

**FACTORS AFFECTING ACCESS AND UTILIZATION OF PMTCT  
SERVICES IN NAIROBI PROVINCE, KENYA.**

**A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR  
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**BY:**

**JUDITH MUTHONI KARIA**

**KENYA**

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The thesis, "Factors affecting access and utilization of PMTCT services in Nairobi, Kenya," is my own work.

Signature.....

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## **DEDICATION**

First and foremost, I would like to dedicate this thesis to my dear husband who stood with me all the way, and who twice paid a great cost to come all the way from Kenya, to visit me and encourage me.

Secondly, to our loving children, who had to fore-go being with me for one year, but lovingly, together with their father, released me to attend this studies. Their endurance of my long stay away from them, their prayers, moral support and encouragement that they gave me throughout this course, was my strength and inspiration. went a long way in making my study a success.

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## ABSTRACT

**Introduction:** Mother to- child transmission (MTCT) of HIV, the main route of HIV infection to the infant, An estimated 50,000 to 60,000 infants get the HIV infection annually in Kenya through their mothers. For this reason Kenya rolled out a countrywide Prevention of Mother to Child Transmission (PMTCT) programme to reduce the HIV infection to the children. Though most public ante natal clinics in Nairobi are offering PMTCT services, it is evident that many pregnant women are not accessing or utilizing the PMTCT services causing 'missed opportunities' which is the reason for this study.

**Objective:** To determine the factors affecting access and utilization of PMTCT services in Nairobi and to suggest recommendations to improve access and utilization of PMTCT services.

**Methodology:** Literature review was conducted through web and manual searches. Also PMTCT data from the Nairobi Provincial Medical Office's health management information database as well as reports from the National office were used. The Andersen model of health service utilization was used in identifying and reviewing factors that hinder pregnant women from accessing and utilizing PMTCT in a four categories: Individual, socio – cultural, health system and policy factors.

**Findings:** The analysis of the available three years PMTCT data found gaps in all the levels of services delivery, from the time the mother comes to the antenatal clinic (ANC) until they exit to go for delivery. Literature review revealed that low education and poor understanding of the PMTCT services, fear of knowing one's HIV status and the powerlessness of the women to make decision about their health were the individual reasons while, Socio – cultural reasons were stigma and discrimination, the marginalized position of the woman in the family and society. The health system's findings were poor working conditions, shortage of health care providers, high workload, lack of training, low morale, inadequate infrastructure and occasional stock-outs of Nevirapine. Policies and guidelines were not easily available at service delivery points to guide service provision.

**Conclusion:** There is a high rate of missed opportunities for PMTCT services in pregnant women at the public antenatal clinics in Nairobi and private health facilities are inaccessible due to their high cost. Nairobi province annual PMTCT data for the three years 2005 – 2007 revealed that between 20 – 32% of the mothers and over 50%-80% of the babies missed to get the Nevirapine prophylaxis among other interventions.

**Recommendations:** Creation of awareness on the importance of PMTCT to women and the general community should be given eminence. Health systems need to be strengthened and more health personnel be recruited to adequately cover the high workload. Procurement procedures should be streamlined to ensure there are no stock-outs of Nevirapine. Specific PMTCT policies should be formulated and the currently guidelines need to be periodically reviewed and updated.

**Key words:** Kenya; PMTCT; HIV/AIDS; Nevirapine; Access; barriers; Utilization; Counselling.

## LIST OF ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal care
ARV	Antiretroviral
ART	Antiretroviral therapy
AZT	Azidothymidine (see ZDV)
CBS	Central Bureau of Statistics
CDC	United States Centre for Disease Control and Prevention
CDF	Community Development Fund
C & T	Counselling and testing for HIV
ELISA	Enzyme- linked Immuno- Sorbent Assay
FHI	Family Health International
FIDA	Federacion Internacionale De Abogadas - a Spanish acronym meaning Federation of Women Lawyers).
FBO	Faith Based Organization
HAART	Highly active antiretroviral therapy
HIV	Human immunodeficiency virus
H/Ws	Health workers
ICW	International Community of Women living with HIV/AIDS
KDHS	Kenya Demographic and Health Survey
KNASP	Kenya National AIDS Strategic Plan
MCH	Maternal and child health
MTCT	Mother-to-child transmission of HIV
NASCOP	National AIDS/STI Control Programme
MOH	Ministry of Health
NGO	Non-governmental organisation
NHSSP	National Health Sector Strategic Plan
NVP	Nevirapine
OI	Opportunistic infection
PEP	Post-exposure prophylaxis
PLHIV	People living with HIV/AIDS
PMTCT	Prevention of mother-to-child transmission of HIV
RHM	Reproductive Health Matters
STD/I	Sexually transmitted disease/infection
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNGASS	United Nations General Assembly Special Session
UNICEF	United Nations Children's Fund
USAID	U.S. Agency for International Development
VCT	Voluntary Counselling and Testing
WHO	World Health Organization
WHR	World Health Report
ZDV	Zidovudine, the generic name for azidothymidine (AZT)



## DEFINITION OF TERMINOLOGIES

For the purpose of this study, the working definitions of the words below should be taken as follows:-

**Acceptability** is the willingness of a client to use a service.

**Access** is how much a population can reach health services. (Some domain of "access" that can be measured are *availability, affordability* and/or *acceptability*)

**Accessibility** is the ability to reach a health service.

**Acceptable** is satisfactory, adequate to satisfy a need or a requirement.

**Affordability** is the person's ability to buy a service

**Availability** is the presence of the required services.

**Utilization** is making use of. This word will be used interchangeably with the word 'use' and taken to mean the same.

**PMTCT** will be Prevention of HIV transmission from infected mother to her infant.

## INTRODUCTION

Mother to- child transmission (MTCT) of HIV is responsible for more than 90% of HIV infections in children under 15 years (UNAIDS, 2001). Studies in Kenya and elsewhere estimates that about 35% - 40% of babies are infected with HIV by their mothers during pregnancy, delivery or through breastfeeding. An estimated 50,000 to 60,000 infants get the HIV infection annually in Kenya through their mothers. **(AIDS in Kenya, 2005)**

Despite the major strides made to control HIV/AIDS and the existence of feasible and affordable interventions to reduce the rate of MTCT by 50% (Population Reports, 2000)., the HIV pandemic still has a solid grip in Kenya and threatens to reverse the gains made in key health measures and in many sectors of the economy. Of concern is the gradual rise in infant mortality rate in Kenya attributed to the HIV infection from 64/1000 live births in 1993 to 77/1000 live births in 2003. **(MOH, June 2006,)**

The KDHS puts child mortality (children under five years) at 115 deaths/1000 live births This translates to 1 death in every 9 children born, before their fifth birthday.**(KDHS, 2003)**. The latest HIV prevalence announced by the National AIDS Control Council (NACC) on 1<sup>st</sup> Dec, 2006, in Kenya was 5.1%, a decline from 7% reported in the Kenya demographic and Health survey (KDHS) of 2003. Despite this decline, the current estimates indicate that about 10% of the reported AIDS cases are in children under five years of age. The main route of HIV infection for the infants and children is through vertical transmission (MTCT), while adult infection is through heterosexual intercourse. **(KDHS 2003)**.

The declaration of commitment on HIV/AIDS of the United Nations General Assembly special Session (UNGASS, 2001) on HIV prevention among infants and young children, committed to reduce the proportion of infants infected with HIV to 20% by 2005, and by 50% by the year 2010, by ensuring that 80% of pregnant women accessing PMTCT services.

Kenya moved from pilot projects to countrywide scale-up of PMTCT interventions since 2002. Though efforts have been put on scaling up PMTCT programmes, (and Kenya has done much on this area), an effective HIV prevention programme must move beyond up-scaling to focus on primary prevention, Antenatal clinic re-attendances, Counselling and Testing of the pregnant mothers, provision of antiretroviral prophylaxis to both mother and infant and adherence to treatment to ensure that babies born of HIV infected mothers are protected from the HIV infection.

A report in one of the WHO bulletin rightly said, "the ultimate goal of public health programmes for the prevention of mother-to-child- transmission (PMTCT) is to save the lives of large numbers of children born to HIV-infected mothers". **(Newell M, 2001)**

The author of this document, a Public Health Education and Promotion Officer, has special interest in the field of HIV/AIDS where she has worked for over fifteen years. She has worked as the Provincial HIV/AIDS/STI Coordinator for Nairobi City and Province. In that position, she coordinated and implemented HIV/AIDS prevention, treatment and care interventions such as; PMTCT, VCT, ART, BCC, HBC among others. She has been a National trainer in the HIV/AIDS programmes too.

The reason for selecting this topic is due to the concern the author has on the effectiveness of the PMTCT programme which is the life saver for babies born of HIV infected mothers. She feels there are many missed opportunities in the provision of PMTCT services as the pregnant mother goes through the various levels of PMTCT interventions in the ANC including counseling and testing, low uptake of prophylaxis Nevirapine (NVP) for both the mother and the infant in Nairobi. Nairobi being the capital City of Kenya with all the available health services and experiences being drawn from many other pilot projects and NGOS, she feels PMTCT can be improved and HIV infections to the infants greatly reduced.

The reason for this study therefore is to look into factors that are affecting access and utilization of the PMTCT services, in order to come up with finding and recommendations to improve the services and reduce the mother to child transmission of HIV.

## CHAPTER ONE: BACKGROUND INFORMATION

Nairobi, the Capital of Kenya is the most populous and largest City in East Africa. It is one of the eight and smallest provinces of Kenya, covering a total area of 684 sq km. It was not until about three years ago that Nairobi got three districts officially gazetted, that is Nairobi North, Nairobi West and Nairobi East. The districts are further divided into eight administrative divisions, which share the same boundaries as the political Constituencies.

Nairobi, a very influential City, is multicultural, multi-religious and a big tourist destination. Many International Organizations and companies working in Africa have their Regional Headquarters in Nairobi. A recent beautification project by the City Council of Nairobi has led Nairobi to be one of the most beautiful Cities in SSA, adorned with a canopy of trees, making its popular name 'The green city in the Sun' fit rightly.

On the other hand, Nairobi has a high influx of rural-urban migrants who come in search of employment. This rapid urbanization, with inadequate housing has resulted in the mushrooming of informal settlements called slums. These slums are in a state of apathy with poor sanitation and environmental conditions. They generally lack basic amenities such as toilets and piped water. The inhabitants have poor access to health services and are therefore susceptible to various health problems.



Kibera Slum in Nairobi: One of Africa's largest slums. Picture Source- Wikipedia.

### POPULATION

Nairobi is densely populated. The population of Nairobi currently, stands at 2,940,911 (2007), with a population density of 4230/sqkm. The numerous slums in Nairobi all together occupy a about 5 percent of the residential land area, but houses 55% of the population of Nairobi. Kibera slum in Nairobi which occupies a 2 sq km area, (see picture 1:0 above) is one of the largest slums in Africa, with over half a million people. **(CBS, Kenya)**

## **SOCIO – ECONOMIC SITUATION**

Nairobi is a highly industrious City. It is also the main portal for agricultural and horticultural goods for export. However, about 55% of its population living in the slums are living below the poverty line of one dollar per day. HIV and poverty are inter-related as both form a vicious cycle of fuelling each other, hampering reduction of HIV and the economic development of the country. In many cases households are stricken to poverty by spending much of their hard earned resources searching for cure for their infected family members with little success. **(NAS COP, 2005)**

## **HEALTH CARE DELIVERY SYSTEM**

The health service structure in Kenya is divided along administrative lines into 8 provinces and 77 Districts with 4 levels of care at National referral hospital, Provincial General Hospitals, District hospitals and Health centres. Health services in Nairobi are provided by the Provincial Medical Office (Ministry of Health), City Council of Nairobi (local government) and the private sector. The major provider of health services is the private sector. Majority of the public health centres in Nairobi are under the City Council of Nairobi, but the health care providers are a mix from both the City Council and the Ministry of Health.

The number of health facilities in Nairobi are as, 52, 80, and 524 owned by Ministry of Health, City Council of Nairobi and Private/NGO/FBO respectively. The slums have a host of informal private clinics (usually run by individuals) many of which are operating illegally or are not licensed, providing sub-standard services.

All public hospitals charge a fee commonly known as the user fee or cost sharing, but services in the health centre level are free. The Ministry of health through the health sector reforms has decentralized health services from the National, Provincial to the district levels. However, Nairobi with a population of 2.9million does not have a provincial hospital but instead has one major Maternity hospital and only one district hospital (without maternity services), serving the entire population. This creates an enormous problem of congestion in the district hospital and the National referral hospital.

Though with decentralization services are expected to be closer to the people, the picture in the slums is quite different as there is high morbidity and mortality of children with close to 1 in 10 children dying before attaining the age of 1year. The pathetic sanitary conditions puts the slum children at a higher risk of infections than children living in other parts of Nairobi or the country. To compound the issue, out of every 10 pregnant women in the slums, 3 experience severe complications during delivery or post-natal, and

only about half of them seek medical care for the complications. (APHRC, 2006)

## **HIV/ AIDS SITUATION**

The KDHS 2003, describes Kenya as having a severe generalized epidemic. However the country's HIV prevalence in the adult population of age group 15 – 49yrs has been declining, from 6.1 percent in 2004, to 5.9 percent in 2005, to 5.1 percent in 2006. This decline is attributed partly to the availability of ARVs, behaviour change and HIV prevalence among men was 3,5 percent in 2006, compared to 6,7 percent among women. HIV new infections reduced from 60,000 in 2005 to 55,000 in 2006. Approximately 1.0 million adult Kenyans and 0.1 million children under 15yrs were living with the HIV infection by 2006.

HIV/AIDS remains a huge problem for Nairobi, with an adult prevalence of 10% (KDHS 2003), (the second highest in the country after Nyanza province with 14%), which also corresponds with ANC sentinel surveillance data of pregnant women which was also 10% in Nairobi. A recent report indicate that HIV prevalence in urban areas is about 8.3 percent, compared to 4 percent in rural areas. **(NACC Report, 2006)**

Response to the pandemic has evolved over time as people became more aware of this new disease, as they experienced illness and death among family members and as services have developed to confront this epidemic.

HIV testing was included for the first time in the 2003 KDHS. This provided a better estimate of the HIV infection in the general adult population, than the sentinel surveillance.

### **The impact of HIV/AIDS in Kenya**

The impact of HIV has continued to be felt across the country by all sectors, from the household, to the community as well as the national level. No single sector can boast of not being touched by the HIV scourge, as the saying goes in Kenya that, "All are affected if not infected"

The sexually active age group 15 – 49yrs that is most affected by HIV is also the most economically productive in the country. When the labour force goes down, production of goods and services is reduced, eventually affecting the economy of the country. Absenteeism from work due HIV/AIDS accounted for 54.3% of the total HIV/AIDS related costs within industries according to a survey carried out in Kenya. **(Loewenson et al, 1997)**

## **Institutional, policy response and hiv/aids coordinating structure.**

In September 1997, the government of Kenya approved the sessional paper No. 4 on AIDS in Kenya (Ministry of Health 1997) as a way of combating the challenges of HIV and AIDS in the country. The goal was to provide a policy framework within which HIV/AIDS responses were to be undertaken in the next 15 years and beyond. This marked the positive political change in the country's commitment to combating HIV/AIDS.

In 1999, a major political commitment was made when the former president of Kenya, President Daniel Arap Moi declared AIDS a National disaster, while his successor President Mwai Kibaki declared total war on AIDS bringing together faith based organization in the fight against HIV/AIDS.

The National AIDS Control Council (NACC) was then formed in 2000 as the National Coordinating Authority, while AIDS Control Units (ACUs) were started in all Government Ministries as a multi-sectoral approach to the HIV/AIDS response.

The government, NGOs, FBOs and International donor partners are involved in numerous activities and services to prevent HIV/AIDS. Some of those activities: are prevention of HIV, treatment and care, and mitigation of socio-economic impact. Some of these efforts have resulted in a quick increase of VCT sites in the country from 3 in year 2000 to 555 by May 2005. In the same duration, annual VCT service uptake increased from 1000 to 380,000.

PMTCT programme, since its launch in 2000 has nearly 600 facilities country - wide offering the services. **(KNASP 2005 – 2010)**

The NACC was mandated to provide the required leadership embracing “**Three Ones**” principles namely:

- One agreed National HIV/AIDS action framework, that provides the basis for coordinating the work of all partners;
- One agreed National HIV/AIDS coordinating authority with a broad-based multi-sectoral mandate; and
- One agreed National Monitoring and Evaluation system.

The country is now implementing the second Kenya National HIV/AIDS Strategic Plan (KNASP) 2005/06-2009/10, which provides the action framework for HIV/AIDS strategies, and plans for multi-sectoral responses. The challenge of combating HIV/AIDS is enormous, A lot needs to be done as NACC rightly says, and I quote, “But progress cannot be taken for granted; enormous challenges remain. The rate of new infections remains unacceptably high.” and that, “The national response must be stepped up to meet these challenges” **(KNASP 2005 – 2010)**

## CHAPTER TWO: PROBLEM STATEMENT

The prevention of Mother To Child Transmission of HIV is a priority in Kenya as in many other countries as it has aims at improving the survival of the child. Since 1984, when then first case of HIV was described in Kenya, HIV infection has emerged as the most important health risk factor for mother and baby. HIV infection has the greatest impact of any health condition in the long term outcome of pregnancy and child survival. **(National PMTCT guidelines, Kenya, 2002)**

In Kenya, the prevalence of HIV in pregnant women is estimated at 13%, while only about 10% of all pregnant women receive PMTCT services as the KNHSSP 2005-2010 indicates. "The utilization of PMTCT services remains low with only one-fourth of pregnant women accessing services." **(UNAIDS in Kenya, 2006)**

Therefore, though the uptake of PMTCT may look impressive, the effectiveness of the programme remains quite low as only a small number of the babies born of HIV infected mothers eventually get the protection. In **Chewe's** study, only 8% of all infants born of HIV infected mothers received antiretroviral prophylaxis in 2005. The rest who did not get the prophylaxis would be considered as 'missed opportunities' This low percentage of infants that receives the ARV prophylaxis are put in further risk of infection as many end up being breast fed.**(Chewe L, et al 2005)**

Pregnant mothers who come for ANC should get the opportunity to be counseled and tested for HIV, so that those who are HIV positive are provided with Nevirapine prophylaxis. However, major discrepancies are noted along the line of care from the uptake of Counselling, through HIV testing to Nevirapine uptake for mother and baby. Inadequate counseling has been cited in previous studies as a cause for dropout at different service delivery points in the PMTCT protocol, posing the need for research to find reasons for these discrepancies (UNAIDS, 2001).

Through the various levels of PMTCT interventions carried out at the ANC from the time the pregnant woman makes her first visit to the time she delivers, a lot of missed opportunities are noted that add up to reducing the effectiveness of the programme.

Some of the obvious gaps/missed opportunities observed are:-

Of the pregnant women who come for first visit to the ANC, not all are counseled; Among those that are counseled, not all get tested, Those that end up being tested, not all receive their test results; and for those who are found to be HIV positive, some end up not getting the Mother Nevirapine (NVP) prophylaxis dose. Fewer infants than the mothers also receive the



infant NVP syrup dose. Chances of the baby getting infected are also increased by breastfeeding, which mothers still do, for various reasons as will be elaborated in chapter 5. Some of these gaps can be extrapolated from available PMTCT data of 2005, 2006 and 2007 for Nairobi Province.(see table 2.0 below) **(PMO, HMIS data, Nairobi)**

**Table 2.0**

**PMTCT service utilization and the missed opportunities at various levels of service delivery (PMO, PMTCT data, Nairobi.)**

	<b>Measure</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
A	ANC 1 <sup>st</sup> Visit	71, 352	82,496	86,609
B	ANC Revisits	96, 139	98, 977	106,058
C	Total ANC visits	167,491	181,473	192,667
D	ANC Counseled	72, 523	83, 708	88,238
<b>Level 1</b>	<b>Gap (C minus D)</b>			
E	ANC Tested	67, 422	77, 346	82,755
<b>Level 2</b>	<b>Gap (D minus E)</b>	<b>5,101</b>	<b>6, 362</b>	<b>5,483</b>
F	Received results	65,836	75,073	81,565
<b>Level 3</b>	<b>Gap (E minus F)</b>	<b>1,586</b>	<b>2,273</b>	<b>1,190</b>
G	ANC Positive	7821	9,282	10,342
H	ANC mother NVP (supplied)	5,381	7,365	8,481
<b>Level 4</b>	<b>Gap (G minus H)</b>	<b>2,430</b>	<b>1,918</b>	<b>1,861</b>
I	ANC baby NVP (supplied)	1,576	3,658	5,000
<b>Level 5</b>	<b>Gap (H minus I)</b>	<b>3,815</b>	<b>3,707</b>	<b>3,481</b>

In this table, level 1-4, indicate the gaps or missed opportunities in service delivery at various levels. Of the PMTCT service delivery.

Using the above data collected from the Provincial Medical Office (PMO) Health management information system (HMIS) database for Nairobi, for the years 2005, 2006 and 2007, This study exposes the gaps at various levels in the PMTCT service provision.

**In level 1:**

Out of the total ANC attendance (new and re-attendances), of 167,491, 181,473 and 192,667, only 72,523, 83,705 and 88,238 respectively were counseled leaving out 94,968, 77,768 and 103,912 as 'missed opportunities' for the years 2005, 2006 and 2007 respectively.

**In level 2:**

Out of the 72,523, 83,708 and 88,238 mothers who were counseled, a further 5,101, 6,362 and 5,483 respectively in each year, were lost as they were not tested.

**In level 3:**

Out of the 67, 422, 77,768 and 82,755 mothers who were tested, a further loss is noted as only 1,586, 2,273 and 1,190 were lost as they never received results.

**In level 4:**

Out of the 65,836, 75,073 and 81,565 who received results, 7,821, 9,282 and 10,342 tested HIV positive, only 2,430, 1,918 and 1,861 were missed out, as they did not get mother dose nevirapine

**In level 5:**

Of the 7,821, 9,282 and 10,342 mothers who tested positive, 6,245, 5,624 and 5,342 baby missed out as the mothers were not supplied with baby dose nevirapine.

This exemplifies the many missed opportunities in PMTCT delivery in Nairobi.

Kenya, which was ranked among the 10 highest diseased burdened countries in the world, in 2005, had 20% of pregnant mothers receiving PMTCT HIV prevention. **(Chewe L, 2007)**. According to the above mentioned PMO PMTCT data, in 2007 alone, of all the pregnant mother who were counseled and tested, 12.5% were HIV infected. Of these, 30% of women and over 50% of the infants did not get the Nevirapine.

One study reports that to attain the UNGASS targets of reducing HIV infections to infants by 50% by 2010, necessitates that, *"80% of all pregnant women accessing antenatal care receive PMTCT services"* The study found out that out of 71 low and middle income countries that were under study, only 7 were on track to meet this target. WHO decries the remarkably low coverage levels of PMTCT in most resource-limited countries, despite the fact that Mother To Child Transmission of HIV is almost entirely preventable with availability of services. **(Chewe Luo, et al, 2005)**

Therefore this study aims to generate more information on the subject, and explore issues affecting the use and access of PMTCT services, highlighting the missed opportunities and gaps at the various levels of the PMTCT intervention that subsequently reduce the effectiveness of the PMTCT intervention.

**OVERALL OBJECTIVE**

The main objective of this study is to describe factors affecting access and utilization of PMTCT services in Nairobi which translates to the babies born of HIV infected mothers not being adequately protected from the HIV infection and to suggest recommendations to improve access and utilization of PMTCT services.

## **SPECIFIC OBJECTIVES**

1. To explore the individual/personal factors influencing access and utilization of PMTCT services in Nairobi.
2. To determine community/socio-cultural factors influencing access and utilization of PMTCT services in Nairobi.
3. To explore the health care delivery system and policy factors affecting access and utilization of PMTCT services.
4. To gather information on lessons learnt from international experience about reducing barriers to access in PMTCT.
5. To identify what health providers/policy makers/stakeholders can do to increase use/reduce barriers to PMTCT services.

## **METHODOLOGY**

To meet the objective of this study, a literature review was conducted through internet and manual search.

Search engine: Public Health Websites, PUBMED, Google scholar, KIT net. Key words combinations used are: Kenya; PMTCT; HIV/AIDS; Nevirapine; Access; utilization; barriers; Counselling. The sites commonly visited are: WHO, UNAIDS, World Bank, UNICEF, FHI and Pathfinder International. Other relevant methods of inquiry included manual searching of books, articles from journals, magazines documentaries and other theses. KIT library and other Government and Non Governmental Organizations' resource centres were used to gather information. PMTCT data was also acquired from the Health Management Information system, (HMIS) at the Provincial Medical Office Nairobi, Ministry of Health, Kenya.

## **STUDY LIMITATION**

The author would have liked to use more recent documents but the available country documents have not been updated since they were published, such as The National guideline on PMTCT which was published in 2002. The Kenya Demographic and health Survey which was last done in 2003 and the AIDS in Kenya publication on HIV trends' last edition was in 2005, among others.

Some of the relevant manuals and policies on HIV/AIDS from NACC, Ministry of health and other departments in Kenya were not readily available as hard copies, neither were they posted on the internet.

Primary qualitative data through structured questionnaires and in-depth interviews of health managers of various organizations providing PMTCT services and testimonies on experiences from implementers of the PMTCT programme in Kenya would have given a better picture of the situation on the ground. However, time and distance were limiting factors.

## **INTENDED CONSUMERS**

The target audience of this thesis are:-

- The policy makers, particularly the national AIDS Control Council,
- The National AIDS/STI Control Programme, (NASCO), Ministry of Health, in Kenya.
- Donor Communities and partners supporting PMTCT programme.
- The Provincial Medical Officers (PMOs)of Health.
- The Provincial AIDS/STI Coordinators (PASCOS)
- District AIDS/STI Coordinators. (DASCOS)
- Health facility Managers and Health workers in Public, private and NGO organizations providing PMTCT services in the country.
- This document can also be used by other developing countries to advice on provision of effective PMTCT services.

## **CHAPTER 3: PREVENTION OF MOTHER TO CHILD TRANSMISSION OF HIV PROGRAMME IN KENYA**

This chapter will highlight the goal, the context, and the key elements of PMTCT, and how it is provided.

The importance of Prevention of Mother to Child Transmission of HIV, (PMTCT) cannot be over emphasized and is well documented in the literature.

The Kenyan Government's sessional paper No. 4 of 1997, noted that the main factor influencing the transmission of HIV infection from Mother to Child is the infection of the mother. Several interventions were listed in the sessional paper to reduce the incidence of HIV infection to the infants and children. The interventions focused not only on preventing MTCT of HIV, but also on obstetric and infant care.

In developed countries, these interventions have worked very well bringing the MTCT rates to as low as 2 – 5%.

Without intervention, about 35-40% of babies born to the HIV infected mothers in Kenya become infected with the virus. The HIV transmission can take place from mother to baby during pregnancy (5%-10%), labor and delivery (10 -20%), or after delivery, during breastfeeding (~15%). (AIDS in Kenya, 2005)

Going by the declaration of commitment on HIV/AIDS of the United Nations General Assembly special Session (UNGASS, 2001) on HIV prevention among infants and young children, that was mentioned earlier, Kenya launched the PMTCT services in the year 2000 on a pilot basis.

Later in 2001, the PMTCT program was initiated countrywide and National targets were set, which are to introduce the PMTCT services in at least 50% of all ANC facilities by 2005 and 80% by 2007. Since then a rapid increase was noted in the health facilities offering PMTCT services, such that by mid 2005, nearly half (47%) of all MCH facilities were offering PMTCT services, almost reaching the first target **(MOH, PMTCT Strategic plan 2003 - 2008)**.

Kenya embraced the United Nation's strategic four- pronged elements of comprehensive approach to PMTCT which are:-

- 1) Primary prevention of HIV infection among girls and women of childbearing age;
- 2) Prevention of unintended pregnancies among women infected with HIV;
- 3) Prevention of HIV transmission from infected mothers to their infants, and
- 4) Provision of treatment, care and support to women infected with HIV, their infants and their families **(National PMTCT Trainer's Manual, 2005.) & (WHO, 2007)**

The author will confine her study on the third element, that is, prevention of Mother to child transmission of HIV, as all the four elements mentioned above cannot be dealt with exhaustively within the scope of this study. The main focus will be looking at the factors that affect access and utilization of PMTCT services in the Ante natal period.

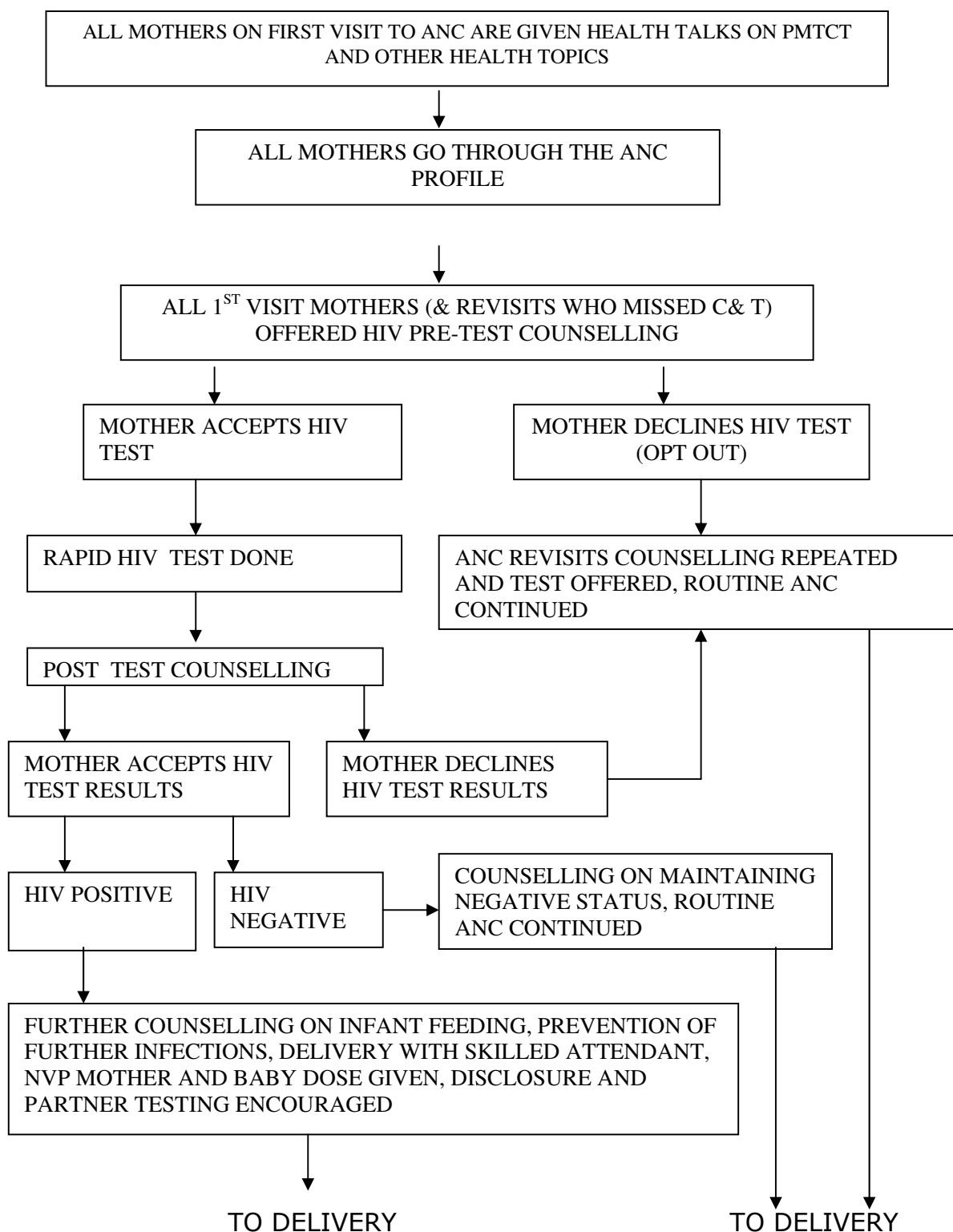
Single dose nevirapine (sdNVP) is the recommended regime being used in Kenya. Nevirapine tablets 200mg is given to the mother at the onset of labour while the infant is given Nevirapine infant dose syrup 2mg/kg body weight within 72 hours of birth. This regime has been widely used in countries with resource limited settings. This simple and economical intervention can effectively reduce mother-to-child transmission by nearly 50% during the first 14-16 weeks of life in breastfed infants as a study carried out in Uganda found out. **(Jackson et al, 2003)**

Azidothymidine (AZT), commonly known by its generic name Zidovudine, (ZDV), is now being used, in addition to NVP in some selected sites in Kenya. Studies indicate that the combination of the two given to the mother, with or without the dose of NVP to the baby is highly effective in reducing MTCT. **(Massachusetts Medical Society, 2004)**

The ARVs are provided at no cost to the patient in all public health facilities.

Other, more complex highly active antiretroviral therapy (HAART), are in use in developed countries. given as a combination of three drugs. HAART is more effective as it can reduce transmission rates to two percent or less.

**FIGURE 3.1: PMTCT FLOW CHART IN ANC, KENYA**



HIV testing is routinely offered in the ante natal clinics, where all mothers are counseled, and testing is offered. However, the mothers are given the opportunity to decline or 'opt out' of testing.

## CHAPTER 4: LITERATURE REVIEW

This chapter will feature a review of studies relating to the issues of PMTCT utilization and access, which have been carried out in other countries and in Kenya and later reflect on solutions that have been found to address the problems in Nairobi. However, the author will first give a brief description of a theoretical model and then outline the modified version. This model serves as a guide but will be modified to better describe and examine the factors that have effects on the pregnant women's ability to access and use PMTCT services.

### 4.1: Theoretical framework

There are many health care utilization models, but only one which has been widely used will be described and later modified to be used as the analytical framework for this study. (see figure 4.1 below)

#### 4.1.1. The Andersen behavioral model

The Andersen behavioral model was developed in 1968, to study factors that determine health care use. The model has been described as having three factors that influence use. These are: **Individual** factors, **Societal** factors and **health services system** factors. Though it has undergone several modifications over the years, the behavioral model remains the most widely used in determining the utilization of health services. (**Kroeger, 1983**).

The Andersen model has been used in many studies as a theoretical or analytical framework to examine factors that determine the use of health services by several vulnerable populations, such as the disabled, the elderly, those with HIV/AIDS or other conditions. (**Hausmann-Muela S. 2003**)

Andersen further described the **individual** factors as having three elements that relates to the individual's ability to access and utilization health services. These elements are: Predisposing factors such as age, gender, formal education, religion, knowledge about the particular health issue; Enabling factors include availability of services, socio-economic status, social class, socio- support networks; Needs factors such as the need for care, perception of illness, values and attitude towards health services. (**Greene, 2005**)

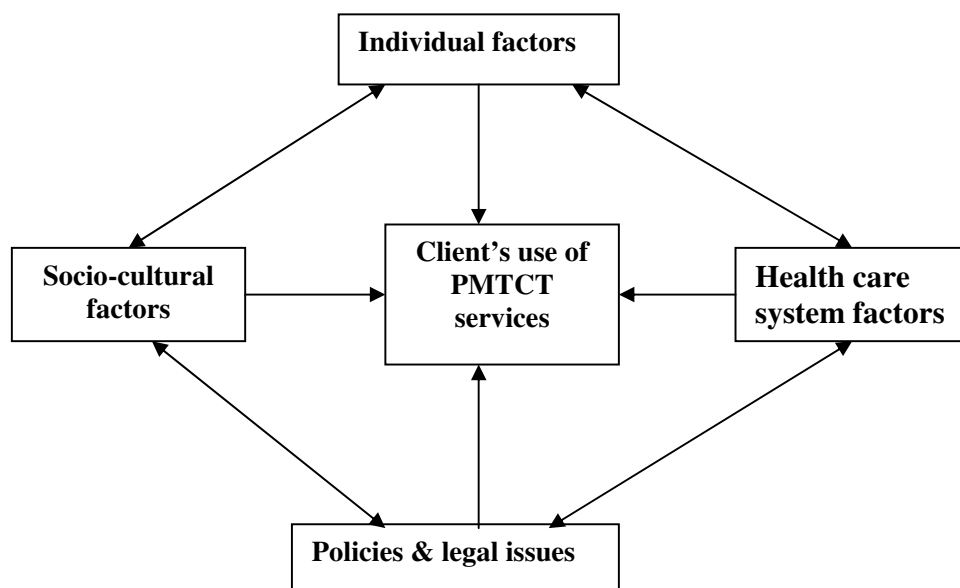
#### 4.1.2 Analytical framework

The author's modified analytical model will be described under four main categories: **Individual** (with predisposing, enabling, and need



Characteristics,) **Socio-cultural factors, Health care system factors** and **Policy factors** with selected variables, that may contribute to the pregnant mother's ability to access and use PMTCT services.

**Figure 4.1:** Framework for analyzing the factors related to access and utilization of PMTCT services.



**Individual factors:** Marital status, level of education, fear of knowing status, disclosure, attitude of client, knowledge & Perceived benefit of PMTCT.

**Socio-cultural factors:** Gender, Stigma and discrimination, social roles, Cultural constraints, Socio- economic, decision-making, Accessibility.

**Health care system:** Structural, workforce, H/Ws motivation & fears, service delivery Availability of drugs supply, packaging of syrup NVP, Health workers (H/Ws) attitudes towards HIV+ clients.

**Policies & legal issues:** Related Policies & guidelines.

These factors may independently, or in combination influence the:-

**Client's access and use of PMTCT services:** Counselling and testing (C&T), receive HIV test results, take NVP mother & baby, Makes decisions on disclose HIV status & feeding options.

## 4.2 Individual factors.

### **Level of education, awareness and perceived benefits of PMTCT.**

Low educational level and lack of accurate information about HIV/AIDS among women of child bearing age is a contributing factor of low numbers seeking PMTCT services and non adherence to treatment instruction. Some women who remain in denial about their pregnancy and those who do not appreciate the importance of ANC end up in the health facility at the last moment when it is too late to start any HIV prevention strategy, a research in Russia found out. **(Babakian G. 2005)**

In a study carried out in USA among women of childbearing age, just over one half had correct knowledge of effective perinatal HIV prevention strategies. The study also noted that even among the pregnant, who should have received the knowledge through counseling, only 65% knew of the existence of PMTCT ARV prophylaxis. Anderson J E, et al (2004).

A similar study in Nigeria indicated that inadequate knowledge of PMTCT services was a barrier to PMTCT use. **(Arulogun OS. 2007)**

According to the **(KDHS 2003)**, knowledge and awareness of HIV and AIDS is nearly universal among adults in Kenya, except among women with no education. The same survey indicate that illiteracy among females is 21% compared to the males with 12%. The KDHS and Behaviour Surveillance survey (BSS) 2003, found that over 70% of respondents of age group 15-49yrs, had basic information on prevention and transmission of HIV, but less than 1/3 of them had knowledge of specific action that mothers could take to prevent HIV infection. Less than 1/3 of the respondents knew about antiretroviral Therapy,(ART) **(KDHS 2003)**

## 4.3 Socio - cultural factors

A woman's ability to seek health care access health care and other services is shaped by several factors including, socio-cultural, socio- economic, her spouse and relatives, socio and religious norms. These factors may hinder her from accessing health care services. **(Jones C, 2004)**

*"Gender inequalities and discrimination are taken as normal especially in African cultures. The marginalized position of women in the society which mostly make it difficult for them to bargain issues on reproductive health is taken lightly."* **(Richard C, et al; 2003)**

In Swaziland, a mother who chooses to use PMTCT to ensure the safety and health of herself and the baby, often face the possibility of abandonment by

her spouse and relatives. While the culture does not allow her to hide her condition from the family. (Mahdi M, 2008)

#### **Box 4.1. Women face problems in seeking health services**

*“A few of us have been infected with STIs, but it has been hard to go for treatment, Our husbands have refused to let us go to hospital because the service provider will ask us to call our husbands in, as they might have the infection too. Our husbands sometimes go to treat themselves secretly but they refuse to provide us money to go for treatment”*  
**ICW member, Tanzania. (RHM 2007,)**

The study by Pathfinder – Kenya found that 43% of married women said that their husbands make decisions for them on health matters. Restrictive socio – cultural traditions, which relate to marriage and sexuality exist , further crippling the woman’s ability to seek health services and also put her in danger of the HIV infection. **(Pathfinder International 2002-2005)**

#### **4.3.1 Stigma and discrimination.**

Stigma is defined as a quality that ‘significantly discredits’ an individual in the eyes of others. It also has consequences on the way one looks at self. The US sociologist Erving Goffman believed that, “ the stigmatized individual is a person with a ‘spoiled identity’ who is ‘rendered unworthy’ in the eyes of others.” Stigma can be either internal (self), where an individual is ashamed of the condition he/she is in and fears being discriminated upon by others, or external (enacted) which is the actual experiences that people go through when external forces discriminate or marginalize them due to their predicaments. **(Mo Kexteya, 2002)**

In many communities, women are marginalized and are still regarded as inferior or second class citizens, even without the HIV infection, lacking autonomy to make decisions on HIV prevention. They are still facing the risk of stigma and discrimination. Where women fear rejection and violence if they are identified as HIV infected, they will be reluctant to take advantage of the PMTCT services.

The director of Lawyers Collective HIV/AIDS unit (LCHAU) in India Mr. Anand Grover, while addressing the XVI International AIDS conference in Toronto said, *“The real challenge is to control stigma within the communities and within the individuals.”* **(Unveiling the truth, 2006)**

Speaking at the XVI International AIDS conference in Toronto, Masimba B, from Zimbabwe described stigma this way, *“Stigma is secretive, subversive and operates in silence, undermining many effects that have been made to fight the epidemic. It undermines prevention, and care strategies and increases the devastating impact of the epidemic”* **(XVI International AIDS conference, 2006)**

For women, knowing and disclosing their status to others can have a negative consequence. In many cases, women are often economically and socially dependent on men, a scenario that puts them at the risk of violence, mistreatment and abandonment. Women's safety is put at risk and confidentiality jeopardized, if they cannot access PMTCT services without prior permission from male partners or in-laws. **(Oberzaucher N, et al 2002)**

In Uganda, a study revealed that women reservations to seek PMTCT services was based on fear that if their sero-status were known the maternity health care givers might refuse to assist them during delivery. The study pointed out that infant feeding with formula milk is a major barrier to seeking PMTCT services due to suspicion, prejudice and stigma among the communities. **(Eide M, et al, 2003)**

Newell M, reports that avoidance of breastfeeding may be impossible in some settings. In Africa and Asia, breastfeeding avoidance poses serious challenges to the economy, the culture and maternal/infant health. **(Newell, 2001)**. In South Africa, a woman feared fetching milk for her infant baby due to the problem of stigma among her neighbours. *"In my case, the thing that is stigmatized, is going to fetch the milk each and every week. It is collected from a particular room and if you go to that room they know that you are HIV positive."* **(ICW member, South Africa) (RHM 2007).**

In African countries, breastfeeding is a source of pride both to the mother and the community. So it becomes a painful option not to breast feed and may lead to social stigma and rejection for women who find they are infected with HIV. Evidence from Kenya suggest that *"Not breastfeeding can result in social stigmatization, economical hardships and early return of fertility."* **(USAID, 2001)**

#### **Box 4.2 gender issues.**

A member of the International Community of Women living with HIV/AIDS, speaking on gender issues.

*"If you start using milk powder everyone will know you must be HIV positive. If you demand condom use, to stop repeated exposure, he will either hit you or just go off and have sex somewhere else, anyway and likely bring back other infections. So you just go on having unprotected sex and breastfeeding even though you know you are doing exactly what they tell you, you must not do."* **(ICW member, South Africa.)**

## **Socio- economic implications.**

In many African communities, the greatest impact of HIV/AIDS occurs at the household level and it comes in many forms. Although AIDS often strikes more than one family member, the implication can be disastrous for an entire family if even one adult develops AIDS and loses the capacity to earn an income due to illness, or the need to care for other household members. HIV and AIDS also impose extra expenditures on affected households for health care and funerals. Once adults die, many households dissolve or become headed by the elderly or children.

Another factor contributing to low access and utilization of health services is constraints and conflict of the time the facilities are open. Though ANC services are free and close to the people, other pressing needs of the family take precedent, giving the mother no opportunity to attend the clinic, a study done in India's slums found out. It mentions that, 'the the slum residents may not readily utilize health services even when provided free of charge or brought closer to their residence because of time constraints generated by pressure to raise money for bare survival, (**Sarin A, 1997**)

According to an abstract presented at the 13<sup>th</sup> ICASA, by Palmeri P., et al , 2003, Tanzania said that extreme poverty contributes to the spread of HIV and AIDS. (Palmeri P., et al, 2003)

In some instances, the mothers are not ignorant of the risks of HIV infection to themselves or to their babies but, due to poverty they little or no choice to have unprotected sex for pay as the most pressing issues to them is how to feed their children.

**Lawrence D, (2004)**, in his study, attributed lack of access to maternal health care services to inability to meet associated cost due to poverty, and poor health services at local health facilities in Kenya

## **4.3 HEALTH CARE DELIVERY SYSTEM FACTORS**

To provide quality PMTCT services, the health care system must have the necessary policies, infrastructure, Supplies and human resources

The performance of health system in many countries has been affected by HIV/AIDS pandemic by increasing the demand for both quantity and quality of services and by reducing the supply of services by its impact on the numbers and performance of the health care providers (**World Bank 1999; Bollinger and Stover 1999**).

WHO 1994 report indicate that many governments in sub-Saharan Africa place a low priority on health and welfare as reflected in their national budget allocations for the health sector; this contributed to lack of maintenance of health infrastructure, Shortage of the health workforce , supplies, and drugs **(WHO 1994)..**

Since the UNGASS declaration of commitment in 2001, most countries took the challenge to start PMTCT services, without ample preparations, such as construction of new or expansion of existing health infrastructures. This had a negative impact in the PMTCT service delivery.

While ANC clients are increasing, Health facilities are not expanding at the same pace, creating a problem of space particularly for Counselling and Testing, thereby compromising privacy and confidentiality of the clients. Many of the clients who should essentially be get services at the primary level, end up seeking the services at the tertiary level.

In South Africa, low uptake of Nevirapine was associated with poor health system infrastructure in particular management capacity. **(Doherty M. 2005)**

A World Health report warned that shortage of the Health workforce is impairing the many countries ability to fight disease. 57 countries are experiencing severe shortage of health providers crippling the provision of essential health services. The report further said that lack of training and knowledge is aggravating the situation, hampering effective response to chronic and emerging diseases. **(WHR, 2006.)**

Comprehensively well trained health care workforce is crucial in ensuring good quality PMTCT service delivery to mothers with HIV and their infants. Lack of appropriate and suitable PMTCT service delivery policy framework can easily compromise the providers' roles.

Despite the fact that health care workers are expected to have full information concerning HIV/AIDS issues, it is a fact that trainings target health providers in specific programmes like PMTCT only if they are working in antenatal clinics. So the majority of health workers are left with barely no information or training.

In a Kenya Health Workers Survey (KHWS), carried out in 2005, health workers who participated in the survey expressed concern that health workers who did not have adequate training in HIV counseling and testing lacked confidence in themselves and may provide inadequate services to patients and miss important opportunities to inform patients of their HIV status. While understaffing is a persistent problem throughout Kenya, Health care providers are bogged down by a myriad of challenges in their efforts to provide quality care services. Some of these challenges include:- chronic shortage of personnel, limited health care infrastructure, lack of human

capacity development (HCD) and institutional support, inadequate supplies and equipment. At the same time, the number of women of child bearing age living with HIV and AIDS who need PMTCT services is continuously increasing. Consequently, health care systems are facing enormous challenges in coping with the increase.

Health workers have fears of contracting HIV infection, which may affect their behaviour and attitude towards the HIV infected clients, leading to poor delivery of service to the HIV infected mothers. It is documented that Health care providers have fears and concerns of working with HIV positive patients due to the possibility of getting infected in their work place. **(RHM 2007)**

In a study carried out in four Asian countries on discrimination against HIV positive people, out of 764 positive men and women interviewed, 54% reported having experienced discrimination from health service providers. In Indonesia, the study found out that, women are twice as likely to experience discrimination as men. 15% of the respondents reported that they were refused treatment or care and 17% experienced delay in service provision. Another 9% were advised not to access health care services by health workers, while another 9% were forced to pay additional charges due to their positive status.

### **Counselling and Testing**

When women are counseled and tested, they would like to choose whom and when to disclose their HIV status to. This is not always the case as health workers in some instances were found to lack confidentiality. *"It happened that personnel at the health care centre, a nurse, said somewhere around my neighbourhood that.....'yes, yes, this girl (meaning myself) really has HIV"* **(Paxton S, et al. 2004).**

In Kenya it has been documented that an average of 65% of pregnant women who have access to antenatal care decline to take a HIV test. Lack of male involvement was cited to be a significant barrier for women to accept PMTCT services **(NAS COP, 2005.)**

A study done by FIDA Kenya, shows that health workers behaviour and attitude towards clients are key determinants to accessibility to health services. Due to negligence, and memories of mistreatment during ante natal and delivery, mothers fore- go care in public health facilities which results in the majority of them seeking services from informal and unreliable sources, making over 58% of women to deliver at home. Subsequent decisions by mothers to utilize health care services are determined by the previous experiences they underwent.

*"..... just as quality treatment makes a lasting impression, so do negligence and abuse. Memories of mistreatment and humiliation, particularly during delivery, remain fresh in women's minds years after they occurred. The lasting and destructive impact of negative health care experiences cuts to the heart"* **Failure to deliver, FIDA, 2007.**

Services provision has in many cases been hampered by lack of essential commodities and drugs. Antenatal clinics experience periods of stock-out of Nevirapine tablets and syrup.

In documentation of their experiences in implementing PMTCT services in Kenya, one of the challenges that Pathfinder International noted was that many facilities in Nairobi and other parts of the country where they worked, experienced periods of stock-outs of HIV testing kits and Nevirapine tablets and syrup. (**Pathfinder International – Kenya 2002 – 2005, pg 22**)

From the ICHD class notes on staff motivation, a study in Mali is quoted to have shown that health workers were de-motivated by lack of materials, recognition and job description.

### **Legal, human rights and policy issues**

The Kenyan government realizes the need to improve the quality of maternal health care services in the country and has set goals to reduce maternal mortality, infant and child mortality and to increase the presence of skilled attendants during 90% of deliveries by 2010. (**National Reproductive Health Strategy, 1997 – 2010**)

Since the time the Government declared AIDS a national disaster in 1999, a number of policies, and guidelines have been formulated through the NACC and the Ministry of Health. (**NASCOP 2005**)

An extensive study which was done on the maternal health services in Nairobi by FIDA – Kenya found that 'Kenya's health care sector suffers from longstanding systemic and widespread problems that impair the delivery of quality care,' for lack of proper policies and structural management. Despite the fact that the government has formulated the sessional paper on AIDS and a number of policies, guidelines and strategic plans, these documents are not readily available to the frontline health workers whether in hard or soft copy, therefore they work without proper directions.

The Kenya section of the International Community of jurists lamented in a paper that, *"Unfortunately, [in Kenya,] even simple policies on health and education are not easily accessible to the public, even though such information is crucial and can have such a major positive effect on people's lives. . . . Right to information laws open up government records to public scrutiny, thereby arming citizens with a vital tool to inform themselves about what the government has done, at what cost and how effectively."* (Kenyan Section of the International Community of Jurists, 2006)



International as well as Kenya's human rights laws and policies do not allow for discrimination on the basis of HIV status. Also the International Labour organization (ILO) code of practice protects employees from job related discrimination due to their sero-status. (***ILO code of practice on HIV/AIDS***).

The Kenyan constitution protects many of the human rights that a mother needs, but they do not include or give a clear definition to include categories like marital status pregnancy and health issues related to HIV/AIDS. (*Government of Kenya, 2005*)

Yet in Kenya as well as in many developing countries, violation of reproductive health rights of women and people living with HIV/AIDS remains a major challenge in the fight against the HIV scourge. The violation of human rights is rampant in families, socio circles, workplaces and even in health care systems.

#### **Box 4.3 Legal Issues**

I went to the hospital for treatment of another disease but as they knew I had HIV from the history file, the doctor refused to treat me" (***Asia-Pacific network of people living with HIV and AIDS, AIDS discrimination in ASIA, 2004***)

The government has not adequately provided legal services to its HIV/AIDS patients, which hampers progress in prevention, care and treatment. Those whose rights are violated, if they go court, they encounter slow and corrupt courts that are not ready to address their plight. Legal services in Kenya are also very costly for the poor infected people who want to seek redress.

In a report by the Open Society Institute (OSI) Director, Nowrojee B, said "Access to justice for people living with AIDS can be just as important as access to health care," Also the co-author of the report, Cohen J, added, "Just as it is possible to scale up HIV-related health services such as condoms ... it is also necessary to scale up HIV-related legal services," (***Reuters:2007***)

In Lesotho, HIV positive women were reported as being forced to use long term contraception as a condition for participation in a 3 year 'trial' of ARV treatment. (***ICW. 2005***)

According to a study in Kenya, on knowing one's HIV status, it was urged that a high number of women who disclosed their HIV status experienced negative outcome, including physical violence, with little options for redress. (***Temmerman, M., et al, 1995***).

## **CHAPTER FIVE: ANALYSIS OF FACTORS AFFECTING ACCESS AND UTILIZATION OF PMTCT SERVICES IN NAIROBI.**

This chapter looks at the findings of the factors affecting PMTCT programme, shedding light on the gaps in service delivery and other mitigating factors, which affects access, and utilization of PMTCT services in Nairobi. Based on the literature review and available data from the Ministry of Health, internet and other sources.

The data three years Nairobi provincial Medical office HMIS report exposes the fact that even when women with HIV are identified and initiated into the Ante natal care system, many are being lost along the way as well as their babies.

As the NVP tablets and syrup were given to the mothers to carry home, the number of mothers and babies who actually ingested the NVP cannot be verified, as 42% of the mothers give birth at home. Therefore, the actual number of mothers and babies who took the NVP could be much lower than the data indicates.

Some of the reasons that could explain the gaps would be analysed below.

The analytical model described in chapter four to analyze the findings in the three main categories affecting access, and utilization of PMTCT services in Nairobi. These are: **Individual** factors, **Societal** factors and **health services system** factors.

### **5.1 INDIVIDUAL**

#### **Level of education, awareness and perceived benefits of PMTCT.**

Access to information is necessary to ensure that pregnant mothers make informed decision about their health and that of the baby. However, right to information in Kenya is impaired by low level of women education as illiteracy among females is twice that of their male counterparts (KDHS, 2003). Nairobi is not an exception, with 55% of the Nairobi population living in the slums where low education and lack of awareness on PMTCT services is a challenge.

The Behaviour Surveillance survey (BSS, 2003)' showed that knowledge of specific action that mothers could take to prevent HIV infection was low in Kenya. Pregnant mothers are therefore not able to make the right, decisions and choices to seek and use PMTCT services and to adhere to medical instructions

A large number of the pregnant women needing PMTCT services come from the slum. Despite the fact that the government has developed

communication strategies, to ensure that information about PMTCT is widely disseminated in the country, young women still do not have adequate information about PMTCT services. This has resulted in low uptake of PMTCT and low numbers of girls and women delivering in health facilities. Almost 42% of Nairobi women deliver at home without skilled medical attendance.

These findings in Nairobi agrees with what was found in the USA and Nigeria's studies on low level of education have an impact on access and utilization of PMTCT services

## **5.2. Socio – cultural factors**

At the level of social culture, a number of factors come into play. In Kenya, 4.3% of married women say their husbands make decisions on the their health care alone without consulting them. **(KDHS, 2003,)**

Other factors that come into play are the gender-power imbalance, in the society. As has been shown in the literature review, married women have very little say concerning their own bodies or their health. The study by Pathfinder – Kenya found that 43% of married women said that their husbands make decisions for them on health matters. Restrictive socio – cultural traditions, which relate to marriage and sexuality exist , further crippling the woman's ability to seek health services and also put her in danger of the HIV infection. **(Pathfinder International, Kenya, 2008)**

Gender imbalance, and discrimination in the society are taken as an ordinary thing among many African culture and is supported by the male dominated governments and religious norms which advocate for masculine superiority philosophy.

This marginalized situation women find themselves in, rob them the bargaining power in issues of reproductive health and sexuality, fuelling more cases of HIV/AIDS particularly in Kenya.

The traditional, cultural and religious beliefs that women's bodies and sexuality do not belong to themselves but to their husbands, families and community puts the women in particular risk of HIV/AIDS and prohibits them from seeking health services. **(RHM vol 12 No 23, 2004 pg 125)**

Mothers lack a conducive environment for equitable decision making on the issues of sex and sexuality. They also lack support and empowerment, which would help them seek PMTCT services and accept the diagnosis of their HIV test, develop coping mechanisms and share their results with significant others without feeling any intimidation **(USAID, 2001)**

### **5.2.1 Stigma and discrimination**

As it has been shown in this study, in Kenya, as in other countries, it is clear that stigma and discrimination has remained a major challenge in fighting HIV and AIDS, and has been a powerful tool of destruction of the marginalized individuals and comes from various fronts. This stigma emanates from three fronts; from the individual, there is self stigma; while there is external stigma exerted to an individual by others, such as family, friends, community, religious organizations; and health Care workers, who exercise power over the individuals.

Therefore, most women are reluctant to access PMTCT services for fear of stigma and discrimination, which is an all too familiar scenario in Nairobi too.

Furthermore, the traditional importance associated with breastfeeding by the communities makes it difficult for the mothers to make the choice of replacement feeding without the risk of stigma and discrimination.

Breastfeeding in Kenya is seen as a cheap, natural means of providing adequate nutrition and protection against many childhood diseases. In comparison, the cost of infant formula along with clean water and fuel needed to prepare it is often far beyond reach of these poor families, mainly in the slums of Nairobi. Furthermore when incorrectly used feeding with infant formula may lead to malnutrition and fatal infectious diseases. Even safely used, it may lead to stigma and rejection for women who find they are infected with HIV who opt not to breast feed. **USAID, 2001)**

### **5.2.2 Socio- economic implications.**

This study has revealed that women in Kenya as well as Tanzania have lower education than men, which causes a negative economic impact on women and puts the woman in a high risk of HIV and AIDS (**Palmeri P., et al, 2003**). With the married woman having no control over her health matters, she has to seek permission to go to the clinic and beg for money for transport and other needs. This greatly impedes her access and use of PMTCT services. The same reasons hinder her from disclosing her HIV status for fear of the repercussions she would get from her husband or family.

While one of the ways to reduce MTCT of HIV is through Replacement feeding options, it is a tall order for the majority of women who live in the slum areas and are ravaged by poverty. So, for them buying the formula or cow milk, is a "luxury" they cannot afford.

Poverty has been found to be a major barrier in accessing health PMTCT services. While PMTCT services in all the health centres in Nairobi are free, high cost of transport coupled with the low socio-economic status, makes it difficult for mothers to access maternal health care services in Nairobi. Nairobi's situation is similar to the Indian scenario described in the literature

review where Sarin A., found that, pressure to raise money for bare survival by the slum dwellers, was more a priority than accessing health services even when they are provided free of charge. Thumbi's Kenya country report on Reproductive health gave poverty as one of the reasons that contributed to over 58% of mothers delivering at home.

### **5.3 HEALTH CARE DELIVERY SYSTEM FACTORS**

The low access and utilization of PMTCT services was in part due to factors such as health provider or health care delivery problems such as chronic shortage of health care workers, inadequate supplies of Nevirapine and low staff morale.

A detailed report by FIDA Kenya clearly demonstrate how the delivery system in Nairobi have affected access and utilization of health care services, more so the PMTCT programme. Lack of confidence of the mothers on health care Workers made them refrain from accessing care. The FIDA report found that some of the health workers were rude and insensitive to the psychological and physical needs of the mothers, which made mothers refuse to use the facilities.

Nairobi faces an acute problem of inadequate physical infrastructure. Since 1984 when the first case was described in Kenya, no new health facilities have ever been constructed nor the old ones been expanded in Nairobi.

All other provinces in Kenya have a provincial general hospital and a district hospital in every district. Nairobi is an exception in that it does not have a provincial hospital, has three districts, with only one district hospital, which lacks a maternity. Pumwani maternity, under the City council of Nairobi, therefore carries the bulk of the pregnant mothers for delivery, where about 70- 80 deliveries are conducted per day.

The PMTCT programme was integrated in the existing ANC with no rooms added for counseling, thus affecting privacy and eroding the confidentiality of the clients. Overcrowding in the ANC is the norm with long queues as mothers wait for the one or two counselors to attend to them. Mothers are usually given group pretest counseling in one small room and then they are asked to wait outside and one by one they go in for individual testing. After blood has been drawn from each one of them, the process starts again where the mothers again go for individual results. This becomes a lengthy and tedious procedure, as there could be only one Health care provider doing the counseling and testing. Some of the mothers eventually give up and go away without being tested as they have to attend to other family chores. This could partly explain why so many mothers attend the antenatal clinic, sometimes only once, and go without getting the PMTCT services. The

health care providers who are overworked may not give the best counselling and mothers are left without adequate information by which they can make informed decisions.

In Kenya, 25 – 95% of women of pregnant women who attend ANC do not accept testing. **(NASCOP, 2005.)**

The health worker too were found to affect the woman's willingness to access and use PMTCT services when their confidentiality was questionable.

Most developing countries are experiencing insufficient human resource capacity, due to natural causes such as death, retirement, high attrition rate in search of greener pastures and training, while many are not replaced due to government sanctions on employment. This coupled with the increase in workload has had devastating effects on the delivery of services in the health care system.

The additional workload caused by the PMTCT programme to the health workers without corresponding remuneration, both overworked and demotivated them.

Investment in human resources strengthening is of critical importance in increasing the mothers attendance to ANC, uptake of Counselling and testing and NVP for mother and baby and overall to support the delivery of the PMTCT services. The current Kenya National AIDS Strategic Plan (KNASP 2005 -2010) targets to train 50% of public health workers on PMTCT. The latest (2008) report shows that only 10,000 out of 30,000 (about 30%) of the health workers have so far been trained. Therefore many of the health workers providing PMTCT services in Nairobi and the rest of the country are not trained.

Further to this, the extensive study by FIDA – Kenya on the maternal health services in Nairobi vividly illustrates, that the root cause of most problems faced by health care providers stems from lack of supplies, which is a chronic recurrent problem in Nairobi.

For health workers to be motivated to work, their needs such as; having the necessary tools to work with, having adequate training, adequate personnel and infrastructure (eg adequate counseling rooms) and systems that are working, must be met. This will ensure quality service performance and heightened work output.

As found in the study, some of the unbecoming behaviours and attitudes that Health workers had towards the HIV infected women emanated from the fears they had of contracting the HIV infection. They resulted to wearing two to three gloves. However, this has not been widespread in Nairobi.

## 5.4 LEGAL AND HUMAN RIGHTS AND POLICY

The Kenyan constitution protects many of the human rights that a mother needs, but they do not include or give a clear definition to include categories like marital status, pregnancy and health issues related to HIV/AIDS. Similarly, the penal code prohibits different, forms of assault to the person but it does not cover the psychological aspect of assault, more so to the woman, whose reproductive rights are violated. Kenya (Gazette, 2005)

In addition to the constitution and the Penal Code, the Government of Kenya has produced several policies and guidelines such as the Sessional paper No 4 of 1997 on AIDS in Kenya, National guidelines on Prevention of Mother to Child HIV/AIDS Transmission and HIV/AIDS strategic plans. Yet the Government has failed in the implementation of the policies, dissemination and follow-up.

Some of these documents are not available in the health facilities, neither are they posted in the internet for easy access. The author of this study went physically from office to office looking for these documents and they were not in stock.

She had to depend on her own documents which she has collected in the course of her work and also borrowed copies from friends.

The right to information is also a fundamental human right as major decisions made by an individual are largely based on the knowledge they have.

The International Labour organization (ILO) code of practice protects employees from job related discrimination as a result of their sero-status. (*ILO code of practice on HIV/AIDS*).

This study further found out that there is lack of a strong political will from the government to tackle cultural and religious practices which oppress the woman.

Various studies clearly reveal that women's lack of control over their own bodies and sexuality is the root of a wide range of human Rights violation in many countries. (RHM vol 12 No 23, 2004 pg 125)

## CHAPTER 6: CONCLUSION

This thesis highlights the factors affecting access and utilization of PMTCT services in Nairobi. The study have found that there are major factors that impede PMTCT access and utilization in Nairobi. These factors have been found to emanate from individual, socio-cultural and the health care system.

It has been demonstrated in Nairobi that many pregnant women do not access PMTCT services due to high illiteracy level, poor knowledge and lack of awareness of PMTCT services and its benefits, fear of stigma and discrimination, fear of knowing her status and disclosure to significant others.

The pregnant woman's lack of money, or authority over resources, and lack of power to make decisions of her own further compounds the problem.

The study also shows that socio-cultural factors such as stigma, discrimination and gender inequalities have played a big role in affecting the pregnant woman's ability to access or utilize PMTCT services. Religious, cultural and traditional norms relegate women to lower level where they are not allowed to make decision even for their own health reproductive matters.

The inclusion of PMTCT services into the already stretched health care system without adequate planning on resources, workforce and infrastructure has caused a myriad of problems. The structural adjustment programmes which froze new employments and retrenchments impacted negatively on the health care system. The high influx of HIV infected clients needing health services, have also aggravated an already bad situation. This chronic shortage of health care providers affects service delivery (the doctor-patients and nurse – patient ratios are lower than those recommended by WHO)

Nairobi City which has a very high population density and the second highest HIV prevalence in Kenya, has had no new health facilities being constructed to match the increased demand for health care services for over twenty years. As it is, Nairobi does not have a single Provincial or district hospital to provide maternity services. This has stretched the age- old facilities to the limits, no wonder mothers detest attending the public ANC clinic because they lack space for privacy and therefore confidentiality is compromised.

Lack of policies and guidelines on PMTCT services at service delivery points have left the health care providers groping around for directions. When the government publishes policies, there are no mechanisms of dissemination and the copies made are too few to trickle down to the provinces and districts, let alone the health facilities.



HIV and AIDS being a new phenomenon in the health sector, is not entrenched in the training curricula for nurses and doctors. Therefore, the older generation of health care providers had no training on HIV/AIDS. This has necessitated the government to train the health care providers on the various components of health care, but this has not yet been achieved. So many health care workers feel inadequate in providing the services particularly the counseling and testing for HIV.

This, coupled with the high turn-over of health workers due to natural and other causes, further impedes the effectiveness of the PMTCT programme, making it difficult for the pregnant mothers to access or utilize services. Low motivation, lack of incentives and the extra workload can be a disincentive for the underpaid, under-trained and under-equipped staff.

## RECOMMENDATIONS

In light of the findings of this study, various key issues emerge and the following recommendations are proposed, for the improvement of the access and utilization of the PMTCT services in Nairobi. Therefore, to address problems of under utilization of PMTCT services matters influencing the delivery of service must be addressed.

- ❖ Recruitment and training of health workers and improving the infrastructure should be given priority for PMTCT programme to be effective.
- ❖ The government should revise the policy regarding the use of Nevirapine as a single dose prophylaxis and use triple therapy ARVs.
- ❖ Improve access to information to the women and the community at large, by providing relevant information, education and communication on PMTCT services and its benefits, through training and using Community health care workers, school health programmes and community gatherings. This will reduce the information gaps, rumours and misconceptions that the women may be having about HIV/AIDS and PMTCT, thereby increasing PMTCT use.
- ❖ The Kenya Government should empower women economically to enable them face the challenges brought about by the HIV scourge.
- ❖ For primary prevention of PMTCT, reproductive health programmes targeting the adolescents should be strengthened. Youth, in and out of schools should be empowered with information. Family Life Education should be taught in schools, with the formation of health clubs, also using sports activities to reach the youths. Male and community involvement should be strengthened.
- ❖ A National PMTCT information and knowledge management policy and strategy should be developed highlighting the PMTCT priorities, with the aim of identifying information needs of different users, making sure the right information is communicated. Channels of distribution and dissemination of information, policies and guidelines should be streamlined.
- ❖ The government should enact laws and formulate guidelines addressing gender inequalities and the violation of women's human rights, both in the community and in the health facility and the rights of the HIV infected person, and should outlaw stigma and discrimination.

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