

**Factors Influencing utilization of PMTCT Services in
Addis Ababa -Ethiopia**

**Goncho Moges Mekonnen
Ethiopia**

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Factors influencing utilization of PMTCT services in Addis Ababa -Ethiopia

A thesis submitted in partial fulfillment of the requirement for the degree of Masters of Public Health.

By

Goncho Moges Mekonnen

Ethiopia

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Table of Contents

Table of Contents	i
List of Tables and Figures	iii
Abbreviations	iv
Definition of Terms for this document	v
Acknowledgements.....	vi
Abstract.....	vii
INTRODUCTION	1
CHAPTER 1 BACKGROUND INFORMATION ON ADDIS ABABA CITY ADMINISTRATION, ETHIOPIA	2
1.2 Socio- demographic and economic situation	2
1.3 Health care delivery system.....	3
1.4 HIV/AIDS situation	3
1.5 Responses to HIV/AIDS and coordinating structure	4
CHAPTER II STATEMENT OF THE PROBLEM AND METHODOLOGY	6
2.1 Statement of Problem	6
2.2 General Objectives	8
2.3 Methodology.....	8
CHAPTER III TRENDS ON UTILIZATION OF PMTCT SERVICES IN ADDIS ABABA	10
3.1 Trend analysis among pregnant women on utilization of PMTCT services in Addis Ababa (2004/5, 2005/6 and 2006/7).....	10
CHAPTER IV INTERNATIONAL EXPERIENCE ON FACTORS INFLUENCING UTILIZATION OF PMTCT SERVICES: A REVIEW OF LITERATURE	16
4.1 Behavior for PMTCT related services	17
4.2 Health care delivery system and policy related factors.....	19
4.2.2 Resources	20
4.2.3 Fears and Attitudes amongst Health Care workers	23
4.2.4 Organization	24
4.3 Individual, Socio-cultural and Economical Factors	25

4.3.1 Predisposing Factors.....	25
4.3.2 Enabling factors.....	29
CHAPTER V FACTORS INFLUENCING UTILIZATION OF PMTCT SERVICES IN ADDIS ABABA: A REVIEW OF LITERATURE	31
5.1 Behaviors for PMTCT related services	31
5.2 Health care delivery system and policy related factors.....	33
5.2.1 Legal and Policy issues	33
5.2.2 Resources	34
5.2.3 Fears and Attitudes amongst Health Care workers	38
5.3.4 Organization	38
5.3 Individual, socio-cultural and economical factors	39
5.3.1 Predisposing Factors.....	39
5.3.2 Enabling Factors	43
CHAPTER VI CONCLUSIONS AND RECOMMENDATIONS	45
6.1. Conclusions.....	45
6.2. Recommendations:	48
References	51
Annexes	61
Annex 1. Problem Analysis diagram	61
Annex 2a. AAHB PMTCT related annual report 2004/5	62
Annex 2b. AAHB PMTCT related annual report 2005/6	63
Annex 2c. AAHB PMTCT related annual report 2006/7	64
Annex 3. PMTCT related services utilization by country	65
Annex 4. Map of Addis Ababa city.....	66

List of Tables and Figures

Table 1	: PMTCT related services and results for three consecutive years.....	10
Figure 1	: Trend among ANC attendant women pre-test counseled for HIV test, HIV tested, received HIV test result and HIV test positive.....	11
Figure 2	: Trend among HIV positive women received NVP, infant born to HIV positive woman received co-trimoxazole prophylaxis and HIV positive women counseled on infant feeding.....	14
Figure 3	: Conceptual framework for factors influencing utilization of PMTCT services.....	16
Figure 4	: PMTCT services related Behaviors.....	17
Figure 5	: PMTCT related services flow chart in Ethiopia.....	32

Abbreviations

AAHB	Addis Ababa Health Bureau
AAHAPCO	Addis Ababa HIV/AIDS Prevention and Control office
AABFED	Addis Ababa Bureau of Finance and Economic Development
AABEC	Addis Ababa Bureau of Finance and Economic Development
AAEB	Addis Ababa Education Bureau
AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
ARV	Antiretroviral
ART	Antiretroviral therapy
CHAGA	Commission on HIV/AIDS and Governance in Africa
EDHS	Ethiopian Demographic Health Survey
FDRE	Federal Democratic Republic of Ethiopia
FBO	Faith Based Organization
HMIS	Health Management Information System
HIV	Human Immunodeficiency Virus
IMCI	Integrated Management of Childhood Illnesses
GOVE	Government of Ethiopia
MOFED	Ministry of Finance and Economic Development
MOH	Ministry of Health
MSH	management sciences for health
MTCT	Mother-to-child transmission of HIV
NHAPCO	National HIV/AIDS Prevention and Control Office
NACP	National AIDS Control Program
NGO	Non-government Organization
NVP	Nevirapine
PLHIV	People Living with HIV
PMTCT	Prevention of Mother-to-child transmission of HIV
UNAIDS	Joint United Nation Program on HIV/AIDS United Nations
UNDP	Development program
UNGASS	United Nations General Assembly Special Session
USAID	United States Agency for International Development
VCT	Voluntary Counseling and Testing
WHO	World Health Organization

Definition of Terms for this document

- Acceptability : Relates to social and cultural distance, HIV counseling and testing, to utilize PMTCT services, perceived cost and quality of services.
- Accessibility : Location of supply and location of users (distance, cost, travel time, transportation resources).
- Affordability : Prices of services, ability to pay, direct and opportunity costs.
- Availability : There is no shortage of the required services.
- Coverage : The percentage of all target population who can receive or have received service intervention.
- Utilization : The ratio between output and service capacity.

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Abstract

In Addis Ababa HIV/ AIDS remains a major health problem. Adult HIV prevalence was at 7.5% in 2007 and among pregnant women in 2005 was 11.7%.

The main purpose of this thesis is to analyze 3 years trend and to identify factors influencing utilization of PMTCT services among pregnant women attending ANC services.

In Addis Ababa PMTCT services started in 2004 and now 49 health facilities are providing services.

The Andersen model of health services utilization was used to systematically describe factors influencing utilization of PMTCT services international and in Addis Ababa based on literature review and reports from Addis Ababa health bureau.

This study revealed that there are human resource constraints, lack of training, insufficient allocation of budget, inconsistent supplies, inadequate counseling rooms, limited access to PMTCT information and services. There is HIV/AIDS related stigma and discrimination in the community, gender inequality, and low male involvement, inadequate knowledge, accessibility and affordability of PMTCT services are the major constraints for low utilization of PMTCT services.

The review shows that while there is a clear HIV/AIDS policy, strategic framework and PMTCT guidelines, there is lack of commitment and services are underperforming. In addition there is inadequate awareness in the community and low utilization of services.

It is recommended that to raise budget, capacity building of health workers, and train non-health professionals for counseling. Increase awareness; involve community to alleviate stigma and discrimination. Improve accesses; strengthen referral linkages and supervision of PMTCT services.

Key words: HIV/AIDS, PMTCT, utilization, barriers, Ethiopia, sub-Saharan Africa.

Word count: 14,954

INTRODUCTION

Ethiopia is one of the most affected countries by HIV/AIDS pandemic in sub-Saharan Africa. According to MOH (2005) estimations a total of 128, 922 new HIV infections occurred in the country. Of these 30,338 were HIV positive births (mother-to-child infections) and in the same year 134,500 AIDS deaths occurred, out of which 20,900 in children under 15 years (MOH/NHAPCO 2006).

The United Nations General Assembly special Session on HIV/AIDS made the declaration of commitment (UNGASS, 2001) on HIV prevention among infants and young children. It set a goal to reduce the proportion of infants infected with HIV to 20% by 2005 and by 50% by the year 2010 by ensuring PMTCT service access for 80% of pregnant women. To achieve the targets Ethiopian government issued national PMTCT guidelines in 2001. These guidelines were updated in 2007 to include latest managerial, technical and clinical developments and nationally and internationally accepted recording and reporting formats. In Addis Ababa the PMTCT program started as pilot in April 2004 in five governmental health facilities. In the same year the service was expanded to 33 health facilities under the AAHB and three hospitals under MOH in Addis Ababa (AAHB, 2006/7).

The author of this thesis has been working as head of Bole sub-city health department (one of the ten sub-cities in Addis Ababa) over five years. One of his main responsibilities is coordinating and supervising implementation of the health programs in sub-city. The author feels that there is a problem on utilization of PMTCT services in the city, which is an entry point for prevention and care interventions for HIV/AIDS in the family and which can reduce HIV infection to infants. The aim of this thesis is to look into supply and demand factors that are affecting utilization of the PMTCT service, and then to come up with practical recommendations to improve the utilization of PMTCT services and reduce vertical transmission of HIV in Addis Ababa.

The content of the thesis is divided into six major chapters. Chapter one discusses the background information, government response and HIV situation in the city. Chapter two presents statement of the problem, objectives and methodology. Chapter three illustrates the three years trend in PMTCT utilization in Addis Ababa. Chapter four presents international experiences on factors influencing utilization of PMTCT services. Chapter five analyses factors influencing utilization of PMTCT services in Addis Ababa. Finally conclusion and recommendation are presented in chapter six.

CHAPTER 1 BACK GROUND INFORMATION ON ADDIS ABABA CITY ADMINISTRATION, ETHIOPIA

1.1 Geographical, Political & Administrative structure

Addis Ababa is the capital city of Ethiopia and largest city in the country, located in the heart of the country on an area of 540 square kilometers. It is situated between 9 degrees latitude and 38 degrees east longitude in the plateau that stretches at the range of 2,200 - 2,800 meters of altitude above sea level. The lowest and the highest annual average temperature are between 9.89⁰c and 24.640⁰c (CSA, 1994).

Addis Ababa is an influential city in Africa due to its historical, diplomatic and political significance. It has been a seat for the African Union, the headquarters of UN Economic Commission for Africa and many other international organizations.

There was decentralization in 2002 which included the devolution of power to lower level administrative organs. According to the amendment of Addis Ababa City Government Charter, currently the administrative structure of the city is the City Government, 10 sub-cities and 99 Kebele (the lowest administrative structure) (AACG, 2001).

1.2 Socio- demographic and economic situation

Addis Ababa is densely populated. Currently total population of Addis Ababa is 2,738,248 of which 1,304,518(47.6%) are males and 1,433,730(52.4%) are females, (CSA, 2008). The number of females is considerably higher than that of males. The population growth rate is 2.1%. The structure of the population indicates the dominance of young population. The population of those under the age of 15 accounts for 45%, while those in the reproductive age group (15-49) account for 47.2% of the population. The age and sex structure of the pyramid shows a wider base and a narrower top, which is a typical characteristic of a developing country (CSA, 2008).

Among those beyond the age of 15 years, 43.9% are married, 38.8% never married, 5.8% are widowed and 9.3% are divorced (DHS, 2005). Primary school enrolment for both sexes is 91%, while secondary was 33% in 2002. Female primary enrolment is 53.2% and secondary 51% (AAHB, 2005). The city is multi-cultural, multi-religious and a big tourist destination. Religious wise 59.1% are orthodox, 25.95% Muslims, 13.5% protestant, 0.6% Catholic, 0.3% traditional and 0.6 are others (CSA, 2008).

Around 53% of the active working population is engaged in some kind of employment with the cross sectional actual employment status of 37.47%. Unemployment is at 30% of the active population. Around 50% of the city's people lives below the poverty line. Forty-four percent of the employed are woman while 68% are men, (AAHB, 2005).

1.3 Health care delivery system

Health services in Addis Ababa are provided by the federal government hospitals, Addis Ababa regional health bureau, private and NGOs health facilities. In the city there are a total of 35 hospitals, 29 health centers, 456 clinics and 29 health posts which are managed by different organizations (MOH, 2006/7).

The ministry of health-owned hospitals provides services to referral cases throughout the country. Defense and police hospitals offer services for their staff.

Addis Ababa regional health bureau is responsible for both curative and preventive health care of the city, under which there are 5 hospitals, 1 Regional laboratory, one clinical nurses training school, 24 health centers, 7 clinics and 37 health posts which are serving the population(MOH, 2006/7).

All public hospitals charge a fee which is commonly known as user fee or cost sharing. Health centers, public clinics and health posts are almost free. Costs of private health care services are high and most health services are not available to all. Some basic health indicators of the city show an infant mortality rate of 45 to 1000 live births and maternal mortality of 566 per 100,000 live births, (AAHB, 2005).

1.4 HIV/AIDS situation

In Ethiopia the first evidence of an HIV/AIDS infection was detected in1984. The prevalence was very low in early 1980s; it has been increasing during the past years. However the country's HIV prevalence in 2007 was 2.1%, (MOH, 2007) with males accounting for 1.7% and females 2.6%. Urban and rural prevalence was 7.7% and 0.9% respectively. Estimations of people living with HIV/AIDS were 977,394, of which 75,420 were pregnant women and the annual HIV positive births were estimated at 14,148, (MOH, 2007). The national HIV prevalence of 2.2% in 2004/5 and 2.1% in 2007 suggest that the epidemic is stabilizing.

The impact of HIV/AIDS epidemic is felt across the country from the household level to all communities and all sectors. The most affected is the sexually active age group 15-49yrs who are also the economically productive age group. Nationally deaths due to AIDS in the age group (15-49) progressively increased up to 2005 when they accounted for 35% of young adult deaths (MOH/NHAPCO, 2006). The loss of young adults in their most productive years will affect overall economic growth.

HIV/AIDS remains a major health problem for Addis Ababa. The adult prevalence in the city increased from 7.2% in 2004 to 7.5% in 2007. The prevalence is the highest in the country (MOH, 2007).

In Addis Ababa the adult HIV incidence is estimated to be 1.52%, New HIV infections in all age groups are 21,585 out of this 808 occurs in children. The main root of HIV infection for infants and children is through vertical transmission (MTCT) (MOH, 2007). The number of HIV positive pregnant women in 2007 was estimated 6,223. According to national ANC based sentinel surveillance, HIV prevalence among pregnant women in 2005 was 11.7% in the city. The number of HIV positive pregnant women since the past three years (2004 to 2006) increasing at an annual average rate of 3%. The annual HIV/AIDS deaths decreased substantially from 892 in 2005 to 539 in 2007(AAHAPCO, 2007). This decline may be attributed to the availability of ART.

1.5 Responses to HIV/AIDS and coordinating structure

Ethiopia is one of the hardest hit countries by the HIV epidemic. In the response to the epidemic, the National AIDS Control Program (NACP) was established at a Department level at the MOH in 1987. They began surveillance activities, designed medium-term prevention and control plans and implemented them. The HIV/AIDS Policy was formulated by the ministry of health and approved by the Council of Ministers in 1998. This positive political commitment created an enabling environment for HIV/AIDS prevention and control programming. Two years later the national HIV/AIDS Prevention and Control Council and National HIV/AIDS Prevention and Control Secretariat (HAPCO) were established.

The council is chaired by the president of the country. The members of the council are government higher officials, multilateral and bilateral donors; national and international nongovernmental organizations, Religious bodies, PLHIV, and civil society. The response to HIV/AIDS has been guided by the

national HIV/AIDS policy and strategic frameworks developed for five year periods, (2000-2004), and for 2005-2008.

In this multi-sectoralism approach all members of the council are involved in activities. Some of those activities are focused on the provision of prevention, care, support and treatment. The efforts have resulted in an increase in number of VCT sites in the country, from 34 in year 2001 to 524 by 2005. From 2005 the number of health institutions which are providing VCT, PMTCT and ART dramatically increased, with VCT sites increasing from 524 to 1005, PMTCT sites from 72 to 408, ART sites from 32 to 271. During these years the VCT service uptake increased from 448,241 to 1,898,191, (MOH 2007).

The national HAPCO was mandated to provide the required leadership embracing “Three Ones” principles (NHAPCO, 2007) namely:

- One agreed national HIV/AIDS Action Framework that provides the basis for coordinating the work of all partners:
- One agreed National AIDS Coordinating Authority with a broad-based multi-sectoral mandate:
- One agreed country-level Monitoring and Evaluation System.

Addis Ababa regional HIV/AIDS Prevention and Control office (AAHAPCO) was established in 2001. The city HIV/AIDS prevention and control programs are lead by the Addis Ababa HIV/AIDS prevention and control council, which is chaired by the city Mayor. There is a management board which is selected by the city government for close follow-up and better facilitation of HIV/AIDS prevention and control activities.

The role of AAHAPCO is to coordinate all HIV/AIDS prevention and control programs, offer technical support for government, NGOs and FBOs who are engaged in HIV/AIDS activities, project appraisal, funding, monitoring and evaluation.

CHAPTER II STATEMENT OF THE PROBLEM AND METHODOLOGY

2.1 Statement of Problem

Children are mainly infected with HIV through of mother-to-child transmission (MTCT) at the time of pregnancy, labor and delivery or through breastfeeding.

MTCT of HIV has created enormous social and economic problems. Besides the dominant heterosexual transmission of HIV, vertical transmission from mother to child accounts for more than 90% of pediatric AIDS. Particularly in developing countries, MTCT has become a critical child health problem.

Globally about 370,000 children were newly infected with HIV in 2007. Mainly through mother-to-child transmission More than 90 per cent of children were infected through MTCT. Nearly 90% of this MTCT of HIV occurred in Sub-Saharan Africa. Without appropriate treatment, out of these infected children approximately half of them will die before their second birthday (WHO, 2007)a.

According to UNGASS (2001) on global guiding principle a comprehensive strategic approach to the prevention of HIV infection in infants and young children's which includes the following four components.

The first one is primary prevention of HIV infection which is to prevent HIV infection among women of reproductive age by creating awareness, HIV testing and counseling, safer sex practices and economic empowerment of women.

The second point, prevent HIV-infected women from getting pregnant through voluntary counseling and testing services. This allows women to know their HIV status before becoming pregnant and providing appropriate family planning services to women living with HIV to enable them make well-versed decisions concerning their reproductive health.

The third point is preventing HIV transmission from HIV-infected women to their children by providing quality antenatal and delivery care, HIV testing and counseling in ANC, antiretroviral therapy for pregnant women eligible for treatment, ARV prophylaxis to prevent infection being passed to their child and adequate infant feeding counseling.

The fourth one is providing care for HIV-infected mothers and their infants through nutritional counseling and support, sexual reproductive health

services including family planning, psychosocial support and access to antiretroviral therapy for the eligible infected mothers and children (WHO, 2007)a.

The service, prevention of mother to child transmission (PMTCT) plays a major role in limiting the number of children being infected by HIV. Without any interventions, in the range of 20-45% of infants would be infected; 5-10% during pregnancy, 10-20% during labor and delivery, and 5-20% through breastfeeding. By implementing PMTCT program, the overall risk can be reduced to less than 2% (WHO/ UNAIDS/ UNICEF, 2008).

While evidence and experience indicates that currently in Sub-Saharan Africa deaths of children due to AIDS show a declining trend mainly due to prevention of mother-to-child transmission (PMTCT) services. However, in most sub-Saharan African countries including Ethiopia the PMTCT services are not utilized as most needed, see annex 3 (WHO, 2007)a. In this countries women's are not willing to disclose their HIV status due to fear of stigma and discrimination, (CHAGA, 2004).

In Addis Ababa in 2006/7 the antenatal service coverage was 81%. Pregnant mothers tested for HIV are only 38.7 %. Of the total tested pregnant mothers 5.8% were HIV positive. From HIV positive pregnant mothers, 44% had received Nevirapine and babies born of HIV positive mothers 75% had received co-trimoxazole prophylaxis, (AAHB, 2006/7).

The main purpose of this study is to analyze three years' trend on utilization of PMTCT services among pregnant women attending ANC services and to identify factors influencing utilization of PMTCT services among pregnant women attending ANC services in Addis Ababa.

Study Questions

1. What is the trend in utilization of PMTCT service among pregnant women who attend ANC services in Addis Ababa?
2. How are health services and policy related factors influencing utilization of PMTCT services?
3. What are individual, socio-cultural and economical factors influencing PMTCT services utilization?
4. What are international experiences on factors influencing utilization of PMTCT services?
5. What can policy makers do to reduce barriers to PMTCT services utilization?

For whom is the thesis primarily intended?

This study intended primarily to benefit pregnant women and their newborn children. It also gives recommendations to Addis Ababa City Administration health workers, policy makers particularly for those who are working in PMTCT services and programs to develop strategy for interventions that will help to utilize PMTCT service at full scale in Addis Ababa.

2.2 General Objectives

To identify factors influencing utilization of PMTCT services in Addis Ababa. To suggest realistic recommendations for health care providers especially working in PMTCT programs and policy makers to improve access and utilization of PMTCT services in Addis Ababa.

Specific Objectives

1. To assess trends in PMTCT utilization among pregnant women who attend ANC services in Addis Ababa.
2. To explore health care delivery system and policy related factors influencing PMTCT services utilization in Addis Ababa.
3. To identify individual, socio-cultural and economical factors influencing PMTCT services utilization in Addis Ababa.
4. To gather international experiences regarding factors influencing utilization of PMTCT services.
5. Based on the study findings to provide practicable recommendations for policy makers and service providers.

2.3 Methodology

To answer my questions literature review will be carried out from Internet and KIT library, WHO, UNAIDS and USAID. To analyze factors which affect utilization of PMTCT services systematically, Anderson model of health service utilization adapted as conceptual framework. The conceptual framework used to describe the situation in Addis Ababa and internationally. National and regional data unpublished reports were also used. Available unpublished PMTCT services report of the last three years of Addis Ababa Health Bureau analyzed.

Literature Search Strategy

Electronic sources pub med through VU Library, Scopus, Google scholar, Google, KIT library.

The data bases were searched using the following key words: HIV/AIDS Policy, PMTCT and Guidelines, Culture, Gender, Human Right, Human Resource for Health, PMTCT Utilization in combination with Sub-Saharan Africa, East Africa, Ethiopia, Addis Ababa, Pregnant Woman, Barriers, Voluntary Counseling and Testing, Acceptability, Access, Breast Feeding, Stigma and discrimination, Anti retroviral Therapy and Public Health Facilities.

Study limitation

- Little information had been found on factors affecting PMTCT services utilization in Addis Ababa.
- The available data for PMTCT related services was incomplete and weak quality.

CHAPTER III TRENDS ON UTILIZATION OF PMTCT SERVICES IN ADDIS ABABA

3.1 Trend analysis among pregnant women on utilization of PMTCT services in Addis Ababa (2004/5, 2005/6 and 2006/7)

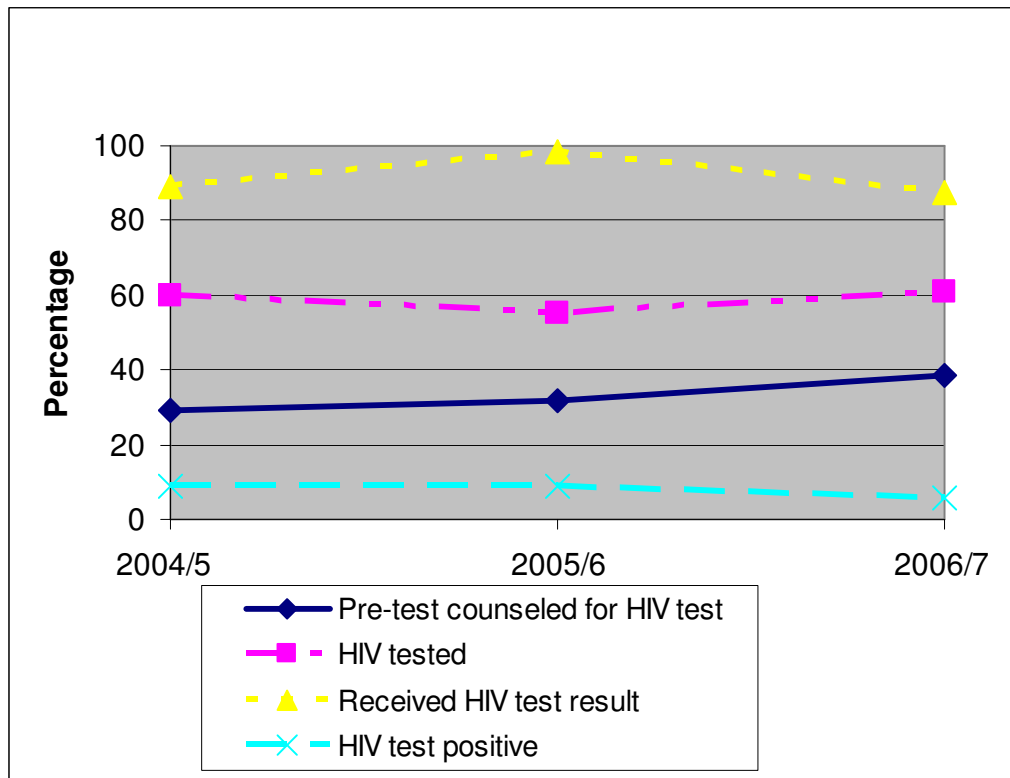
The source of the data is Addis Ababa Health Bureau unpublished routine reports see annex 2a, b and C.

Table 1: PMTCT related services and results for three consecutive years

Ser. No.	PMTCT related services	Years		
		2004/5 n (%)	2005/6 n (%)	2006/7 n (%)
1	ANC attendance	151,493	39,143	138,438
2	Pre-test counseled for HIV test	43,889(29)	12,448(31.8)	53,563(38.7)
3	HIV tested	26,250(60)	6,843(55)	32,753(61.1)
4	Received HIV test result	23,451(89.3)	6,737(98.5)	28,725(87.7)
5	HIV test positive	2,410(9.1)	567(8.9)	1,901(5.8)
6	Partners tested	585 (24.3)	314 (55.4)	1,366 (71.9)
7	Women received NVP	1,235 (51)	184 (32.5)	835 (44)
8	Infant born to women HIV+ received co-trimoxazole prophylaxis	265 (11)	505(89.1)	1,227 (64.5)
9	HIV+ women counseled on infant feeding	1,808 (75)	374 (66)	1,423 (75)

AAHB Routine PMTCT report (unpublished)

Fig: 1. Trend among ANC attendant women pre-test counseled for HIV test, HIV tested, received HIV test result and HIV test positive.



Results

1. ANC attendance

ANC attendance in 2004/5, 2005/6, 2006/7 was 151,493, 39,143 and 138,438 respectively. In 2005/6 the data are very low as compared to other years. It is considered as weak quality data. The weak quality data on reporting and registering supported by the end report of Intra health International (IHI) and Hareg project in Ethiopia, (2007)

2. ANC clients pre-test counseled

As shown in the table 1, from the total ANC attendance 29% were counseled in 2004/5, 31.8% in 2005/6, and 38.7% in 2006/7. However, the majority of pregnant women in the three consecutive years did not attend pre-test counseling. The possible explanation may be due to lack of adequate information about PMTCT benefits, fear of stigma and discrimination from

community after disclose test result, shortage of counselors to provide counseling services, or inconsistency of service availability and lack of necessary materials.

The possible explanation was supported by the end of project report of IHI and Hareg project in Ethiopia, (2007) that shortage of health care providers, socio-cultural and logistical barriers, are leading pregnant women to low utilization of PMTCT services.

The number of pregnant women accepted pre-tested counseling shows an increasing trend for a period of time. The possible explanation is the benefits of PMTCT services became widely known. A study which was conducted on determinants of acceptance of HIV testing among pregnant women attending ANC clinic in selected health centers in Addis Ababa shows that those with third, fourth pregnancies were found to accept HIV test than those with second pregnancy. Frequent ANC visits will expose pregnant women to more information on PMTCT benefits that lead them to use PMTCT services (Seid, 2007).

It was globally agreed that 80% of the pregnant women attending antenatal care should have access to routine HIV-testing and counseling by the year 2010 (UNGASS, 2001). According to this report Addis Ababa PMTCT services coverage is far away from the target.

3. HIV test uptake among counseled ANC attendants

Among the total pregnant women who were counseled about PMTCT, those who accepted HIV testing were 60%, 55% and 61.1% in 2004/5, 2005/6 and 2006/7 respectively. The acceptance rate is very low. The possible explanations are weakly understood the benefit of PMTCT services during counseling for HIV testing or fear of stigma in the community or both.

The same possible explanations was mentioned by PMTCT program supporting NGO (IHI and Hareg project in Ethiopia) on the end of the project report (2007) stated that, the differences between ANC attendants and uptake of HIV test in ANC client is may influenced by surrounding stigma on people living with HIV.

4. Pregnant women who received their test result

As depicted in the table pregnant women who received their test results are 89.3%, 98.5% and 87.7% in 2004/5, 2005/6 and 2006/7 respectively. The trend shows that in 2005/6 the percentage of pregnant women who received their test results is the highest. The possible explanation could be the population size (n) is smaller compared with other years. In addition to that

the trend shows that if women get adequate information on PMTCT benefits, before HIV-test, they are keen to know their sero-status. The study conducted by Seid, (2007) confirms the above possible explanation, that if pregnant women have adequate knowledge on the benefits of undergoing HIV test, this increases their interest to know their sero-status and to save the life of the unborn child.

5. Pregnant women who tested HIV positive

According to this report, there is a decreasing trend on the number of pregnant women who tested positive. In 2004/5, 9.1% tested positive, 8.9% in 2005/6 and 5.8% in 2006/7. In 2006/7 the prevalence showed a remarkable decline compared to other years. The possible explanation can be that actual HIV prevalence among pregnant women is declining. This finding supported by the end project report of IHI/Hareg project on 2007 in Ethiopia, that shows HIV prevalence among pregnant women declining trend from 2004/5 to 2006/7(IHI/Hareg project, 2007). Another supporting document is the national ANC-based HIV sentinel surveillance survey results show that the national urban HIV prevalence among pregnant women reveals slow and gradual declining (MOH/NHAPCO, 2006).

Another possible explanation is that this can also happen by chance or/and it is also possible that in later years more lower-risk women were willing to be tested as testing gained wider acceptability.

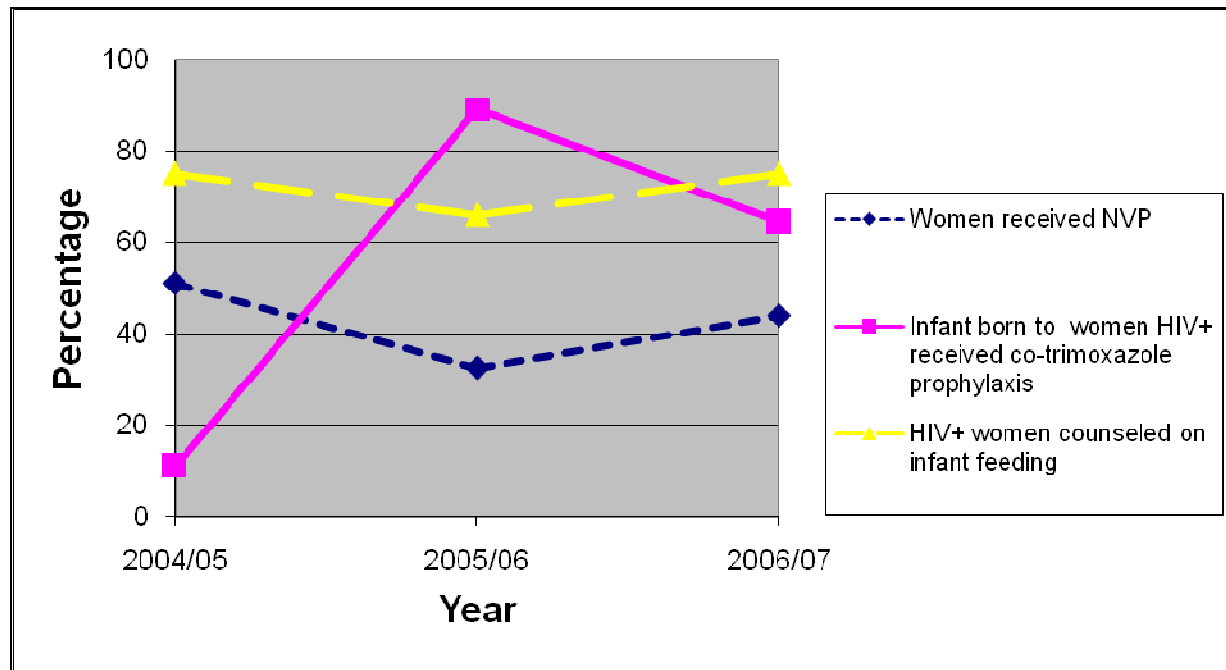
6. Partners tested for HIV

Mothers who had HIV positive test results and got their partners tested for HIV were as follows: 585, (24.3%), in 2004/5, 314 (55.4%) in 2005/6 and 1366 (71.9%), in 2006/7. As indicated in the figure 1 there is an increasing trend of male involvement. The possible explanation may be increased awareness of PMTCT services in the community. But compared to the women pre-tested counseled and general population it is low.

The cultural barriers that, ANC is considered as a women's responsibility, are reflected on PMTCT utilization. However, males should be considered as major players and contributors to the community to the acceptance of PMTCT services (Theuring et al., 2009).

According to WHO, (2007) a guiding principles of PMTCT scale-up male involvement has been recognized as a priority focus area to strengthen PMTCT services.

Fig: 2. Trend among HIV positive women received NVP, infant born to HIV positive woman received co-trimoxazole prophylaxis and HIV positive women counseled on infant feeding.



7. Pregnant Women received NVP

According to the report, among pregnant women with HIV positive result in 2004/05 51%, 2005/06 32.5% and 2006/07 44% have received NVP. The trend shows that swinging trend, declined in 2005/06 and increased in 2006/07. The possible explanation may be pregnant women discontinued ANC follow-up, home delivery or/and shortage of NVP or/and due to inadequate knowledge women refused to take NVP. It may be weak quality of data.

Global agreed commitment to reach 80% of pregnant women living with HIV should be received antiretroviral prophylaxis or antiretroviral therapy to reduce the risk of mother-to-child transmission for the year 2010 (WHO, 2007)a. In Addis Ababa to meet this target needs special attention on improvement the PMTCT services.

8. Infant born to women HIV positive received co-trimaxazole prophylaxis

Infant born to HIV positive women received co-trimaxazole prophylaxis 11%, 89.1% and 64.5% in 2004/05, 2005/06 and 2006/07 respectively. The percentage in 2004/05 is very low compared to other years. This low uptake

may be, since it was the first year of the PMTCT program to be implemented, knowledge of women was still inadequate, no trust on the drug effectiveness and may be drug shortage and loss to follow-up. It may be also a weak quality of data.

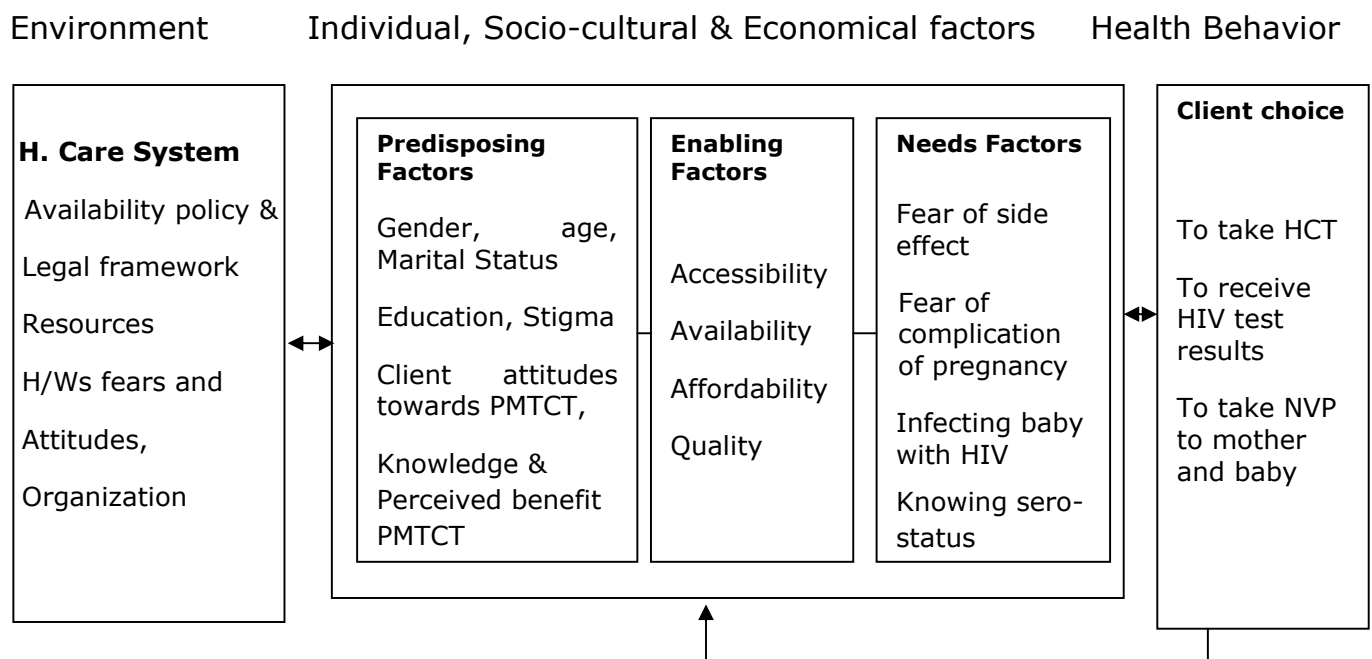
9. HIV positive women counseled on infant feeding

From the total HIV positive women in 2004/05 75%, 2005/06 66% and 2006/07 75% was counseled about infant feeding. For this low result the possible explanation may be the issue not well addressed by health care providers or women lost to follow-up or weak data quality. A study done in Addis Ababa, on assessment of quality of ANC linked HIV counseling and testing for intervention of PMTCT services shows that half of the counselors had not taken the basic VCT training (Ismail, 2008). Untrained counselor, due to lack of adequate knowledge on PMTCT services they may pass inadequate information to clients during infant feeding counseling.

CHAPTER IV INTERNATIONAL EXPERIENCE ON FACTORS INFLUENCING UTILIZATION OF PMTCT SERVICES: A REVIEW OF LITERATURE

In this section, factors which are influencing on utilization of PMTCT services were reviewed. To describe the factors systematically, Andersen model of health service utilization has been adapted as a conceptual framework. The environmental variable; health care delivery system factors and individual, socio-cultural and economical factors influencing PMTCT services utilization analyzed by using literature review and the country situation. The conceptual framework served as a supportive tool in better describing of factors affecting utilization of PMTCT services.

Figure 3: Conceptual framework for factors influencing utilization of PMTCT services

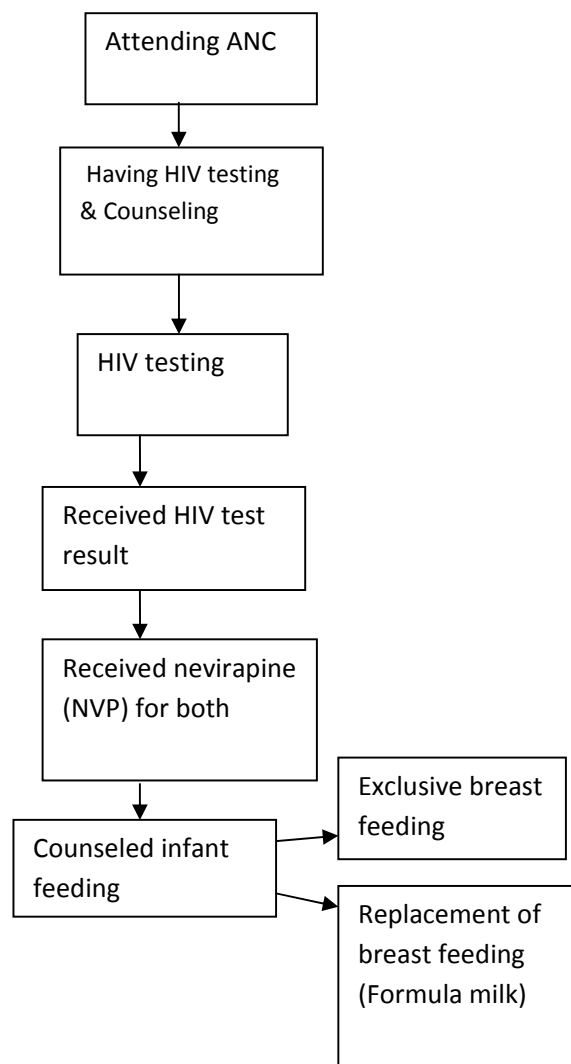


Adapted from: Andersen R, M., 1995

4.1 Behavior for PMTCT related services

The pregnant women decision-making for HIV testing and counseling depends on many factors. One of the factors is the client perception regarding ANC and PMTCT services and the benefits such as getting care and support, knowing free ART drugs for herself and the baby and having future follow-up. If the clients have negative attitude about ANC, PMTCT and inadequate knowledge about the service benefits they prefer traditional healers instead of health facilities. Therefore, the existence of integrated, adequate, quality and reliable ANC and PMTCT services make mothers to seek the services more. Utilization of PMTCT services interventions are began with different behaviors (WHO, 2007)a.

Figure 4: PMTCT services related Behaviors



Adequate maternal and child health (MCH) services are the cornerstone of any intervention to prevent mother to child transmission. Upgrading and expanding MCH services has a great impact in increasing the uptake of PMTCT services (CHAGA, 2004). Having numerous antenatal care attendants is an important opportunity for health care providers to provide information routinely on the benefits of HIV testing and counseling to pregnant women.

Even though, most of sub-Saharan African countries have adopted WHO guidelines and on the process of scaling-up PMTCT services. These countries utilization of ANC services is high, PMTCT service utilization is low. Joint Progress Report of WHO/ UNAIDS/ UNICEF, (2008) shows that antenatal care coverage rate in South Africa and Zambia were 92% and 93% respectively but a low proportion of 64% and 65% pregnant women respectively tested for HIV. This low utilization of PMTCT may be a result of mothers having inadequate knowledge regarding the benefits of PMTCT affecting their service seeking behavior.

The experience of health workers on PMTCT service scale-up in Uganda showed that involving and increasing awareness of community leaders on the benefit of PMTCT services, improved service seeking behavior in the community and especially among women (Biribonwoha et al., 2007).

Pregnant women readiness to utilize PMTCT services is determined by knowledge of the future, whether they will have a baby who is HIV positive or negative. If they have adequate information on the consequences of utilizing PMTCT services (knowing having HIV negative baby in the future), increase their interest in utilization of PMTCT services. Pregnant women, who have adequate information on PMTCT services, assume the responsibility to use the services so that they can have the benefit of having HIV negative babies.

Knowledge, attitudes and practices survey which was conducted in Zimbabwe to see the change in pregnant women utilization of PMTCT services before and after extensive community awareness mobilization for two years on PMTCT benefits indicates that the awareness of PMTCT among women increased. This changed PMTCT services utilization practice and behavior for pregnant women significantly (Gliemann et al., 2006).

There are factors which influence low utilization of PMTCT services at the various levels of behaviors in Fig 4.

4.2 Health care delivery system and policy related factors

4.2.1 Legal, Human rights and Policy issues

Health is one of the fundamental human rights and national governments have responsibility for the health of their people and to ensure adequate and standard health services. Basic human rights principles hold that health care must be accessible and affordable to all, irrespective of race, gender, religion, geography, and income.

Access to HIV prevention, care and support are health rights to those in need. All pregnant women have a right to these services and voluntarily. Institutions offering VCT/ PMTCT services should consult the WHO/UNAIDS guiding principles to keep the rights of clients, which all members of African states have agreed and signed (CHAG, 2004)

VCT/PMTCT guiding principles

"Mandatory HIV testing is not ethical & not effective for public health. HIV testing should be voluntary

1. Pre test information for pregnant women should include

- The risks of transmitting HIV to the infant
- Measures that can be taken to reduce mother-to-child transmission, including antiretroviral prophylaxis and infant feeding counseling
- The benefits to infants of early diagnosis of HIV

2. Confidentiality should be protected

- only the health care provider should have access to medical information of the client " on a need to know basis"

3. Post test support services should be addressed

- Pregnant women who received positive test results should be communicated with and an explanation of the childbirth preparedness plan, use of ARV drugs for own health and to prevent MTCT, about nutrition ,infant feeding options, partner & infant HIV testing ,follow-up and referral to appropriate health services, care and support."

(WHO/UNAIDS, 2007)

Due to stigma and lack of confidentiality, pregnant women will not seek HIV-related counseling, testing, treatment, and support services. In resource limited countries implementing successful interventions into public health policy has been slow because of variety of factors such as inadequate funding, cultural, social and institutional barriers (Fowler et al., 2007).

Attitudes of discrimination and stigmatization associated with HIV in the community have a negative influence to uptake of PMTCT services. A study which was conducted on pregnant Nigerian women's willingness to accept or reject VCT shows that 69% of the women refused VCT. The reason for their refusal is social and cultural stigmatization associated with HIV, (Okonkwo et al., 2007)

Another study in Nigeria on health care providers' attitude toward pre-test information and informed consent before HIV testing shows that 78% of respondents agreed there are circumstances when it is appropriate to test a patient without his or her knowledge or permission. This attitude shows neglect of the VCT guidelines and a violation of the rights of clients, which has adversely affected service utilization, (Reis et al., 2005)

4.2.2 Resources

Financial Resources

Allocation of financial resources to the general health services in Sub-Saharan African countries is low and varying from country to country. Data indicates that total expenditure on health as percentage of GDP in 2007 was Kenya 4.7, South Africa 8.0, Tanzania 4.4, and Uganda 6.9 (WHO, 2007)b. For effective response to HIV/AIDS epidemic, the budget to be allocated for health system should be increased.

In most Sub-Saharan African countries HIV/AIDS programs are funded by donor organization but lack of capacity to absorb additional financial resources into public budgets and delays in fulfilling donor conditions makes these countries unable to spend the available funds appropriately (Poku et al., 2007).

Human Resources

To provide standard health care services and implementing health programs effectively, health workforce is one of the key resources. Moreover, in order for the health system to function well, health workers should be adequate in number as well as skills-mix. However, according to WHO, (2006) estimations, Africa with 24% of the global disease burden has only 3% percent of the world's health workforce.

Data indicates that physicians and nurses ratio to 100,000 populations in Kenya was 13 & 19, in Zambia 7 & 113, in Uganda 5 & 5, in Ethiopia 3 & 19, in Tanzania 2 & 37, and in Malawi 1 & 26 respectively. According to WHO, (2006) recommendations, to provide basic health services, the minimum workforce needed is 2.28 trained health workers per 1,000 people or 143 nurses and 20 doctors per 100,000 people (WHO, 2009).

This indicates that in Africa there is extreme shortage of health workforce, which makes it difficult for African countries to respond to HIV/AIDS epidemic and the possibility of attaining millennium development goals (WHO, 2006). Due to this shortage of health workers, African countries are unable to implement curative and preventive health services as desired.

For scaling-up PMTCT services, these countries will require more health workforce, which is a greater bottleneck than funding (Olive and Lilani., 2009). Most sub-Saharan African countries fall short of WHO health workforce recommendations.

The main reason for these chronic health workforce shortages is lack of retention as result of 'brain drain' to western countries. Some of the factors responsible for this 'brain drain' are poor remunerations, poor working and living conditions, high workload, health risks, outmoded work rules, inadequate development of new health workers and giving low priority to public health by the governments (WHO, 2009).

A study done in Zambia indicates that due to a shortage of health workforce in public health sector, the country is facing challenges to provide comprehensive HIV/AIDS services (Slavea and Sulzbach, 2006). Another study done in Uganda reveals that one of the factors, which affects the PMTCT program implementation, is shortage of human resource. In the same study in Uganda, interviewed health workers indicated that, high turnover of staff seriously affected delivery of services because there are always new staffs in the clinic who have no experience and need training (Biribonwoha et al., 2007). This de-motivates clients to utilize PMTCT services.

Availability of sufficient number of health care provider's is most important issue in health service performance. As seen earlier, crisis of health human resource in Sub-Saharan African countries is increasing. This health staff shortage often leads to inappropriate use of trained staff, poor deployment practice and delays in clients receiving services.

A study which was conducted in South Africa on utilization of PMTCT services by pregnant women shows that for adequate service, having a doctor at the

clinic at least twice a week in addition to a nurse, more nurses to reduce extended waiting time and the service will be available, (Peltzer et al., 2005).

Supplies

Lack of equipment and supplies affects health facilities in most sub-Saharan African countries. This can happen not only because of limited financial resources, it is often a result of poor management and organization of available resources. "In Africa limited human as well as financial resources represent major barrier to up scaling PMTCT but financial resources for up scaling HIV- related programs are increasing and becoming available, a big and immediate challenge is human resources capacity, to deliver service and the capacity to absorb additional financial resources" (CHAGA, 2004). This makes difficult to fulfill necessary supplies as needed.

In order to implement PMTCT and other HIV/AIDS programs effectively, adequate and reliable supply management systems is necessary. Better availability of medicines and related supplies plays a great role in increasing PMTCT service utilization.

Most African countries have poor supply management systems due to inadequate storage and equipment, weak inventory control and poor procurement and short shelf life of PMTCT products, which has negative effects in providing efficient services (WHO/UNICEF, 2008).

A study carried out in South Africa shows that in almost all PMTCT study sites there have been problems of procurement and supply of test kits, which resulted in missed opportunities for HIV testing. There have been several operational problems with the distribution of free formula milk (Doherty et al., 2005).

Inconsistent supply of logistics, even skilled staffs (counselor and laboratory technician) and centers where established makes the availability of services sub optimal.

Infrastructure

One of the factors which affect the provision of effective health services is inadequate infrastructure in health facilities such as uncomfortable waiting areas, counseling room which compromise privacy, laboratory rooms which are far from ANC rooms and having unsuitable physical facilities. These uncomfortable infrastructures de-motivate and create inconvenience to clients. A review done on barriers impeding people living with HIV/AIDS in developing countries from accessing antiretroviral treatment indicates that

poor infrastructure of health systems affects the utilization of services (Posse et al., 2008).

A study conducted in South Africa on factors influencing the utilization of PMTCT services shows that poor infrastructure of health facilities like cold waiting rooms and lack of waiting space have contributed to low utilization of PMTCT services (Peltzer et al., 2005).

4.2.3 Fears and Attitudes amongst Health Care workers

Health care providers have fears and concerns when they are working with HIV positive clients due to the possibility of getting infected in their work place. This can lead health workers to have discriminatory behavior and can change their attitudes toward HIV positive clients.

A study carried out in Nigeria on causes of discriminatory attitudes and practices against HIV positive people indicates that, out of 1021 professionals who participated in the study, 81% have fear of HIV contamination, 17% have fear of contamination from materials or instruments and 10% not having materials needed to treat them (Reis et al., 2005).

In South Africa on how nurses in Cape Town clinics experience the HIV epidemic found that nurses were frustrated by the increasing number of terminally ill patients as a result of AIDS, as well as their own lack of access to treatment if they get HIV positive (Lehmann and Zulu., 2005). They also felt de-motivated due to an increase in mortality and inability to provide appropriate care to HIV positive patients.

Another study conducted in Namibia, on perceptions of health care providers who work in HIV/AIDS counseling and related services showed that conceptualized occupational burn-out was a particular type of stress occurring principally in professional contexts. This was true with health workers, especially where work demands lead to chronic emotional exhaustion and reduced sense of personal accomplishment. Burnout results in high staff turnover, absenteeism and reduced productivity, all of which have serious effects on utilization of services, (Pendukeni, 2004).

Health-care professionals, despite their ethical obligations, can have discriminatory behavior and negative attitudes toward patients with HIV/AIDS, because of lack of resources in health facilities, inadequate knowledge about HIV/AIDS and fear of becoming contaminated.

Due to the negative attitudes coming from fear of health care providers clients are discouraged from using PMTCT services.

4.2.4 Organization

To scale-up PMTCT programs, WHO in collaboration with global partners have developed guidelines, which have the following organizational principles: adopting a public health approach for increasing access to PMTCT services, having a comprehensive strategic approach to the prevention of HIV infection in infants and young children, integrating delivery of PMTCT interventions within maternal and child health services, during pregnancy a woman's health as the overarching priority in ARV treatment decision and having highly effective ARV treatment for MTCT prevention (WHO, 2007)a.

In order to implement these guidelines effectively and to get better benefits from PMTCT services, having adequate and quality health services is crucial.

Strengthened health care delivery systems play a great role to improve the quality of PMTCT services, to have sustainable PMTCT services and to ensure a smooth and effective expansion of the program (CHAG, 2004). However, for sub Sahara African countries inadequate and uneven distributions of health resources are the major problems. Most of these countries depend on government-run public health systems and hospitals & clinics. In most of these countries, HIV/AIDS prevention and control programs are financed by international donors.

Adequate maternal and child health services (MCH), sexual and reproductive health services, antenatal care and skilled delivery attendance is the basis to prevent MTCT of HIV. However, due to financial, managerial and human resources constraints most African countries provide limited PMTCT services (CHAG, 2004).

4.3 Individual, Socio-cultural and Economical Factors

4.3.1 Predisposing Factors

Age and Marital status

Age is a cause to develop a certain quality of maturity (encyclopedia). It is related to socio-emotional development as a human being is approaching to middle age, they have more social relationships, self reliance, settle economically and less likely to be influenced by traditional and cultural beliefs than at young ages.

The utilization of PMTCT services differs among ages. As women age, they are more likely to accept HIV testing. A study which was carried out in Rwanda shows that acceptance of HIV testing was about three times higher among women 35 years or older than among younger mothers, (Jamease et al., 2002). In this study the age association with PMTCT services was significantly high.

Another study which was conducted in Nigeria shows that pregnant women aged between 25 and 35 years were 1.9 times more likely to accept VCT than women under the age of 25. Women ages 35 years and older were 2.4 times more likely than woman less than 25 years of age to agree to VCT (Okonkwo, et al., 2007).

Many women in low-income countries are socio-economically dependent on men or family. Without a husband known by family or community, it is culturally unacceptable for a woman to be pregnant. Unmarried pregnant women are less willing to use HIV counseling and testing and PMTCT services due to fear of the reactions from their families and communities if they test HIV positive. Another reason is fear of judgmental view of health care provider toward pregnancy without a husband and positive HIV result.

A study which was conducted on pregnant woman in Nigeria shows that married women were more likely to accept HIV counseling and testing when compared to women who were single or living with their partner and not formally married (Okonkwo et al., 2007).

Gender Issues

Gender inequalities are one of the key factors accelerating the spread of HIV/AIDS and for low utilization of PMTCT services. Most women living in Sub-Saharan African countries have no power over their bodies and decision making powers. In addition, norms such as encouraging men to have more sexual partners and older men to have sexual relations with younger women

and inadequate knowledge about HIV/AIDS makes women more vulnerable to HIV/AIDS than men. Based on WHO and UNAIDS, (2008) estimates, from the global total of people living with HIV, women constitute 50% and in sub-Saharan Africa comprise 60% (WHO/ UNAIDS, 2008).

Gender power imbalances put many women in economically dependent, passive positions in the community and are unable to make independent decision without partner consent which in turn affects their PMTCT service utilization (Perez et al 2004). Men are dominant in different African countries. Study conducted in Uganda among women who have access to PMTCT services indicates that 40% of them are not willing to accept HIV testing without their husbands' consent (Bajunirwe and Muzoora., 2005).

Even if women know about their husbands having sex with other women, with unknown HIV status they cannot refuse to have sex because of economic dependency and fear of physical violence. The rights of women remain under the control of men in Africa (de Poli, et al., 2004)

Another study done in Kenya, women are expected to be dependent on men and in this society it is the responsibility of men to decide every aspect of the family matters (Wodi, 2005).

Lack of male involvement in HIV testing and women inability to disclose their HIV status may prevent HIV infected women from receiving appropriate antiretroviral interventions for both PMTCT and their own treatment (Fowler et al., 2007).

Level of Education

Social and cultural factors such as poverty, stigmatization, and low educational level affect the take-up of PMTCT services. Low level of education and lack of adequate information about PMTCT for woman of reproductive age contributes to low utilization of PMTCT services and non adherence to treatment instructions. In sub Saharan African countries, women are less likely to seek health care or be cared in health care setting compared to men. Socioeconomic status and low literacy are major factors influencing this outcome (Wodi, 2005)

The population based survey which was conducted in Zambia shows that among the higher educated people in age group 15-29, the prevalence of HIV decreased significantly while on the other hand HIV prevalence rose or remained stable among lower educated people. In the same study, mothers who had education beyond primary school were almost three times more likely to report willingness to be tested for HIV compared to those who had

not finished primary school education or had not been educated at all (Knut, et al. 2001).

Stigma and discrimination

United Nation General Assembly special session political declaration, addressing that Stigma and discrimination is "a critical element in combating the global HIV/AIDS pandemic" (UNGASS, 2006). Different studies identified stigma as a central contributor to the HIV/AIDS pandemic, and increase in resource limited countries.

HIV/AIDS related stigma is common in Sub-Saharan African countries. In these countries people living with HIV/AIDS are unfairly treated in the community, by family members and others because community believe that HIV/AIDS is an infection mostly associated with behaviors such as extra marital relations, prostitution, drug addiction and others. In most African countries, awareness about HIV/AIDS is high but knowledge of HIV pathology, symptoms, care and support is very low which may lead to stigmatizing and discriminating against people living with HIV/AIDS.

In most of Sub Saharan African countries, people who are living with HIV/AIDS are discriminated by community members, caregivers, family members and in workplaces. A study conducted in ANC clinics in Ghana shows that 29% of respondents agreed that people with HIV should be isolated in certain villages or towns (Ulasi et al., 2008).

ANC clinic attendance in South Africa shows that majority of the pregnant women agree that peoples living with HIV/AIDS are not accepted by the community, people avoid being associated with them, are not allowed to share household utilities and attending the some social gatherings (Peltzer et al. 2005). While another study carried by Bolu et al. (2007) in resource limited countries and Okonkwo et al., (2007) in Nigeria, supported that social stigma in the community correlated with acceptance of VCT in pregnant woman.

As a result of HIV/AIDS related stigma and discrimination in the community many people do not want to know their sero-status and to use PMTCT services.

Client Knowledge and attitudes towards PMTCT services

Knowledge is the psychological result of perception and learning and reasoning. One of the major factors for high transmission of HIV and low utilization of preventive strategies and methods is inadequate knowledge of HIV/AIDS and wrong perception.

The client attitude toward PMTCT services depend on the information gathered from health workers at ANC clinic or from friends or anyone who gives first hand information. On first hand information if pregnant women get proper and adequate information, they will utilize PMTCT services willingly.

A study carried out in Uganda on 404 pregnant women who were attending ANC clinic, interviewed about rapid HIV test and the willingness to take an HIV test, 87% responded that they would accept an HIV test if it is offered to them. This indicates that if women have adequate information they have positive attitude toward PMTCT (Bajunirwe and Muzoora., 2005)

A community- based study which was conducted in South Africa shows that friendly staff and good ANC service quality serve as promoters of antenatal clinic attendance and PMTCT utilization (Tlebere et al., 2007). Positive attitudes of health care providers to their clients in working places encourage their decision to test.

If mothers who came for antenatal care services receive adequate information on most of the PMTCT components such as HIV testing, counseling, confidentiality, Nevirapine dosage, infant feeding options, care and support, they are willing to use PMTCT services. One possible reason for under use of PMTCT service is that women do not receive adequate counseling and information about the benefits of PMTCT.

Assessment of knowledge regarding MTCT and prevention conducted among pregnant women who were attending antenatal clinics in rural and urban Uganda shows that, 80% of respondents knew that a mother with HIV could pass the virus to her child, 12% answered that she cannot pass and 8% answered that they did not know (Bajunirwe et al., 2005).

Having adequate knowledge about HIV/AIDS increases willingness and ability to utilize PMTCT services.

"There is nothing that will prevent me from accepting VCT if I know that I will be given drugs that will reduce the chance of infecting my child"
Woman in Tanzania about PMTCT

(Quoted in de paoli et al., 2004)

A study done on factors influencing the utilization of preventing mother-to-child HIV/AIDS transmission (PMTCT) services among pregnant women in South Africa reveals that from women who accepted an HIV test after

counseling 96% received their HIV test results and participate in necessary follow-up visits (Peltzer et al., 2005).

Another study conducted on mothers attitudes towards using services preventing mother-to-child HIV/AIDS transmission in Zimbabwe show that, 54% among pregnant women would prefer caesarian sections if they were HIV positive, to reduce the possibility of vertical transmission of HIV/AIDS (Chivonivoni et al., 2008). If women have adequate knowledge on the benefits of the PMTCT services they will develop positive attitude on utilization of PMTCT services.

4.3.2 Enabling factors

Accessibility and Affordability of PMTCT services

Sub-Saharan African countries known as resource limited region, health service coverage to population is very low. The long distance to access the health facilities that provide VCT, ART, PMTCT services limits the user from utilizing the service as required.

A study, which was conducted in South Africa among ANC attendants, indicates that most of them used public transport (bus or taxi) and spent long hours to reach health facilities. Thirty-nine percent of respondents spend up to 30 minutes, 26% up to one hour, and 36% more than one hour to get to the clinic (Peltzer et al., 2005). Because of distance of health facility from residential area, some mothers deliver outside the health facility and as a result they cannot get PMTCT services.

Affordability is not only associated with direct payment for health services, it includes cost of productive labor time; transportation cost, food, and times spend attending PMTCT services.

In sub-Saharan African countries most people are living under the poverty line and with low financial accessibility. A study which was conducted in South Africa on utilization of maternal health services shows that lack of financial resources for transport and distance to health facilities were the greatest barrier, (Tlebere et al., 2007). Inability to pay long distances from health facility to residential area, combined with high transport costs contribute to low utilization of PMTCT services.

Quality

There is no single definition of health service quality. It varies according to the situations. Quality of care is defined differently between observed and perceived; it is an interaction between service provider and consumer. The consumer views of quality care are important for health care services (Donabedian, 1979).

Quality in the context of PMTCT service include different dimensions such as, confidentiality, privacy, accessibility and convenient opening hours, affordability, skills of counselor and health workers, equipped delivery rooms, adequate supplies, and referral linkages. In this context it is fulfilling the interests of clients and professionally defined standards of care for PMTCT.

A survey which was carried out among pregnant women in ANC clinic in South Africa shows that they perceived quality of care as privacy at the time of counseling, to have ambulances to take them to hospital, to reduce long waiting time, more health worker, while waiting for service having TV to watch and having gowns to cover themselves during examination (Peltzer et al., 2005).

CHAPTER V FACTORS INFLUENCING UTILIZATION OF PMTCT SERVICES IN ADDIS ABABA: A REVIEW OF LITERATURE

In this chapter factors, influencing utilization of PMTCT services in Addis Ababa will be discussed based on the literature review and available data from the Ministry of Health, Addis Ababa Health Bureau, Electronic data and other sources.

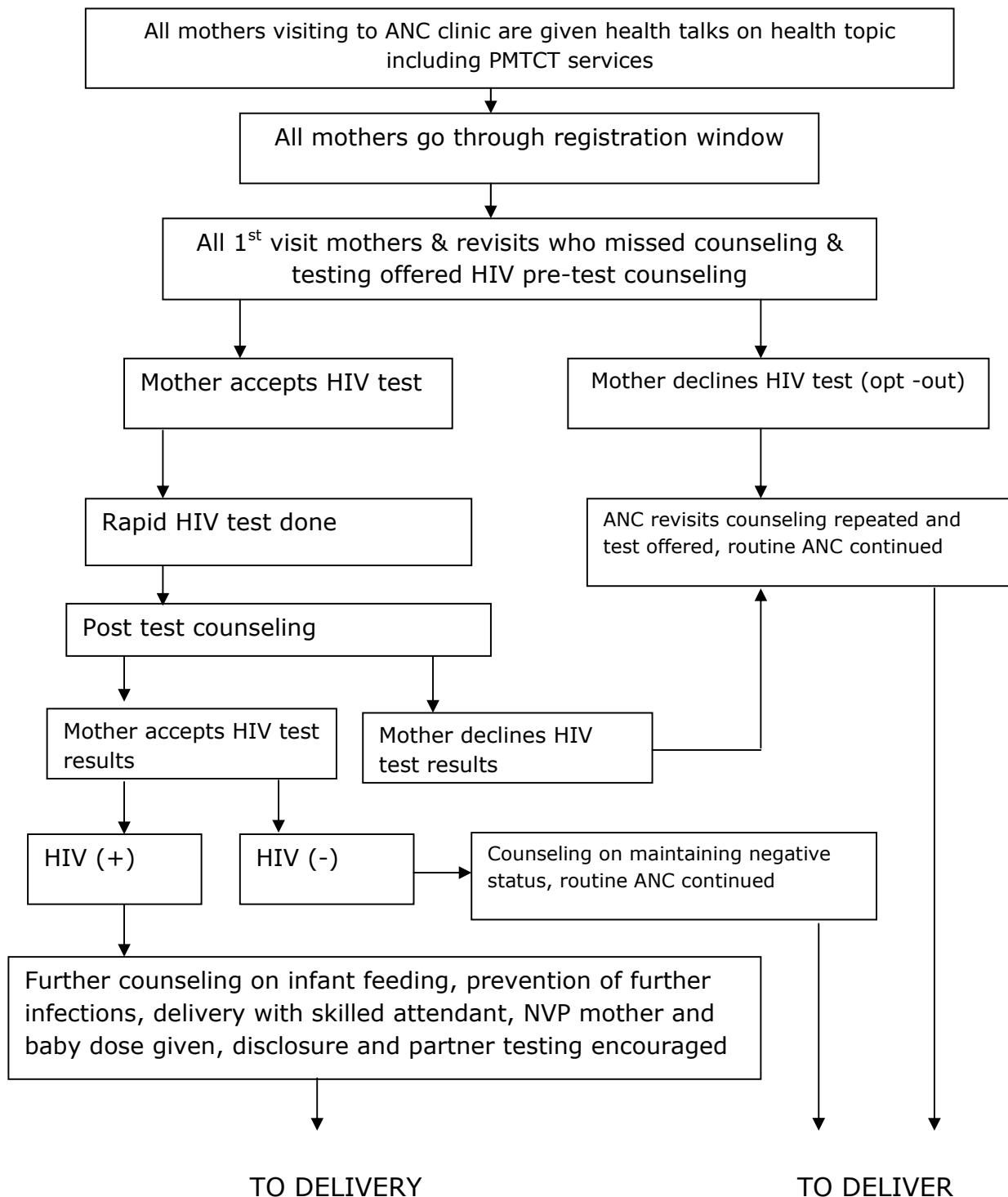
5.1 Behaviors for PMTCT related services

In Ethiopia utilization of PMTCT service interventions begins with ANC services utilization. ANC services are focused on 4 visits, 1st as early in pregnancy as possible, 2nd at 28-32 weeks, 3rd after 36 weeks and 4th before expected date of delivery, (MOH/NHAPO, 2007).

Personal health practices like frequency of two or more antenatal care visits will expose the women to more information regarding HIV, MTCT and PMTCT which will increase PMTCT services seeking behaviors. This is supported by a study on pregnant woman in Addis Ababa by Worku, G. (2005) which showed significant improvement on utilization of PMTCT services among women who had visited antenatal care services more than twice.

In the country PMTCT services are integrated to existing ANC services. All women coming for ANC, labour and delivery and post partum follow-up, are supposed to be tested if they are not tested during current pregnancy and routinely informed about the benefits of HIV testing on the right to say "no" bases. This enhances their behaviors to seek PMTCT service interventions, (MOH/NHAPCO, 2007).

Fig 5: PMTCT related services flow chart in Ethiopia



Sources: PMTCT Guidelines MOH/NHAPCO, 2007

5.2 Health care delivery system and policy related factors

5.2.1 Legal and Policy issues

Since the Ethiopian government declared AIDS a national disaster, the country adopted the first HIV/AIDS policy in 1998. The policy gives priority to establishment of the national HIV/AIDS council, national and regional HIV/AIDS secretariats and advisory board. In 2001, the national strategic framework was approved which included the interventions against HIV/AIDS such as providing voluntary counseling and testing, preventing mother-to-child transmission, promoting and distributing condoms and also managing sexually transmitted infections, ensuring blood safety, education, communication, protecting human right, conducting research and surveillance, providing care and support for people living with HIV (MOH, 2005).

In 2007, the country approved the latest updated guideline for prevention of mother-to-child transmission. The national PMTCT strategies are based on four comprehensive approaches which are adopted from UN strategic approach to PMTCT i.e. primary prevention, prevention of unintended pregnancy among HIV-infected women, prevention of HIV transmission from HIV-infected women to their infants and the provision of care and support for families (MOH/NHAPCO, 2007).

In Both HIV/AIDS policy and PMTCT guidelines HIV testing conditions are well addressed, "All testing whether client or provider-initiated should be conducted under the conditions of the Three Cs: involve informed consent, be confidential, and include counseling" (MOH/NHAPCO, 2007).

Ethiopian human rights laws and policies prohibit discrimination on the basis of HIV status. In Ethiopia there is no legal discrimination among people living with HIV/AIDS in terms of access to education, utilization of public and social services, employment except for pilots in civil aviation and air force (FDRE, 1998). But in practice there is evidence of discrimination in some schools, workplaces, homes and health care services (Garbus, 2003).

5.2.2 Resources

Financial Resources

Financial resources are crucial inputs for provision of adequate and optimum quality health services. Sources of health financing in Ethiopia are domestic revenue, taxes, private out of pocket, donors, NGOs etc.

Financial resources allocation to the general health service in the country is low compared to other sub-Saharan African countries discussed earlier. Total expenditure on health as percentage of GDP in 2007 was 3.8% (WHO, 2007)^b. In the country for the year of 2006/7 share of health as proportion of total budget was 11.56% (MOH, 2006/7) which was increased from 5.1% in 2004/5 but failed to meet 15% according to Abuja declaration of 2001. (From the total budget allotted to health services in the country, the share of Addis Ababa was 0.3% in (2004/2005) and 17% in 2006/07 (MOH, 2006/7). For the implementation of health programs at various levels, the available financial resources are insufficient.

Assessment which was conducted in Addis Ababa on HIV care and support services shows that inadequate budget is allocated for HIV/AIDS intervention activities (FHI and AAHB, 2002). In Addis Ababa, HIV/AIDS intervention activities largely depend on international donor funding. But donor funds are mainly not managed at health facility level, even if allocated for same activates not flexible.

Human Resources

In order to provide PMTCT services as required, human resources i.e. trained PMTCT counselor, lab technicians and supportive staffs should be available adequately.

Ethiopia like other Sub-Saharan African countries suffers from an acute shortage of health workforce at all level. In the country according to health and health related indicators 2006/7, from 2002-2005, the physician to population ratio was 1: 29,777, midwives (seniors) to population ratio was 1:48,405, pharmacists to population ratio was 1:382427 and laboratory technician to population ratio 1:25,747. The data in 2006/7 shows a declining trend i.e. the ratio of physician to population was 1:42,706, midwives (seniors) to population ratio 1:76,086 pharmacists to population ratio 1:432,584, laboratory technician to population ratio 1:42,400 (MOH, 2006/7). These figures show the health workers to population ratio declining every year, which affects the performance of health care service including PMTCT programs. In Addis Ababa the physicians to population ratios were

1:25,923, midwives (seniors) to population ratio were 1:7,725(MOH, 2006/7). Shortage of health work force affects the quality and quantity of health services.

The factors contribute to human resources shortages in public health facilities with limited government budgets to keep civil service salaries in line with inflation, poor working environment and some health workers themselves affected by HIV/AIDS (USAID, 2005).

To retain health workers in public health facilities, health work force should be motivated to work fulfilling necessary tools like reasonable salary, infrastructure like counseling rooms, adequate training, less workload, recognition of their work, availability of essential equipment and material (Lindelw and Serneels.,2005)

“No physician would leave the public sector if he or she was paid well. The reason for the attrition is purely financial—the salary in the public sector is like a tip. The average salary for a physician in the government is 980 Birr [118 USD] of which 300 Birr [36 USD] is for tax. By moving to the private sector we can earn three or four times as much”.

Physician/health officer in Addis Ababa

(Quoted by Lindelow, and Serneels., 2005)

Ministry of health set standard human resource requirement for health facilities but Addis Ababa health bureau is unable to fulfill these standards. HIV counseling and testing is a sensitive health service which requires a great effort, efficiency and time to provide minimum information for informed consent when recommending HIV testing and counseling to a pregnant woman. In addition, the number of trained health care providers has been inadequate and this leads to low utilization of PMTCT (AAHB, 2005).

Even if all the necessary resource are available, if many clients came at once and health care providers are overworked, it is difficult to provide sufficient services on time which leads clients to go back without having accessed PMTCT services.

Health care providers leave work pretending to go for a break and end up going for social or private commitments, which also makes services unavailable.

This Absenteeism expressed by services user

"Usually patients have to wait long for physicians. And after examining 3 or 4 people, health workers say that it is tea break and patients have to wait until the staff return. This usually takes long. There is a lot of suffering during this time".

User in Addis

(Quoted by Lindelow and Serneels., 2005)

Absenteeism confirmed by health care providers

"We observe it—we cannot lie about it. Not respecting working hours is something we got used to and this has created a problem for the patients. During tea time, for example, people go to other places—to work in the private sector, for personal commitments, etc. Even the small amount of time we have in the facility we do not use effectively"

Health care provider

(Quoted by Lindelow and Serneels., 2005)

Absenteeism in such resource limited health facilities discourages utilization of PMTCT services by clients.

Because of inadequate health work force, providing HIV counseling according to national VCT guideline became difficult and unable to uphold the rights of clients. Shortages of human resource and absenteeism of health care providers affect the delivery of PMTCT services and limit its uptake.

Supplies

Equipment such as VCT kits, ARV drugs are donor dependent and procured at national level and distributed to all regions. The main problem for supply of ARV drugs and VCT kits are managerial gaps at regional and district level such as poor communication and inability to predict the amount required.

An assessment done in Ethiopia regarding drugs supply and management system indicates that poor inventory and information management, lack of

communication and commodity exchange mechanisms resulted in stock-outs and expiry at health facilities, especially for products with a short shelf life, such as HIV test kits (GOVE and MSH) [no date]

"There is inadequate supply of material [in the public sector]. It is not possible to work efficiently and meet expectations. If you try to work with what is available, your services will be sub-standard and eventually you might be forced to drop your ethics"

Health assistant in a provincial town

(Quoted by Lindelow and Serneels ., 2005)

Ministry of Health supplies drugs and other materials regularly to the Addis Ababa health bureau and then to the sub-city health department but in my long time working experience with Addis Ababa health bureau, due to managerial gaps, transportation and other related problems supplies take some time to reach health centers and hospitals which creates a delay in provision of PMTCT and other services.

In Addis Ababa other materials such as registration books, client cards, and protective materials etc are processed and procured at health facility level which passes through bureaucratic financial administrative processes, ordering and delivering is delayed. This inconsistent availability of VCT kits, ART drugs and other materials create health workforce dissatisfaction and make clients less keen to utilize services.

Infrastructure

The PMTCT program in Addis Ababa was incorporated to existing ANC services with no rooms added for counseling and testing. In most of health facilities there are not enough rooms for counseling and there is a shortage of waiting space which compromises the confidence of clients. Due to this inconvenience in health facility and lack of privacy women who seek PMTCT services will give up and go away without accessing services. One of the causes for health system failures in Ethiopia is poor physical infrastructure (Lindelow and Serneels., 2005). This leads to low utilization of PMTCT service in Addis Ababa.

5.2.3 Fears and Attitudes amongst Health Care workers

Health care workers positive relationship to ANC clients is central to PMTCT services. When ANC clients trust health care workers, they will show willingness to take HIV tests and respond positively to PMTCT services.

In Ethiopia there is ethical obligation for all types of health professions to provide health care services to people living with HIV/AIDS without discrimination (MOH, 1998) but health workers fear risk of HIV infection from HIV positive clients during service provision which may change their attitudes and behavior towards stigma and discrimination. In addition, inadequate salary, lack of incentives, workload, and shortage of protective and preventive materials, poor working environment, and inadequate knowledge about HIV/AIDS contributes to their negative attitude towards people living with HIV/AIDS (Rajaraman and Pamer., 2008).

In a study carried out in eastern part of Ethiopia knowledge of healthcare workers towards universal safety precautions and HIV/AIDS contamination, out of 330 respondents only 54% of healthcare workers perceived themselves to have adequate knowledge of universal safety precautions (Reda et al., 2008).

Another study done in Addis Ababa, on assessment of quality of ANC linked HIV counseling and testing for intervention of PMTCT services shows that half of the counselors had not taken the basic VCT training and more than half do not take refresher training (Ismail, 2008). This indicates that most of the counselors do not have adequate knowledge on PMTCT related services, which contributes to their negative attitude towards people living with HIV/AIDS. This highly affects utilization of PMTCT services.

Lack of adequate knowledge about HIV/AIDS, discouraging working conditions, and unattractive salaries contribute to stigmatizing perception towards people living with HIV/AIDS by health workers. Stigmatizing attitudes of health care providers have negative influence to ANC clients leading to loss of trust in health worker and not willing to have PMTCT services.

5.3.4 Organization

PMTCT program at Addis Ababa city health bureau incorporated with family health department especially under maternal and adolescent health team and there is one focal person for PMTCT program. At sub city level PMTCT program is under disease prevention and control team of the sub city health

department, especially family health expert is responsible for implementation of PMTCT service at health facilities. At health facility level there are counselors working in PMTCT and related MCH services. For the program adapted pre-existing recording and reporting formats.

The program moved beyond scaling up and focused on integration with existing antenatal care, delivery, postnatal, child health care (IMCI), family planning units and other HIV/AIDS related programs (MOH/NHAPCO,2007).

The program is on an "opt-out "basis, more pregnant women are getting tested unless they specifically state that they do not want it. The ANC clients, those who wish to use PMTCT services get the services as shown in fig. 5.

ANC as well as PMTCT services in public health facilities are provided during working hours and free of charge. The program fully implemented in Addis Ababa governmental health centers and hospitals which are providing MCH services.

Addis Ababa health bureau report stated that review meeting carried out twice per year on the performance of family health services including PMTCT (AAHB, 2006/7). Even though, the utilization of PMTCT services is still low (Seyoum, 2007).

5.3 Individual, socio-cultural and economical factors

5.3.1 Predisposing Factors

Age and Marital status

As discussed in the previous chapter there is association between age and acceptance of VCT services. As Ethiopian Demographic Health Survey (2005) indicates pregnant women aged 25-30 were more willing to accept an HIV test and receive test results than those less than nineteen years old. This may be related to socio-emotional development, self reliance and economic independence.

Different studies undertaken in the country show a difference between the married and single (Divorced/separated/widowed) woman in acceptance of PMTCT services.

Ethiopian DHS (2005) revealed that married women are more likely to accept HIV counseling and testing than single pregnant woman.

A study which was conducted on acceptance of HIV counseling and testing on pregnant women in Addis Ababa shows that single woman were less likely to accept HIV test than married woman (Seid, 2007).

Another study which was conducted in Addis Ababa Armed force hospital show that married women were more likely to be tested than unmarried women (Worku, G. 2005). The possible explanation for this may be married woman are more confident than single woman due to their social status and acceptance.

Gender Issues

Gender is a social determinant of health; gender inequalities accelerate the spread of HIV/AIDS and limit successful utilization of PMTCT services.

The dominance of men, women economic dependency, poverty, limited knowledge about PMTCT and low decision making power of women highly affects the utilization of PMTCT services. Some parts of the country are still practicing traditional beliefs where women are not guaranteed equal rights and equal status with men. This results in women needing consent from their husbands to take HIV tests.

Another study which was conducted in Wolaita Zone (Southern part of Ethiopia) on factors affecting acceptance of HIV testing among ANC clients , with emphasis on role of male partners shows that 69% of the participants need partners consent to take HIV testing (Tasew, 2008).

The study which was conducted on determinants of acceptance of HIV testing among pregnant woman in Addis Ababa shows that women who need getting husband consent before HIV test were found to be less likely to accept HIV test than their counterparts who do not need husband consent, (Seid, 2007).

Ethiopia DHS 2005 assessment of women's control over their own earnings in Addis Ababa revealed that women who earned cash on their work were 35.7%, those who earn with husband or partner jointly 60.9%, this shows that the highest share of decisions are made by involving male partners. This shows that there is no gender equality.

Women fail to accept PMTCT services because of fear of stigma and discrimination by the community and husbands. A study on pregnant woman

in Addis Ababa shows that many women do not like to be seen in VCT rooms (Worku, G. 2005)

Level of education

As discussed in the previous chapter more educated women access VCT services more frequently than the less educated women.

In Ethiopia 53% of women with secondary or higher education have comprehensive knowledge about HIV/AIDS prevention and transmission methods. However, among women who have no education, only 7% have knowledge about HIV/AIDS prevention and transmission methods (DHS, 2005).

The study which was carried on utilization of PMTCT services in Ethiopia Amhara region shows that pregnant women who had formal schooling were more likely to undertake voluntary HIV counseling compared to those without formal schooling (Worku, T. 2007).

Another study in Addis Ababa showed that higher level of education (secondary and tertiary) of the woman was strongly associated with acceptance of HIV test (Seid, 2007). The findings of this study are supported by a study conducted in Addis Ababa by Worku, G. (2005). The different studies recognize that level of education determines use of PMTCT services.

Stigma and discrimination

Stigma and discrimination are some of the main barriers why people do not wish to know their HIV status. HIV/AIDS Stigma and discrimination for women results from community and health care providers. In Ethiopia HIV positive woman and men are not equally accepted by the community. If a man gets infected, it is said to have happened accidentally, but if a woman gets infected it is said she has multiple sexual partner. This traditional assumption still exists' in some communities.

Actual discrimination expressed by women living with HIV in Ethiopia

"We are really living under the fear of discrimination it has silenced us because of this we cannot take care of ourselves and others."

(Quoted by Banteyerg, et al., 2005)

Health survey conducted in Ethiopia shows that people fear to make social relations with those people infected with HIV. For example, only 20% of women and 26% men have willingness to buy vegetable from an HIV infected vegetable seller, (DHS, 2005). This Discourages people from getting HIV tested and disclose their sero- status. In the country for mothers who give birth, breastfeeding is accepted as pride of a mother and family members. An HIV positive mother who is advised not to breastfeed her child, will be rejected and stigmatized by community.

In Ethiopia health care providers can stigmatize clients in need of VCT, PMTCT and other HIV/AIDS related health services because of fear of own contamination, incomplete knowledge about HIV/AIDS transmission, work overcrowded, unable to fulfill clients' needs, low incentives and unequipped health facility, (Banteyerga et al., 2005).

In health facilities discrimination is not only from health professional but also from non medical staffs. In the same study non-medical staffs who are working in health facility reported that medical informants described gossip as a way for providers to notify each other of a patient's sero- status in client's history card. This is easy for them to gossip because of their access to medical information, (Banteyerga et al., 2005).

For persons who needs VCT or PMTCT services, stigmatization and discrimination by health professional and non medical staffs limits the utilization of health care services.

A study which was conducted in Ethiopia, Tanzania and Zambia indicate that judgmental attitudes, avoidance and isolating behavior impedes peoples' decisions and delays willingness to access VCT, prevention and care services, (Nyblade et al., 2003)

Client Knowledge and attitudes towards PMTCT services

Knowledge is the psychological result of perception and learning and reasoning. One of the major factors for high transmutation of HIV & low utilization of preventive strategies and methods is inadequate knowledge of HIV/ADIS and wrong perceptions.

Ethiopia demographic and health survey (2005) shows that 69% of women have knowledge on transmission of HIV from mother to child during breast-feeding. In addition, around one-fifth of women know that taking certain drugs (antiretroviral) during pregnancy can reduce the risk of HIV

transmission (DHS, 2005). According to the survey, knowledge on PMTCT services is high, but having knowledge about PMTCT does not necessarily guarantee attitudinal change to subsequent use of PMTCT services. Adequate knowledge on how to prevent MTCT of HIV to pregnant women, and their families will increase the uptake of PMTCT services.

A study which was conducted on factors determining utilization of PMTCT services on pregnant women in Addis Ababa shows that those with adequate knowledge of existence of interventions that reduce mother-to-child transmission of HIV were about 3.2 times likely to be tested than those who were not aware (Worku, G. 2005). The findings of this study are supported by another study conducted in Addis Ababa by seid (2007) and in Awassa by Mirkuzie (2008). Lack of adequate knowledge on the existence of services is one of the obstacles on utilization of PMTCT services.

5.3.2 Enabling Factors

Accessibility and Affordability of PMTCT services

Accessibility involves physical and economical access. In terms of physical accessibility, potential health service coverage in Addis Ababa is 103% (MOH, 2006/7). There are more than 500 different health facilities (hospitals, MCH centers, health centers, clinics) providing health services, which are owned by government, private, NGOs, FBOs. Health facilities providing PMTCT services in Addis Ababa are 47 (MOH, 2006/7). This means PMTCT services are limited to few health facilities and this makes the service inaccessible.

Ethiopia is one of resource limited countries, around 26 million of the population lives below the poverty line and gross national product is \$180 (World Bank, 2007). Particularly the economic status of the majority Ethiopian women is very low, 88 percent of them are in the lowest wealth quintile (EDHS, 2005). Making the services affordable for the society is a big challenge for the country.

Study conducted in Ethiopia on utilization of PMTCT services among pregnant women in Western Amhara Region revealed that women are over loaded with domestic work and out of home activities to generate income. As a result they do not have time to take care for their health and time to spend in the clinics (Worku, T. 2007).

ANC and PMTCT services in Addis Ababa are provided free. Pregnant women can get access to ANC care either by walking or by using public transport for short distances. PMTCT services providing health facilities are few in number

and most of them are located in the central part of the city. For the poor women it is not affordable for them to pay transport for long distances to access services. This long walking distance, shortage of money and high cost of transport discourages pregnant woman from utilizing PMTCT services.

In Addis Ababa private hospitals, MCH centers, clinics and NGO health facilities are providing ANC services but not yet started PMTCT services. However, information about vertical transmission of HIV and VCT service was given and referred HIV positive mothers for ARV prophylaxis and other related services to public health facilities (Seyoum, 2007). There is no follow up mechanisms whether they reach to public health facility or not. This is missed opportunity for Addis Ababa PMTCT program. In Addis Ababa public health facilities providing ANC and PMTCT services are not easy to access for employed women as services are not provided during lunch time and weekends.

Quality

Quality in the context of PMTCT service includes different dimensions such as, confidentiality, privacy, accessibility and convenient opening hours, waiting time, affordability, skills of counselor and health workers, equipped delivery rooms, adequate supplies, and referral linkage are considered as quality, (MOH/NHAPCO,2006/7)

The PMTCT program in Addis Ababa has been integrated into existing antenatal care services. In most of the health facilities there is a shortage of rooms for counseling, which is difficult to maintain women's rights to privacy and protecting their confidentiality. In some health facilities laboratory rooms are located in separate building, in waiting rooms there is limited space so clients wait outside. These challenges compromise the confidentiality and privacy at health care facilities which have negative effects on protection of individual client's information. That fear of leakage of private medical information to other health workers, partners, family members and community, is an obstacle to utilization of PMTCT services.

Another challenge for pregnant women for low utilization of PMTCT services was long waiting time in health facilities to get PMTCT services. A study which was conducted in Addis Ababa on assessment of quality of ANC linked HIV counseling and testing for intervention of PMTCT indicates that 86.7% of the clients stayed in the health center up to 1.5 hours to get pre-test counseling (Ismail, 2008). There is no fixed time appointment system.

CHAPTER VI CONCLUSIONS AND RECOMMENDATIONS

6.1. Conclusions

The study shows a three years trend analysis of PMTCT services utilization and finding on factors affecting utilization of PMTCT services in Addis Ababa.

The trend analysis for the three consecutive years (2004/5 to 2006/7) indicates that there is no progress on utilization of PMTCT services during those years. All PMTCT related service coverage is low, but we cannot conclude with certainty because of the weak quality of data. Based on the current trend Addis Ababa may not reach the globally agreed level of coverage for PMTCT related services by the year 2010.

Ethiopian human rights laws and policies prohibit discrimination on the basis of HIV/AIDS status. In the country as well as in Addis Ababa there is hidden discrimination in workplaces, schools, homes and health facilities for PLHIV. This discriminatory behavior in the community severely impedes the utilization of PMTCT services.

The study found that human resource constraints highly affect PMTCT service utilization in Addis Ababa. As the Addis Ababa health bureau report that numbers of health workers are decreasing time to time. This has resulted in shortage of skilled human resources and high workloads which create staff dissatisfaction on their job. In addition, there is high turn-over of staffs due to low salaries, inconvenient working environment and fear of contamination when working with HIV positive clients.

Trainings and refresher courses on HIV/AIDS and other related services are not given adequately for the health workers which de-motivate them and prevent them from acquiring adequate knowledge, especially for PMTCT services providers. A dedicated staff for PMTCT services is essential, but in most health facilities management can have other priorities resulting in multiple tasking of PMTCT staff. This can lead health care professionals, despite their ethical obligation, to discriminatory behavior and negative attitudes toward people living with HIV/AIDS. Besides, Addis Ababa health bureau is unable to fulfill the staffing requirements, making the PMTCT services to suffer.

Another bottleneck for effective provisions of PMTCT services in Addis Ababa is financial resource constraints. From the data, different studies and my experience, financial resources allocated for health services are very low and insufficient to implement health programs. In addition, the expending

system is bureaucratic, slow and not flexible enough to fulfill the demands. There are managerial gaps and insufficient budgetary allocation which are some of the challenges on provision of PMTCT services in Addis Ababa. The budget allocated for Addis Ababa is very low, inconsistent and far below the provisions of the Abuja declaration of 2001. The budget for HIV/AIDS intervention services mostly depends on donors; donor funds are not flexible and mainly not managed at health facility level.

In Addis Ababa there are weak supply chain and information management systems emanating from poor communication and inability to forecast requirements. There are poor drugs inventory system and weak drugs, equipment, commodity, exchange mechanisms. Some drugs, materials and products which have short shelf life expire before usage.

Sometimes the supplies will be available in MOH or Addis Ababa city health bureau but because of transport shortage and other managerial problems they do not reach the health facilities on time, when they are strongly needed. This supply inconsistency makes health facilities unable to provide health services as required, especially for HIV/AIDS and PMTCT services which need supplies without any interruptions. This also causes dissatisfaction among health professionals in their jobs, leading to loss of trust by clients.

The study shows that poor resource management systems are a big challenge to implement and provide PMTCT services as would be preferred.

In Addis Ababa city PMTCT program is implemented by integrating into existing ANC services and on infrastructure which already existed. The PMTCT program was started without planning for additional infrastructure. In most public health facilities there is a shortage of rooms for counseling and testing and insufficient waiting space for ANC clients. This discourages expecting mothers from attending ANC and PMTCT services. As a result of the shortage of rooms there is lack of confidentiality and privacy during HIV counseling. This leads to fear of being seen by family and others community members while accessing HIV related services. It is influencing pregnant women towards low utilization of PMTCT services.

Gender inequalities are one of the key factors contributing to low utilization of PMTCT services in Addis Ababa. In traditional beliefs women do not have equal rights and status with men which, leads wives to seek husbands' consent before HIV testing. Women economic dependency on men, poverty, low decision making power in family and community highly affects the utilization of PMTCT services. Moreover, women are over loaded with

domestic work and other activities to generate income. As a result they become busy and do not get enough time to attend to their health and to know about PMTCT services and other health related matters.

According to this study knowledge in the community as well as among the pregnant women on transmission of HIV from mother to child during breastfeeding and PMTCT services is high but the utilization of the services is low. Having knowledge about PMTCT does not necessarily guarantee attitudinal change to subsequent use of PMTCT services. Wrong perceptions of PMTCT services by clients, low level of illiteracy, lack of adequate information and awareness on the benefits of PMTCT services are affecting utilization of PMTCT services.

The study also shows that socio-cultural factors such as stigma and discrimination, gender inequalities lack of husband consent play a big role in affecting utilization PMTCT services among pregnant women. Stigma and discrimination emanates from the community and health care providers.

Pregnant women do not access PMTCT services due to fear of knowing their sero- status and disclosure of their test results to others. Lack of husband or partner consent, low power to make decision for their own reproductive health matters, weak acceptance of PLHIV in the family as well as in the community are some of the problems to get access to PMTCT services.

Other major constraints to utilization of PMTCT services are accessibility and affordability for the services. Addis Ababa city has high population density and wide geographical distribution. Most of public health facilities providing PMTCT services are poorly dispersed and located in the central parts of the city. For women with inadequate income to pay transport for long distances to access PMTCT services and related services becomes too expensive.

In Addis Ababa PMTCT services are limited to 47 health facilities. Private health facilities are providing ANC and VCT services but not providing PMTCT services, if they find pregnant women with HIV positive result, they refer to public health facility to get PMTCT services. There are weak referral arrangements between the public and private health facilities. In addition there is no follow-up system; that results in missed opportunity to Addis Ababa PMTCT program.

6.2. Recommendations:

- ❖ Capacity building for health care providers by targeting professional ethics, primary prevention of HIV, HIV counseling and testing, infant feeding, ARV drugs administrations including post-exposure prophylaxis. Rapid HIV testing including women with unknown HIV status during labor and delivery, intra partum care for HIV infected pregnant women and post partum care for women and their babies. Addis Ababa health bureau (AAHB), Nurses training school, Sub-City health departments and NGOs working on HIV/PMTCT are mandated for the activity. In my capacity as member of AAHB management team I will initiate these activities. I will work with the nursing training school and NGOs to strengthen these.
- ❖ Train non-health professionals e.g. teachers and religious leaders on HIV counseling and testing by targeting PMTCT services to alleviate the human resource for health crisis. Addis Ababa health bureau, Nurses training school and NGOs working on HIV/PMTCT are mandated for the activity. Using my working experience and capacity I will bring up a topic for discussion in management meetings to realize this.
- ❖ Distribution of supplies such as testing kits and other laboratory supplies, ARV drugs, procurement of protective materials, registration books and other logistics should be available consistently at health facility level. For this activity Addis Ababa health bureau, Sub-City health departments & health facility management teams are mandated. As member of Addis Ababa health bureau management team I will encourage colleagues to lead in the improvement of the distribution of supplies.
- ❖ Lobby the government officials on budgetary allocation for health according to the Abuja declaration of 2001. Call for additional budget for PMTCT program to increase supply, for advocacy work, to retain health professionals on PMTCT services, for maintenance of health facilities and for construction of additional rooms for counseling. This ensures confidentiality. AAHB, AABFED and Sub-City health departments are mandated for the activity. As head of sub-city health department I will initiate discussion on the topic and encourage prioritization of PMTCT on budgetary allocation.
- ❖ Promote involvement of development partners in HIV and PMTCT programs on technical capacity building, tackling stigma and discrimination in the community, forecasting PMTCT commodity needs, logistics management and procurement and additional fund allocation for provision of PMTCT services. For the activity MOH, NHAPCO, AAHB, and

AAHAPCO are mandated. In my capacity as member of AAHB management team I will initiate these activities.

- ❖ Decrease the bureaucratic handling of regular budget and donor funding, so that enough money can find its way to facility level and make it easy to utilize the money. For the activity MOFED, MOH, Addis Ababa city government and AABFED are mandated. In my capacity I will use different opportunities to explain the magnitude of the problem to them.
- ❖ In order to implement anti-discrimination laws and policies effectively, the government should involve people in positions of power and influence. Involve community, organize community based education and sensitization on HIV/AIDS, MTCT, PMTCT and specific education targeted against stigma and discrimination of PLHIV. Make use of community gatherings, social events, social support groups, women, youth and PLHIV associations, influential persons, religious leaders, CBOs and FBOs in doing this. For the activity Addis Ababa city HIV/AIDS prevention and control council and all stakeholders are mandated. In my capacity as member of AAHB management team I will propose and organize meetings to strengthen these in Bole sub-city and hold discussions with other sub city health management teams.
- ❖ Improve access to information for adolescents, reproductive age women and the community at large by promoting HIV/AIDS, MTCT and PMTCT services through Addis Ababa mass media. Mobilize awareness campaigns by using key-message like 'one- test- two lives saved. Advocate the benefits of PMTCT services for the infant, mother as well as for the family and community. For the activity AAHB, AAHAPCO and AABEC are mandated. In my capacity I will encourage media organizations to produce and disseminate messages on PMTCT.
- ❖ Sustained gender equity and empowerment of women to increase women decision making powers in the community on uptake of HIV and PMTCT services. For the activity national and regional government are mandated. In my capacity I will lead in the translation of prepare articles, documents on gender equity and empowerment of women into the national language and disseminate them.
- ❖ Provide community based health education by targeting male involvement in ANC and PMTCT services. For the activity AAHB, AAHAPCO, Sub-City health department and sub-city HIV/AIDS prevention and control teams are mandated. In my position I will

organize community meetings and debates on importance of male involvement and encourage other sub cities to do the same.

- ❖ Increase access to PMTCT services by expanding to private and NGO health facilities which are providing MCH services. AAHB and Sub-City health department are mandated to the activity. As Addis Ababa health bureau management team I will initiate discussion with AAHB management teams on the involvement of private and NGO health facilities in the provision of PMTCT services.
- ❖ Go-beyond the clinic to access those who are living in peripheral parts of the city by integrating PMTCT services to outreach immunization services. For the activity AAHB and Sub-City health departments are mandated. As head of sub-city health department for the activity I will initiate integration of PMTCT services into EPI services.
- ❖ Strengthen referral linkage between MCH hospitals and health centers; to all HIV positive women for ART, to organizations which are providing care and support services for them and their babies. AAHB, AAHAPCO, Sub-City health department and health facility management team are mandated to the activity. As member of Addis Ababa health bureau management team I work towards the strengthening of this activity.
- ❖ Strengthen HMIS at regional, sub-city and health facility level by providing training and computerizing systems to get better quality of data which are helpful to improve PMTCT services. AAHB, Sub-City health departments, health facility management teams and NGOs working on PMTCT are mandated for the activity. In my capacity as member of AAHB management team I work towards the strengthening of the training of all cadres in HMIS and to improve reporting and recording systems.
- ❖ Strengthen coordination and supervision of PMTCT services at city, sub-city and health facilities level by adopting existing appropriate checklists. AAHB and Sub-City health departments are mandated for the activity. As member of Addis Ababa health bureau management team I will encourage the AAHB to run refresher courses on the advantages of support supervision and using checklists.
- ❖ Further evaluation and studies on factors influencing utilization of PMTCT services in Addis Ababa should be done and come out with practicable recommendations. AAHB, AAHAPCO and NGOs working on HIV/AIDS are mandated for the Activity. I will present the findings of this study to concerned parties so that it can form the basis for further studies.

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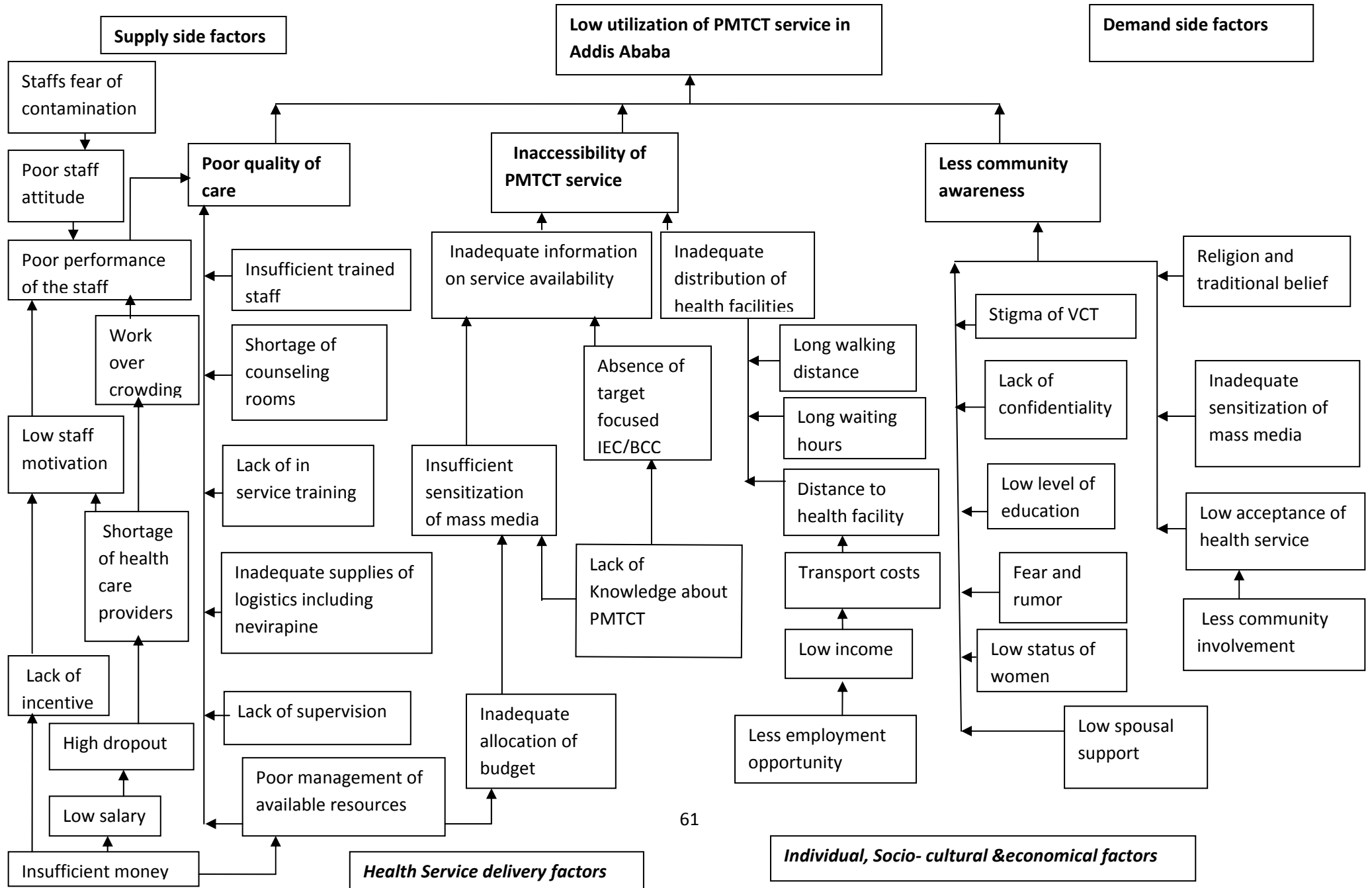
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Annex: 1 Problem Analysis Diagram



Annex 2a

Addis Ababa Health Bureau
2004/05 Annual PMTCT Report

S/ N	PMTCT Report	AA	Sub-Cities										
		Total	Arada	Addis K.	Akaki	Bole	Gullele	Kirkos	Kolfe	Lideta	Nifas S-Lafto	Yeka	Zewditu
1	Number of ANC clients	151493	15470	11507	14543	7170	9021	8461	9979	18990	24276	28885	3191
2	Number of ANC clients pre-test counseled	43889	8655	1789	1851	1636	1809	3658	2513	5468	4059	8751	3700
3	Number of ANC clients women received testing for HIV	26250	2304	1570	1653	1446	1716	1179	2175	3477	2918	4206	3606
4	Number of pregnant women who received their result and post-testing counseling	23451	1908	1483	1530	1357	1636	1041	1994	3398	2826	3980	2298
5	Total number of pregnant women who tested HIV positive	2410	258	215	110	232	169	359	61	477	228	212	89
6	Total number of pregnant women who tested negative	14958	1853	1603	1528	795	1505	1101	722	2130	2714	2610	695
7	Total number of pregnant women who received NVP	1235	158	149	114	86	69	86	71	131	156	101	114
8	Total number of newborn who received NVP		46		81	53	28			80	72		
9	Total number of HIV positive pregnant women who received counseling on infant feeding	1808	117	327	98	91	112	208	53	233	328	165	76
10	Total number of HIV positive pregnant women who received counseling in FP for post-partum contraception		109		72	48	91	112		53	328	165	
11	Total number of partners tested	585	54	122	34	65	29	57	17	65	68	45	29
12	Total number of HIV positive pregnant women referred for long term care						23			164	152	80	
13	Total number of HIV positive women referred for food support		17		8	28	16		5	37	20	3	4
14	Total number of HIV exposed infant taking cotrimoxazol	265	13	16	22	13	3	4	4	26	26	4	134
15	Total number of infants born from HIV positive mother tested negative (age 18 month or above)		12	37	12		8	28		2	6		
16	Total number of infants born from HIV positive mother tested positive (age 18 month or above)						1	1			3		

Annex 2b

Addis Ababa Health Bureau

2005/06 Annual PMTCT Report

Ser. No.	PMTCT Report	AA	Sub-Cities										
		Total	Arada	Addis K.	Akaki	Bole	Gullele	Kirkos	Kolfe	Lideta	Nifas S-Lafto	Yeka	Zewditu
1	Number of ANC clients	39143	5149	979	596	3663	3251	3011	3877	5398	6932	5569	718
2	Number of ANC clients pre-test counseled	12448	1368	253	165	751	660	569	1411	4101	710	2300	160
3	Number of ANC clients women received testing for HIV	6843	567	283	555	686	695	637	597	983	706	940	194
4	Number of pregnant women who received their result and post-testing counseling	6737	559	273	540	686	667	620	589	979	700	939	185
5	Total number of pregnant women who tested HIV positive	567	37	35	37	42	40	166	17	65	42	56	30
6	Total number of pregnant women who tested negative	5015	456	378	418	641	614	474	560	830	658	874	50
7	Total number of pregnant women who received NVP	184	22	17	11	6	17	11	9	19	23	30	19
8	Total number of newborn who received NVP		14		10	5	11	8			25	54	28
9	Total number of HIV positive pregnant women who received counseling on infant feeding	374	26	17	37	23	35	23	19	62	58	53	21
10	Total number of HIV positive pregnant women who received counseling in FP for post-partum contraception		6	3	4	2		14		2	32		
11	Total number of partners tested	314	14	13	25	24	50	14	8	33	44	72	17
12	Total number of HIV positive pregnant women referred for long term care		14		19						33		
13	Total number of HIV positive women referred for food support		4	21	10				17		13	10	
14	Total number of HIV exposed infant taking cotrimoxazol	505	11	10	7	10	6	36	6	136	99	14	170
15	Total number of infants born from HIV positive mother tested negative (age 18 month or above)			15					4	6	3	1	
16	Total number of infants born from HIV positive mother tested positive (age 18 month or above)												

Annex 2c

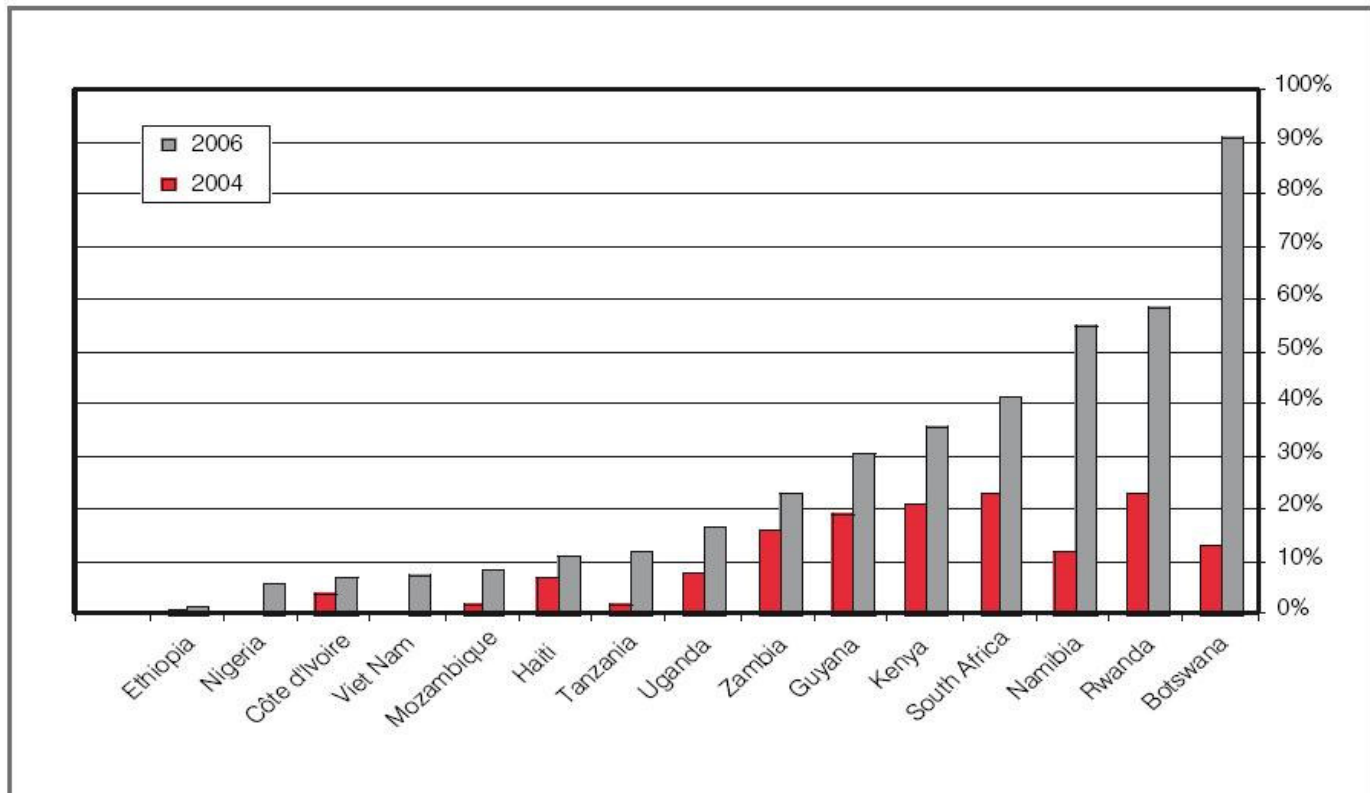
Addis Ababa Health Bureau

2006/07 Annual PMTCT Report

Ser. No.	PMTCT Report	AA	Sub-Cities										
		Total	Arada	Addis K.	Akaki	Bole	Gullele	Kirkos	Kolfe	Lideta	Nifas S-Lafto	Yeka	Zewditu
1	Number of ANC clients	138438	28835	7984	10299	12462	11217	11319	7772	18673	22901	6976	2954
2	Number of ANC clients pre-test counseled	53563	10353	2879	3746	3349	2768	3297	3645	13342	4802	5382	1075
3	Number of ANC clients women received testing for HIV	32753	3709	2785	2309	3020	2366	2347	2216	4692	3949	4577	783
4	Number of pregnant women who received their result and post-testing counseling	28725	3358	2785	2356	2993	2548	2179	1610	4592	3828	1710	766
5	Total number of pregnant women who tested HIV positive	1901	227	173	134	156	143	144	225	214	226	236	23
6	Total number of pregnant women who tested negative	26165	2438	2509	2340	2742	2421	2026	1608	3971	3729	1615	766
7	Total number of pregnant women who received NVP	835	272	85	82	29	56	26	25	56	81	50	73
8	Total number of newborn who received NVP		106		77	29	40	13			49	55	102
9	Total number of HIV positive pregnant women who received counseling on infant feeding	1423	193	157	138	59	139	86	60	202	200	107	82
10	Total number of HIV positive pregnant women who received counseling in FP for post-partum contraception				86	10	25	96		101	71		
11	Total number of partners tested	1366	160	126	133	101	209	64	64	118	190	103	98
12	Total number of HIV positive pregnant women referred for long term care				81	79	120	56		124		35	35
13	Total number of HIV positive women referred for food support		7		7		78	7		3		13	
14	Total number of HIV exposed infant taking cotrimoxazol	1227	35	58	187	14	36	109	48	150	126	12	452
15	Total number of infants born from HIV positive mother tested negative (age 18 month or above)									31			
16	Total number of infants born from HIV positive mother tested positive (age 18 month or above)		2	33	1	6	4	7		7		3	3

Annex :3 PMTCT related services utilization by country

Percentage of pregnant women living with HIV attending at least one antenatal care visit who received any antiretroviral drug regimen for PMTCT in Fiscal Year 2004 and Fiscal Year 2006 with United States Government support (both upstream and downstream) by country



Sources:WHO,2007_a

Annex :4 Map of Addis Ababa city

