by December 2005, 88% of public health facilities was providing Voluntary Counselling and Testing services (VCT), which marks an improvement from 2003/04, when 64% of facilities offered these services" (National Department of Health, 2006/07 – 2008/09). "The delivery of HAART now will be put into context, i.e., Eastern Cape Department of Health and Testing services (VCT),

which marks an improvement from 2003/04, when 64% of facilities offered these services" (National Department of Health, 2006/07 – 2008/09).

Since the advent of the CCMT Operational Plan, the South African communities have embraced the challenge of knowing about their status. However, the introduction of VCT and HAART has not been without challenges of human resources, infrastructure and technical expertise. Therefore, these challenges have hamstrung the full-blown VCT and HAART implementation, notwithstanding the great strides of rolling out ARVs in all provinces.

South Africa boasts one of the most comprehensive HIV/AIDS programmes in the global village but the incidence and prevalence of the disease continue unabated. All programs in South Africa are underpinned under the guiding principles and tenets of *The Constitution of the Republic of South Africa* (1996). According to Kenyon (2001:50), South Africa has created one of the most progressive and far-sighted policy and legislation environments in the world. Despite the existence of a well thought out plan, sufficient time, a large economy to draw on, a reasonable pool of skilled health and education workers and a sophisticated media, these policies and laws have not been adequately implemented and have impacted significantly on the ground.

2.16 Report of South Africa's Comprehensive HIV and AIDS Strategy to United Nation General Assemble on HIV and AIDS (UNGASS)

The Prevention of Mother To Child Transmission (PMTCT) programme has expanded significantly since its inception in September 2001. A total of 3 064 facilities offered PMTCT services during 2005. The prevention of mother to child transmission programme aims to prevent or reduce mother to child transmission of HIV, provision of voluntary counselling and testing and where appropriate, nevirapine or other appropriate medicines, and formula milk for feeding in public sector health facilities throughout the country (UNGASS MARCH 2006:19).

The South African Progress Report on Declaration on HIV and AIDS further says that using available prevention of mother to child transmission data on the NPBI-4 formula, an estimated 55% of pregnant HIV+ women received nevirapine to reduce the risk of mother to child transmission in public sector facilities in 2004. The report (March

2006:19), however, acknowledges that are inherent in strengthening the health care system and monitoring these programmes, as a result South Africa could not establish the number of children who have been saved as a result of the intervention.

Table 3: Prevention of MTCT: Antiretroviral Prophylaxis

NPBI-4 Prevention of MTCT: Antiretroviral Prophylaxis			
Data Source: Name	DOH: PTMCT Statistics (Jan 2004 – Dec 200) DOH: Annual antenatal HIVsero-prevalance (October 2004)		
Data Source Type	Programme monitoring data, HIV surveillance		
Data collection period (day/month/year)	DOH: PMTCT Statistics (Jan 2004 – Dec 200) DOH: Annual antenatal HIVsero-prevalance (October 2004)		
PART : Data requirements	**Public Sector**	**Private Sector**	**Total**
Numerator			
1. Number of HIV-infected pregnant women provided with ARV therapy to reduce the risk of MTCT at the end of 2004	261 421	Not Available	
Denominator			
2. Number of women who gave birth in the last 12 months	1118198	Not Available	
3. HIV prevalence in pregnant women (%)	29.7		
4. Estimated number of HIV-infected women in the country at the end of 2004	332, 105	Not Available	
To calculate line 4, multiply line 2 by line 3, and divide the product by 100			
PART II: Indicator computation **Indicator scores by health sector**			
5. Divide the number of HIV-infected pregnant women			

provided with therapy (nevirapine) *(line 1) by the relevant sector by the number of HIV-infected pregnant women in the country (line 4) and multiply the result by 100			

With respect to the table above the current policy of government is monotherapy (Nevirapine) as the is yet insufficient evidence to support the use of other therapeutic agents, in addition , the numbers provided are estimates (UNGASS Report, 2006:20).

2.17 HIV Treatment: Antiretroviral Combination Therapy

South Africa remains one of the most HIV-infected countries world-wide. The Actuarial Society of South Africa (ASSA) estimated that the total number of people living with HIV in South Africa in 2005 was 2.5 million. They further estimated that 520 000 of those South Africans who had AIDS were not receiving the required treatment, while approximately 124 000 were receiving treatment across both the private and public sectors (Stewart et al., 2007:286).

Stewart et al., (2006:287) impress upon that Highly Active Antiretroviral Ttreatment (HAART) has been provided on a limited scale in South Africa since 2000, but largely to the medically insured population through the for-profit private health care (Whiteside, 2000). In the public sector, the availability of antiretroviral therapy in accredited public health facilities commenced in the first quarter of 2004 as a component of the Comprehensive HIV and AIDS Care, Management and Treatment Programme for South Africa (UNGASS, 2006:20). Before that "some individuals also receive treatment through non-profit organization" (Stewart et al., 2006:287). It must be noted that according to Stewart et al., (2006:287) expansion of a public sector-driven programme was initially delayed due to a number of factors, including the excessive costs of drugs and diagnostic tools and the absence of a national plan.

According to the UNGASS report (2006:20), the National Antiretroviral Treatment Guidelines, published in 2004, are used for the assessment, enrolment and management of persons who are eligible for ART. During 2005 the National

Antiretroviral Treatment Guidelines for children were published. The first edition National Antiretroviral Treatment Guidelines states the following patient eligibility criteria for adults and adolescents:

"The medical criteria are as follows:

- CD4 count <200 cells/mm3 irrespective of WHO stage, or
- WHO stage IV disease irrespective of CD4 count.

Clinical criteria as follows:

- Confirmation of diagnosis of HIV-infection
- Recurrent (>2 admission per year) hospitalization or prolonged hospitalization (>4weeks)for HIV-related illness OR
- The patient satisfies the provisional WHO Stage III/IV disease
- Foe symptomatic patients, CD4 percentage <20% if under 18 months OR <15% if over 18months.

Psycho-social Considerations

- Demonstrated reliability, i.e., patient has attended three or more scheduled visits to an HIV clinic
- No active alcohol or other substance abuse
- No untreated active depression
- Insight: patients need to have accepted their HIV-positive status".

These criteria identified above the list is not exhaustive, however, the review of the antiretroviral therapy in the Amathole Health District will fundamentally be underpinned under the internationally and national agreed standards.

2.18 Percentage of people with advanced HIV infection receiving combination therapy

There are major challenges associated with reporting the number of individuals who are on treatment (UNGASS, 2006:23). The report confirms that "the South African programme because it is one of the largest and one of the most comprehensive in the world faces the greatest challenge as regards establishing adequate monitoring systems". It is further confirmed in the UNGASS report that "the current electronic

patient information system is still under development and pharmacovigilance centres are gradually being developed and strengthened so as to provide adequate information of patients who discontinue treatment, deaths, side effects, those lost to follow up etc". The estimates provided below should therefore be read with ballpark, the report warned.

Table 4: Percentage of people with advanced HIV infection receiving antiretroviral combination therapy

NPBI-5: HIV treatment: antiretroviral combination therapy	
Date Sources: Department of Health, South Africa Aurum Institute of Health, Aid for AIDS, **Life**works, Implats Platinum, Pepfar etc	
Date collection period: January 2005 – December 2005	
Numerator:	
1. Number of people receiving ARV therapy at the beginning of the year (Jan 2005)	51040
2. Number of people who commence treatment in the last 12 months (January – December 05)	121620
3. Number of people receiving ARV therapy at the start of the year who died during the year 2005	
4. Number of people for whom treatment was discontinued for other reasons	
5. Number of people receiving ARV therapy at the end of the year (2005)= (lines 1 + 2) – (lines 3 + 4)	
Denominator	
6. Number of people with people with HIV infection in the total population4	
7. Percentage of people with HIV who are at advanced stage of infection5	
8. Number of people with advanced HIV infection is a product of the last two above points. (multiply line 6 by line 7 and dividing the product by 100)	
9. Percentage of people with advanced HIV infection receiving antiretroviral combination therapy (divide line 5 by line 8 and multiply by 100)	

NB: There is huge information gap in the table above as a result of many private and NGOs failing to submit on time.

Below are the case studies from other countries who have successfully implemented ARVs programmes.

2.19 Free State's approach to implementing the Comprehensive Plan

The Free State's version of the Operational Plan for comprehensive HIV and Care, Management and Treatment for South Africa (CCMT programme) was, like the national plan, introduced towards, the end of 2003. Since then implementation has proceeded through an initial preparation phase as well as a subsequent establishment phase, and is now entering its expansion phase (van Rensburg, 2006:45). The author continues to

say that: "It remains programme a Programme of massive proportions posing immense challenges to policy implementers – indeed, Chapman (2005:73) described the programme as "one of the most significant public health interventions" and went to say "I believe it will become the most difficult public health interventions to sustain".

The challenge becomes even more demanding as service delivery has to be re-orientated from acute to chronic disease care to ensure uninterrupted, life-long treatment and high levels of adherence to multi-drug regimens over many years (Schneider et al., 2004:81).

In October 2007, at the Health Systems Round Table Conference Schneider, et al., (2007:15) noted that, of the 14,627 people enrolled over 18 months onto the CCMT (*Comprehensive Care, Management and Treatment*) programme, 62% was women, while 6,889 (48%) was judged as eligible for ART; only 3,619 (53% of those eligible) actually received ART. Of the 2,422 deaths recorded, 87% was in the pre-ART group. The provision of HAART resulted in an 86% drop in mortality. The long waiting lists and problems of delayed access once enrolled have prompted a review of the model of service provision in this province.

According to Schneider et al., (2007), the non-clinical outcomes of ART have also been extensively studied in the Free State. Longitudinal data collected on patient cohorts in this province, presented by Frikkie Booysen, indicate steady improvements in quality of life (EQ-VAS and EQ- 5ED instruments), self-reported physical health and emotional well-being, disclosure of status, labour force participation, and personal income over a 24-month period (Figure 9). However, he noted a possible early trend of a decline in self-reported health status in those on treatment for more than two years.

2.20 Western Cape Antiretroviral Therapy Perspective

Boulle (2007:46), in his "the evolution of ART scale-up programme in Southern Africa", provided outcome data on the first 12,587 patients started on treatment between 2001 and 2005 in the Western Cape. At 24 months, 82% of the cohort remained in care, while at 48 months 72% remained in care. Of those remaining in care, more than 90% had undetectable viral loads (<400 copies per ml) and CD4 counts of greater than 200 after 4 years.

He also cited the analyses conducted by the Medical Research Council (presented at the 2007 Durban AIDS Conference) showing a stabilization (and in some instances a decline) in adult female mortality rates in all but three provinces (Free State, Limpopo and Mpumalanga). This has been attributed to the ART programme and suggests that impacts at population level are beginning to emerge (Boulle, 2007).

When making comparative analysis, the outcomes data from the Free State and Western Cape indicate an ART programme of high quality, despite considerable barriers having been reported to entry into the Free State programme. As scale-up proceeds, there are new challenges to be faced. With increasing access to ART in the Western Cape, the proportion of patients presenting with low CD4 counts (<50 cells/mm3) has decreased and, as a result, early mortality has declined over time. On the other hand, as coverage expanded, facilities have become more and more saturated and thus less able to provide either individualized patient attention or active defaulter tracing. Early loss to follow-up has therefore increased over time (Schneider et al., 2007:16).

2.21 Comprehensive Care Management and Treatment of HIV/AIDS in Eastern Cape

The poor socio-economic and health status indicators for the Eastern Cape are a reflection of the underdevelopment of previous homeland areas, and its impact on health and socio-economic conditions of African people forced to live in these areas. Black people in South Africa, and especially in the Eastern Cape, are still faced with what Whitehead (*McIntyre, D. (1998) "Input Paper on Health for the Poverty and Inequality Report", Health Economics Unit, University of Cape Town*) has termed "unnecessary and avoidable problems" such as poor sanitation and lack of safe access to drinking water. High unemployment, illiteracy and living in remote and inaccessible geographic areas continue to restrict life style choices of poor people, and increase their need for access to public health facilities.

In the Eastern Cape, there has been a constant increase of HIV prevalence from 23.6% in 2002 to 29% in 2005. There has been a statistical significant decline in HIV prevalence from 28.6% in 2006 to 26% in 2007.

Table 5: HIV Prevalence per District in Eastern Cape, 2002 – 2007

DISTRICT MUNICIPALITY	2002	2003	2004	2005	2006	2007
ALFRED NZO	28.3	30.1	27.65	28.8	25.1	21.8
AMATOLE	21.7	27.1	27.29	30.7	28.7	26.7
CACADU	16.8	20.2	19	13.1	22.8	14.5
CHRIS HANI	25.3	27.3	30.2	30.3	27.1	26.3
NMMM	32.6	31.2	34.5	32.9	31.9	27.9
OR TAMBO	23.6	29.2	33.8	33.8	29.7	27.3
UKHAHLAMBA	19.0	24.9	22.4	27.3	27.3	29.5
TOTAL	23.6	27.1	28.03	29.1	28.6	26

Since the launch of its CCMT Plan on the 15th of May 2004, the Eastern Cape Province had a total of 7 hospitals to implement the ARV treatment program, the programme has dramatically increased to rural areas. To date, 20 hospitals, 3 Community Health Centres and Correctional services facilities, have been accredited and are implementing the program. The accreditation of facilities is now focusing in ensuring that each Local Service Area (Sub-district) has an operational site *(http://www.ecdoh.gov.za/press_releases/25/Progress report_on_ARV_programme/04_Se... 2006/09/23)*.

The implementation of the CCMT program has shown much progress. According to the report, "the province has surpassed its target of 50 000 clients on treatment during the last financial year despite the shortage of critical health care providers like doctors and pharmacists". This report shows that it is possible to make ARVs accessible to the clients who are in dire need of the treatment.

2.22 Comprehensive Care Management and Treatment of HIV/AIDS in Amathole District Municipality

The Amathole District is home to the capital city of the Eastern Cape, Bhisho. It includes parts of the former Ciskei and Transkei, as well as former the Cape Provincial Administration areas. The port city of East London is also situated in the Amathole District.

The district accounts for 25,9% of the Eastern Cape's population. Amathole has 1,7 million people most of whom are found in the former Transkei and Ciskei areas. Women are in a majority in the district standing at 53,6% while men make up 46,4% of the general population. The district is characterised by an increased trend towards urbanization, however, this is not matched by a similar trend in economic development.

The Amathole District Municipality is made up of eight local municipalities, namely:

- Buffalo City: East London, Bhisho, Dimbaza;
- Amahlathi: Stutterheim, Cathcart, Keiskammahoek, Kei Road;
- Nxuba: Adelaide, Bedford;
- Nkonkobe: Alice, Fort Beaufort;
- Ngqushwa: Peddie, Hamburg;
- Great Kei: Komga, Kei Mouth, Haga Haga, Morgans Bay, Chintsa;
- Mnquma: Butterworth, Nqamakwe, Centane; and
- Mbashe: Dutywa, Elliotdale, Willowvale.

2.23 Mainstreaming HIV/AIDS Progress and Challenges in South Africa's HIV/AIDS Campaign

South Africa boast with one of the comprehensive HIV and AIDS programme in the global village but the incidence and prevalence of the disease continue unabated. All programmes in South Africa are underpinned under the guiding principles and tenets of the Constitution of South Africa (Act No. 108 of 1996). According to Kenyon et al., (2001:50), South Africa has created one of the most progressive and far-sighted policy and legislation environments in the world. Despite the existence of a well thought out plan, sufficient time, a large economy to draw on, a reasonable pool of skilled health and education workers and a sophisticated media, these policies and laws have not been adequately implemented and have impacted significantly on the ground.

Notwithstanding all what has been articulated above, Kenyon et al., (2001:55) take note of the factors responsible for the failure of the implementation of the programme as follows:

- ❖ Poverty and inequality;
- ❖ A public sector undergoing restructuring at every level;
- ❖ A turnover of staff;

- ❖ A lack of effective leadership; and
- ❖ And a failure to mainstream HIV activities at all levels of society.

Irrespective of these challenges, South Africa has experienced a "re-emergence of health activism and social action to combat the epidemic" (Kenyon et al., 2001:71). The increase in the prevalence of HIV is an indication of inadequacy in the implementation of the plan. The full implementation of HIV and programme will yield positive results for the government. The delaying of the disease from HIV to AIDS will save the country huge sums of money in hospitalization, burials, and claims from Insurance companies and minimize number of orphaned children. The success of the HIV and AIDS programme needs mobilization of the organs of civil society who have capacity at an efficient cost for implementation.

2.24 District-Based Programme Outcomes

(a) Lesotho

Lynch (2007), in her discussion document (Providing free HIV/AIDS treatment and care at PHC level in context of HR shortage) in the Round Table Conference on health systems reported data on outcomes for Scott Hospital Service Area, one of the district-based programmes represented at the conference. Of the 246 patients initiated onto treatment in the first two quarters of 2006, 71% was followed up at clinics and 29% at the local hospital (Table 5). Six-month retention rates for patients initiated in clinics were 91.4%, compared with 70.4% for the hospital. Less than 3% of patients in clinics were lost to follow-up, compared with 4% at the hospital. Mortality rates were also lower at clinics. In a rural context, where geographical access is a major concern, these findings suggest that well-trained nurses providing care in well-supported PHC facilities are better able to do follow up on patients than are hospitals.

Table 6: Scott Hospital Service Area: 6-month cohort: clinics and hospital for first tow quarters of 2006

	Clinics	Hospital	Total
Total adults initiated on ART (%of total)	175 (71%)	71 (28.9%)	246
Women (% of total adults)	134 (76.6)%	50 (70.4%)	184 (74.8%)

Number 6 months on ART			**246**
Remaining in care	160 (91.4%)	50 (70.4%)	210 (85.4%)
Died	10 (5.7%)	11 (15.5)	21 (8.5%)
Transferred out	2 (1.2%)	2 (2.8%)	4 (1.6%)
Loss to follow-up	5 (2.9%)	10 (14.1%)	15 (6.1%)

Source: S Lynch: *Providing free HIV/AIDS treatment and care at PHC level in context of HR shortage: MSF experience in Lesotho.*

(b) District-Based ART in two districts of South Africa (Umkhanyakude – KZN, Okhahlamba and Mhlontlo Sub-district in OR Tambo – Eastern Cape)

One of the striking features of the available literature is the emerging evidence of sub-district and district experiences in rapidly expanding access to ART and other HIV interventions in resource-constrained rural areas of South Africa and Lesotho as discussed above.

The three South African areas are already meeting the 2011 *National Strategic Plan* target (and beyond) for ART access. The Umkhanyakude District (northern KwaZulu-Natal), for example, had a rapid increase in rates of enrolment into HIV care over three years (2004-7) (Figure 5). At the time of the Round Table, the sub-district served by Mseleni Hospital and its referring clinics was providing ART to nearly 3,000 people, meeting 95% of current need. In total, 2.5% of the population in this sub-district are on ART. Similarly, Emmaus Hospital and its clinics (Okhahlamba Sub-district, KwaZulu-Natal) are currently reaching enrolment targets of 80% of new need for ART, as is the Mhlontlo Sub-district (Eastern Cape). In rural Lesotho, the Scott Hospital Service Area has reached a monthly ART enrolment rate of 110 new patients per month, 18 months after inception of the programme, representing 40% of need, and against a backdrop of extreme health worker shortages (Schneider et al., 2007: 10).

These experiences demonstrate that rapid scale-up can be achieved at district and sub district levels, even in low-resource settings. They also mirror that of the Lusikisiki Sub-

district (Eastern Cape) reported at a meeting convened by MSF and the Nelson Mandela Foundation in 2006.

Table 6: Profiles and achievements of rural districts/sub-districts in ART roll-out

District/Sub-district	Population	HIV prevalence, need for care	Facilities	Monthly enrolment onto ART
Umkhanyakude District (KZN) consisting of five sub-districts	500,000 More or less	ANC HIV Prevalence,35%; 6,000 additional people need ART annually	5 hospitals 49 clinics	500 more or less
Emmaus Hospital (Okhahlamba sub-district, Uthukela District (KZN)	150,000 More or less	ANC HIV prevalence: 35%	1 hospital 5 clinics	100-120
Mhlontlo Sub-district (OR Tambo, EC)	200,000 More or less	ANC HIV prevalence: 26%, 1,600 additional people need ART annually	2 hospitals 27 clinics	60-80

Sources: P Barker: Engaging primary care clinics for district-based comprehensive HIV care; B Gaede: ART services in rural areas– learning from the successes; S Lynch: Providing free HIV/AIDS treatment and care at PHC-level in context of HR shortage: MSF experience in Lesotho.

Barker, in Schneider (2007:11), talks of the strategies and principles implemented in order to expand access at the local level, and the strategies are articulated below:

- A district-wide or sub-district-wide approach to implementation through all available facilities, rather than the concept of separate "ART sites". All the areas aimed to provide a full package of services (testing, initiation and follow-up) in a decentralized fashion through the PHC system. In the Scott HSA, the full package of HIV care was implemented in PHC facilities from the outset, while in the other areas the process of decentralization of tasks has occurred in a more incremental fashion. In the Mhlontlo Sub-district, for example, the provision of ART was broken down into five key steps – testing, staging, preparation, initiation and long-term follow up. Providers were not only encouraged to see their contribution as part of a whole, but were also supported to take increased responsibility for each of the steps over time. In Emmaus, decentralization of care was facilitated by making maximum use of existing mechanisms, such as the established chronic care system to prescribe ARVs for six months at a time;

- An integrated and holistic approach to service provision. For example, in Emmaus Hospital and Scott HSA, TB and HIV services are provided together in PHC clinics, on the same day, by the same clinician and using common records. Combined TB/HIV lay counsellors adopt a single approach to treatment preparation and adherence management for the two diseases. All the sub-districts have focused on improving PMTCT services;
- A population-based approach to defining need and setting targets for HIV services. Extrapolating from district antenatal HIV prevalence, estimates of numbers of HIV infected people and those in need of ART can be established for the population of the sub-district. From this, the rate of enrolment required to address both existing and new need is calculated, and targets are set for the district/sub-district. In Umkhanyakude and Mhlontlo, monthly enrolment targets were set for each individual facility;
- Investment in strengthening existing district based support systems rather than creating parallel or new systems. In Emmaus Hospital and Scott HSA, investments were made in improving the drug supply, laboratory, transport, referral and clinical support, and supervision systems to PHC facilities;
- Using existing professional staff establishments, but improving the efficiency of resource use through task shifting. Such task shifting was from doctors to nurses, and from professionals to lay workers and support staff;
- Instituting simple monitoring and evaluation systems and using the analysis of information for management;
- Clear strategies for programme implementation. In Scott HSA, the implementation process involved intensive theoretical and in-service and on-site training; the development of nurse-oriented guidelines; weekly visits from a clinician whose role was defined primarily as providing in-service training; and support for the management of difficult cases. In Umkhanyakude and Mhlontlo, Barker described the methodology of the Institute for Healthcare Improvement (IHI) as follows: connecting clinics throughout a district in a network so they can learn from one another; defining the scope of the problem; setting goals linked to *need;* simplifying clinical care into discrete, linked processes that will lead to a clearly identified outcome/goal; and empowering local health care workers to improve their local health systems through the use of change methods and engaging them in the M&E process;

- ❖ An active process of learning by doing. In Emmaus in the Caribbean, a positive ("*we can do it*") attitude and an ability to identify and learn from problems enabled local actors to improve access to ART over time, eventually reaching universal access targets; and
- ❖ The presence of change agents and champions for innovation. The Scott HSA programme was supported externally by MSF, and IHI supported implementation in Umkhanyakude and Mhlontlo. In all areas, strong local champions were key to successful and sustained implementation.

Barker summarized his input by concluding that PHC services could be successfully integrated into cohesive district-based comprehensive HIV/AIDS care and that the current resources in the district heath system could provide most of HIV/AIDS needs for South Africa. Priorities, for the short term, thus comprise improving VCT and dealing with the regulations preventing lay workers performing HIV tests; the development of standard treatment guidelines for nurse-initiation of ARVs; building linkages with community structures (home-based carers, traditional healers, NGOs); and systematizing integration of HIV care into PHC and TB services. In the medium term, the PHC infrastructure, including staffing, has to be reviewed with future workloads in mind.

2.25 Health Systems and the Comprehensive Plan

Health systems, as defined by Schneider (2007:6), are the vehicle through which proven interventions are delivered, and the underlying processes required to support such delivery. According to the World Health Organization, health systems consist of (1) *goals* – building access, equity and responsiveness – and (2) *functions* – organizational arrangements for service delivery (primary health care [PHC], hospitals, management structures, public/private sectors), resources (financial, human, infrastructural), institutional intelligence (research, monitoring and evaluation) and stewardship (leadership, governance, legislation and regulation). With such a wide set of structures and processes, opinions on the functioning of the health system will depend on which specific aspect of the system you are looking at and from what point of view. It has become common, for example, to describe the health system as being "in crisis". Yet, a public sector user, a manager, a politician, a private medical specialist or a UN representative will portray this crisis and its causes in very different ways. Others may altogether reject the notion of a "crisis".

With these words of caution, Schneider proposed four observations regarding health systems and four years of *Comprehensive Plan* implementation in South Africa:

1. The ART programme has demonstrated that the health system is indeed capable of innovation and performance;
2. We are still far from achieving universal access to ART through this health system;
3. The existing models of service provision are unable to meet the prevailing needs; and
4. The ART programme has had a number of impacts on the health system, not all of which are positive.

The early evidence from the ART programme in South Africa suggests that, once enrolled, patients enjoy increased levels of survival, viral load suppression, self-reported adherence and retention in treatment that is on a par with levels in the developed world, and even much better than those for several other chronic diseases. With 300,000 people initiated onto treatment, the *Comprehensive Plan* is arguably one of the better performing programmes in the South African health system (Schneider, 2007:6). Possible reasons for this are as follows:

- The presence of ring-fenced resources, the attention to systems (such as drug supplies and laboratory services), and the standards for inputs set through the accreditation process;
- The possibility of saving and improving the quality of life through ART has fired the imagination of scores of providers, clinicians and middle-level managers across the country. The programme has thus benefited from a widespread process of bottom-up service development where local actors have actively experimented with new ways of doing things in order to expand access; and
- New ways of functioning have been introduced into the health system. These include treatment preparation/literacy programmes, patient empowerment processes, and new relationships with providers, often through the mediating role of lay workers/people living with HIV/AIDS. In the context of widespread stigma, ART services represent rare spaces where people with HIV experience acceptance.

Schneider et al., further argue that, despite these gains, however, universal access to ART is still far from being achieved. The *National Strategic Plan* defined universal access to ART as the enrolment of 80% of people entering the AIDS-phase of illness (according to models of the Actuarial Society of South Africa) in a specific year. A report issued by the national Treasury reveals that only 120,000 people were enrolled onto treatment between April 2006 and March 2007, i.e., a mere one-quarter of persons with AIDS, i.e., WHO classification Stage 4 Disease (although excluding private sector enrolment). Who is thus gaining access to services and who is not? In other words, what measures of implicit rationing are being applied in the health system? And are these leading to systematic inequities along geographical, socioeconomic, age or gender lines?

Although much attention and huge resources have been devoted to ART access, coverage levels have not been high enough to alter fundamentally the experience of HIV in the mainstream of the health system. Hospital admissions in high burden areas, for example, have continued to rise, resulting mostly from an increase in the tuberculosis epidemic and from difficulties with diagnosing and managing HIV-associated tuberculosis.

Schneider et al., (2007:7) observe that Universal access to ART is unlikely to be achieved with the predominant model of ART service delivery currently being implemented in the public health system, namely, vertical services funded through ring-fenced resources and provided in 313 (at the time of presentation) accredited CCMT (comprehensive care, management and treatment) sites, based in hospitals, community health centres or PHC clinics, and provided by doctors, professional nurses and pharmacists. The need for ART is expanding by about 500,000 people per annum. In order to meet 80% of this need, each of the existing 313 accredited sites would have to enrol more than 100 new patients each month with current use of resources. Very few CCMT sites are able to achieve this level of enrolment. Quite the converse is true: as sites become more saturated, the rates of enrolment tend to decline – and simultaneously the ability to ensure retention in care.

The authors further noticed that a number of responses to these challenges have

emerged from experiences on the ground. These include:

- ❖ Reorganizing provider roles across the phases of treatment (staging, preparation, initiation and follow-up) to remove delays and bottlenecks in access ART;
- ❖ Simplifying follow-up routines, through triage processes that identify those who are stable and adherent;
- ❖ Maximizing the use of scarce resources;
- ❖ Spreading the patient and work load more widely among facilities by positioning the service in the PHC system (much like the TB programme at present) and managed principally by nurses; and
- ❖ Mobilizing the resources of the private sector for public service purposes.

Despite the endorsement of such approaches through the PHC system, there are still many barriers to implementation at the political, the professional and the bureaucratic levels.

The health system impacts of ART access are still either poorly understood or poorly researched. As suggested above, the ART programme has been a source of innovation and hope in the health system. At the same time, ART coverage levels remain too low to alter the impacts of HIV significantly where they have been felt most, in hospitals. In the Free State Province there is evidence to suggest displacement of nursing staff from the general PHC system into the ART programme, and in some provinces, a significant non-governmental sector – funded through mechanisms such as PEPFAR – has recruited scarce skills from the public health system. On the other hand, there has been a significant increase in administrative and support staff, and greater involvement of lay health workers in the PHC system. The impacts of these human resource shifts on other programmes – as a result of the *Comprehensive Plan* – are unclear. TB treatment outcomes in the Free State, for example, did not change between 2004 and 2006. In contrast to other new programmes and reforms implemented since 1994, the subjective response of front-line providers to the ART programme has been largely positive Schneider, 2007:7).

From a health systems perspective, Schneider hinted at the next generation or next order of health systems challenges:

- ❖ Expanding access to ART while maintaining quality and innovation;
- ❖ Shifting the perspective of the programme from a site-based to a district, population based one. This will require the development of new programme frameworks, methodologies, implementation strategies and training, e.g., planning, monitoring, supervision;
- ❖ Developing integrated approaches to service delivery at a district level: in particular, finding ways to ensure that the investments in treatment mobilize a preventive response – without which the ART programme will become unsustainable – as well as integrating ART with TB and maternal-child health services; and
- ❖ Addressing human resource constraints and obstacles, including nursing governance/regulations and training, better integration of lay workers through career pathing and, more broadly, a review of the norms for PHC teams.

Addressing these challenges will, according to Schneider, require a new cycle of innovation, learning and policy adaptation. There is the ever-present risk of losing momentum and entering a phase of despondency, stasis and inertia.

(a) Future Costs and affordability of ART

Both the *Comprehensive Plan* and the *National Strategic Plan* have universal access to ART as one of the main goals. The prospects of and challenges in meeting this goal constituted a key aspect of deliberations at the national discussion forums.

Susan Cleary addressed the question: What proportion of South Africa's health budget is required to achieve a policy of universal access to ART? Based on empirical data from Khayelitsha (Cape Town), she modelled the impact on the budget of universal access to first- and second-line ART regimens over a ten-year period (2004-2014). She also confirm that universal access is defined as meeting 100% of need for the whole period, i.e., it assumes that the ART programme was able to achieve 100% coverage from the moment it was introduced in 2004 (not the levels actually achieved).

If this hypothetical condition of universal access were met, a cumulative total of 3.3 million people would be remaining in care by 2014 at a cumulative cost of US$12.5

billion. If the health budget was constant (in real terms) over the period, 16% and 47% of the budget would need to be allocated to the ART programme in 2006 and in 2014, respectively. This rise in proportion is due to the addition of approximately 0.5 million to the pool of people needing care each year over the period. If a strategy of providing only first-line drugs was pursued, 2.8 million would be remaining in care at a cumulative cost of US$11 billion in 2014. A strategy of no ART provision also has a cost of US$7.6 billion for the 1.3 million people remaining in care, and consuming 20% of the health budget in 2014 (Cleary,2007).

Cleary's analysis does not represent actual developments. In reality, far less than 100% of need has been met since 2004, and the *National Strategic Plan* has proposed a national access target of 80% (not 100%) by 2011. Moreover, health expenditure has also increased in real terms since 2004, much of it on conditional grants for HIV. The analysis however does serve to highlight that as scale-up proceeds, ART may become difficult to finance, unless there is a considerable increase in the health budget or a decrease in the costs of the programme, e.g., in the staffing and in the use of tests and drugs. It is also important to note that the increased costs of HIV cannot be avoided: even if no ART was provided, HIV care would still consume 20% of the health budget in 2014, for only 1.3 million people remaining in care. If budget resources remain finite, then choices will need to be made that maximize the equity of access, such as deciding to provide only one first-line regimen as in Malawi (Schneider, 2007:10).

(b) User and Household (demand-side) Perspective

In a health systems conference conducted in South Africa a number of presentations was made which explored the user, household and social context and impact of HIV and ART. Several studies, completed and ongoing, used longitudinal methods to research these effects in South Africa. Of these, the study of the Centre for Health Systems Research and Development (University of the Free State) is the most established and comprehensive in scope, and has now conducted five rounds of surveys with patients enrolled in the Free State's HIV programme. Four presentations drew on this dataset. Cohort studies examining the socio-economic impacts of ART are also in progress in Gauteng, Mpumalanga, and Khayelitsha (Cape Town), while cross-sectional studies have been completed in the Eastern Cape, Gauteng and Western Cape (Coetzee, 2007).

(c) Patients Perceptions and experiences

Heunis (2007) analyzed predictors of satisfaction with HIV services in the Free State cohort of patients. Of the factors he examined, a growing trend of dissatisfaction with waiting times at assessment sites was the most significant. Dissatisfaction with the other dimensions of the service (e.g., privacy, cleanliness, respect) remained constant over time, with roughly 30% of patients consistently expressing some form of dissatisfaction in the patient surveys.

In open-ended interviews with people taking ART in Gauteng, Ngoma (2007), found that, despite a high degree of adjustment to the demands of treatment, patients continued to grapple with the management of disclosure and the ever-present threat of stigma and rejection. HIV marked a "*new life*" with new social networks (mostly other HIV positive people) existing alongside an "*old life*". Some interviewees led a dual life by not disclosing to any members of their prior networks, although this did not necessarily prevent them from taking treatment regularly. Family support (emotional and financial), good relations with health workers, access to grants, and the informal connections made with other HIV positive people at HIV services – rather than formal support groups – enabled greater adjustment to and acceptance of the "*new life*".

In the Free State, patient cohorts (Booysen & Pappin, 2007) showed that 83% of those on ART for more than two years had disclosed its status to someone outside of its family, compared with 44% in the pre-ART group (Figure 15). Reported desire to keep HIV status a secret declined from 41% in the early phases of treatment to 22% after 24 months. This suggests that being on ART promotes disclosure.

Along with using data from the same Free State study, Wouter et al., (2006), examined the association between "*public disclosure*" (i.e., to non-family/ non-partners) and social support variables in these cohorts. These variables include the presence of treatment and emotional buddies – referred to as "*bonding social capital*", and contact with a support group or community health worker – referred to as "*bridging social capital*". Disclosure was associated with bonding capital – but not with bridging social capital – which reinforces the importance of family social networks in emotional wellbeing.

2.26 Implications of ART in Employment, Grants and Adherence

Most of the people attending HIV services are unemployed. Employment rates varied from 12% in a study in the Eastern Cape, to nearly half of those on treatment for two years in Khayelitsha (Cape Town). Employment improved over time – from 16% to 25% in the Free State cohort, and from 33% to 49% in the Khayelitsha cohort (Table 6). Booysen noted three important "*labour market transitions*" in people on ART: first, from being too ill to work, to participating in the labour force (employed or unemployed); second, from being unemployed (not searching), to being unemployed (and searching); and third, from being unemployed to being employed (Schneider, 2007:19-20).

Access to disability grants appears to differ greatly at various study sites. Fewer than half (44%) of the patients attending the 16 ART sites assessed by Meyer *et al., (2005).* were receiving disability grants. According to Peltzer et al., (2006) at an Eastern Cape site, 67% of patients attending ART services was receiving grants, compared with 35% in those not on ART. Moreover, access to the disability grant shows different trends over time in different parts of the country. In the Free State, access to grants appears to increase with duration of treatment – from 49% to 73% – while the Khayelitsha cohort displays an opposite trend of decreasing access to the disability grant – from 74% to 47%. The policy in the Western Cape limits disability grants to patients with CD4 counts <200. Meyer *et al., (2005)* found that those older (in age) and those with longer duration on treatment were more likely to receive grants than the younger and more recent enrolees into the service. A decrease in grant access in successive cohorts of patients may reflect changing national policy towards limiting access to disability grants.

Many have raised concerns regarding the disincentive to ART adherence posed by grant withdrawal or termination. Peltzer et al., (2006) reported on a cross-sectional study examining the impact of the disability grant on people living with HIV/AIDS in the Eastern Cape. They found no relationship between self-reported adherence to ARVs and non-receipt or withdrawal of the disability grant. However, they found a highly significant association between reported (non-)use of health services and access/withdrawal of the grant.

In the previous discussion by Booysen, it was noted that access to a disability grant in the Free State cohort of patients was associated with reduced labour force participation

and could, therefore, promote inappropriate dependency in some patients. On the other hand, he argued, the grant also acts as a "*lifeline*" to the benefit of the patient, enabling retention and access to social support, which, in itself, leads to improved health and ability to participate in the labour force. He called for a thorough review of the complex interaction of incentives and disincentives associated with the disability grant.

2.27 The Burden of ill-health on Households and Cost implications

The SACOCO (South African Costs and Coping) study of 280 households in rural Mpumalanga, presented by Jane Goudge *et al., (2006)*, found that one-fifth (20%) of households with ill-health of any kind incurred health expenditures above 10% of total household expenditure. Such levels of health expenditure are categorized as "catastrophic", in that they could lead to household impoverishment. An in-depth study of expenditure patterns and coping strategies was conducted in a subset of 30 households with chronic illnesses (including HIV and TB) over six months. Households fell into three categories: (1) "*highly vulnerable*" – experienced a decline in livelihood; (2) "*vulnerable*" – in danger of a decline in livelihood; and (3) "*secure*" – livelihood not threatened. The ability to maintain household livelihood in the face of chronic illness was strongly associated with access to grants, i.e., pensions, child care and disability grants (Figure 16). Those with grants were more able to afford regular transport costs to facilities, and were, ironically, also more likely to receive exemptions when utilizing hospitals.

The SACOCO study highlighted the difficulties in access faced by poorer households and families facing ill-health – many of which are currently falling through the social welfare net. Goudge (2006), therefore, called for a multi-faceted policy agenda to prevent illness-induced impoverishment by improving the quality of and trust in primary health services, reducing (or eliminating) user fees, increasing access to grants (such as Child Care grants),and subsidizing transport to health facilities.

2.28 Antiretroviral Therapy and Health Systems Strengthening

The challenges faced by the health systems are posing serious service delivery complexities in many parts of South Africa. It has been articulated in the previous discussions that the introduction of ART (especially Free State and Lesotho) has faced

severe human resource shortages. In the following discussions, issues that impact on the strengthening of health system will be explored extensively.

(a) HIV, stress and the medical brain drain

One of the forces behind the human resource crisis is the emigration of skilled health workers from developing to developed countries. Bhargava et al., (2006) analysed the relationship between the HIV pandemic, the medical brain drain, and economic development in sub-Saharan Africa. Combining data on medical migration with data on wages, HIV prevalence and adult mortality as a result of AIDS, they found the following associations:

- Higher wages in some African countries predict a significantly lower medical brain drain;
- Higher HIV prevalence in the population can increase the emigration of physicians; and
- Higher medical brain drain predicts a larger number of adult deaths resulting from AIDS.

Bhargava et al., (2006) cited results of surveys of health care workers in selected African countries, which showed that higher salaries were a key motivator for emigration. Stresses associated with caring for HIV/AIDS patients were also cited as a reason for emigration in certain (especially Southern African) countries.

According to Bhargava, study many participants (especially front-line service providers) repeatedly called for greater concern about the needs of providers and in particular their health needs. AIDS-related deaths are one of the main causes of attrition among health workers in Lesotho where an estimated 20.9 health workers per 1,000 are in need of ART treatment. In Malawi, this figure stands at 44.6/1,000. Lynch called for an active approach to retain scarce skills particularly for rural areas, which would include strategies such as: occupational health and safety (HIV testing, Hep B immunisation and ART) services for nurses and nursing students; financial and non-financial incentives (hardship allowance, risk allowance, study tours, continued education, distance learning); and improved working conditions (radios, solar panels, basic equipment and minor structural renovations).

(b) Human resource impact of ART in the Free State

Steyn (2007) reviewed data on the deployment and management of human resources for the ART programme in the Free State. The data were obtained from the provincial Personnel Administrative system (PERSAL), as well as from a longitudinal study of the ART programme in the province. The *Comprehensive Plan* estimated that a comprehensive HIV care and treatment service in South Africa would require amongst others, 975 doctors, 2,924 professional nurses and 661 pharmacists. However, current staff production levels are nowhere near generating the required numbers of health workers. Moreover, in South Africa, nearly one-third of professional nurse posts were vacant in 2006. In early 2007, the vacancy rate for all health professional posts in the Free State stood at a staggering 40%. Not surprisingly, the ART programme in the Free State was unable to attract the required number of personnel. In 2006, 49% of doctor posts, 35% of pharmacist posts, and 31% of dietician posts approved for ART were vacant.

Table 7: Filling of posts and vacancy rates in the Free Sate

Posts Categories	ART Programme (August 2006)			Free State vacancy rate- Jan 2007
	Approved	Vacancy	Vacancy rate	
Doctors	39	19	48.7%	32.4%
Professional Nurses	114	18	15.8%	31.3%
Pharmacists	17	6	35.3%	50.6%
Dieticians	13	4	30.8%	
Social Workers	13	6	46.2%	
Total	196	53	27.0%	40.4%

Source: F Steyn & D van Rensburg: Mangaung staff shortages for ART: experiences from the Free State

It is noteworthy that the Free State's ART programme managed to fill most of the allocated professional nurse posts – only 15.8% were vacant, compared with the provincial average of 31%. However, most of the ART posts were filled through so-called "*lateral transfers*" into the more highly graded posts of the ART programme. Of the 97 ART professional nurses posts that were filled, only 20% were new to the

province's public health system – 43% of staff filling posts were drawn from within the same district, 11% from inter-district transfers, and 25% from the same facility where the post was filled. Moreover, evidence suggests that the shifts in personnel exacerbated existing rural-urban inequities within the province. Although it is not clear whether additional staff were recruited into the vacant posts created by the lateral transfers, the more likely scenario is of displacement of staff from the rest of the health system into what is in effect a vertical programme, thus potentially undermining the rest of the health system.

Steyn (2007) made the following recommendations for provincial action:

- Paying more attention to the equitable deployment of staff within and across districts;
- Decentralizing the ART programme to more points of care – as is currently being implemented in the STRETCH programme;
- Broadening the training on ART beyond the staff in the ART programme;
- Integrating the ART programme with other PHC programmes;
- Substituting professional nurses increasingly with mid-level nursing cadres and shifting tasks from professional nurses to enrolled nurses and nursing assistants;
- Increasing the number of professional health workers trained, including mid-level cadres, such as pharmacy assistants; and
- Providing more effective supervision and support.

(c). Implementing ART in the context of extreme health worker shortages

Lynch (2006) summarized the human resource crisis facing Lesotho along the following lines:

- The availability of 5 doctors/100,000 people – compared with 21.4 and 29.7 doctors/100,000 public sector-dependent population in the Free State and Gauteng provinces of South Africa, respectively; and
- The availability of 0.71 nurses/1,000 population (0.4/1,000 in Scott HSA) – compared with 3.9/1,000 in South Africa.

Under such circumstances, the introduction of a separate, vertical ART programme was clearly unthinkable. The ART programme in Scott HSA was therefore implemented as a comprehensive HIV/TB service in existing structures and processes of the PHC system.

It involved intensive theoretical and in-service/on-site training to nurses on the management of HIV-related conditions and ART, and the provision of nurse-oriented guidelines/tools. Additional investments were made by MSF in support systems to health centres:

- A mobile "clinical mentorship" team visiting each health centre on a weekly basis. These visits were structured not only towards clinical care, but also to in-service training, support, monitoring quality and transporting severely ill patients back to the hospital;
- The inception of structured quarterly HIVTB supervision visits to health centres, using a Clinic Supervision Tool (CST) and TB site-visit checklist. The counselling coordinator formed part of these regular visits; and
- Strengthening the laboratory and drug supply functions in the district, employing technicians for the district laboratory and pharmacy.

One of the most important changes made in the Scott HSA was the recruitment, training and employment of lay TB/HIV counsellors from amongst the patients who had been enrolled onto the programme. These workers were extensively trained and empowered to provide a range of core functions in support of the TB/HIV activities at health centres, while an intensive supervision process was instituted. There are proposals for the formal accreditation of lay counsellors in Lesotho. While the ability to mobilize this new human resource capacity was crucial to the implementation of the ART programme in Scott HSA, Lynch warned against seeing "task shifting" to lay health workers as the panacea to the human resource crisis. Nurses and other health professionals remain crucial, and strategies to promote increased training, recruitment and retention need to be vigorously pursued.

(d) Experiences with lay and Community Health Workers (CHW) in other contexts

Lehmann et al., (2007) reviewed the international experience with CHWs, and highlighted the recent resurgence of interest in CHWs, while also posing the question whether we are actually learning from the past. The term "*community health worker*" is a generic term for the wide array of agents who are "*carrying out functions related to health care delivery; trained in some way in the context of the intervention; and having no formal professional or paraprofessional certificated or degreed tertiary education*". Although a typology of CHWs roles is not easy, distinctions can be drawn between

generalist and *specialist* CHWs, *facility-based* and *community-based* CHWs, and *prevention* and *care* roles.

Ongoing training and appropriate supervision appear to be key to successful CHW programmes. Internationally, there are two main choices in the governance of CHWs: firstly, an NGO driven approach with financing by government, but implemented through NGOs; secondly, full integration into health services and PHC teams – as in Brazil. Historically, CHW programmes were often grafted onto existing services, without thinking through the implications for health service providers or communities. They were thus neither the panacea for weak health systems nor a cheap option to provide access to health care for underserved populations.

Hlophe et al., (2007) conducted regular assessments of the CHW presence, roles and motivations in the Free State. The assessments were conducted as part of the CHSR&D's longitudinal study in the first 16 PHC facilities involved in the ART programme in the province. Inventories of numbers and roles over time show a consistent presence of CHWs linked to clinics and performing TB/HIV-related functions, although numbers varied considerably between facilities and districts. The research also reported a major investment in the training of CHWs, as well as a shift from single-purpose to multi-purpose HIV/TB workers, greater role clarification, the provision of stipends, and moves to create career paths for CHWs into the formal health system. By the third follow-up assessment, however, developments around CHWs appeared to have stagnated with little additional training or active management evident since the previous assessment. Relationships with nurses (designated as supervisors) were often described as difficult, while support, supervision, and possibilities for career advancement remained problematic.

2.29 Conclusion

The advent of HIV infections had caused enormous pressures to the socio-economic situations of the world especially the developing countries. Southern Africa Development Community is reported as one of the hardest hit regions of the world. According to chapter two, Section 27(1)(a) of *The Constitution of the Republic of South Africa*, "everyone has the right to have access to health care services, including reproductive health care;" Section 27(2) further qualifies the right to access to health

care by saying " the state must reasonable legislative and other measures, within its available resources, to achieve the progressive realization of each of these rights".

In this chapter, the key concepts of public policy have been extensively explored to highlight the importance of policy and implementation conceptual frameworks. In this discussion chapter, many models of antiretroviral therapy implementation have been extensively discussed. Evaluation of the policy concepts were also discussed intensely in pursuit to measure progress towards the achievement of the policy objectives.

Factors influencing the sustainability and feasibility of effective antiretroviral treatment programmes in resource-limited settings were reviewed with a focus to Malawi, Botswana, Brazil, Haiti, Ghana, South Africa and Uganda. The review provides an overview of experience and lessons learned with regards to the feasibility and different approaches being taken to the delivery antiretroviral therapy.

CHAPTER THREE
RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

The research methodology and design give a clear picture and road map to be followed in conducting this study. It provides the necessary steps and procedures that were used to interact with all relevant participants in the study. The researcher takes into account issues relating to ethical considerations and was sensitive to the views and feelings of the participants the research survey. In this chapter, methodological issues are raised as to how the data were collected.

3.2 Research Design and Methodology

The quantitative and qualitative research methods were used in the implementation of the study. The quantitative research approach is the research which is more highly formalized as well as more explicitly controlled, and in terms of methods, relatively close to the physical sciences (Regenesys, 2006:35). This research approach is more instrumental in giving objective findings as the researcher is the external person and ask questions in a structured manner.

The focus of this approach was on specific questions and hypotheses and remains constant throughout the study. The data collection procedures and types of measurement were constructed in advanced and applied in a standardized manner. The data collectors avoided adding their impressions or interpretations. The measurements were focus on specific variables that were quantified through rating scales, frequency counts.

The quantitative descriptive method was used. This method required the use of questionnaires for data collection and explanatory designs. The questionnaires were designed in a manner that fulfils specific research objectives. The structuring of the questionnaires were in such a way that it would determine the desired outcomes. The randomized cross- sectional survey was used in survey design and the first step was to identify the research population, then the geographical area and from that the researcher did random sample of respondents. Information was collected by means of primary data

collection mechanisms. The data were received from primary sources like people implementing antiretroviral programme at the identified or sampled sites.

3.3 Target and Sampling

The research target of the study was antiretroviral therapy sites and only two Community Health Centres and four District Hospitals were sampled. The agents who are entrusted with the implementation of antiretroviral drugs were in a good position to provide updated, relevant and necessary information. Target people in the collection of data were Nursing Services Managers (site coordinators), Nurses at Antiretroviral units, pharmacists, Dieticians, HIV/AIDS Programme Managers, Doctors, Social Workers.

Sampling is a process of selecting the individuals who participates (observed or questioned) in a research study from a population (Regenesys, 2006:59). The stratified random sampling was used in the study. Stratified sampling will be chosen because it promotes representativity Regenesys, 2006). Leedy et al., (2005:202) agree with Regenesys (2006) that stratified random sampling has the advantage of guaranteeing equal representation of each identified strata. In stratified random sampling, the researcher samples equally from each one of the layers in the overall population (Leedy et al., 2005:202). In the case of the study, it was made it possible that hospitals and clinics providing antiretrovirals were equal represented.

3.4 Data Collections Techniques and Procedures

Data in this study were collected using questionnaires. A questionnaire is a list of carefully structured questions, chosen after considerable testing, with a view to eliciting reliable responses from a chosen sample (Hussey & Hussey, 1997:161). According Regenesys (2006:42), questionnaires are associated with both positivistic/quantitative methodologies. The collection of data from all the participants took a period of two weeks. All the participants were requested to participate by first sourcing their permission and cooperation.

Questionnaires were used in the study because they were inexpensive to administer, information is easy to tabulate, confidentiality is maintained and no expertise to administer.

A questionnaire survey was used as the main source of data collection. Structured questions were sent out to people at antiretroviral sites and were administered by research assistant and the main researcher. The questions were structured in form of open-ended and closed-ended questions. The researcher distributed thirty questionnaires to six health facilities providing antiretroviral therapy at the Amathole Health District. Out of thirty questionnaires distributed, only twenty were returned.

The researcher did everything practically possible to encourage the interviewees to respond to the questionnaires. Respondents who did not return their questionnaires were called by the main researcher and explained the importance of their cooperation for the success of the project. They all made promises to fill the questionnaires after the researcher gave many extensions (for a period of two months). Even the intervention of the institutional managers did not yield positive results.

3.5. Data Analysis

The data were analyzed by using tables and graphs in order to depict trends and patterns of the antiretroviral drugs implementation programme. Also descriptive data analysis was used in order to elaborate thematic issues in question.

3.6 Limitations of the Study

This research report is limited in that it only illustrates feedback of only selected antiretroviral therapy sites. Accreditation of public health institutions is still a huge challenge. However, many health facilities are hamstrung by poor infrastructure, shortage of human resources and limited financial envelope. It was not always possible to meet all relevant stakeholders like pharmacists, ART Managers as well as Social Workers. There was both an over-exaggeration of achievements as well as reluctance of some managers to provide information for fear of being viewed in a negative light, despite assurance that names will not be divulged.

The researcher explained in detail the objectives of the study and showed respondents the comments of the Superintendent General of the Department of Health in his letter of approval " it is the department`s wish that the findings will be shared with the department with the permission of the relevant academic institution". It was clearly explained that the study wanted to get the true of the antiretroviral therapy implementation.

3.7 Ethical Considerations

The proposed research study was conducted under highest ethical standards possible. Written permission to conduct the research was sought from Superintendent General of the Department of Health, participating institutions and individual participants or respondents. All quoted work from other sources was strictly acknowledged and free from plagiarism. The researcher ensured that research findings were presented with honesty without any bias.

3.8 Conclusion

The design and methodology used assisted the researcher to pay special attention to scientific fundamentals of research. The questionnaires used assisted respondents to express their views freely and suggest on how shortcomings could be addressed.

The researcher and assistants had an opportunity to observe certain variables during the data collection process. The respondents were able to practically demonstrate or show the researcher some of the issues which came up during the interviewing process.

The documentation of the collected information was structured in themes in order to assist the researcher in presenting the results. The methodology used assisted to ensure that the planned was executed according to plan and made it easy for information sort out.

CHAPTER FOUR
DATA ANALYSIS

4.1 Introduction

This research report or results focuses on the accredited Community Health Centres and District Hospitals in the Amathole District in the Eastern Cape. These institutions were selected as they were accredited between 2004/2005 – 2008/2009 financial years and had been reported as progressing satisfactorily and others facing challenges in getting Antiretrotherapy (ARVs) programme off the ground.

HIV positive prevalence rate among antenatal patients in the Eastern Cape increased from 23.6% in 2002 to 29% in 2006 and then declined to 26% in 2007 (Odendal, 2007:5). There was an increase in HIV prevalence especially among women served in the Amathole District. Implementation of the Comprehensive HIV and AIDS Care, Management and Treatment started in the first quarter of 2004. The aim of this evaluation was to determine the progress; Identify strengths, weaknesses and challenges that affect the implementation of the Comprehensive HIV and AIDS Care, Management and Treatment Plan with a view to determine best practices that will improve and expand the delivery of HIV and AIDS Care, Management and Treatment services.

It is important to indicate forthrightly that out of thirty questionnaires distributed only two thirds (i.e., twenty) were returned by the respondents; N=20. The results have been presented focusing on the following thematic areas of the questionnaire (1) background of service providers, (2) Services available at the health facility, (3) Health systems for Antiretroviral Therapy and, (4) Human resources.

4.2 QUANTITATIVE AND QUALITATIVE ANALYSIS

4.2.1 Quantitative Analysis

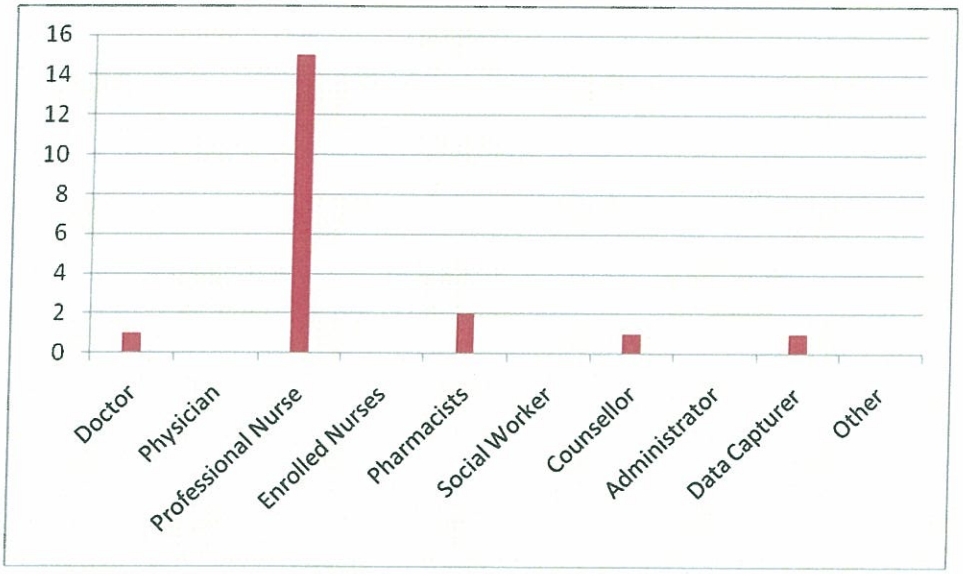
Theme One: Background of service providers

All facilities (two health centres and four district hospitals) sampled in the study were government facilities situated in the Amathole District. On average all the accredited

sites had the catchment population of more or less between 250 000 to 380 000 population.

Out of twenty respondents, seventeen were females and only three were males. The following categories of personnel responded:

Figure 4.1. Respondents



The figure given above illustrates that professional nurses (No=15) followed by pharmacists (No=2) are the majority of personnel providing antiretroviral therapy in the public health facilities in the Amathole District. This picture demonstrated above, clearly shows that the public health facilities providing antiretroviral therapy are still faced with shortage of personnel critical to run the programme.

The figure reflects that 75% of the personnel were professional nurses who provided services in the antiretroviral therapy sites. It was only 5% of doctors and 10% of pharmacists manned antiretroviral therapy sites in the Amathole District.

On average, most of the employees have been working at the Antiretroviral clinics for a period of two years and six months. The facilities sampled in the study started implementation of Antiretroviral therapy as follows:

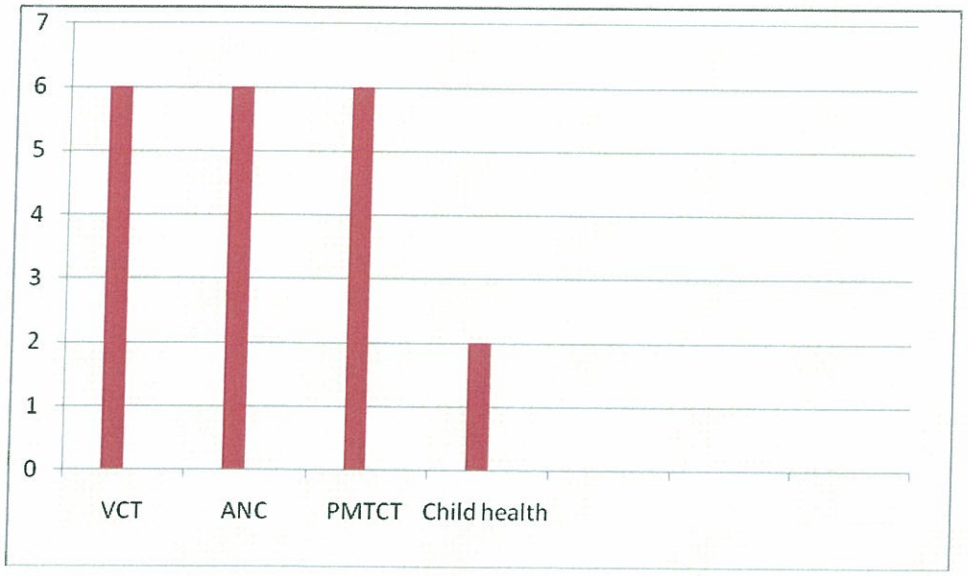
Table 4.1: Years when ART programme was initiated

Number of facilities initiated ATR	Year of initiation of ART
1. 2	2004/2005
2. 3	2005/2006
3. 1	2007/2008

This table above displays the stage at which the Department of Health at the Amathole District has started the provision of antiretroviral therapy. It started small but was increasing incrementally.

Theme two: Services available at the health facility

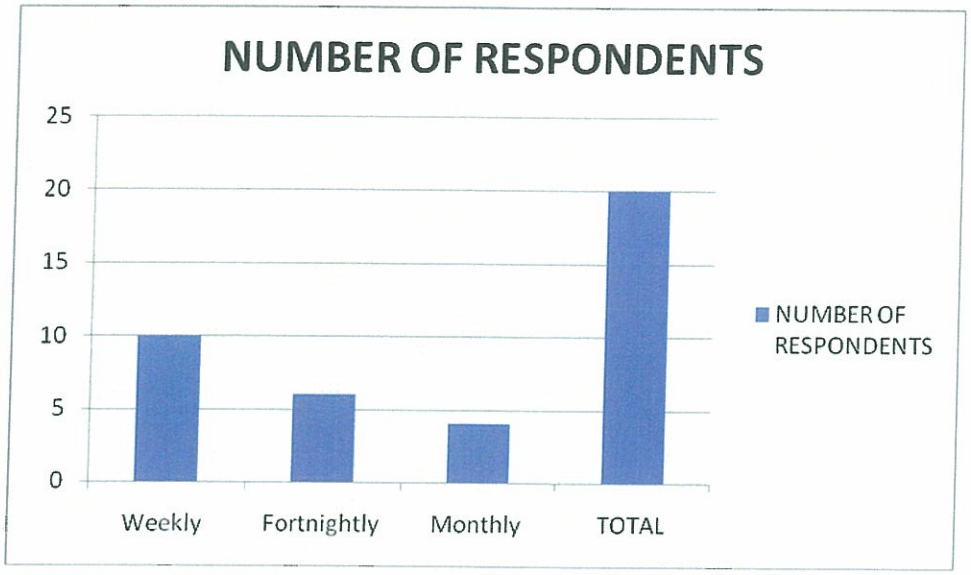
Figure 4.2: Services available at ARV Sites



On the question asked about the type of health services provided at antiretroviral sites, about 100% of the respondents in six participating health institutions confirmed that Voluntary Counselling and Testing (VCT), Ante Natal Care (ANC) and Prevention of Mother-To-Child Transmission (PMTCT) were confirmed to be offered at antiretroviral sites. Child health services was only provided in two of the six (33%) facilities participated in the study.

In relationship with adherence to counselling the responses were categorized as follows:

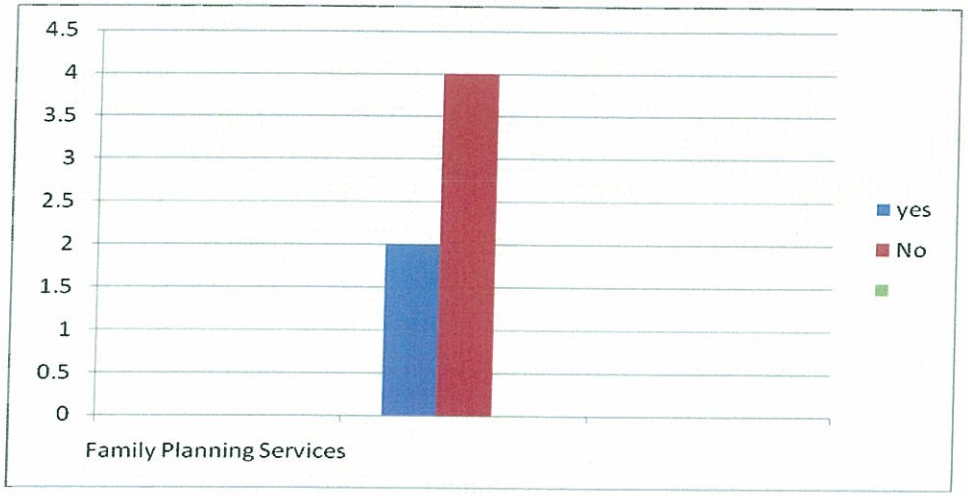
Figure 4.3: Adherence to counselling



The figure above reflects how often the adherence to counselling was conducted and adhered to; out of the twenty respondents to the question, 50% reflected that counselling at their facilities to place weekly, however, 30% and 20% confirmed that adherence to counselling at their facilities took place fortnightly and monthly respectively.

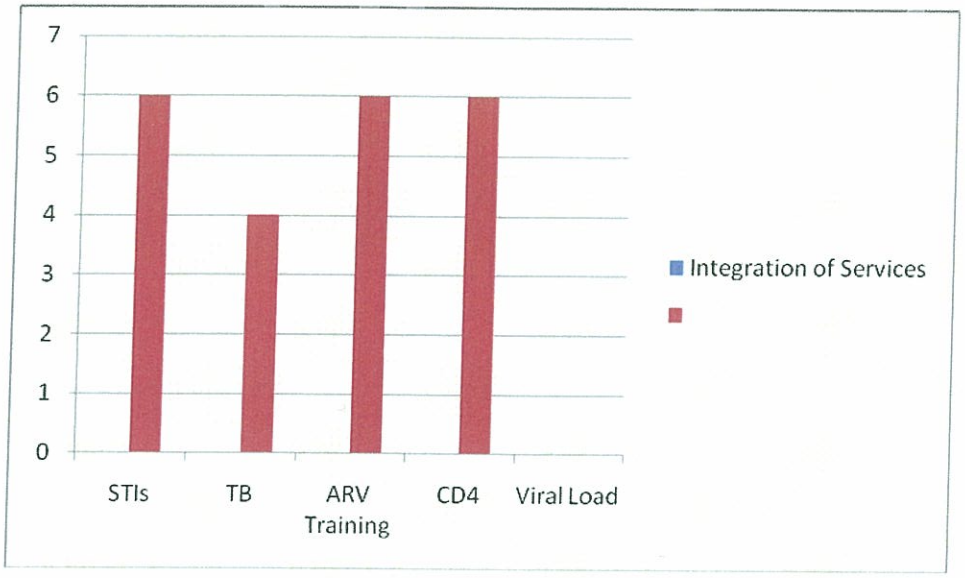
The results above reflected that there is no proper protocol that is adhered to at all facilities that provide antiretroviral therapy programme.

Figure 4.4: Family Planning Services at ARV Sites



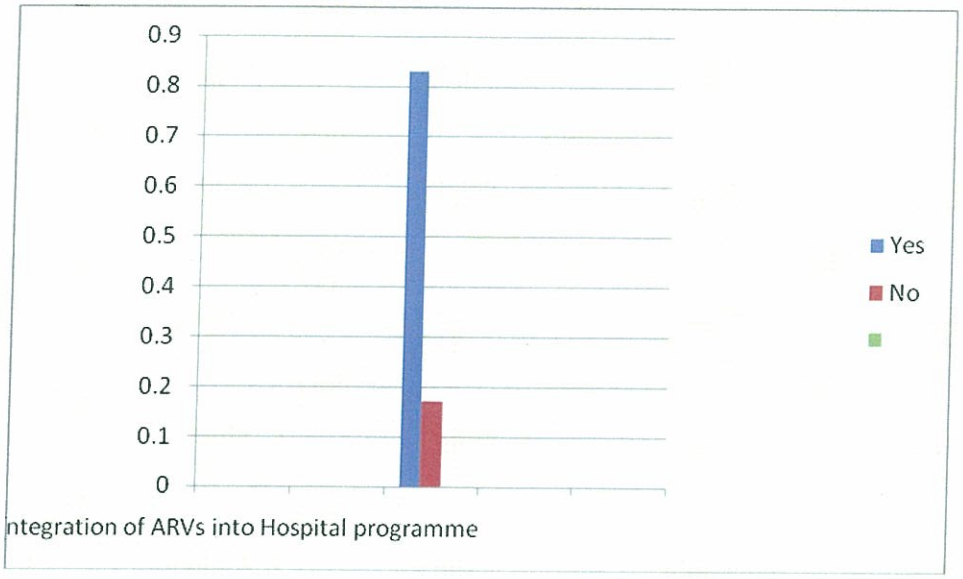
Thirty-three percent (2 out of six)) of the facilities participated reported that they implement family planning services to their patients/clients. It was evident that antiretroviral sites have not fully integrated into the main stream health services.

Figure 4.5: Integration of Services at ARV Sites



Outreach support services were only confirmed by 17% of the institutions participated in the study. CD4 count and viral load were confirmed to be done annually by all the twenty responded questionnaires. The management of Sexually Transmitted Infections (STIs) was implemented in all the six participated facilities in the Amathole District. Only nine of the twenty (45%) respondents confirmed that tuberculosis services are provided in the Antiretroviral therapy sites. All twenty (100%) respondents in the six participated facilities confirmed that they were trained on antiretroviral therapy and it was provided by the government and institutions of higher learning.

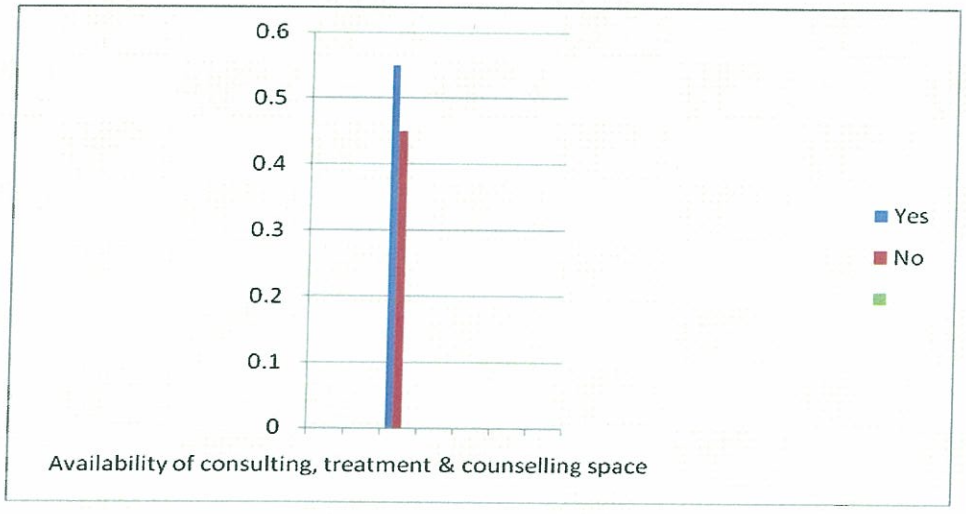
Figure.4.6: Integration of ARVs into Hospital programme



Five facilities (83%) said that Antiretroviral therapy was integrated into other services of the hospital. Only one (17%) facility confirmed that tuberculosis was integrated into Antiretroviral site services. It was further said that all patients for Antiretroviral therapy were summarily motivated for Voluntary counselling and Testing. Challenges were reported in all facilities, e.g., lack of staff – Doctors, Nurses and Pharmacists. In all facilities it was reported that facility managers were advocating for employment of new personnel.

Theme Three: Health systems for Antiretroviral Therapy

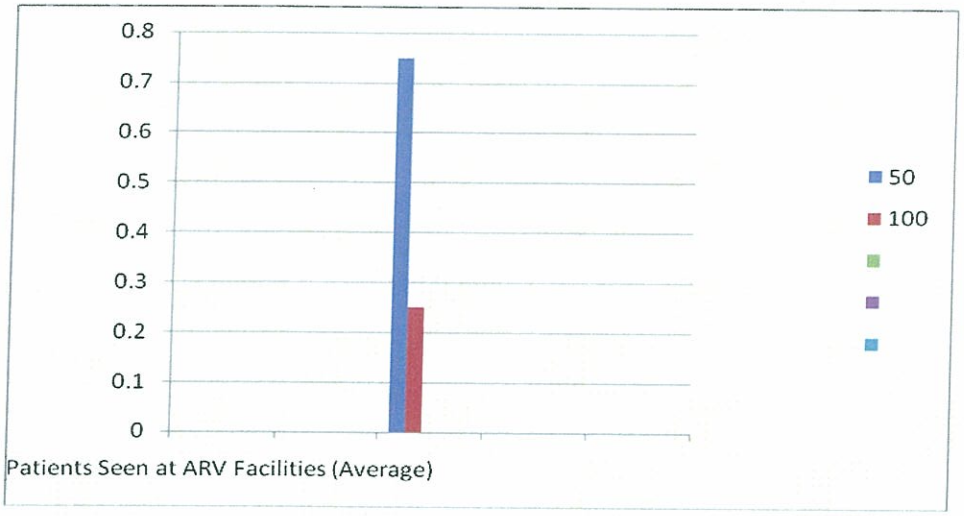
Figure 4.7: Availability of consulting, treatment & counselling space



The figure above reflects that eleven (55%) of the respondents confirmed that their sites have consultation, treatment and counselling rooms. Nine (45%) of the other respondents reported that consultations, treatment and counselling rooms were used interchangeable.

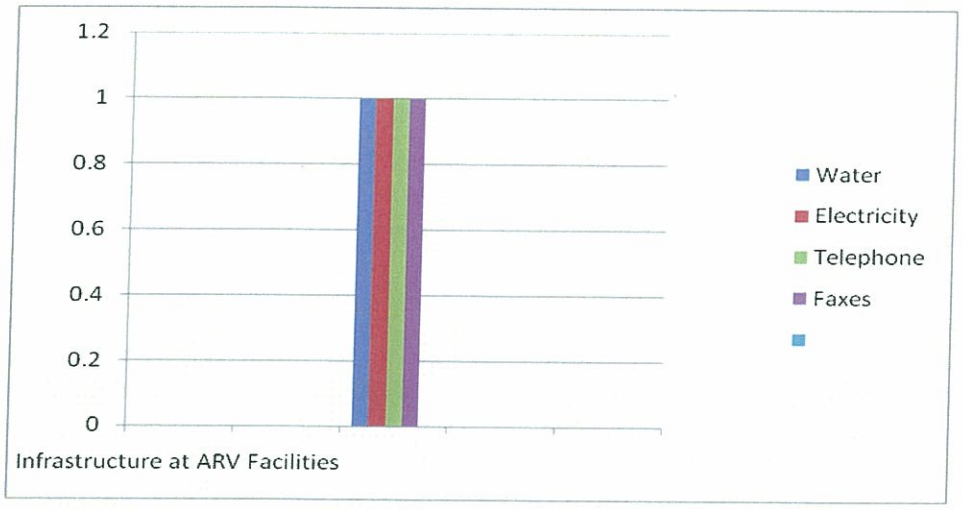
According to the respondents, the implementation of antiretroviral therapy had areas of best practice where comprehensive package of services was realized. However, it was important to record that there were also institutions where services, especially infrastructure was not good.

Figure 4.8: Patients seen at ARV Facilities (Average)



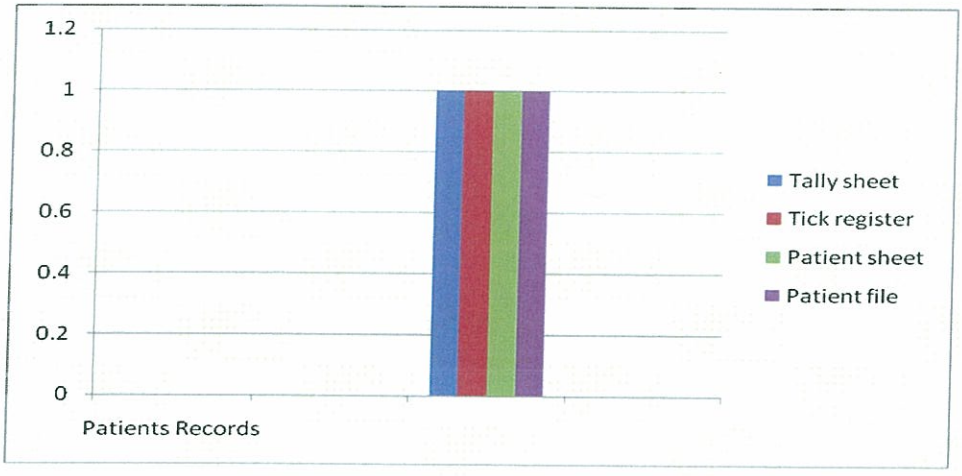
Looking at the issue of how many patients on average seen per day at the facilities; 75% of the respondents said they see fifty (No=50) patients per day, while 25% of the respondents reflected that they see 100 patients per on average. Twenty (100%) respondents overwhelmingly reported that workload had increased magnificently since their facilities were accredited for Antiretroviral therapy. This increase in work load had put a lot of strain on the current number of employees employed.

Figure 4.9Infrastructure at ARV facilities



In relationship with provision of water and electricity, all six (100%) facilities participated in the study confirmed that all Antiretroviral therapy sites had good working water and electricity. All the twenty (100%) in the six facilities reported that their institution had good working telephones and fax lines. It is thus clear that the implementation of antiretroviral therapy at the Amathole District had areas of good performance.

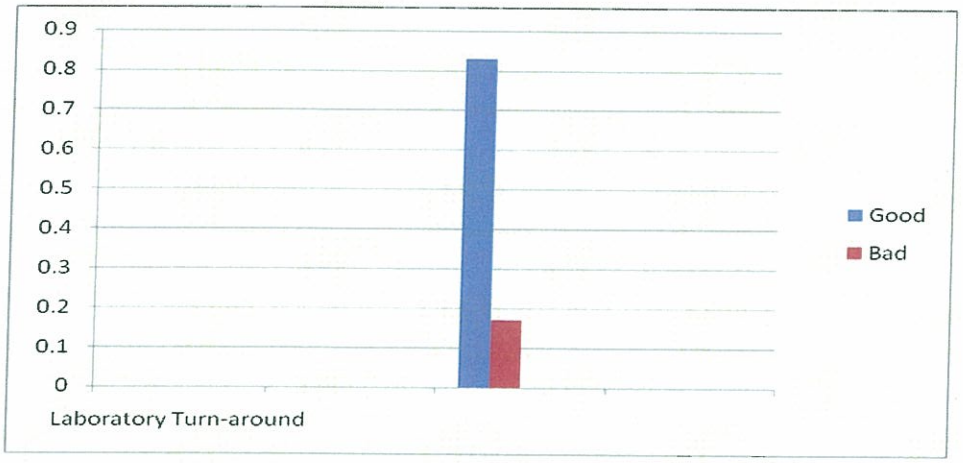
Figure 4.10: Patients records



In response to record keeping of patients, the following documents were confirmed as being used at the facilities; tally sheets, tick registers and patients sheets. This information was captured into District Health Information System version 1.4. by Information Officers at the sites and imported to Provincial Information Officer.

Twenty of the respondents reported that confidentiality was maintained by keeping the records or patients files under lock and key in a locked room. As criteria for accreditation of Antiretroviral therapy sites, all six sites confirmed that they had pharmacists. Standard Operating Procedures (SOPs) for antiretroviral therapy sites were confirmed in all six sampled antiretroviral sites. However, four responded reported that there was a high turnover of pharmacists. This turnover was hampering service delivery in those affected sites.

Figure 4.11: Laboratory turn-around



In looking on how laboratory services were assisting the effective implementation of the programme; 83% of the facilities participated in the study reflected that laboratory services had good turn-around, however, 17% of the facilities reflected that laboratory service had challenges in implementing effective and turn-around. This graph above represents one of the positive elements of the implementation of antiretroviral therapy in the Amathole District.

In response to achievement of the objectives of the Comprehensive HIV/AIDS Care, Management and Treatment; all twenty respondents unanimously reported that provision of antiretroviral therapy reached its objectives. The availability of antiretroviral drugs in the Essential Drug List was reported to be good by all twenty respondents from the six participating facilities.

Theme four: Human Resources

The issue of Human Resources is crucial in the context of the impact that HIV and AIDS has had on the health system in Amathole. As stated in the National Strategic Plan (NSP:2007-11), "HIV and AIDS affect both the supply and demand of health care systems."

While the effect of the demand it places on the health care system is obvious, on the supply side of health systems, the human resource effect of HIV and AIDS are two-fold: the stress and morale impacts on rapidly changing epidemiological, demand and mortality profiles in patients caused by HIV and AIDS, and HIV infection in providers themselves.

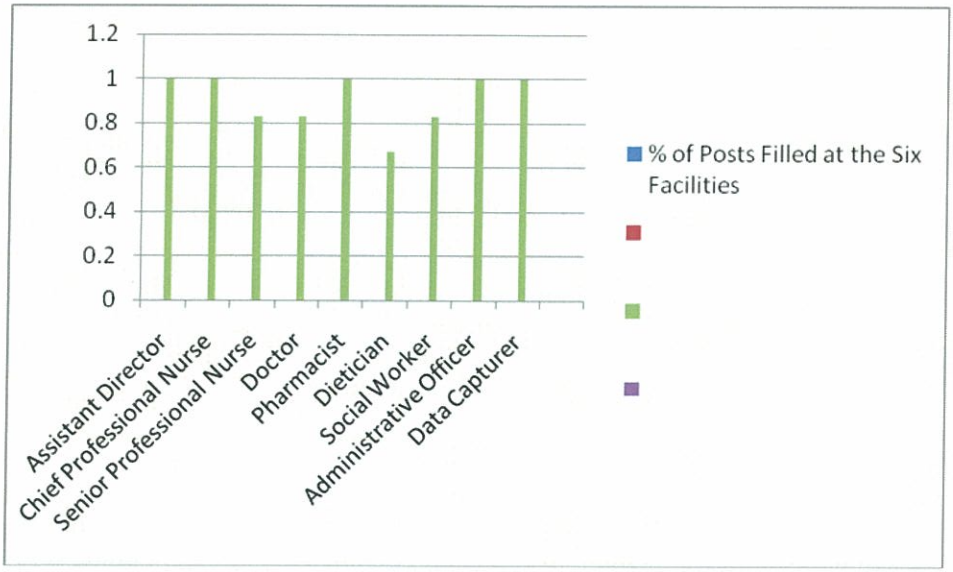
The antiretroviral therapy site had a staff complement of the following as prescribed by the Department of Health Human Resource Planning and Organizational development:

Table 2: Antiretroviral Therapy Site Human Resource Complement

Posts Required by Accredited Site	**Status of Posts at six Facilities**	**Source of Funding**	**Prescribed Salary Levels**	**% of Post filled in the Six Facilities**
Assistant Director (Manager)	6 filled	HIV/AIDS Conditional Grant	9	100%
Chief Professional Nurse	6 filled	HIV/AIDS Conditional Grant	8	100%
Senior Professional Nurse	5 filled	HIV/AIDS Conditional Grant	7	83%
Doctor	5 filled + 1 part-time	HIV/AIDS Conditional Grant	10	83%
Pharmacist	6 filled	HIV/AIDS Conditional Grant	9	100%
Dietician	4 filled	HIV/AIDS Conditional Grant	8	67%
Social Worker	5 filled	HIV/AIDS Conditional Grant	8	83%
Administrative Officer	6 filled	HIV/AIDS Conditional Grant	7	100%
Data Capturer	6 filled	HIV/AIDS Conditional Grant	4	100%

All the antiretroviral therapy sites were accredited to have the above illustrated number of personnel in their staff establishments. Below is the graphical presentation of staff completed at the six participated facilities in the study.

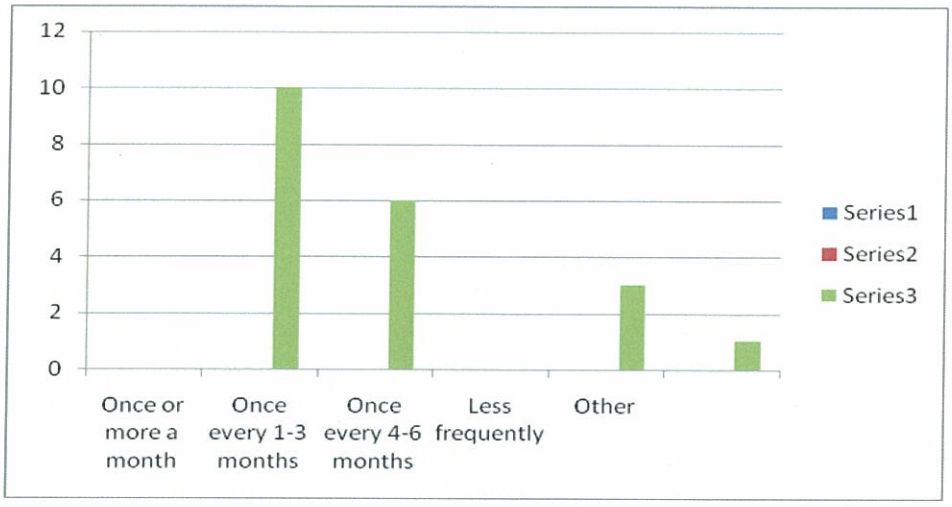
Figure 4.12: % of posts filled at the facilities



There was a fair distribution of health personnel at the facilities. During the period under review nurses and pharmacists reflected 100% of the staff complements. The challenges faced by the antiretroviral sites were the huge turnover of pharmacists and Dieticians, especially at rural areas. With the introduction of Occupation Specific Dispensation (OSD), many professional nurses were applying for transfers to areas which offered Occupation Specific Dispensation.

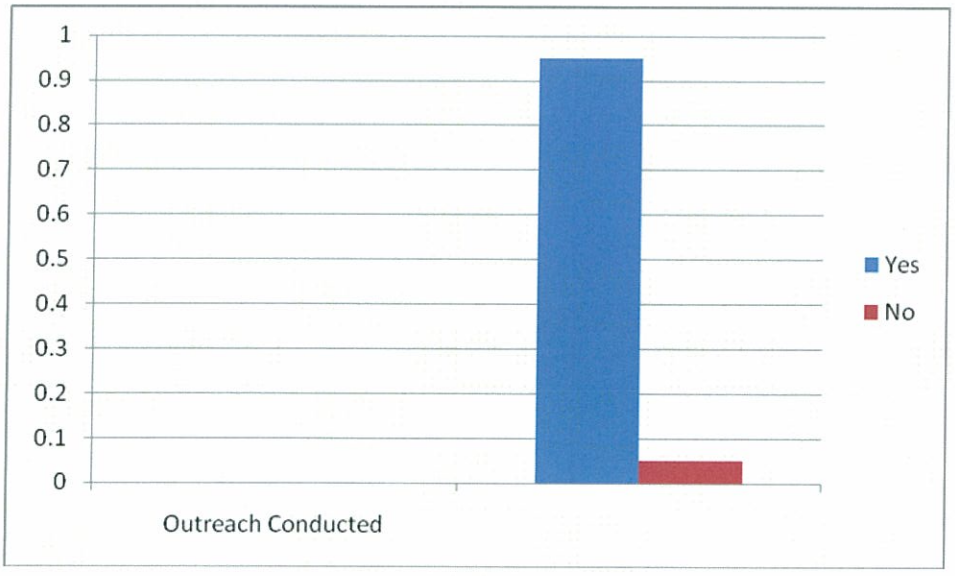
Fifteen (No=15) of the twenty (No=20) respondents advised that the government must increase the salaries of the scarce skills personnel like doctors, nurses, dieticians and pharmacists. They must improve the conditions of living like accommodation, subsidized electricity and water.

Figure 4.13: Frequency of Adherence Counselling session.



Twenty (100%) respondents confirmed that they had antiretroviral adherence support groups activities taking place at their facilities. It was unanimously reported by all twenty respondents that antiretroviral adherence counselling was taking place once or more a month.

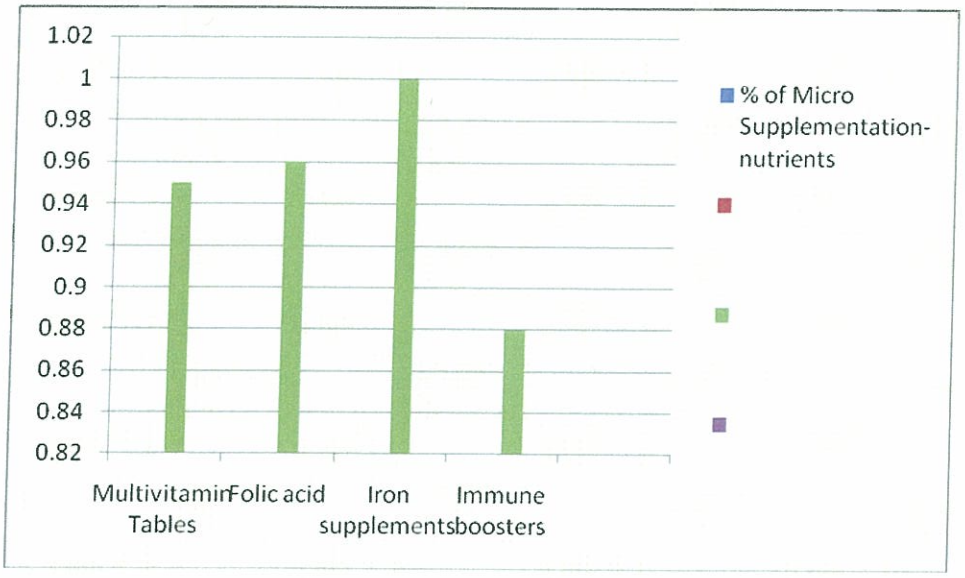
Figure 4.14: Outreach conducted



Only one site confirmed that they make an outreach to the local community in the vicinity of the antiretroviral site. Nineteen (No=19) of the respondents reported that they did not conduct outreach programme to local communities. While focusing on the provision of antiretroviral therapy services at the health institutions, Figure 4.14 illustrates that 95%

of the institutions did not provide outreach services to the patients on antiretroviral therapy programme. This has a huge potential of losing patients who did not come back voluntarily to the facility.

Figure 4.15: % of micro supplementation- nutrients



Regarding nutritional support activities availability at antiretroviral therapy sites, only six facilities confirmed that dieticians provided necessary dietary activities to patients. Patients receive nutritional education with respect to nutrition related problems, importance of health eating habits, fortified foods and enrichment of meals, economical foods, handling symptoms of HIV, as well as general hygiene practices.

All patients receive micro-nutritional supplementation like multivitamin tablets, folic acid, iron supplements and other immune booster. Nutritional supplementation varies at facility level but in a combination of the following: Nutrim; Philani Yabantwana; Nutria-optimal; Nutria Junior; and Adult and Imana.

Those patients requiring additional support based on a social assessment were referred to the Department of Social Development for further evaluation and inclusion in the Food Security Programme.

4.2.2 Qualitative Analysis

Having completed the quantitative analysis of the respondents, the focus will be on qualitative analysis by exploring the sources and also attempting to record respondents verbatim as they reflected on the questions that were posed.

The study was conducted in all public health facilities at the Amathole District. The majority of the respondents were females. Even though respondents were satisfied with the quality of services provided by the antiretroviral facilities, it is still worrying that some of the facilities do not provide quality services due to a variety if factors like shortage of staff.

Another important issue raised by the respondent is whether the health authorities are doing something positive and tangible in addressing shortage of staff. It was interesting to realized that many health facilities which provide antiretroviral therapy had integrated Voluntary Counselling & Testing, Ante-Natal Care, Prevention of Mother-To-Child Transmission, Child Health, Family Planning, Sexually Transmitted Infections and Tuberculosis. However, Child health, TB and STIs seem to receive low rate of integration between antiretroviral therapy units and health facilities where ARV units are situated.

On the question of adherence to treatment and counselling, it was answered by stating that progress had been made in both areas. In relationship with challenges experienced at the facilities, the respondents unanimously indicated that shortage of staff especially pharmacists and dieticians posed serious challenge to the effective and efficient implementation of antiretroviral therapy programme.

The training of personnel on technical aspects of antiretroviral therapy took place at recognized and accredited institutions of higher learning and Non-Governmental Organizations (NGOs) funded by President's Emergence Programme For HIV/AIDS Response (PEPFAR) . Seemingly, the implementation of antiretroviral therapy in many areas of the district, are heavily dependent on PEPFAR funded NGOs to provide human, material and financial resources. It seems there is no clear commitment and dedication by the department of providing sufficient resources to sustain the programme.

When looking at the issue of enough consultation, treatment and counselling spaces, although many respondents praised the availability of enough space in many facilities, there was a sizable few facilities which reported limited space for consultation, treatment and counselling. This shows that there is still a serious infrastructural challenges faced by facilities providing antiretroviral therapy, notwithstanding, the greatest and satisfactorily improvements at the Antiretroviral Therapy units.

Opinions about the quality of patient care at the antiretroviral therapy sites was said to be average to good. One respondent was quoted saying "total quality patient care is not provided or maintained due to shortages of staff". Accordingly, another respondent was enthusiastic about the quality of patient care provided in their institution and was quoted saying "in our facility drugs from depot arrives on time, overall, we are excited and satisfied about the quality of antiretroviral therapy services".

In response to the achievement of the objectives antiretroviral therapy programme, all the respondents unanimously confirmed that provision of the HIV/AIDS treatment was reaching its intended objectives, i.e., making ARVs available to all needy patients as per the departmental protocol. Indeed, the provision of ARVs has improved many lives including reviving people from the bed of death. The researcher would highly appreciate and desire that the Department of Health expedite the expansion of accredited sites throughout the district.

In describing the support received from managers both at district and provincial levels, one respondent said that: "the Chief Executive Officer is so supportive and has a listening ear. The nursing service managers are also co-operative". However, there was a limited number of respondents who described support from their managers as low to average. The areas that confirmed low to average support from their manager both locally and provincial levels, need special attention and encouraged to improve their level of support to colleagues who need that support.

It was also reported that many professional nurses left antiretroviral therapy sites because these sites are not declared Occupation Specific Dispensation (OSD) sites. As a result, many nurses leave antiretroviral sites and look for jobs in the OSD designated

sites throughout the district. Due to this unfortunate situation, antiretroviral therapy sites experience vacancies.

The introduction of ARVs at the accredited facilities has caused an increase in the amount of work of the personnel, especially the nurses and the doctors. The increase of ARVs targets annually was reported to have no correlation with the increase of the staff complement at each site. Many responded requested that ARVs site organograms must be reviewed in of the increasing patients targets annually.

This situation illustrated above, indicates that there is a disjuncture between planning, resourcing and delivery of services to the needy communities.

4.3 Conclusion

According to the findings in the study, the Department of Health in the Amathole District has performed satisfactorily in ensuring that antiretroviral therapy at its facilities is rendered effectively and in alignment to the prescribed protocols. It became very clear that alignment between planning, resourcing and delivery of health services had a discord. It was articulated vividly that the advent of OSD was not well coordinated, and as a result, it alienated many deserving health professionals operating at the ARVs sites. This has created unnecessary instability in many ARVs sites.

Accordingly, shortages of personnel in many facilities need an urgent attention of the authorities; the implementation of ARVs cannot falter at this stage. All necessary resources, i.e., human, material and financial should be provided if the country is to realize and achieve Millennium Development Goals of which the National Strategic Plan on HIV/AIDS is premised. These results illustrated above bring hope that irrespective of many challenges faced by the Department of Health in the province, however, there are certain areas of excellent which must be celebrated and embraced. It is one story that needs to be told to many despondent health professionals and communities.

CHAPTER FIVE
CONCLUSIONS AND RECOMMENDATIONS

The study presented here dealt about the evaluation of the implementation of the antiretroviral policy in the Amathole Health District, Eastern Cape Province. The Coordinated public response to HIV and SIDS began in 1992, with the formation of National AIDS Coordinating Committee of South Africa (NACOSA). In 2002, the South African government pledged its commitment in the fight against HIV/AIDS by introducing Nevarapine to pregnant mothers.

Although one of the key principles of the implementation of ARVs is to strengthen the health system as a whole through injection of resources, it is the weaknesses and inequities within the health system which prove to be the major challenge in the implementation and sustaining the effective implementation of antiretroviral therapy programme.

While reflecting on the objectives, the study sought to assess responses to the antiretroviral therapy in the Amathole Health District and its impact of the ARVs implementation at the public health facilities and thereby recommended possible solutions in an attempt to expedite ARVs roll out. The implementation of ARVs according to Comprehensive HIV/AIDS Care Management and Treatment (CCMT) protocol was good in many health facilities designated for the job in the district.

The assessment of the impact of the programme in improving people`s lives was somewhat positively recorded because the practitioners reported that, since the inception, management of HIV positive people has improved magnificently. Patients are no longer turned back after diagnosis with HIV positive, they are referred to relevant unit which initiates ARVs treatment for continuum of care.

The first chapter of the study presents with the background of the study. In this chapter the reader is introduced to conceptual understanding of the research study. The objectives, problem statement, brief literature review, the hypothesis, the research design and methodology and ethical considerations.

The second chapter of the study presents the literature review. This aimed at providing different works of literature by a number of sources to prove beyond reasonable doubt that the matter has been explored in detail in certain contexts. The literature review explored works of various authors and scholars who have written about the implementation of antiretroviral therapy in different settings throughout the world. Best practices and challenges were articulated extensively. The study was underpinned by policy analysis theory, which made it clear that proper understanding of the policy cycle, that is, policy making, implementation, monitoring and evaluation is crucial to make ARV success possible.

On the one hand, Chapter three looks on how the research design and methodology were followed during the course of the study. On the other hand, Chapter four gives full account on how the findings were analyzed. In the main, the findings of the study in Chapter four proved the hypothesis that it is indeed true that the implementation of antiretroviral therapy in the Amathole Health District is facing some challenges which make ART inaccessible to the HIV positive patients.

Based on the confirmation of the hypothesis postulated, the following recommendations are proposed, which attempt to address the improvements required at programme and health system level to strengthen as well as to scale up to the continuum of care within antiretroviral therapy sites at the Amathole District:

a. *Increase access and accreditation of facilities:* Accreditation of sites should be accelerated. District health teams should be innovative and utilize primary health care centres as well as district hospitals in combination to provide a continuum of care.
b. *Models of care:* The process of initiating patients on ARVs is very intensive and places an additional burden on an already immune-compromised patient. Therefore, it is essential that the pre-ARV assessment phase is streamlined and devolved to primary health care.
c. *Integration of services*: All health workers need to be capacitated to be fully informed about ART programme so that they can manage patients holistically. Hospital staff needs to be informed about ART, the different regimens, how to identify and manage the side-effects of ARV as well as how to integrate ARV with

ward procedures. This will assist in management of critically ill-patients requiring ART.

d. *Strengthening of the programme management:* A united and integrated response that is informed by sound scientific knowledge and supported by strong leadership is essential for mobilizing resources to address the challenges in the health system to scale up and sustain the response to HIV and AIDS. A more relevant and flexible structure should be implemented for the management of the programme at district and facility levels.

e. *HIV/*AIDS Financing with the introduction of ART: The Provincial Department of Health should be implored to allocate a sizable amount of budget from its equitable budget to the running of HIV/AIDS programme, and this budget must be carefully monitored and evaluated to achieve its intended results.

f. *Human resources:* Limited human resource capacity is the biggest constraining factor on further expansion of the ART programme. The limited scope of practice of many professional categories of health workers should be reviewed and widened to allow multi-tasking and rotation of service providers to cater for deficiencies in certain key areas.

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ANNEXURE A: PERMISSION LETTER

TO : TO WHOM IT MAY CONCERN

FROM : SINGILIZWE T. MOKO

DATE : 20 JULY 2009

SUBJECT : REQUEST FOR PERMISSION TO CONDUCT RESEARCH

The above matter refers:

Permission is hereby requested for student, Singilizwe T. Moko, Student Number 2006-02738, from the Faculty of Management & Commerce, School of Public Management & Development, with the University of Fort Hare, to conduct research in your department.

The study entitled "An Evaluation of the Implementation of the Antiretroviral Treatment Policy in Amathole District Municipality of the Eastern Cape". The study is conducted as part of the dissertation for a Masters Degree in Public Administration with the University of Fort Hare.

The findings of the study will be made available on request, after completion, and if you have any queries please feel free to contact the researcher at 083 378 0177.

Thank you.

_____

Singilizwe T. Moko

ANNEXURE B: COVERING LETTER

TO : PARTICIPANTS
FROM : SINGILIZWE T. MOKO
DATE : 20 JULY 2009
SUBJECT : RESEARCH INTERVIEWS

The above matter refers:

Thank you very much for taking some valuable time to participate in this research project about "An Evaluation of the Implementation of the Antiretroviral Treatment Policy in Amathole District Municipality of the Eastern Cape".

The study is conducted by Singilizwe T. Moko as part of the dissertation for a Masters Degree in Public Administration with the University of Fort Hare. As a participant in this study, all your feedback will be treated confidential and your identity will not be disclosed during analysis. The information will only be used for the purposes of the research project.

The interview will take about 10-15 minutes of your time to complete and should you have any queries please feel free to contact me at 083 378 0177.

The findings of the study will be made available on request after completion.

Thank you

_____

Singilizwe T. Moko

ANNEXURE C: A PUBLIC HEALTH APPROACH TO ANTIRETROVIRAL TREATMENT: AMATHOLE DISTRICT EXPERIENCES

QUESTIONNAIRE GUIDE

PERSONNEL RESPONSIBLE FOR IMPLEMENTATION OF ANTIRETROVIRAL PROGRAMME

GENERAL

In 2002, based on the recommendations of the HIV/AIDS & STIs review commissioned in 1997, the cabinet of the Republic of South Africa reiterated its commitment to the implementation HIV/AIDS & STIs Strategic Plan 2000–2005. The government monitored the implementation progress and the introduction of Nevarapine to pregnant mothers to prevent mother to child transmission,

- Release of a comprehensive protocols for sexual assault, including post exposure prophylaxis with antiretroviral drugs.
- In 2003 a cabinet decision was made that a Comprehensive HIV&AIDS Care, Management & Treatment for South Africa be implemented.

RESPONDENTS

This questionnaire has been prepared for the participation of health personnel (antiretroviral treatment sites) and health office managers (responsible for antiretroviral treatment) only. Health personnel responsible for the implementation of antiretroviral treatment are based at public health accredited sites by the National Department of Health. These government employees could be employed by the state or Non-Governmental Organizations operating in the field of HIV&AIDS management.

GUIDELINES

Please be informed that the information gathered during this research will be handled in a responsible manner within the confines of the research ethics. Confidentiality is an integral part of ensuring that participants` views will be respected and protected.

PROCESS

The researcher and/or field assistants will administer the questionnaire based on the direct engagement with the respondents.

COMMUNICATION

The researcher and/or field assistants will engage the respondents in both isiXhosa and English. However, all responses will be captured in English.

DISCLAIMER

This questionnaire has been prepared for a research project undertaken to fulfill the requirements of a Masters Degree in Public Administration at the University of Fort Hare.

Your participation will be greatly appreciated

PART A Questionnaire for Service Providers

This section has to be filled by Interviewers before they start with an interview.				
Name of health facility				
Describe the type of Area	URBAN		RURAL	
Date of Interview	___/____/____ DD MM YY			
Interviewer Name				
Name of Quality Controller				
Date Checked	___/____/____ DD MM YY			
Entry Point of Respondent	1=VCT 2=Child/Mother's Health 3=PMTCT/ANC 4=Other (Specify) _____			
Interviewer Complete?	0=No 1=Yes			
Reasons for incomplete interview. _____ _____ _____ _____				

Section 1: Background of Service Providers. Firstly I would like to ask you background questions about yourself and the facility			
1.1.	What type of health facility is this? Would you say it is a	1. Government health facility 2. Public Private Partnership 3. NGO health facility 4. Private health facility 5. Other (specify) _____	
1.2.	At what level is this facility? Would you say it is a	1. General Hospital 2. Referral Hospital 3. Health Centre 4. Clinic 5. Mobile health facility 6. Other (specify)_____	
1.3.	What is the estimated size of the population in the catchment area?	Record estimate _____	
1.4.	Sex of respondents (**Observed**)	1. Male 2. Female	
1.5.	What is your current job title at this health facility	1. Doctor 2. Physician (specialist) 3. Professional Nurse 4. Enrolled Nurse 5. Pharmacist 6. Social Worker 7. Counsellor 8. Administrator 9. Data Capturer 10. Other (specify)_____	
1.6.	For how long have you been holding this position?	1. Weeks _____ 2. Months _____ 3. Years _____	
1.7.	For how long have you been working in this facility?	1. Weeks _____ 2. Months _____ 3. Years _____	
1.8.	When did the facility begin to provide HIV/AIDS care or services?	DD MM YY	
1.9.	When did the facility begin providing Antiretroviral Treatment?	DD MM YY	

1.10. How do you rate the standard and process regarding implementation of ART in your facility?

- Average
- Good
- Bad

1.10.1. What is your opinion about the quality of the service providers in the institution?

_____
_____
_____
_____
_____
_____
_____
_____
_____

Section 2: Services available at the health facility Now I am going to ask you about services available at the health facility and which services you are currently providing in your position.			
2.1.	Does the facility provide the following services? 2.1.1. Voluntary Counselling & Testing for HIV	0 = No 1= Yes	
	2.1.2. Antiretroviral Treatment	0 = N 1 = Yes	
	2.1.3. Ante-natal services (ANC)	0 = No 1 = Yes	
	2.1.4. Prevention of mother to Child Prevention (PMTCT) to pregnant women	0 = No 1 = yes	
	2.1.5. Child health (including immunization)	0 = No 1 = Yes	Are the immunization records? Yes No
	2.1.6. Adherence counselling to ARVs	0 = No 1 = Yes	How often? (Yes or No) Weekly = Fortnightly = Monthly =
	2.1.7. CD-4 Count & Viral load monitoring	0 = No	How often?

		1 = Yes	(Yes or No) Monthly = Quarterly = Annually =
	2.1.8. Outreach support for HIV+ patients run by home-based care givers linked to the facility	0 = No 1 = Yes	Carers linked to: 1. NGO 2. facility
	2.1.9. How many support groups operating in the facility		Are they effective? 1. Yes 2. No
	2.1.10. Family Planning services	0 = No 1 = Yes	
	2.1.11. Sexually Transmitted Infections diagnosis & management	0 = No 1 = Yes	Are personnel trained? 1. Yes 2. No
	2.1.12. Tuberculosis services	0 = no 1 = Yes	
	2.1.13. List other services _____ _____		
	_____ _____		
	2.2. Did you receive training on management of Antiretroviral Treatment	0 = No 1 = Yes	If the answer is no please skip to section 3
	2.3. If you received training to deliver Antiretroviral services, please list what you were trained on: 2.3.1. 2.3.2. 2.3.3. 2.3.4. 2.3.5.		

	2.4. How long ago was this training?	Records months Record Years	
	2.5. Who provided the training?	1.government 2.NGO 3.Training institution 4.Regional training centre 5.Other specify	

2.6. How are the services integrated in your institution? Explain in detail.

_____
_____
_____
_____
_____
_____
_____
_____

2.7. What are the challenges you are experiencing in your facility regarding implementation of ART?

_____
_____
_____
_____
_____
_____
_____
_____

2.8. If there are challenges, please explain how these challenges could be resolved.

_____
_____

Section 3: Health Systems for Antiretroviral Therapy

3.1. Does your facility have enough consultation, treatment and counselling spaces?

a. Yes
b. No

3.2. What is the breakdown of the available space? (number of each category available)

a. Consultations =
b. Treatment =
c. Counselling =

3.3. Approximately how many Antiretroviral patients does your facility see per day on average?

a. numbers of patients seen per day =

3.4. Has your workload increased since this site was accredited for ART provision?

a. Yes
b. No

3.5. If yes, how do you cope with such an increase in workload in this facility?

3.6. How do you view to be the standard of electricity provision in your ART site?

a. Poor
b. Average
c. Good

3.7. If the standard is poor or average, how provision of ART is impacted and do you intend to address the situation and how?

3.8. How do you view to be the standard of water supply in your ART site?

a. Poor
b. Average
c. Good

3.9. If the standard is poor or average, how provision of ART is impacted and do you intend to address the situation and how?

3.10. Does your facility have a reliable working telephone and fax machine?

a. Yes
b. No

3.11. If the answer is no, how do you ensure that ART services are implemented effectively and efficiently?

3.12. What type of records keeping is available for care and treatment on site? Please list and explain.

3.13. How do you ensure that patients' confidentiality is maintained at all times in the site?

3.14. Do you have a fulltime ART Pharmacist on site?

a. Yes
b. No

3.15. Do you have drugs dispensing Standard Operating Procedures (SOPs) in place in the site?

a. Yes
b. No

3.16. If no, how do you ensure that drug supply management is maintained sufficiently and effectively in your site?

3.17. Do you have an effective and efficient laboratory system in your site? That is well functioning laboratory system, e.g., good turn-around of results.

a. Yes
b. No

3.18. If no, how do you ensure that patients' results are received on time? And what interventions have put in place to turn-around the situation?

3.19. How would describe the support you receive from your managers both locally and head office when faced with challenges?

3.20. In your own opinion, does the site you are working at achieve the objectives of the HIV/AIDS Comprehensive Care, Management and Treatment?

a. Yes
b. No

3.21. If no, what are the shortcomings and what do you suggest to solve the shortcomings?

3.22. Are all the drugs listed in the Essential Drug list available at your ART site at all times?

a. Yes
b. No

3.23. If no, what are the obstacles and how do you intend to address them?

4. Section 4: Human Resources

4.1. How many people are supposed to staff this ART site? (posts approved in the site organogram)

CATEGORY	POSTS ON THE ORGANOGRAM	STAFF CURRENTLY APPOINTED
Doctors		
Nurses		
Enrolled Nurses		
Assistant Nurses		
Pharmacists		
Counsellors		
Data capturers		
Medical Specialists		
Social Workers		

4.2. What are the challenges facing your human resources in your ART site?

4.3. If you were to give advice about staffing of ART site, what recommendations would you make?

5. Community involvement

5.1. What Antiretroviral Therapy adherence support activities for HIV+ patients are being carried out in your site?

5.2. How often are patients counselled about ART adherence?

a. Once or more a month
b. Once every 1-3 months
c. Once every 4-6 months
d. Less frequently
e. Other _____

5.3. What are the challenges faced by adherence support groups?

5.4. If there are challenges, how do you resolve them?

5.5. How often are support group meetings held for patients?

a. Once or more a month
b. Once every 1-3 months
c. Once every 4-6 months
d. Less frequently
e. Other _____

5.6. Do you conduct any outreach program from your site? (visits/meetings conducted out of the ART site)

a. Yes
b. No

5.7. If no, what are the obstacles impeding you to conduct an outreach program?

5.8. What are nutritional support activities carried out to support patients on ART?

6. Generally, comment on the implementation of ART and how best can it be improved.