PREVENTION OF MOTHER TO CHILD TRANSMISSION (PMTCT) OF HIV/AIDS: A REVIEW OF USING PMTCT SERVICES IN SOUTH AFRICA

BY

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DECLARATION

I, *FADILA JUMARE & S210251115*, hereby declare that the *thesis* for *Master of Arts to be awarded* is my own work and that it has not previously been submitted for assessment or completion of any postgraduate qualification to another university or for another qualification.

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List of Abbreviations and Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral Therapy
CADRE	Centre for AIDS Development Research and Evaluation
DOH	Department of Health
GNP	Gross National Product
HIV	Human Immunodeficiency Virus
HSRC	Human Sciences Research Council
HST	Health Systems Trust
MDG	Millennium Development Goal
MRC	Medical Research Council
NGO	Non Governmental Organization
NSP	National Strategic Plan
PLWA	People Living with AIDS
PMTCT	Prevention of Mother to Child Transmission
SANAC	South African National Aids Council
TAC	Treatment Action Campaign
UNAIDS	United Nations Program on HIV/AIDS
UNDP	United Nations Development Program
UNICEF	United Nations Children Education Fund
USAID	United States Agency for International Development
VCT	Voluntary Counseling and Testing
WHO	World Health Organization

Abstract

Despite good intentions and commitment from health providers, it is difficult for HIV positive pregnant women to access Prevention of Mother to Child Transmission of HIV (PMTCT) services (Skinner et al 2005:115). The aim of this research was to find out the extent to which socio-economic and cultural factors influence access to and utilization of PMTCT services. It appeared that despite having a legal plan and framework to ensure that PMTCT services are available and free, the realities confronting HIV positive women in South Africa as suggested by the literature contradicted this objective. Inevitably, these contradictions were identified as some of the main factors contributing to lack of access and inadequate utilization of PMTCT services. These factors were identified through a review of fifteen studies selected based on their relevance to the research aim. The findings were presented according to the following themes: Functioning of clinics, adherence to ART, uptake of VCT and infant feeding practices. According to research evidence, the major socio-cultural factors influencing access and utilization of PMTCT services include fear of stigma and discrimination which are related to cultural norms and practices. The socio-economic factors include transport costs, lack of food, medicines and formula milk which are all related to poverty and unemployment. The research also found that health system constraints such as long waiting times in clinics, stock-outs of formula milk, medicines and test kits influenced the utilization of PMTCT services by HIV positive women.

CHAPTER 1-INTRODUCTION

1.1 Introduction

The HIV/AIDS epidemic affects all aspects of social and economic development in South Africa. It has been reported by South Africa's Department of Health (2010:2) that 5.63 million adults and children were infected with HIV/AIDS, also stating that of these, 5.3 million were aged 15 years and older, 3.3 million were females and 334,000 were children. Among antenatal women aged between 15 and 49 years, the HIV prevalence rate is 29.4 per cent (Department of Health, 2010:2). According to SANAC, (2010:9) there are geographic variations with some provinces more affected than others, mainly reflecting background socio-economic conditions. For example in a study of women attending antenatal clinics, KwaZulu-Natal, Mpumalanga and Free State had overall HIV prevalence greater than 30 per cent. Eastern Cape, Gauteng and Limpopo provinces on the other hand had prevalence between 20 and 30 per cent (Department of Health 2010:30).

According to the World Health Organization (WHO) (2010:1), Prevention of Mother to Child Transmission (PMTCT) of HIV/AIDS is important in light of the effort and campaign to achieve the Millennium Development Goals (MDGs) on health and HIV/AIDS. This is because it provides the best evidence-based interventions for promoting the health of both the mother and the child. With the hope of reducing neonatal mortality rate resulting from HIV/AIDs and saving the lives of babies annually, the program for Prevention of Mother to Child Transmission (PMTCT) entails: HIV counseling and testing, short course Antiretrovirals (ART) provision, HIV and infant feeding counseling and support, and promotion of male involvement and support (Rutenburg, et al 2003:8).

With these activities forming the heart of the programme, PMTCT was developed and laid down in the National Strategic Plan (NSP) 2000-2005 (Department of Health, 2010:2). This plan has the aim of reducing the rate of new HIV infections and the rate of HIV incidence among children who are less than five years of age. In addition, it is aimed at increasing PMTCT coverage by increasing geographic access as well as uptake by pregnant women. It further aims at minimizing the risk of HIV transmission and maternal mortality through providing ART for pregnant women

infected with HIV/AIDS. The NSP for HIV/AIDS 2000 to 2005 was developed and it represents South Africa's multi sectoral response to the challenge with HIV and the wide ranging impacts of AIDS (SANAC, 2010:7). Flowing from the NSP of 2000-2005, the NSP 2007-2011 was developed and it further stipulated that reducing HIV/AIDS prevalence and its impacts can be achieved through key programs including health education, voluntary counseling and testing, Prevention of Mother to Child Transmission (PMTCT) and antiretroviral therapy. With regards to PMTCT, this NSP aims at increasing coverage and reducing MTCT to less than 5% (SANAC, 2010:11)

Despite good intentions and commitment from health providers, PMTCT services can be difficult for pregnant women in South Africa to access, despite the provision of free health services for women and children (Skinner et al 2005:115). This research specifically focuses on the factors that inhibit women's utilization of PMTCT services by firstly discussing the economic and cultural factors that influence women's utilization and access to PMTCT services. The research will also note the challenges facing health managers in ensuring access to PMTCT services after discussing the situation and experiences of women in terms of inequality in social and economic opportunities. These will be achieved through a literature review and content analysis of qualitative studies on PMTCT particularly those conducted by health research institutions and NGOs to evaluate PMTCT program in South Africa's district clinics.

1.2 **Context**

In order to implement the National Strategic Plan for HIV/AIDS, strategies for PMTCT services are made available throughout South Africa. Despite strategies to eradicate Mother to Child Transmission (MTCT) of HIV, two-thirds of the affected populations in middle and low income countries have no access to basic interventions in PMTCT services (Moodley 2011:122). This suggests that PMTCT services are not fully utilized and therefore do not make an adequate contribution towards HIV/AIDS prevention. Evidence has shown that policy makers, PMTCT users and those involved in providing PMTCT services are faced with various challenges in its implementation (Nuwagaba-Biribonwoha, et al. 2007:269-274; Pai, 2009:55-62; Willan, 2004:109-117 & Chopra, et al. 2009:835-846). For example, a study of Kenya and Zambia revealed that the uptake of PMTCT interventions reflects both capacities of the clinics to provide

PMTCT services and acceptability of the intervention to the clinic attendees (USAID 2002:2). According to Standing (1997:10), the formidable cost of drugs is one of the factors that prevent women from accessing health services. Although some public sector health services in developing countries are free, drugs may not be available and as a result, women may spend substantial amounts of money on private healthcare or travel far to purchase drugs (Standing, 2002:10).

This shortage of drugs is particularly important because concern by UNAIDS, UNDP and WHO over the cost of antiretroviral treatments has raised the question of long term sustainability of access to affordable HIV treatment. It is further noted by the WHO that prices of HIV/AIDS drugs are too high for many low and middle income countries (WHO 2011). The challenge with costs of HIV/AIDS drugs is further exacerbated by lack of funds from international donors as evidenced by the fact that funding for tackling HIV/AIDS in 2009 was much lower than in 2008 (WHO 2011). This reflects on a statement made by the Eastern and Southern African civil society (2011:3) that underfunding of the Global Fund to Fight AIDS, Tuberculosis and Malaria threatens to halt or even reverse gains made in strengthening and expanding treatment, care and support programs. Although increasingly important there are other capacity problems that can inhibit full implementation of the PMTCT program such as poor infrastructure, understaffed and over-pressured clinics (Skinner et al 2005:115).

Moreover, lack of economic and social support inhibits utilization of PMTCT services. The literature on gender and HIV/AIDS has shown that gender related factors such as inequality increase women's vulnerability and dependency which in turn restricts their access to much needed information and services and exposes them to severe consequences such as being socially ostracized and marginalized (Gupta, 2002:4). In particular, women's relationships with their partners may affect their abilities to undergo Voluntary Counseling and Testing (VCT) and infant feeding due to fear of being abandoned (Israel & Kroeger 2003:3). Standing (1997:2) adds that the lack of freedom to act without permission from husbands or senior kin and low valuation of the health needs of women and girls inhibits access to and utilization of health services (Key 1987; Stock 1983; Tipping and Segall 1995 cited in Standing (1997:2).

Given the challenges for implementing PMTCT, and the lack funds to finance HIV/AIDS interventions, Varga, et al (2004:799) mention that social and community factors such as HIV/AIDS stigma and gender relations are particularly important barriers to accessing PMTCT services. These are the broad factors that this research is primarily concerned with. In addition, Ruger (2004:121-122) posits that women are affected disproportionately by HIV/AIDS. This inequality can be explained by poverty which is also considered as a gender sensitive factor in this research. Poverty is important because it is seen as one of the main factors and consequences of HIV/AIDS as illustrated by Whiteside (2002:316-320) and others[1].

1.3 **Research Question**

The research question that follows from the identified problems and challenges of PMTCT is: How do cultural and economic factors influence women's utilization of PMTCT services? Research has shown that access to and utilization of health services are influenced by cultural and ideological factors (Standing, 1997:2). Specifically, the negative perceptions about HIV that result in shame or ostracism and the stigma faced by people with HIV/AIDS prove to be the most difficult barriers to slowing the spread of HIV/AIDS (Israel & Kroeger 2003:4). Research conducted on women's inequality in economic opportunities will provide a useful basis for an enquiry into access to and utilization of PMTCT services such as those conducted by Barret, (1995); Razavi (1997); Wilkinson (1996); World Bank (1998) and Dollar & Gatti, (1999) cited in Moss (2002:650).

1.4 **Sub-foci questions**

Certain elements to be analysed in this research include barriers to accessing antenatal clinics such as gender inequality, stigma of being HIV positive and women's economic and social vulnerability. These elements were chosen because it is expected that they would reveal the socio-cultural and socio-economic factors that inhibit access to and utilization of PMTCT services. They were chosen based on a literature review of articles written especially by Gupta (2002:4), Varga, et al (2004), Nzama (2004), Tipping & Segall (1995) and Israel & Kroeger

[1] Tladi (2006:369); van Donk (2002:1) ; Barnett & Whiteside (2007:210)

(2003:3). Nzama (2004) for example found evidence in Hlabisa District in South Africa that women found it difficult to take HIV tests without consent from their partners. This is a cultural norm that can expose women to the risk of being abandoned and losing emotional and economic support.

Therefore the central hypothesis of this research is that cultural and economic factors inhibit access to and utilization of PMTCT services. The specific cultural factors that this research is primarily concerned with include those dealing with women's relationships with their friends, families and communities. As mentioned earlier, women's relationships with their partners may affect their abilities to undergo Voluntary Counseling and Testing (VCT) and infant feeding due to fear of being abandoned (Israel & Kroeger 2003:3). Standing (1997:2) adds that the lack of freedom to act without permission from husbands or senior kin and low valuation of the health needs of women and girls inhibits access to utilization of health services (Key 1987; Stock 1983; Tipping and Segall 1995 cited in Standing (1997:2). In order to analyze these factors, this research will find out information about implementation of the PMTCT program in district clinics by referring to the following sub-questions relating to each of the aforementioned factors:

- What are the cultural and economic circumstances faced by HIV positive women attending antenatal clinics?
- What are the negative perceptions of PMTCT that result in fear of PMTCT utilization?

An economic factor that is important to this research is that which is concerned with poverty. According to Skinner et al (2005:117), poverty undermines the individual woman's sense of capacity to act. Of particular interest is the lack of income that places women at disadvantage when it comes to gaining access to and control over healthcare resources and for their own benefits. A sub-question that will aid in understanding this situation is outlined as follows:

- What are the costs that women incur in accessing PMTCT services?

The experiences and knowledge inferred from the above sub-foci would enable one to explore the various factors that prevent health care staff from effectively implementing the PMTCT

program. Each of these factors will be explored with the aim of gaining insight into the role that gender inequality plays in reducing access to PMTCT services.

1.5 **Aims and objectives of the research**

This research seeks to evaluate PMTCT in district clinics based on previous academic research findings. This will be done by firstly analyzing literature about effects of gendered experiences of women on their health and noting the factors that either inhibit or improve their access to PMTCT services. The data will be complemented with an assessment of studies on HIV/AIDS and PMTCT drawn from health research institutes such as Health Systems Trust (HST), Medical Research Council (MRC) of South Africa and studies carried out by the World Bank, World Health Organization (WHO) and the United Nations (UN) and relevant independent or academic research institutes, NGOs and other sources. These studies would be specifically selected from archives, journals and documentary sources according to their content, which would include studies on the relationship between gender, access to and utilization of PMTCT services including studies that illustrate the experiences of women. According to Standing (1997:3), utilization of health services is a helpful measure from the point of view of a gender approach to healthcare because it emphasizes problems of access and under-utilization for women. It is therefore the aim of this research to link utilization of PMTCT services to gender disadvantage by addressing the following issues which will be discussed in chapter four of this research:

- Explore and describe the challenges faced by health care staff in ensuring access and utilization of PMTCT services in clinics.
- Assess the cultural and economic factors influencing the access to and utilization of PMTCT services by HIV positive women.
- Drawing upon good practice studies in PMTCT programmes, this research will conclude in chapter five with highlights of the strengths and weaknesses of the PMTCT program in

South Africa. This will be done with a specific focus on the views of healthcare staff and HIV positive women found in research articles.

1.6 **Purpose of the research**

The main reason for choosing this topic is that the large amount of literature, for example, Butler (2005:591-614); Decock et al. (2002:67-72) and Zungu-Dirwayi et al. (2004), on the topic point to the fact that there is still a lot to be done by South Africa regarding what HIV/AIDS policies they formulate and implement. I am interested in this topic because a study on HIV/AIDS and Prevention of Mother to Child Transmission will provide more information on challenges facing the South African government in implementing its national strategic plan for HIV/AIDS 2007-2011. The information about barriers to accessing PMTCT will provide district health providers information and ideas on about what the priorities should be for efficient antenatal care and PMTCT services. The healthcare users can also gain from increased awareness and information regarding the challenges women face in accessing PMTCT services and how to overcome them.

CHAPTER TWO: LITERATURE REVIEW

2.1 **Introduction**

This section addresses literature on the slow response of the South African government to HIV/AIDS and the effects on PMTCT. After outlining the impact of HIV/AIDS on women and discussing literature on how the marginalization of women inhibits their access to healthcare, the apparent contradiction between PMTCT implementation and the international interventions for prevention and treatment of People Living with AIDS (PLWA) is explored. Challenges of PMTCT faced by both women and the health system are discussed including gender and poverty related factors influencing the use of PMTCT services.

2.2 **An overview of the impact of HIV/AIDS on women**

Kevin DeCock, the World Health Organization's (WHO) HIV/AIDS director states*, "We cannot treat our way out of this epidemic. For every case going into treatment, six more are going to the back of the line."* (Tarakeshwar et al 2008:19).

Approximately 358 000 maternal deaths occurred worldwide in 2008 with 99% occurring in developing countries (Wilmoth et al 2010:718). In 1999, 22.4% of pregnant women attending antenatal services in the public sector in South Africa were HIV positive (Department of Health, 2000 cited in Gilbert & Walker 2002:1093) but by the end of 2008, this figure had risen to 29.3% (Department of Health 2009:iv). In South Africa, it was estimated that of the 5.27 million HIV-infected individuals aged 15 years and older, 2.8 million were females (Department of Health 2008:24). Even more importantly than numbers, women take the brunt of the socio-economical effects of HIV infection (Albertyn 2000:3)

As most infected women are of child bearing age, they risk infecting their children and thus face difficult choices about child bearing. As care givers in their families, women usually care for dying family members and for children orphaned by the epidemic (UNAIDS 2006 cited in

Ashford 2006:3). Women with HIV infection are often faced with socioeconomic stressors that exacerbate the negative consequences of HIV for their physical and mental well-being. For example, unemployment, lack of money for transport and food were cited by Yeap et al (2010:1104) as significant obstacles to mothers' uptake of HIV care and treatment for their infected children. In addition, women no longer viewed themselves as attractive or desirable, felt that their reproductive rights were socially disapproved, and feared they could lose custody of their children if others became aware of their HIV status (Hackl et al 1997:53). In a study conducted by Faithfull (1997:144), HIV infected women were faced with the impact of grief and feared that they might infect their children through casual contact. The fact that women are often dependent on men economically, socially and culturally makes them vulnerable to HIV infection. As such not only will they possibly face violent reactions from their partners, but they also risk being abandoned by their partners and facing economic and social hardship (Modeste & Majeke 2010:162).

In some instances, women are reluctant to undertake VCT or disclose their HIV status because they know they will be blamed for sexual immorality. For example Pashwana-Mafuya (2008: 2) contend that women are accused by their in-laws of avoiding breastfeeding in order to appear or smell attractive to other men. There is also a belief that the new born baby should be given "isicakati" (traditional drink) as their first feed for a couple of days in order to cleanse the gut immediately after birth and improve the baby's stools (Pashwana-Mafuya 2008:1). These cultural influences on infant feeding choices indicate that some babies born to HIV positive women do not receive nevirapine 72 hours after delivery.

2.3 **Gender, Health and Socioeconomic inequality in relation to HIV/AIDS**

Gender inequalities affect women's experience of living with HIV, their ability to cope once infected, and their access to HIV/AIDS services (WHO 2009:xii). Gender equity and economic structures are closely linked (Moss, 2002:650). Gender equity has been promoted by the international development organizations (e.g., the World Bank) because it is positively associated with lower fertility and better health for women and children as well as with economic development (Moss 2002:650).

The reasons most frequently cited to explain the inequality and disadvantaged situation of women vis-à-vis men are related to low levels of education, employment and income (de los Rios 1993:3). For instance women with secondary education were more than five times as likely to use VCT than women with no education in Eastern Cape South Africa (Hutchinson & Mahlalela 2006:446). Similarly, Medly (2004:300) cites that women with higher level of education were more likely to share their results with their partners than women who were illiterate. These authors also found that importantly, the effects of stigma in VCT utilization appear considerably stronger for females than men.

Shisana, (2004:2) asserts that the difference in value of men and women has a direct implication for the level of access to, and control of resources available to men and women to protect their health and the health of their families. For example, a study in Tanzania found that while men made the decision to seek VCT services independent of others, women felt compelled to discuss testing with their partners thereby creating a potential barrier to accessing VCT services (Gupta 2000:4).

Shisana (2004:3) outlines examples of trends observed in Lesotho and Swaziland noting that if a woman is married in a community of property she is considered a legal minor and cannot sign a contract without her husband's permission. In Lesotho if she is married she remains under the guardianship of her husband and if she is unmarried she remains under her father's. In Mozambique, Shisana, (2004:3) states that because the man is the traditional head of household, the wife is expected to be subordinate. Her property is given to the husband, who has the right to authorize her to enter into commercial transactions. In Swaziland a woman cannot have access to land without her husband or male relative nor inherit from her deceased husband. How then will women access health services or disclose their HIV status to their partners or parents? Furthermore, in Swazi society women are expected to be subordinate and submissive (Whiteside, et al., 2003:27), which puts them at a disadvantage in accessing healthcare services including HIV/AIDs treatment.

The idea that women are less powerful than men in terms of social, economic and political standing gives the impression that women must obey men or their economic support will be withdrawn. In a South African study conducted by Dunkle et al (2004:1418) women with

controlling partners were more likely to say that they had never used a condom. By being more dependent on others for their longer term security, their risk to HIV increases and consequently their lack of access to treatment especially PMTCT increases (Standing 1997:2).

Therefore in addition to the economic factors, cultural expectations and practices were found to contribute to women's vulnerability to HIV/AIDS (Shisana 2004:9). The consequence of inequality between men and women in cultural, economic, social and political spheres is that the chances of taking HIV/AIDS preventive measures are diminished. Even where legislation fosters good gender relations, harmful traditional practices remain, suggesting that it will take more than the passing of laws to end gender discrimination (Shisana, 2004:6).

2.4 International Instruments for Prevention of Mother to Child Transmission of HIV/AIDS: Placing women at the forefront of prevention strategies

Tarakeshwar et al, (2008:19) outline that usually integrated within a hospital or a community clinic that provides HIV care, Voluntary Counseling and Testing (VCT) enables interested individuals to learn their HIV status, learn more about HIV, and potentially gain access to HIV care and treatment, if available. Also, developments in the area of antiretroviral (ARV) therapy for the treatment of HIV disease and the prevention of mother-to-child transmission (PMTCT) have focused attention on expanding access to VCT (Baggaley, 2001:1). It is therefore no doubt that the promotion of VCT as an essential element in the response to the HIV epidemic, is a priority of UNAIDS (Baggaley 2001:1).

In addition to VCT, Tarakeshwar et al (2008:25) mentioned biomedical interventions to HIV/AIDs prevention especially the provision of ART which is important for PMTCT. The greatest prevention success has been achieved by administering ART for prevention of mother-to-child transmission (PMTCT) during and after childbirth (Hoffman et al, 2008:44). Following delivery, uninfected infants remain at risk of HIV infection via breast feeding. In industrialized countries, HIV-infected mothers are instructed to use formula feeding to eliminating the risk from breast milk transmission (Hoffman et al, 2008:44). Also cited in Hoffman et al (2008:44) are Arendt et al., (2007) who argued that continued use of ART by the mother following delivery

and through-out breast feeding is the most efficacious way to prevent HIV transmission after delivery.

Integrating gender into policies, programmes and services ensures more responsiveness to the social, economic, cultural and political realities of users and beneficiaries. This can help HIV/AIDS programmes and services better inform and empower clients, and improve access to and uptake of services (WHO 2009:xii). In its recommendation, the WHO outlines that it is necessary to develop and strengthen linkages with social services, including HIV-positive mothers' support groups, legal services, income generation schemes, food security initiatives, home-based and community-based care programmes, orphan care, and services for women living with violence, where available (WHO 2009:20). A case of successful implementation of HIV/AIDS responses is exemplified in Brazil's battle against stigma and discrimination. In Brazil, stigma and discrimination were understood as central to the response to HIV/AIDS and it has been waged consistently through partnerships between government and civil society (Berkman et al, 2005:1168).

In addition the success of the São Paulo free drug program in the form of universal distribution created many more points of access to treatment and allowed more rapid scale-up. The Brazilian program of universal, free access is financially viable in large measure because of Brazil's capacity for local manufacture of pharmaceuticals (Berkman et al 2005:1170). For these reasons, Brazil may be best known for its policy of ensuring free and universal access to antiretroviral therapy (ART). This policy, which is increasingly recognized as a central element of any public health response to the HIV/AIDS epidemic (Galvao et al 2008:136) has brought international recognition to the country as a model in the fight against the epidemic.

Benatar (2004:87) argues that the example of leadership on HIV and AIDS in such countries as Brazil, Uganda, and Botswana has long been evident and could have been emulated. However, it is necessary to note that interventions found effective in one country may not be equally successful in other countries. For example Muko et al (2004:134) argue that even though the WHO/UNAIDS guidelines on infant feeding in HIV/AIDS settings are quite clear, measures like formula feeding entail infectious and nutritional risks in the health context of low income countries where they are not economically or socially accessible. In essence, the social,

behavioral and biomedical interventions outlined for PMTCT may not be culturally transferable to some settings and the level of infrastructure and resources may not be available. In a South African study conducted by Sibeko et al (2005:31), mothers valued the use of traditional herbal preparations (Muthi) for their new born babies thus hindering the ability to practice exclusive breastfeeding.

2.5 **Critique of South Africa's HIV/AIDS prevention and treatment Programs**

Despite international support for wider use of ARVs and a comprehensive plan for HIV/AIDS, it was not until 2000 that the NSP 2000-2005 was developed in South Africa. The plan articulated the AIDs policy of the government and drew upon the strategic plan template provided by the United Nations. However, critics such as Butler (2005) and Willan (2004) suggest that it lacked concrete commitment and time frames and created controversy by being silent on ARV options. As stated by Mbali, (2004:317), the government remained opposed to providing ART based on arguments about the drug's expense, side effects and lack of infrastructure to provide them. Schneider (2002:149) adds that despite dramatic drop in the prices of drugs at the time of a TAC court case to provide ARV for PMTCT, the government indicated that other than for PMTCT, ARV was still not affordable or feasible in the public health sector. More importantly, there were political and ideological reasons not to promote ARV such as former president Mbeki's strong denialism that infused the DOH.

As Butler (2005:597) argues, senior politicians, including the former president Thabo Mbeki remained unwilling to attack the stigmatization brought about by HIV/AIDs. At the same time they were denying the link between HIV infection and AIDs even in the face of overwhelming evidence provided by the global scientific community (Benatar 2004:86). For instance, regarding the affordability of ART, Butler (2005:598) suggests that unlike other African states, South Africa was not constrained solely by its inability to afford ARVs themselves or by a need to mobilize donor support in order to procure drugs. According to Willan (2004:114), the delays and shifts in treatment were not fiscally driven because the cost of the providing ARVs in South Africa by 2015 is estimated to rise to 1.7 percent of GNP, which meets UN's estimate that middle income countries can afford 2 per cent of their GNP on healthcare. Also Mbali (2004:324) cites TAC (2001) contending that a MTCT program would cost R80 million per year

as opposed to R800 million lost per annum by failing to prevent babies from contracting HIV from their mothers.

The South African responses failed to realize that HIV/AIDS is not just a health problem that can be contained by adopting a few medical or health centered interventions. For example Butler (2005:595) notes that while HIV/AIDS awareness grew, stigmatization continued largely unabated.

Calling for the need to re-examine the link between HIV/AIDS as mentioned by Schneider (2002:149) resulted in severe consequences. This complements Butler (2005:605) that the delay, obfuscation and tardy implementation of ARV treatments resulted from these persistent strains of denialism with potentially negative consequences. Apart from stigma, poor health care infrastructure and limited access to health services necessitate modification of prevention and treatment approaches in the South African setting. For instance Willan (2004:110) found that many clinics did not have the necessary drugs such as ART to administer the PMTCT policy. Also patients were dying because of inadequate staff in healthcare facilities and lack of training for staff in dealing with the epidemic (Willan 2004:111).

Mbali (2004:315) maintains the view that despite its controversies, not all the aspects of the HIV/AIDs policy were deemed as failures for example the continued annual antenatal survey of HIV and syphilis prevalence and the establishment of the moderately successful Beyond Awareness campaign of the Department of Health. In essence Mclntyre et al (2008:301) conclude that while the South African response to HIV/AIDs prevention has witnessed so much effort in VCT and ARV provision, there is no concomitant decline in HIV infection rates. It is therefore suggested that this is mainly because of the country’s political history of AIDS (Mclntyre et al 2008:301) including stigmatization and discrimination (Butler 2005).

Benatar (2004:86) adds that many obstacles frustrate the introduction and maintenance of comprehensive and effective programs for preventing the transmission of HIV and for treating infected patients with antiretroviral drugs. Some of these obstacles include a high prevalence of violence against un-empowered women, constraints on financial and human resources, an inadequate health care infrastructure and resistance to adopting bottle feeding rather than breast-

feeding. These aspects including cultural barriers form the basis of discussion in the next section (Benatar 2004:86).

2.6 **Socioeconomic and cultural factors affecting uptake and acceptance of PMTCT services**

So far, this paper has established that short-course antiretroviral treatment can reduce mother to-child transmission of HIV including amongst women living with HIV/AIDS who are breastfeeding. However, Mofenson & Mclntyre (2000:2242) cite that a woman cannot make informed choices about preventative interventions unless she knows her HIV status also stating that while initial acceptance of HIV testing is high, many women do not return for their test results. Mclntyre, et al (2008:139) also contend that the delivery of interventions for PMTCT has proven more difficult than expected thereby pinpointing key factors which continue to drive their failure including low uptake of VCT and continuing postnatal transmission through breastfeeding. The reasons mostly cited for women refusing HIV testing are related to stigma, discrimination, and potential consequences such as domestic violence, abandonment, or murder. Also, in some settings, families have few resources for travel and most live a long distance from a clinic thereby limiting access to ART. Accessing emergency transport is especially difficult and expensive (Skinner et al. 2005:115). In addition, these authors cite that poor infrastructure also means that families do not have access to clean water which complicates infant formula feeding.

2.6.1 Stigma and Discrimination

Decock et al, (2002:68) mention that increasing access to HIV/AIDS care and antiretroviral drugs in Africa is a topic of high-level international discussion, but its potential effect on enhancing prevention is yet to be realised. Chopra (2009:839) notes that this is attributed to avoidable factors at family levels such as delays in seeking care. The reasons why women refuse to seek for care are the stigma and discrimination that are associated with HIV/AIDS. According to Decock et al (2002:68) stigma emerged universally and early on as a powerful, pernicious force that is an important barrier to prevention efforts.

Amuzu (2008:120), states that fear of discrimination often prevents people from seeking treatment for AIDS. In some cases, HIV/AIDS-positive persons may be evicted by their families and rejected by their friends and colleagues. Furthermore, women opting to feed their children through replacement feeding are stigmatized in many cultures which greatly complicates adherence to it. They are often identified as being infected with HIV, leading to associated stigma where women may be ostracized and expelled from their families (Horvath et al 2010:3). By stating that stigma is linked to the workings of social inequality, Parker & Aggleton (2003:16) argue that to properly understand issues of stigmatization and discrimination, whether in relation to HIV and AIDS or any other issue, countries must think more broadly about how some individuals and groups come to be socially excluded, and about the forces that create and reinforce exclusion in different settings. For example in some settings, women may fear revealing their serostatus because they may be labeled as promiscuous or sex workers and stigmatized as such (Parker et al 2002:4).

Additionally, Parker et al (2002:16) report on a symposium where it was noted that religious doctrines, moral and ethical positions regarding sexual behavior, sexism and homophobia, and denial of the realities of HIV/AIDS have helped create the perception that those infected have sinned and deserve punishment, therefore increasing the stigma associated with HIV/AIDS. HIV/AIDS-related stigma and discrimination in families and communities is commonly manifested in the form of blame, scapegoating, and punishment. Communities often shun or gossip about those perceived to have HIV or AIDS. In more extreme cases as seen in reports from South Africa, Brazil Thailand and India, it has taken the form of violence and HIV/AIDS related murders (Nardi and Bolton 1991 cited in Parker et al 2002:7).

2.6.2 Poverty and HIV/AIDS

Women represent 70% of the world's poor and they have less education, longer working hours and lower life expectancy (Gilbert & Walker 2002:1093). These authors outline the situation in South Africa saying that on average, women earn between 72% and 85% of what men with similar education earn and continue to predominate in low skilled and low paid occupations and only 22% of all managers were women. Whiteside (2002:316) posits that although there is not a simple causal relation between the epidemic and poverty, HIV prevalence is highly correlated

with unequal distribution of income. That the HIV/AIDS epidemic impoverishes people, their households, communities and enterprises is by now widely accepted. As such household income is affected thereby limiting access to care and treatment for HIV/AIDS.

As a result of poverty, Horvath et al (2010:3) assert that many mothers do not have the means to afford the costs of formula and other breast milk substitutes. Particularly important in resource poor regions is lack of access to clean water which increases the risk of diarrhea if replacement feeding is used. As such, using formula feeding to protect infants against the risk of HIV infection could also place the same infants at risk of morbidity and mortality from other infections (Horvath et al 2010:3).

2.6.3 Health System Constraints

One of the most significant impacts of providing ART in hospitals is capacity. As Fareed Abdullah noted in a report presented in Toronto on the ART roll out, while there are 192 treatment sites in 170 local municipalities, a significant portion of the treatment is provided through hospitals. Some of these hospitals have case loads in excess of 8000 active ARV recipients (Sember 2008:71). Sember (2008:71) also asserts that continuing the roll-out and sustaining those already on treatments is close to impossible with current staffing levels in South Africa. In addition to understaffing, the basic infrastructure of these facilities, both the medical equipment and the buildings themselves, cannot accommodate such numbers (Sember 2008:71). To achieve universal access on the level of 80% coverage or higher, the health system and the ART delivery system will have to reduce the services provided to persons living with HIV/AIDS (Sember 2008:71).

In their study of two peri-urban hospitals in Kwazulu-Natal, initiation of simple interventions in South Africa was challenging, its operational challenges manifested in poor uptake of HIV testing (56%), only 55% of women being given single-dose nevirapine, and only 50% of infants being followed up until 12 months and tested (Doherty et al 2005:215).

These challenges in ensuring wide-scale implementation and quality assurance of PMTCT programmes in resource-limited countries are known to be due to human resource limitation at primary health clinics (2.3 health care workers per 1 000 population) according to Naicker et al

2009:60-64). Moodley et al (2011:125) report that time, human resource and financial constraints can lead to inadequate support, supervision and monitoring of health services at primary health clinics. Furthermore, there have been many reports from health care settings of HIV testing without consent, breaches of confidentiality, and denial of treatment and care. Also included is failure to respect confidentiality by clearly identifying patients with HIV/AIDS, revealing serostatus to relatives without prior consent, or releasing information to the media or police. These appear to be problems in some health institutions (Parker et al 2002:6).

2.7 **Conclusion**

Having discussed how women bear the burden of HIV/AIDS in different settings and their constant socioeconomic exclusion on the basis of their gender roles, this section discussed the literature on international interventions for prevention and treatment of HIV/AIDS and the effects of PMTCT. It was then argued that the South African government's response to HIV had always been an ambivalent one. Its attempts to address the escalating epidemic have been shrouded in controversy some of which include: the refusal to provide interventions to prevent mother-to-child transmission of HIV; AIDS denialism; equating nutritional supplementation to ART; and the slow pace at which government roll out of ART occurred (Mclntyre et al 2008:301). As a result, moving from research into PMTCT to actual service provision took some time. This section drew extensively on the critical analyses of HIV/AIDS policies promoted by the South African government. Therefore in order to address issues pointed out by critics, Fenton (2004:1187) notes that political leaders must face up to the issue of HIV/AIDS, and help to create a situation in which the best ways to tackle it can be openly discussed. Stigma must be broken down at all levels. Care, support, and treatment for those already affected by HIV/AIDS are necessary in their own right, and will also help to reinforce prevention efforts.

CHAPTER 3 - RESEARCH METHODOLOGY

3.1 **Aim and objectives**

Aim

The overall aim of this research is to review literature on PMTCT services and identify factors which affect PMTCT service utilization by pregnant women attending antenatal care clinics in South Africa.

Objectives

In the previous chapters, it has been ascertained that PMTCT components entail Voluntary Counseling and Testing (VCT) of women attending antenatal clinics, provision of antiretroviral treatment (ART) and formula feeding for infants. This research intends to explore the aspects of PMTCT that women find most difficult to utilize or access and why.

In order to find out whether PMTCT services are adequately utilized and the extent of satisfaction by clinic users, this research would describe the attitudes, practices and experiences of HIV positive women attending antenatal clinics regarding their use of the PMTCT services. This will not be done through research with the women attending clinics, but through desk research into relevant literature. The study also intends to find out if and how economic factors contribute to the challenges faced in accessing PMTCT services.

Finally, this research seeks to identify the socio-cultural circumstances which prevent women from utilizing and accessing PMTCT services. These may explain the factors that limit the possibility of HIV status disclosure even to potential important sources of support such as family and friends.

3.2 **Research design**

This research will use the qualitative design to explore the factors influencing the use of PMTCT services. Existing literature as discussed in chapter two of this research mentions that certain factors which are partly gender and poverty related tend to impact the use of PMTCT services. Bearing in mind these factors, this research will analyse qualitative studies containing information on barriers to PMTCT utilization with the aim of eliciting the perspectives of health care staff involved in coordinating or executing PMTCT programs. The views of health care staff will be included in this research in order to explore collective norms, experiences and possible divergent views related to the barriers of PMTCT implementation.

Thereafter, the data will be complemented with studies on how women perceive and use PMTCT services so that the actions and motivations of HIV positive women can be understood through their subjective experiences as reported in the qualitative studies. A qualitative research design is more like a journey in which each of the stages builds on previous experiences (Richards, 2005). According to Creswell (1994:145), it is more concerned with processes rather than outcomes. This design was chosen because the researcher is interested in the qualitative descriptions of PMTCT services and barriers to using them, rather than quantitative numbers and figures on the intensity of use of the services. Using the qualitative research will enable a comparison of the views of healthcare staff with that of the women using PMTCT services. The information from women using PMTCT services can therefore be used to confirm or refute claims made by the healthcare staff. Also, a comparison may provide insight into why services are underused and the gaps that exist in perceptions of use between users and providers of PMTCT services.

3.3 **Data collection tools**

In order to collect articles for the purpose of this research, various databases containing journals and documentary sources such as South African Medical Journal (SAMJ), Qualitative Health Research, AIDS Care, WHO bulletin and others will be searched for articles containing information on HIV/AIDS and PMTCT. These articles would be specifically selected according to their content, which would include studies on gender, access to and utilization of PMTCT

services including studies that illustrate the experiences of women. The terms that will be used during the computer based searches of various databases include “PMTCT”, “PMTCT and VCT”, “PMTCT and ART”, “PMTCT and infant feeding”, “Stigma and PMTCT”. To be eligible for review, the article must have been conducted in South Africa and must have included qualitative data on barriers to accessing PMTCT services. The participants from each study must be either health care providers, HIV-positive women or both. The articles will be drawn from health research institutes such as Health Systems Trust (HST), Medical Research Council (MRC) of South Africa and studies carried out by the World Bank, World Health Organization (WHO) and the United Nations (UN), relevant independent or academic research institutes, NGOs and other sources. The information from health staff and women found in these articles may provide different perspectives on the topic. Each study will be reviewed to obtain information regarding the following issues which are related to the sub-foci questions cited in chapter one of this research:

- Specific aspects of the PMTCT program that the women adhere to in order to prevent MTCT such as VCT, ART and infant feeding.
- Socio-cultural perceptions and practices affecting the use of PMTCT services.
- Costs incurred by women in accessing PMTCT services.

3.4 **Scope of the research and sampling**

The researcher will purposely select and review published PMTCT studies from January 2005 to October 2011 which consist of pregnant women attending district antenatal clinics in South Africa. The selection of articles will be done on the basis of the researcher’s judgement as to the most representative and relevant studies. The reasons for including the selected articles will be accounted for in the findings chapter. These will among others relate to the aforementioned sub-foci questions. As such, the studies that will be used in this research will be selected by determining those which can give meaningful information on women’s experiences and perceptions of PMTCT services provided to them. For example meaningful studies include those

studies that qualitatively reported on one or more PMTCT components including the reluctance by HIV-positive women to accept VCT or disclose their HIV status to relatives, the use of exclusive formula feeding and what prevents HIV positive women from accessing ARVs.

This paper aims to include articles that reflect geographical spread by selecting articles from all of South Africa's major rural and urban areas, which report on the use of PMTCT with by HIV positive women. This will enable the researcher to check for similarities and possible differences in viewpoints from various articles and also shed more light on the topic. Only 15 articles will be selected because many of the studies are not easily accessible and a few meaningful articles will be more manageable. The sample size will ideally comprise at most 5 studies relating to VCT services, 5 studies relating to infant feeding practices by HIV positive mothers and 5 studies relating to provision of ARVs to HIV positive pregnant women. Although the small sample size will limit the research from being representative, it will at least give indications for future research into factors influencing the use of and access to PMTCT services.

3.5 **Data analysis**

Data from the sources mentioned above will be combined to determine which economic and socio-cultural factors most likely play a role in hindering access to and utilization of PMTCT services. Content analysis as described and outlined by Hseih & Shannon (2005:1279) will be used to compare factors across ethnic and cultural backgrounds of women that are reported in different South African cities. In this approach, the researcher aims to organize the data using a deductive method. This method involves retesting existing data in a new context (Elo & Kyngas 2008:111). When doing deductive content analysis, researchers develop categorization matrix to arrange emergent categories and show how they are interconnected. The matrix is usually developed based on earlier work such as theories, models, mind maps or literature reviews, after which the selected data are reviewed for content and coded for correspondence with the pre-determined categories (Hsieh & Shannon 2005 cited in Elo & Kyngas 2008:111). This research will analyze articles on PMTCT by generating categories from them, then interpreting them in

terms of a categorization matrix developed from the wider economic and socio-cultural factors found in chapter two of this research.

Data analysis starts with reading all data repeatedly to achieve immersion and obtain a sense of the whole (Tesch, 1990 cited in Hseih & Shannon 2005:1279). Then, data are read word by word to derive codes by highlighting the exact words from the text that appear to capture key thoughts or concepts (Miles & Huberman 1994 cited in Hseih & Shannon 2005:1279). Next, Hseih & Shannon (2005:1279) suggest that the researcher would approach the text by making notes of his or her first impressions, thoughts, and initial analysis. As this process continues, labels for codes emerge that are reflective of more than one key thought. These often come directly from the text and then become the initial coding scheme. Codes then are sorted into categories based on how different codes are related and linked. These emergent categories are used to organize and group codes into meaningful clusters (Coffey & Atkinson, 1996 cited in Hseih & Shannon 2005:1279). Morse & Field (1995) cited in Hseih & Shannon (2005:1279) posit that ideally, the numbers of clusters are between 10 and 15 to keep clusters broad enough to sort a large number of codes. However, since the research is working with a relatively small number of articles, the researcher will determine the number of clusters that will be most convenient for analysis.

Also noted by Hseih & Shannon (2005:1279) is the idea that a tree diagram can be developed to help in organizing categories into a hierarchical structure. Next, definitions for each category and code are developed. Depending on the purpose of the study, researchers might decide to identify the relationship between categories and subcategories further based on their concurrence, antecedents, or consequences (Morse & Field, 1995 cited in Hseih & Shannon 2005:1279). In this research, common categories and patterns among the literature review and articles will be found and grouped by their relevance to the research question and sub-questions. A list of these categories will be added as appendix to this research report including a summary table listing all the articles that were analysed. This method of analysis was selected because it has the benefit of providing valid inferences from data to their context and because of its flexibility in terms of research design (Elo & Kyngas 2008:108).

3.6 **Measures to ensure reliability and validity**

According to Babbie & Mouton (1998:281) the use of multiple sources of information serves to promote reliability of research findings. Mouton (1996: 146) emphasizes that the objective of data collection is to produce reliable data. In order to increase the reliability of a study, it is necessary to demonstrate a link between the researcher's findings and the data (Polit & Beck 2004 cited in Elo & Kyngas 2008:112). The researcher aims to demonstrate this link by summarizing the articles reporting on perceptions of HIV positive women and those which carry perceptions of health staff regarding access to PMTCT services. A table will be used to highlight which articles focus on cultural factors affecting the use of PMTCT services and those that discuss economic factors.

Validity will be achieved by presenting a list of categories that were used for interpreting the data and showing every step taken during the research analysis. Furthermore, numerous excerpts from the articles will be used to support and validate the researcher's interpretation. This can be done by paraphrasing sections of the articles where interviewees were quoted to ensure that the issues in question are verified and understood correctly. A Diagram may also be used to show the relationship between the factors identified and their relevance to each research sub-question will be discussed.

3.7 **Generalizability**

Most of the articles identified by the researcher will focus primarily on areas with lower socioeconomic conditions. As such, the results of this research can only be interpreted in relation to specific study settings. The small sample size also means that the results of this research cannot be generalized to the whole of South Africa, but will provide useful data for conducting a study at national level.

CHAPTER 4: RESULTS AND ANALYSIS OF FINDINGS

4.1 **Introduction**

In chapter three, the research design and methods including the use of qualitative data from journal articles for the purpose of this research were discussed in detail. This chapter discusses the findings from a review of fifteen published articles containing studies conducted by the Health Systems Trust (HST), Centre for Aids Development Research and Evaluation (CADRE), WHO, Medical Research Council (MRC), UNICEF, World Bank, and UN. These were identified after a comprehensive search of various databases and journals including South African Medical Journal (SAMJ), Qualitative Health Research, AIDS Care, WHO bulletin and others[2]. Themes and sub-themes were then derived from these journal articles. In order to find out the cultural and economic factors that are most likely to influence PMTCT implementation, the findings from articles discussing the views of health care providers and those discussing experiences of HIV-positive women were compared across authors and across different research settings in South Africa. The results were then revealed and content analysis was done using the process outlined and described by Shannon & Hsieh (2005:1279) as discussed in chapter three of this research.

4.2 **How the PMTCT studies were analyzed**

All the qualitative studies in text form that were eligible for this research were reviewed. To be eligible for review, the article must have been conducted in South Africa and must have included qualitative data on barriers to accessing PMTCT services. The participants from each study must be either health care providers, HIV-positive women or both. The findings from each study were examined by reading through and making notes. Thereafter, all aspects of PMTCT that were relevant to this research were written down and assigned to categories. The categories were then assigned to relevant sentences and paragraphs in order to describe all aspects of the articles. Due

[2] Tropical medicine and international health, African journal of AIDS research, AIDS research and therapy, Nursing and health sciences, Maternal and child nutrition, Journal of public health policy, The journal of nutrition and Health SA Gesonheid.

to extensive pre-analysis of various literature sources which were discussed in chapter two of this research, a start list of categories was drawn up and a categorization matrix was developed as described by Elo & Kyngas (2008:111). Prior knowledge and assumptions from the literature review in chapter two served as a basis for pre-existing categories that were compared with the findings of this research. The researcher then looked for similarities and differences between the categories and organized them into a meaningful description of health care providers' and women's experiences with PMTCT services. Finally, the descriptive themes and their associated data were examined in light of the research question and sub foci questions to make inferences on factors influencing PMTCT utilization and access.

The table below provided the researcher with a guiding framework of categories based on the pre-analyzed articles discussed in chapter two. These can be compared with barriers to PMTCT that appeared in studies conducted by HST, HSRC, WHO, and CADRE. Another table will indicate how these relate to economic and socio-cultural factors.

Table 1- Categorization matrix showing themes and sub-themes related to the experiences and views of women attending antenatal clinics regarding access to and their use of PMTCT services

Themes	Sub themes
Infant feeding practices	Influence of family/relatives and health workers, inability to disclose HIV status, stigma, scarce resources to sustain formula feeding, clinics run out of stock
Non adherence with ARV	Fear of discrimination, lack of transportation, clients' inability to read and write
Non compliance with and uptake of VCT	Fear of being HIV positive, breaches of confidentiality and quality of VCT
Functioning of clinics/practices of service providers	Staff Shortage, hospitals' capacity, attitude of nurses/health care staff

4.3 **Analysis of findings**

During the analysis, most of the articles noted that the success of the PMTCT programme depends for the most part on patient co-operation or participation, and recognized VCT as a crucial first step in uptake of PMTCT services (Delva 2006:708); (Varga 2008:787); (Mavhandu-Mudzusi 2007:256). Three broad themes emerged from the review of articles namely; perceived problems with access and adherence to ARVs, uptake of VCT and infant feeding practices. As demonstrated below, shortages of staff, test kits, medical supplies and formula milk were grouped in the theme "health system constraints". Following these, a number of cross-cutting categories such as fear of stigma and discrimination emerged in all aspects of PMTCT. These were the themes mentioned in chapter two of this research and confirm the argument made by Mclntyre (2008:301) that despite so much effort in VCT and ARV provision, there is no concomitant decline in HIV infection rates.

Theme 1- Health system constraints

Workload: Difficulty in tracking down staff, excessive paperwork and difficulty in booking appointments

Staff shortage: Too many patients at clinics/long queues

Clinic services: Lack of ART and formula milk, quality of VCT, attitude of nurses, confidentiality concerns

HIV positive women as reported by Doherty et al. (2006:2424) affirm that clinics had run out of formula-milk supplies. This was either because the HIV positive women had run out before the scheduled date to collect more or because the clinic was out of stock: "I always buy every week. I spend R100 ($15) per week on milk. If it gets finished, you wait for the date. You do not just go and tell them that it is finished". Clinics also run out of medication, meaning that the costs of ARVs are transferred to patients who might not afford them (Goudge & Ngoma 2011:57). This was evident in the following quote "About the pills, sometimes they say there are no pills and send me to the hospital but I am persevering, I go there". Regarding VCT, nurses in an interview conducted by Mavhandu-Mudzusi et al. (2007:256) identified shortage of material resources as a major challenge thus reducing the quality of VCT. One nurse interviewed by Mavhandu-Mudzusi et al. (2007:256) says "No proper counseling room, room is also used as a storeroom. You also find that there is no buffer kit".

A new category "understaffing" emerged from the review of articles such as Delva et al (2006:706), Dwadwa-Henda et al (2010:28) and Doherty et al (2006:92). Peltzer et al (2005:35) in their study gathered that there was only one nurse attending a clinic which results in long waiting times. One nurse in a study conducted by Sprague et al (2011:5) notes the following "I provide 5 counseling sessions per day because I have other work to do". According to Miller et al. (2010:52), health system concerns such as long queues in clinics led patients to abandon treatment. This can be considered as an indirect cost incurred by HIV positive women in accessing PMTCT.

Research in an Eastern Cape resource poor setting feared a lack of confidentiality among counselors (Frizelle et al. 2009:25). Another study by Varga et al (2008: 795) cites the following regarding confidentiality "the nursing staff will read your file and discuss it in the tea room with everyone". In the same study by Varga et al (2008:795), adolescents in focus group discussions

described negative attitudes of health staff towards them as evident in the following quote “if the nurses take your blood for HIV test, they will ask you to pray that it is negative because what you have done to yourself is that you are going to die”.

Several patients interviewed by Miller et al (2010:51) expressed concerns about the difficulty in booking appointment and tracking down paper work or staff as their reasons for abandoning treatment. This was found in the following quotes by a HIV positive woman “Every time there is a misunderstanding, they do not book you on the appointment you agreed on and when you go back, you wait until four o’clock, they start telling you that you did not book”.

Theme 2- Perceived problems with Adherence to ARVs

- **Non disclosure of HIV status:** Shock, denial**,** lost or sold nevirapine tablets
- **Nevirapine administration**: Confidentiality, non disclosure of HIV status
- **Being poor and unemployed**: Lack of food, availability of potable water and transport
- **Stigma**: Isolation by family and community

Health staff interviewed by Delva et al. (2006:708) mentioned that patients sometimes lost their nevirapine tablets or sold them in the community. Non-disclosure to the partner sometimes posed problems of confidentiality during nevirapine administration to the baby. When the male partner was present at delivery it was difficult to administer the nevirapine syrup (Delva et al 2006:708). Varga et al (2008:795) found that adolescents in both key informant workshops and focus groups openly stated they would find ways not to disclose their HIV status at the clinic during labor and delivery, despite knowing that without disclosure the health care workers would not give the baby nevirapine after delivery. In focus group interviews, with Varga et al (2008:795), mothers described specific strategies they had used to hide their HIV status, which included arriving at the clinic in labor without an antenatal card (“losing” or “forgetting” the card), substituting another mother’s antenatal card who had had a negative HIV test result, or scratching out or erasing the HIV test result from their own cards (Varga et al 2008:795).

In their study on factors influencing the use of ART, Peltzer et al (2005:28) found that socio-economic factors such as availability of potable water and transport affect women's acceptance, supervision of ART and adherence to take-home ART for both mothers and their new born. According to Peltzer et al (2005:28), most of the participants did not have access to tap water and many of them spent between 30 minutes and 1 hour to get to the hospital or clinic. An indirect cost that is said to inhibit adherence to ARVs is the fact that the pills make patients hungry. For instance in the same study conducted by Peltzer et al (2005:28), a woman after three years of treatment reports "I should always have something to eat because ARVs cause hunger". The same woman indicated that being poor and unemployed, she cannot afford three meals a day.

Social factors were also mentioned such as the way HIV positive women are treated in their communities. Quotes found in Peltzer et al (2005:36) include the following: "People are scared of them because they think they will be infected. If there is a wedding or a traditional gathering they don't invite them to be part of it. They are laughed at by their friends. Others give them names and others point at them and say they have three letters (HIV+)". Similarly, Goudge & Ngoma (2011:57) discussed how stigma and isolation by family and community threatened a HIV positive woman's access to ART. The following quotes confirmed their findings: "My husband has turned his back on me"; "I would see people talking about me and laughing. I don't know why they are laughing". Sprague (2011:5) cites that Shock, denial or uncertainty can delay women's return to health facilities for the next step in HIV service provision, namely, ART initiation.

Theme 3- Uptake of VCT

- **Confidentiality:** Quality of counseling/not enough time in counseling rooms
- **Psychological impact of a positive test result**: shock, denial, non disclosure of test result

- **Social Stigma and discrimination**: Isolation and negative attitude attached to HIV/AIDS

The quality of counseling and other factors influencing VCT uptake are reflected in client-counselor dynamics as discussed in theme 1 above. For example, Varga (2008:794) mentioned that confidentiality breach, poor treatment and prejudicial attitudes among health providers keep HIV positive adolescents from actively participating in VCT. Health care staff cited in Mavhandu-Mudzusi (2007:254) indicated that there was no time to do pretest counseling, testing and post test counseling because they are overloaded with clients.

According to the health care staff interviewed by Delva (2006:708), lack of knowledge, shock and denial may have been responsible for suboptimal VCT uptake and follow-up. Fear of HIV related social stigma and the psychological impact of a positive test result were common real-life experiences of adolescents using PMTCT services as cited by Varga (2008:795). This is evident in the words of an 18 year old HIV positive mother who said "I just started attending [antenatal] clinic somewhere else to avoid [HIV testing]....I said I would [have the test] but then I started thinking about who might be [at the clinic] watching when I went for the test and what they would think of me. At home they say if you have to have an HIV test it means there is something wrong".

This view is similar to that of VCT providers in a study conducted by Mavhandu-Mudzusi (2007:260). In this study, fear of stigma and discrimination particularly the negative attitude attached to HIV/AIDS pose a challenge to prevention of HIV. Discrimination is practiced even by the nurses themselves who sometimes exaggerate the wearing of protective clothing as noted by one VCT nurse who was quoted in the study conducted by Mavhandu-Mudzusi (2007:260) "One will put on double pairs of gloves, plastic apron on top of nurse's gown and mask. This embarrassed the patient as other patients will start to know that the patient is positive, which leads to stigmatization and isolation". Similarly in a study conducted by Sprague et al (2011:5), one health worker also noted the following: "People are scared of themselves and stigma prevents people from testing". In addition, Peltzer et al (2010:101) interviewed healthcare staff who were concerned about stigma that result in non-disclosure of HIV status also saying that a few clients refuse counseling by lay counselors because they stay in the same communities.

"Thus some clients prefer being counseled by professional nurses because they stay far away from communities" (Peltzer et al 2010:101).

Theme 4- Infant feeding practices

- **Community norms/culturally accepted practices and negative attitudes**: Pressure at home/ influence of other family members, taking traditional medicines, expectations that mothers will breast feed
- **Specific environments and living conditions:** Access to clean water and proper heating or electricity
- **Confusion about infant feeding information**: Breast milk is not enough
- **Unable to afford formula milk**: Financially and emotionally dependent/ the tins are very costly
- **Unavailability of infant formula at some sites**: Run out of formula-milk supplies
- **Stigma as a result of using formula milk:** Inability to disclose HIV status , Fear of negative consequences such as less help from the family
- **Transportation problem:** poverty in communities

Peltzer (2010:102) found from interviews with health care staff that "Clients are mix-feeding their babies due to pressure at home, especially when they have decided to disclose their HIV status". This is against the infant feeding guideline which states that mothers must either practice exclusive breastfeeding or formula feeding for up to 6 months (Department of Health & South African National AIDS Council 2010:32). Thairu (2005:5) posits that in a community where breast-feeding is normative in the strongest sense of the word, choosing replacement feeding would have seemed abnormal in such a way that choosing to bottle feed is tantamount to announcing that one is HIV positive. As a result, there is negative community attitude towards victims of the disease which was a common theme in the interviews with Thairu (2005:6). As an 18-year-old mother who had chosen exclusive breastfeeding reported: "At home they say breast milk is not enough for the baby, they say I must give him other foods so that he can grow". Frizelle (2009:20) states that culturally accepted practices about infant feeding may make it very difficult for a woman to adhere to PMTCT-related feeding options. For example, in South

Africa, rapid cessation of breastfeeding is generally difficult for young mothers to do because of pressures from family.

In this same theme, Doherty et al (2006:91) discuss instances where there is confusion about infant feeding because of mixed messages portrayed when there are posters promoting breast-feeding and others promoting formula feeding within the same clinic. Mothers who participated in the PMTCT program often hid their HIV status from partners and relatives, stating fears of rejection, physical abuse and of losing financial or social support (Buskens 2007:1105).

Thairu (2005:7) further cites the role of economic circumstances in decision making as a common theme in the interviews as women who had chosen formula feeding also noted difficulties associated with their choice. One of these women complained: "The tins are very costly. At home we take 6 [tins] for a month, but it doesn't end. Six, six, six, but they don't last for a month, when the month is [halfway through] we need to go and buy more. [At least] with breast-milk, you know you can take that money and buy other things".

There was still a risk of pushing patients to formula feed exclusively, even if they did not have access to clean water and proper heating (Delva 2006:708). Varga (2006:956) found that disclosure of HIV status made women more precarious especially when they are unemployed. For example, a woman who was financially and emotionally dependent on her husband and his family was disowned and forced out of the house. It is largely because of consequences like this that HIV positive women as cited by Varga (2006:956) avoid disclosure of their HIV status by employing protective strategies such as changing formula labels and containers.

Dwadwa-Henda (2010:33) reports findings from interviews with health workers whose concerns centered on affordability of formula milk and the specific environments and living conditions faced by women. For example healthcare workers cite that "There is not enough water and electricity in these areas. Electricity is only for cooking, meaning there is no heat to warm the baby's milk. In certain areas there is no water and electricity, meaning that the child will be susceptible to acquiring certain water-borne diseases (Dwadwa-Henda 2010:33). Dwadwa-Henda (2010:37) further cites that the unavailability of infant formula at some sites was found to lead to mixed-feeding. If women opt for exclusive formula feeding and then find that there is no

formula milk at the local health facility, they tend to switch to breastfeeding. This is especially the case among poor women who are unable to afford formula milk.

The table below summarizes the socio-economic and socio-cultural factors influencing PMTCT implementation.

Table 2- Socio-economic and socio-cultural factors influencing PMTCT implementation

PMTCT components (Broad themes)	**Research questions**	
	Socio-cultural factors	**Socio-economic (Direct and indirect costs)**
Utilization of VCT	Confidentiality, poor and ad hoc counseling, stigma, shock and denial, negative attitudes towards HIV positive women, fear of positive HIV result	Poverty, transport, inadequate resources such as test kits and buffers, long waiting times/queues
Adherence to ARVs	Stigma, discrimination, Shock, denial and uncertainty	lack of medications/stock outs of nevirapine, Lack of transportation, long waiting time in clinics
Infant feeding practices	Stigma/discrimination, negative attitudes of community and norms regarding infant feeding, Fear of HIV status disclosure, social isolation	Lack of money to buy infant formula and stock-outs in clinics, Lack of transportation, potable water, waiting times in clinics and lack of access to electricity.
Health system constraints	Poor and ad hoc counseling, long waiting times in clinics, negative attitude of nurses	Stock-outs of infant formula and nevirapine in clinics

From the above analysis, it appears that fear of stigma and discrimination and health system constraints are the major cross-cutting categories affecting all aspects of PMTCT implementation. Stigma and discrimination are also associated with shame and blame because people who are HIV infected are often presumed to be promiscuous or careless and thus responsible for their infection. As discussed in chapter two of this research, these result in fear

of HIV status disclosure and remain the major impediments and the greatest challenges to slowing the spread of HIV/AIDS through PMTCT.

The categories related to transport costs, poverty and unemployment were common in the broad themes "infant feeding practices" and "adherence to ARV". In areas where there are poor roads and underdeveloped transport systems, HIV-positive women are expected to travel long distance to seek PMTCT services. Also, they may not afford transport costs thus presenting formidable barriers to provision of PMTCT. This also concurs with chapter two of this research, which also noted that some families do not have access to clean water which complicates the use of infant formula for feeding babies. However, poverty and unemployment did not play a similar role in the uptake of VCT as compared to "stigma, discrimination" and "health system constraints".

4.4 **Comparing the experiences of heath care staff vs HIV-positive women**

It is evident in this analysis that health care staff and HIV positive women had no differences in opinion except in the broad theme "VCT". In this theme, it was noted by Varga et al. (2008:794) stigma, breach of confidentiality with test results, prejudicial attitudes among healthcare workers and social stigma or rejection by family prevented HIV positive adolescents from testing. On this note, nurses interviewed by Mavhandu-Mudzusi et al. (2007:254) revealed more of factors relating to health system constraints by stating inadequate test kits and counseling rooms meaning clients will only undergo pre-test counseling without testing. In this case and in cases where there are long queues, most of the clients did not return for testing.

Similar views and experiences were cited in most of the articles reviewed. It appears that some categories were dominant in each broad theme and serve to be the most frequently cited factors influencing PMTCT service utilization. They were also the most common views mentioned by healthcare staff and HIV positive women. Regarding the views on ARTs, transport costs, shortage of medication, long waiting times, queues and logistical challenges were cited by women interviewed by Miller (2010:51). Similarly, another study that focused on the views of healthcare staff argued that shortage of staff meant heavy workload meaning that patients might not receive nevirapine (Delva et al. 2006:706).

Stigma and isolation by community and family members was also evident in the view of a mother who changed from formula milk to breast milk when she was discharged from the hospital saying: "They do know that if the baby takes this kind of formula it means the mother is HIV and they are going to ostracize him'' (Doherty 2006:2423). This experience is confirmed by health care staff in another finding by Sprague et al (2011:5) who cites a former nurse saying that the tins used for formula feeding were associated with stigma.

Box 1- Geographical differences in factors influencing PMTCT implementation

Province	**number of studies**
Eastern Cape (7)	Doherty et al (2005),Peltzer et al (2010), Sprague et al (2011), Peltzer et al (2005), Buskens, I. et al (2007), Dwadwa-Henda, N. et al (2010), Doherty et al. (2006).
Western Cape (4)	Doherty et al (2005), Delva, W. et al.(2006), Buskens, I. et al (2007), Doherty et al. (2006).
Kwazulu-Natal (5)	Doherty et al (2005), Thairu et al (2005), Doherty T. et al (2006), Buskens, I. et al (2007), Dwadwa-Henda, N. et al (2010).
Gauteng (5)	Varga, C. A. et al. (2006), Goudge, J. & Ngoma, B. (2011), Miller, C.M. et al (2010), Sprague et al (2011), Buskens I. et al. (2007).
Limpopo (3)	Varga (2008), Miller, C.M. et al (2010), Mavhandu-Mudzusi, A. H. et al (2007).

The review of studies reflects a range of settings including peri-urban and rural areas. Box 1 above illustrates the relationships between the study settings and the number of articles referring to them. The articles reviewed revealed that Eastern Cape has the most articles reporting on the problems with access and utilization of PMTCT services. Notably, most of the studies were conducted with women in poorly resourced areas who were thus more likely to experience negative consequences regarding the direct and indirect costs incurred in accessing PMTCT services. For example a study in Gauteng province reported that lack of stable food sources and unemployment were major factors to ART adherence (Goudge & Ngoma 2011). On the other hand, a study in Limpopo conducted in a large public hospital and a rural NGO clinic revealed mainly factors related to functioning of clinics such as long waiting times/queues, with some patients mentioning side effects of ART as their reason for non adherence (Miller 2010:52).

These differences may reflect the difference in focus of the researchers in the articles that were used. For example, Dwadwa-Henda et al. (2010) focused mainly on infant feeding practices but also mentioned a few factors relating to functioning of clinics.

The researcher is aware of the possible bias that may occur due to the small sample sizes used in some of the studies selected for review. For example, Delva et al (2006) interviewed only fourteen health care staff in Cape Town while Peltzer et al (2005) interviewed 186 pregnant women. This may affect inferences that can be made from the former since they are not representative of the population being studied. However, they can give indication of what to expect in areas with similar cultural or socio-economic conditions.

4.5 **Conclusion**

The aim of this chapter was to establish research evidence regarding the influence of socio-cultural and socio-economic factors on the utilization of three aspects of PMTCT services. This was done by means of content analysis of fifteen articles and the results were presented according to three broad themes relating to aspects of PMTCT namely: Adherence to ARVs, VCT and infant feeding practices. It emerged that the most common factors influencing PMTCT utilization included non disclosure of HIV status due to stigma, discrimination and rejection by community members. It was noted that fear of HIV positive result and partners' reaction influenced women's decisions to use VCT services. These suggest socio-cultural factors as identified by both health care staff and HIV positive women. Another category that emerged was the cost or unavailability of formula milk and medication which makes it difficult for women to adhere to ART and the recommended modes of infant feeding. In settings where women are poor, unemployed and lack access to resources, fear of rejection is tied to the loss of financial support from family members. These together with transportation costs and lack of food were grouped under economic factors that have significant implications for PMTCT utilization and access. It can therefore be deduced from the overall analysis that fear of stigma and discrimination, poverty and health system constraints are the main factors that influence PMTCT and specifically regarding infant feeding, mixed messages are a factor. This is in line with the socio-economic and socio-cultural factors discussed in the review of literature (chapter two) of this research.

CHAPTER 5- CONCLUSION AND RECOMMENDATIONS

5.1 **Research summary**

In chapter one, the objectives of this research were set out including the research question and sub-foci questions. The question guiding this research centered on the influence of socio-cultural and socio-economic factors in utilizing and accessing PMTCT services by HIV positive women in South Africa. The guidelines on PMTCT as laid down in the National Strategic Plan for HIV/AIDS 2007-2011 served to provide the scope of defining the various components of PMTCT listed in chapter one. These PMTCT components include: Voluntary Counseling and Testing (VCT), short course Antiretrovirals (ART) provision and infant feeding counseling and support.

Chapter two provided a discussion of relevant literature on PMTCT access and utilization. Evidence from literature has shown that the uptake of PMTCT interventions reflects both the capacities of the clinics to provide PMTCT services and the acceptability of interventions to HIV positive women. The acceptability of PMTCT services can be either economic (poverty related) or socio-cultural norms and practices. In order to confirm this claim, the situation of women was established within the context of gender inequality and international best practice on PMTCT implementation. This was done by reviewing relevant articles on the challenges to accessing and utilizing PMTCT services. Chapter three presented the use of content analysis of fifteen studies related to PMTCT while chapter four analyzed the findings from these studies which were relevant to the research question and objectives.

This chapter seeks to address the extent to which the research objectives were met by discussing the findings related to each objective. Recommendations will also be formulated with regard to future applications of the research findings. This will provide the Department of Health with information on the assistance that can be given to health care staff to enable them to implement the PMTCT program and understand the plight of HIV positive women. Finally the chapter discusses the limitations to this research.

5.2 **Discussion of findings**

The first objective of this research was to explore and describe the challenges faced by health care staff in ensuring access to and utilization of PMTCT services in South African clinics. The reasons most frequently cited by health care staff for HIV positive women failing to return to clinics are related to health system constraints, a theme that emerged from the articles that were closely reviewed in chapter four of this research. This theme revealed socio-economic factors such as the inadequacy of testing rooms, unavailability of test kits, ARVs and formula milk. Staff shortage was also a challenge resulting in patients waiting long hours to be attended to. The theme health system constraints is interlinked with socio-economic and socio-cultural factors cited by HIV positive women in three broad themes that emerged in this research namely: Uptake of VCT, adherence to ART and infant feeding practices. However while health care staff referred to socio-economic challenges, only socio-cultural factors seemed to affect HIV positive women's VCT service utilization. These include factors such as confidentiality and attitudes of health care staff which affect the quality of counseling and testing. This formed the starting point of the second objective of this research which seeks to assess both socio-cultural and socioeconomic factors influencing PMTCT implementation.

It appeared that despite having a legal plan and framework to ensure that PMTCT services are available and free, the articles revealed transport costs, poverty, unemployment and lack of food as major socio-economic factors hindering ART administration and exclusive breast feeding. The influence of these factors results in costs being imposed on HIV positive women and is made worse by their financial dependence on their partners and family. Consequently, the mental health of HIV positive women and their willingness or ability to seek ART and VCT services are affected (Sprague et al 2011:1); (Mavhandu-Mudzusi, et al 2007:254).

The realities confronting HIV positive women as suggested in this research provided examples of instances where fear of stigma, discrimination and abandonment resulted in lack of disclosure of HIV status and affected the use of PMTCT services by HIV positive women. It was noted that these were the main socio-cultural factors affecting the use of PMTCT services and have potential outcomes such as social isolation and HIV positive mothers doubting their ability to care for their children (Doherty et al 2005:90). Inevitably, cultural beliefs are said to influence

infant feeding choices and the use of ARVs which lead to high risk of transmitting HIV to the new born.

As for the third objective of this research which relates to the strengths and weaknesses of the PMTCT program in South Africa, it can be deduced from chapter four of this research that the major drawbacks are fear of stigma and discrimination, poverty and capacity of clinics to plan and prepare for the PMTCT program. In my opinion, this results in frustration from both health care staff and HIV positive women using PMTCT services as illustrated by Bateman (2009:565). This author posits that low staffing levels mean that patient waiting times dramatically increase the chances of verbal abuse and violence towards nurses in South Africa and consequently low nursing care (Bateman 2009:565) . As such, provision of PMTCT services alone will not effect any real change in maternal and child health without concerted effort to train more health care staff and de-stigmatize all aspects of the PMTCT program.

The strength of the PMTCT program is reflected in the renewed political will, community awareness, commitment and support from NGOs such as Treatment Action Campaign (TAC), Mother to Mother (M2M), Centre for Aids Development Research and Evaluation (CADRE) and Health Systems Trust (HST). For example TAC's efforts are evident in the work of Robins (2008:314) who mentions that "TAC successfully advocates the transformation of the stigma of HIV/AIDS into a "badge of pride" that is publicly displayed on T-shirts at township funerals, demonstrations, workshops, and other public spaces. It is through these activist mediations that it becomes possible for the social reintegration and revitalization of large numbers of isolated and stigmatized HIV/AIDS sufferers into a social movement and a caring community" (Robins 2008:314).

5.3 **Recommendations for further research**

Schneider (2002:145-167) mentions inequality as one factor that needs to be considered in public health policies in order to reduce HIV/AIDS. In addition, Ruger (2004:121-122) posits that women are affected disproportionately by HIV/AIDS. Further research could assess and investigate how to mitigate the influence of the aforementioned factors described in the findings of this research. Thus in order to discover areas of improvement in the PMTCT program it is

recommended that research should address the steps that should be taken by the South African government to reduce inequality of women in social and economic opportunities. For example training programs could be held in disadvantaged communities where women can be encouraged to learn various skills that could enhance their economic wellbeing. Also, more opportunities should be given to skilled women in political and community organizations so that other women can be inspired and encouraged to follow suit.

Given the challenges for implementing PMTCT, and the lack of funds to finance HIV/AIDS interventions, it is recommended that further research on PMTCT should look into what the priorities should be for an effective PMTCT program. In the researcher's opinion, efforts should be made by the Department of Health to train more health care staff for PMTCT services such as VCT in public clinics. This will eliminate long queues in clinics and reduce the burden of health care staff that are responsible for both PMTCT service provision and other health care needs of clients. A confidentiality policy should be put in place in clinics providing VCT services and knowledge on the policy should be enhanced including the reasons behind the policy. This will ensure that the interests of HIV positive women are safeguarded.

Varga et al (2004:799) mention that social and community factors such as addressing HIV/AIDS stigma, improving awareness of PMTCT facts, addressing gender relations and encouraging male participation are particularly important for improving access to PMTCT services. This requires stronger efforts by nurses and midwives to co-ordinate meetings with HIV positive women who are faced with similar situations. In this way they can share their experiences and coping strategies therefore, becoming more confident in relating with their partners and families. Campaigns could be organized by community organizations and the media could be used to create community awareness on some of the factors hindering PMTCT utilization. This will generate support for HIV positive women who are threatened by stigmatization.

Poverty reduction is also considered as a gender sensitive factor in this research and it is important because it is one of the main factors and consequences of HIV/AIDS as mentioned by Whiteside (2002:313) and others[3]. Therefore, directly tackling poverty should remain one of the

[3] Tladi (2006:369); van Donk (2002:1) ; Barnett & Whiteside (2007:210)

primary goals of public policies thereby enabling women to afford food and transport costs for visiting clinics. In this respect the researcher recommends partnership through communication with community organizations, Department of Social Development (DSD), Department of Health (DOH) and Department of Transport (DOT). This will ensure access to social grants for women in resource poor settings and allow policy makers to explore the possibility of bringing PMTCT services closer to the under resourced communities.

5.4 **Limitations to the research**

With this topic, the preferred choice would have been to use interviews and focus group discussions with health care staff and HIV positive young mothers, but that this was outside of the limited scope of this research, which is part of the requirements for obtaining a Master's degree. The extensive ethics procedure for a highly sensitive topic such as HIV/AIDS led to delays in obtaining the necessary permissions to conduct interviews in clinics. Another limitation is that the studies reviewed for this research were specific to areas with low socio-economic conditions as such caution should be exercised in generalizing findings to other geographical settings. However, they are broadly representative of prevailing PMTCT practices in South Africa. Chapter two of this research noted the idea that some HIV positive women mixed breast feeding with other liquids because of the need to give traditional medicines to their babies (Pashwana-Mafuya 2008:1). The researcher expected to find more of such cultural practices regarding exclusive breast feeding in chapter four but the articles reviewed for this research did not explore intensely into them. For reasons of practicality, purposive sampling was used. A wider search may have generated a wider sample of articles.

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Nelson Mandela Metropolitan University

for tomorrow

APPENDIX I

PERMISSION TO SUBMIT A TREATISE/DISSERTATION/THESIS FOR EXAMINATION

Please type or complete in black ink

FACULTY: BUSINESS & ECONOMIC SCIENCES

SCHOOL/DEPARTMENT: DEVELOPMENT STUDIES

I, (surname and initials of supervisor/promoter) BAKKER, H.

and (surname and initials of co-supervisor/co-promoter) ____________

the supervisor/promoter and co-supervisor/co-promoter respectively for (surname and initials of candidate)

JUMARE, F.

(student number) 21025111S a candidate for the (full description of qualification)

MASTER'S DEGREE IN DEVELOPMENT STUDIES

with a treatise/dissertation/thesis entitled (full title of treatise/dissertation/thesis):

PREVENTION OF MOTHER TO CHILD TRANSMISSION (PMTCT) OF HIV/AIDS: A REVIEW OF USING PMTCT SERVICES IN SOUTH AFRICA

hereby certify that we give the candidate permission to submit his/her treatise/ dissertation/ thesis for examination.

28/11/2011

SUPERVISOR / PROMOTER **DATE**

____________ ____________

CO-SUPERVISOR / CO-PROMOTER **DATE**

As approved by Senate on 10 November 2005 with adjustments by Exams office on 24 October 2006

APPENDIX 2 -Factors affecting access to and utilization of PMTCT services

Study setting	Researchers	Study population	Study design	Factors identified	Outcomes
Paarl, a peri-urban farming area in the Western Cape; Rietvlei (RV), a rural district in the Eastern Cape; and Umlazi (UM), a periurban township in KwaZulu-Natal.	Doherty et al (2005:90-96)	Subsample of 40 women selected from a larger cohort of 650 HIV-positive mothers	Qualitative in-depth interviews	Stigma (entrenched in family and community norms that question exclusive breastfeeding/ formula feeding) Fear of disclosure of HIV status	Social isolation and mothers doubting their ability to care for their children.
Cacadu district, Eastern Cape province,	Peltzer et al (2010:95-106)	11 clinic supervisors, 31 clinic programme coordinators, and 8 hospital/maternity staff members	in-depth interviews	Fear of HIV-status disclosure Problems with infant feeding Sub-optimal VCT, low compliance with nevirapine uptake	Decline in Clients' health seeking behavior
Eastern Cape peri-urban facilities and Gauteng hospital	Sprague et al (2011:1-9)	83 HIV-positive women; 32 female caregivers of HIV-positive children; and 38 key informants, including HIV and public health specialists, academics, nurses, doctors and lay counselors	In-depth interviews	fear of a positive test result or a partner's reaction; and stigma	Impact on mental health, willingness and ability to seek health services and care, shock and denial which can cause delay in returning for ART initiation

Study setting	Researchers	Study population	Study design	Factors identified	Outcomes
Eastern Cape province	Peltzer et al (2005:26-40)	186 pregnant women	Interviews with both open and close ended questions	Lack of transport and communication with a health facility/physical access to health facility Negative community attitudes towards people living with HIV/family and community support Stigma Infant feeding preferences	Low uptake/utilization of PMTCT services
Limpopo province	Varga, 2008:(786-802)	10-15 participants at each of two sites (one semi urban and one rural)	focus group discussions and community based surveys	client-counselor dynamics, early pre-marital pregnancy stigma, fear of positive test result and concerns over confidentiality	Avoidance of disclosure to labour and delivery staff despite knowing this would mean no ARV for their new born babies
Rural area in Kwa-Zulu Natal	Thairu et al 2005:2-10	22 hiv positive women	Ethnographic interviews	Social stigma, family influences, economic circumstances, beliefs about quality of breast milk and risk of transmission through breastfeeding	Mixed feeding practices and sub optimal PMTCT
An NGO clinic serving a rural population in Limpopo Province and a large public hospital in Gauteng Province	Miller, C.M. et al 2010:48-54	58 Patients that had defaulted ART	Qualitative interviews	transport costs, time needed for treatment, barriers to treatment, stigma around HIV/AIDS, and side effects associated with ART	Low adherence to ART

Study setting	Researchers	Study population	Study design	Factors identified	Outcomes
Cape Town metropolitan region	Delva, W. et al. 2006:76-79	Fourteen senior nursing and paediatric staff members	semi-structured in-depth interviews	Inadequate knowledge/awareness, Lack of partner involvement/serostatus disclosure,Social stigma,Shock/denial, Low compliance, Low socio-economic status (electricity and clean water)	Decline in heath seeking behaviour
Vhembe District, Limpopo Province	Mavhandu-Mudzusi, A. H. et al 2007:254-262	20 Professional nurses	In-depth individual interviews	Clients who do not disclose their status: Problems associated with confidentiality Fear of stigma and discrimination, Cultural practices by community members	Setbacks in VCT programs related to certain practices and behaviors of community members and clients
Poor urban setting in Gauteng Province	Goudge, J. & Ngoma, B. 2011:52-64	22 HIV patients on ART	focus group discussions and in-depth interviews	Lack of stable food sources, unemployment, self esteem, social support,	Low adherence to ART
(Paarl, Rietvlei, and Umlazi)	Doherty, T. et al (2006:2421-2426)	27 HIV-positive women	longitudinal qualitative interviews	pressure from the family to introduce other fluid, lack of disclosure(supportive home environment), fear of stigmatization, resources such as electricity, a kettle, and flask, h insufficient formula milk supplies, travel to the clinics, unemployment Knowledge about how to abruptly wean their infants from breast	Inability to practice exclusive mixed or formula feeding

Study setting	Researchers	Study Population	Study design	Factors identified	Outcomes
Corronation women and children's hospital Johannesburg	Varga, C. A. et al. (2006:952-960)	31 women attending PMTCT services	Repeat in-depth interviews	Fear of rejection, stigma and withdrawal of financial support, sociocultural norms, living environments	Constraints to disclosure of HIV status
South Africa: Watersmeet and Ladysmith in KwaZulu-Natal; Ravensmead, Langa and Hanover-park in Western Cape; Idutywa and Motherwell in Eastern Cape; and Soweto in Gauteng.	Buskens, I. et al (2007:1101-1109)	A total of 155 mothers and pregnant women, 31 relatives (fathers, grandmothers and caregivers), 92 health workers (nurses, counsellors, PMTCT co coordinators, community health workers and doctors) and seven traditional healers	formal and informal interviews	traditional advice and authority, influence and authority of relatives and breadwinners,	Constraints to disclosure of HIV status
South Africa	Frizelle, K. Solomon, V. & Rau, A. 2009	135 documents including peer-reviewed journal articles, full research reports, summary reports, policy documents, guidelines, and chapters in books	Literature review	Poor-quality counselling and healthcare workers' poor attitudes, poverty and structural barriers, Cultural factors concerning appropriate behaviours linked to counselling and testing, PMTCT, and stigma, including perceptions of poor social support and discriminatory perceptions of PMTCT practices	Inability to access PMTCT services
Maluti-a-Phofung in the Free State Province, Moretele in the North West Prov- ince, Senqu in the Eastern Cape Province, and Maphumulo and kwa-	Dwadwa-Henda, N. et al 2010	+/-27 HIV-positive women who had utilised PMTCT services men, healthcare workers; service providers involved in PMTCT services, infant nutrition advisors and traditional birth attendants;	focus groups and individual interviews	fear of testing positive, lack of privacy and confidentiality, unavailability of infant formula, community norms regarding infant feeding.	Decline in uptake of PMTCT (conflict about infant feeding options, lack of disclosure)

Nongoma in KwaZulu-Natal Province.		grandmothers and mothers-in-law; and NGO representatives.			