

Assessment of Opportunities and Challenges towards the Implementation of
PMTCT Guideline in Public Hospitals of Addis Ababa City Government

By

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A Thesis Submitted to School of Social Work

Presented in Partial Fulfillment of the Requirements for the Degree of Master of
Social Work

Addis Ababa University

Addis Ababa, Ethiopia

July 2014

Addis Ababa University
School of Graduate Studies

This is to certify that the thesis prepared by Fantahun Gobezie, entitled: *Assessment Of Opportunities and Challenges towards the Implementation of PMTCT Guideline in Public Hospitals of Addis Ababa City Government* and submitted in partial fulfillment of the requirements for the degree of Masters in Social Work complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

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ABSTRACT

Interventions to PMTCT are commonly recommended strategies to prevent HIV transmission from mothers to their babies. Ethiopia has started the PMTCT intervention programs since the late 1990s. Although the coordinated efforts against HIV/AIDS helps Ethiopia to reduce national prevalence among adults to 1.5%, the performance of PMTCT programs so far was as low to 28% in 2013. The Ministry of Health revised the 2007 guideline in 2011 to facilitate an accelerated implementation of the program. The objective of this study, therefore, was to assess the status and associated opportunities and challenges in the implementation of the 2011 PMTCT guideline in public hospitals run by the Health Bureau of Addis Ababa City Government. Qualitative approach based on key informant interview and checklists was employed. Thematic data analysis from the raw data was carried out. Findings of this study confirmed that implementation of the PMTCT guideline at facility level was not as per the recommendations of the guideline. Commitments of the global community and MOH through the introduction of advanced ART drugs make PMTCT program a promising intervention to see HIV free generation in the near future. Poor integration and monitoring system, low community involvement, loss to follow up and limited skilled workforce were found the major challenges to the PMTCT program. With an integrated approach, multidisciplinary professionals including social workers have many roles to play in this regard.

Acknowledgement

My sincere and deepest gratitude goes to my advisor Dr. Alemayehu Mekonnen for his unreserved assistance and constructive comments and relevant guidance from the beginning to the write-up of this thesis work.

In addition, I would like to give my deepest gratitude to my family for their unreserved and tireless support, encouragement and patience throughout this study.

I am also indebted to PMTCT service providers at Empress Zewditu Memorial, Mahatma Gandhi Memorial & Yekatit 12 Hospitals. Without their professional cooperation this study would have been impossible.

I am also very grateful to PMTCT program specialists from the Ministry of Health, Federal HAPCO and Addis Ababa Health Bureau for their material support and unreserved participation as key informant interviews during the data collection step of this study.

Last but not least, I would like to thank Addis Ababa Health Bureau for granting me the permission to conduct my research at its health facilities.

List of Acronyms

AIDS=Acquired Immunity Deficiency Syndrome

ANC=Antenatal Care

ART=Antiretroviral Treatment

ARV=Antiretroviral

CRC=Conventions on the Rights of Children

CSA=Central Statistical Agency

DHS=Demographic and Health Survey

DNA-PCR= Deoxynucleic Acid-polymerase Chain Reaction

HAPCO=HIV and AIDS Prevention and Control Office

HDA= Health Development Agent

HIV= Human Immune Virus

ICPD=International conference on population and development

KII=Key Informant Interview

LTFU=Lost to Follow up

M & E = Monitoring and Evaluation

MNCH=Maternal, New Born and Children Health

MOH=Ministry of Health

MSG= Mothers Support Group

MTCT= Mother to Child Transmission of HIV

NGO=Non-governmental Organization

PLHIV =People Living with HIV

PMTCT=Prevention of Mother to Child Transmission of HIV

TWG=Technical Working Group

UNAIDS = Joint Program of United Nation for HIV and AIDS

UN=United Nation

UNDP = United Nation Development Program

UNICEF=United Nation Children's Fund

USAID=United States Aid for International Development

VCT =Voluntary HIV Counseling and Testing

WHO= World Health Organization

Table of Contents

ABSTRACT.....	2
Acknowledgement.....	3
List of Acronyms.....	4
Chapter 1: Introduction.....	10
1.1. Organization of the Paper	10
1.2. Background.....	10
1.3. Statement of the Problem.....	13
1.4. Research Question.....	15
1.5. Objective.....	15
1.5.1. General objective.....	15
1.5.2. Specific objectives	16
1.6. Significance of the Study.....	16
1.7. Definition of terms	17
Chapter 2: Review of Related Literatures.....	19
2.1. General.....	19
2.2. The PMTCT guideline and its formulation process	20
2.3. Human resources for health care systems	22
2.4. Multidisciplinary approaches in MNCH.....	23
2.5. Integration of PMTCT service into other programs	24
2.6. Community participation	26
2.7. Opportunities to implementing the PMTCT program	28
2.8. Challenges to implementing the PMTCT program	29
2.8.1. Poor linkage of PMTCT to MNCH and other HIV/AIDS care and treatment services	29
2.8.2. Loss to follow up (LTFU)	31
2.8.3. Stigma and discrimination	32
2.8.4. Poor demand for MNCH services	33
2.8.5. Other socio-cultural barriers.....	34
Chapter 3: Research Method.....	36
3.1. Study sites selection	36
3.2. Description of participants and their selection criteria	36
3.3. Rational of qualitative approach.....	37
3.4. Data collection	38
3.4.1. Primary data	38

3.4.2. Secondary data	39
3.5. Nature of the research project	39
3.6. Data analysis	39
3.7. Ethical consideration	40
3.8. Limitations of the study	41
Chapter 4: Findings of the study	43
4.1. General.....	43
4.2. Background of Key informants	44
4.3. The PMTCT guideline and its formulation process	44
4.4. Human resources	48
4.5. Multidisciplinary approaches in health care	50
4.6. Integration of PMTCT services into other health programs	50
4.7. Community participation	53
4.8. Major opportunities in the implementation of the PMTCT program	55
4.9. Major challenges in the PMTCT program implementation	56
4.9.1. Stigma and discrimination	61
4.9.2. Integration of PMTCT services into other programs	62
4.9.3. Human resources	63
4.9.4. Community participation	63
Chapter 5: Discussion.....	65
5.1. The PMTCT guideline and its formulation process	65
5.2. Human resources	68
5.3. Multidisciplinary approaches	69
5.4. Integration of PMTCT services into other programs.....	69
5.5. Community participation	71
5.6. Opportunities to implementing the PMTCT program	72
5.7. Major Challenges to implementing the PMTCT program	73
5.8. Monitoring & Evaluation of PMTCT program	74
Chapter 6: Conclusion and Implication	75
6.1. Conclusion	75
6.2. Implications.....	77
6.2.1. Social work Implications	78
6.2.2. Research Implications.....	79
6.2.3. Policy Implication	79

References.....	80
Annexes	88

Chapter 1: Introduction

1.1. Organization of the Paper

This thesis comprises of six sections. The first section gives brief background information and presents the objectives, significance, scopes and the rationale of conducting this study. Then, it is followed by the review of related literature section. The third section describes the whole research method including process of data gathering, data analysis and ethical issues. Findings of the study are presented on the fourth section. Results are depicted and discussed in the fifth section. Finally, the conclusions and implications of the study for social work practice, further study and policy are presented.

1.2. Background

HIV and AIDS prevention programs have been in place for decades and resulted in remarkable positive changes in the world. It is also observed that millions of new infections continue to occur annually and prevention gains are not always sustained. HIV shows an increasing incidence in some subpopulations; and new infections of infant and children resulted from poor performance in PMTCT programs continue to be crucial issue of concern. These realities are suggesting that the pandemic is dynamic and that current behavioral interventions and medical technologies are unlikely to fully reverse this significant global pandemic (Pizer & Kenneth, 2009).

By the end of 2010, an estimated 34 million people were living with HIV worldwide. The proportion of women living with HIV has remained stable at 50% globally. Unlike the global trend, women were disproportionately affected by the epidemic in Sub-Saharan Africa and the Caribbean, 59% and 53% of all people living with HIV, respectively. The introduction of ART

reduced the number of people dying of AIDS-related causes from a peak of 2.2 million to 1.8 million in the same year (UNAIDS, 2011).

Globally, approximately 529,000 maternal deaths occur which 1% of pregnant women are estimated to be HIV positive. Ninety-nine percent of these deaths occurred in developing countries like Ethiopia. It was also indicated that 3.4 million children are living with HIV worldwide due to vertical transmissions of the virus of which 2.5 million of them are found in Sub-Saharan Africa (Thyssen & Emil, 2013; Marconi & Roca, 2012; Eyakuze, Jones, Starrs, & Sorkind, 2008).

Recent assessment of maternal mortality trends indicated that HIV/AIDS is the leading cause of death during pregnancy and the postpartum periods in countries with high HIV prevalence. Eighty-six to ninety-two percent of HIV-related maternal mortalities occur in this region. This is worsened due to the fact that many births in such resources limited settings are not attended by skilled birth attendants (Alana, Emily, & Christian, 2012).

About 25 to 50% of them will transmit the virus to their newborn during pregnancy, labor, delivery and breast feeding unless treatment interventions are given to HIV positive mothers. The rate of infection in Sub-Saharan Africa is the highest with over 1,000 new borns infected per a day (Marconi & Roca, 2012). According to World Health Organization (2008), among the 430, 000 estimated children who were newly infected with the virus, 90% of them contracted it through MTCT. Half of these infected children died before their second birthday. However, the risk could be reduced to less than 2% and to 5% if specific interventions were done for non-breastfeeding and breastfeeding populations, respectively (WHO,2010).

The global community has exerted efforts against the pandemic to save lives of mothers and their families. Interventions to PMTCT are one of the most remarkable advances in this

regard. Research and program experiences over the past have demonstrated newer and more effective ways to prevent new pediatric infections, particularly in high-burden, low-resource settings. According to the latest data, significant progress has been made in delivering PMTCT services in low- and middle-income countries though much work remains (Both & Roosmalen, 2010).

In Ethiopia, the first AIDS cases were reported in 1986 that suggests HIV infection occurred probably in 1970s and early 1980s. The predominant mechanism of transmissions of the virus in Ethiopia is unprotected heterosexual intercourse (Federal HAPCO/MOH, 2012). Demographic and housing survey (2011) revealed that the prevalence of HIV among adults aged 15-49 years was 1.5%. It was also indicated that the prevalence among women in their reproductive age groups was higher (1.9% in age 15-49) than their male counterparts (1% in age 15-59). The peak HIV prevalence (3.7%) among women was observed in the age groups of 30 and 34 years compared to 3% of prevalence among men of 35-39 years of age. Therefore, the overall HIV prevalence is higher for women than men in most age groups in Ethiopia (CSA, 2011).

The country launched the first national PMTCT program in 2001 after the first PMTCT guideline was developed (MOH, 2001). The 2001 PMTCT guideline was also revised and the full package of the service was started in health facilities after the 2007 PMTCT guideline was endorsed. The government in collaboration with partners played significant roles to advocate and implement the program. The Ministry of Health later identified that the 2007 guideline has not addressed important components like clear regimen of ART medications for PMTCT prophylaxis in the package. As such the current PMTCT guideline was developed in 2011 (MOH, 2011).

The Ministry of health has planned to integrate PMTCT services into the routine antenatal care (ANC) program at all hospitals and health centers throughout the country with the goal to reach 80% of ANC attending HIV positive mothers. The Ministry also incorporated the PMTCT services into the health extension system at lower levels of health care. The achievement was only 8% in 2009/10 and 28% in 2013 (MOH, 2013). These reveal that though there is high prevalence of HIV among women (FHAPCO/MOH, 2010) and the performance of the PMTCT program is not sufficient yet. In Oromya region, for instance, 76% of the positive pregnant women had not received antiretroviral (ARV) prophylactic and lifelong treatments in 2010 (Federal HAPCO, July 2011). These situations call for attention of policy makers and researchers to design concerted and comprehensive implementation strategies through multidisciplinary approaches and active community participations in the program.

1.3.Statement of the Problem

Evidence showed that incidence of HIV in Ethiopia has fallen by 25% between 2001 and 2009 (MoH/ Federal HAPCO, 2012). The country still experiences the highest HIV burden next to South Africa which is attributed to the largest population size. The prevalence of HIV infection in Ethiopia is biased towards women and urban communities where the rate in Addis Ababa is leading by 5.2 % (Alemnesh, 2011; UNAIDS, 2010).

As part of the general commitment to reduce maternal and child mortalities, the Government of Ethiopia had targeted to reduce the proportion of infants infected by HIV by 50% in 2010 by ensuring access of PMTCT services to 80% of pregnant women who attend ANC clinics (UN, 2001). However, the national coverage of ANC services by skilled birth attendants was only 25% at health institutions in 2010 (WHO, 2010). Minimal utilization of antenatal and postpartum services, therefore, hampered the overall PMTCT program. Moreover, uneven

quality of care in antenatal and obstetric settings, HIV-related stigma and discrimination, and insufficient male and community involvement constrained the PMTCT program implementation (Alemayehu & Woldemedhin, 2009).

Though the primary stakeholders in the fight against vertical transmission of HIV are people living with HIV themselves in general and HIV positive pregnant mothers in particular, there are debates that experiences in PMTCT service provisions gave much emphasis to infants than to the mother herself. It is argued that health care providers sometimes either “ignore” or “forget” that HIV-positive mothers have a reproductive health rights (Marion, 2008). Besides, evidences showed that more attention has been given to biomedical aspects of the PMTCT than to behavioral and structural dimensions of the program. Furthermore, challenges of methodological limitations negatively affect the positive outcomes of interventions, delivering the package at the population level, and evaluating safety, acceptability, coverage, and effectiveness (Kurth, Wasserheit, Baeten, Celum, & Vermund, 2011).

Addis Ababa, where this study was carried out, has the highest HIV prevalence where 12% of the nation burden falls (Ethiopian Health and Nutrition Research Institute /MoH, 2012). On the contrary, uptake of PMTCT services is often low due to structural, socio-cultural and technical challenges. Report revealed that only 21% of HIV positive pregnant women got the prophylaxis for PMTCT services (Addis Ababa Health Bureau, 2012). As to the report, PMTCT services were planned to be integrated within the existing reproductive health services among which family planning is the major destination. The coverage of family planning in the same year paradoxically was only 41% in the city.

Due to poor performances including weak integration into the broader reproductive health facilities and communities, and infrastructural barriers, the PMTCT program didn't

address the needs of clients. The design and implementation of PMTCT policy/guideline was one of the cornerstones to fight against vertical transmission of the virus. But, it was argued that the policy/guideline was developed in prior consideration of vertical integration by giving little attention to structural dimensions including horizontal integration, community participation and multidisciplinary approaches (Hampanda, 2013).

These gaps call for attentions of many practitioners and decision makers in the area. Researchers, dominantly from public health domain, played their part to address the problem particularly from the biomedical dimensions, in this regard. Previous works gave due attention to surveys relying on quantitative techniques to assess the physical and infrastructural aspects of the service facilities. This study assessed the implementation of the PMTCT guideline at health facilities and its associated opportunities and challenges by employing qualitative method of data collection and analysis to favor exploration of detail and rich informative discussion and conclusion.

1.4. Research Question

The research questions were stated as “were the provisions of the guideline implemented in a full-fledged manner at health facilities in Addis Ababa? What were the major opportunities and challenges in implementing the guideline? Are there any gaps in the provisions and/or formulation process of the PMTCT guideline?”

1.5. Objective

1.5.1. General objective

The general objective of this study is to examine the implementation status of PMTCT guideline in public hospitals of Addis Ababa City Government.

1.5.2. Specific objectives

- To evaluate the extent of implementation of the PMTCT guideline at health facility level.
- To identify opportunities and challenges in the implementation process of PMTCT guideline at health facility level.
- To identify gaps in the provisions of the PMTCT guideline.

1.6. Significance of the Study

Against the pandemic of HIV and AIDS, the global community in general and researchers in particular, have been working collaboratively in how to prevent the transmission of the virus. Among others, PMTCT is one of the successful efforts that save lives of many infants. Although the service is promising, the program performance so far was too low in Ethiopia. About 14,000 infants have contracted the virus from their mothers. Had the interventions been successful, it would have been possible to rescue almost all the lives of these infants.

One of the principles of social work education is ensuring human wellbeing through promotion and prevention of social justices, in general and for children and women in particular. International, regional and national laws ensure all children have the right to life, survival and development (UN-CRC, African Child Welfare Policy, and Article 36 of the Ethiopian constitution). Policy makers have to, therefore, be sure to ensure that children enjoy benefits of basic human rights including health; survival; benefit from global resources and be protected from any life threatening conditions.

As one of the vulnerable groups, women of reproductive age groups have to access and have the right for reproductive health services. At the Cairo conference on population and

development (ICPD), the global community reached consensus to ensure the rights of all women, including HIV positive women, to decide freely about their reproductive rights to decide freely and responsibly the number and timing of having children. The health systems are, therefore, expected to incorporate and practice the recommendations agreed on such global conferences and help citizens to exercise such rights (UN, 1995).

It is believed, therefore, that this study will have a contribution to some workable recommendations for policy makers. It will also contribute to social work education and further study in the area of maternal and children health in general and PMTCT program in particular.

1.7. Definition of terms

Community= A group of people who share an interest, a neighborhood, or a common set of circumstances.

Community participation = The process of working collaboratively with and through groups of people affiliated by geographic proximity, special interest, or similar situations to address issues affecting the well-being of those people.

Integration =Integration in health care implies effective system of communication, collaboration and commitment among health care providers to ensure the wellbeing of clients through continuous, comprehensive and culturally competent health care services.

Loss to follow up (LTFU) = Refers to individuals who have discontinued their PMTCT treatments and couldn't be traced back to resume the services.

Multidisciplinary approaches = Multidisciplinary approaches in health refer to different approaches to treatment, and the participation of people from different professional domains

and/or disciplines required to provide multidimensional and adequate health services for clients.

PMTCT = It is an intervention strategy to prevent HIV transmission from child bearing mothers to their infants and children during pregnancy, labor, delivery and breastfeeding.

In the next chapter, I discussed related literatures issues including processes of PMTCT policy formulation, human resources for health sector, multidisciplinary approaches in maternal health and child health, integration of health services, community participation, opportunities and challenges of PMTCT program implementation.

Chapter 2: Review of Related Literatures

2.1. General

The literature review part of this study comprised of seven major issues for discussion. The first topic addressed the concept of health policy/guideline in which existing literature give equal emphasis to the formulation process as to the implementation of any policy matters. Such literatures in this regard revealed that most health policies and/or guideline were not successfully implemented due to lack of adequate consultation and consensus-building among stakeholders, available resources, technical capacity, attitude and behavior of health professionals. The second and third topics highlighted the importance and challenges of human resources and multidisciplinary approaches towards successful provision of health care services. Some literature revealed that skilled human resource is a backbone for quality and accessible health services. The health care team is also expected to have a multidisciplinary mix of professionals ranging from biomedical specialists to social workers, psychologists and community workers.

The fourth topic discusses the concept of “integration” in the context of health care systems. Literature in this regard revealed that the word “integration” has been contested since long periods of time though recommendations have not been well practiced at grass root levels of health systems. The next three topics are about the role of community involvement, opportunities and challenges of PMTCT program implementation, respectively. The issue of active community participation was always emphasized in many literature to facilitate successful implementation of health care programs. Similarly, the role of community involvement in PMTCT program implementation was considered both as important strategy to address the problem. Opportunities and challenges associated with the implementation of PMTCT program were exhaustively discussed in the literature review part of this study.

2.2.The PMTCT guideline and its formulation process

The process of policy formulation is one of the crucial steps for policy development agenda. Implementation cannot be analyzed unless formulation process of policy is evaluated. Policy design theorists, therefore, argued that scholars should look further back in the causal chain to understand why policies succeed or fail because of the original policy formulation processes significantly contribute to implementation outcomes (Fischer, Miller, & Sidney, 2007, p.80-97).

A health policy is expression of governments' intention/plan that directs investment and action to alleviate suffering improve health care and prevent illness of the population (Cheung, Leeder, & Mirzaei, 2010). These authors further elaborated their explanation to different manifestations of a policy as laws, official statement issued, practice guidelines or guiding principles. World Health Organization (2012) also stated health policies as:

Health policies are understood as the formal written documents, rules and guidelines that present policy-makers' decisions about what actions are deemed legitimate and necessary to strengthen the health system and improve health. These formal documents are translated through the decision-making of policy actors into their daily practices.

Ultimately, these daily practices become health policy as it is experienced, which may differ from the intentions of the formal documents.

The above definitions imply that guidelines are considered either as health policy documents or manifestations of the policies themselves. The PMTCT guideline is, therefore, a policy formulated to assist health care planners, health service providers, community and other partners to expand, integrate and strengthen comprehensive service provision to prevent vertical transmission of HIV (MOH, 2011).

A guideline may be defined in different ways that convey similar concepts. The Oxford Advanced Dictionary (1995) defines it as:

.. a general rule, instruction or pieces of advice that governments issued.

Or, it is a document that aims to reorganize some processes accordingly and as a document that contains recommendations about health interventions, whether they are clinical, public health-related, or policy interventions.

Importance of guidelines is emphasized particularly in low-income countries where resources are scarce and evidence-informed decisions are crucial. The mere presence of guidelines, however, don't guarantee successful implementation. Hence, guidelines may fail to influence the implementation of health programs as per the recommendations forwarded. A study indicated that guidelines fail to achieve their objectives because of inadequate consultation and consensus-building among stakeholders, lack of consideration of available resources, limitation of technical capacity, attitude and behavior of health professionals. Moreover, the tradition of using expert opinion-based approaches, lack of training on use of the guideline, lack of ownership, organizational barriers, and competing priorities affect the contribution of guidelines negatively (Nabyonga, Wavamunno, Bakeera, & Criel, 2012).

Another study has shown that guidelines are syntheses of best available evidences to support decision making by clinicians, managers, and policy makers. They are, however, underused. As to this study, the guideline implementability (characteristics of guidelines that may enhance their implementation by users) framework includes eight domains namely: adaptability, usability, relevance, validity, applicability, communicability, resource implications, implementation, and evaluation (Gagliardi, Brouwers, & Bhattacharyya, 2012)

2.3.Human resources for health care systems

Development and assignment of motivated and competent health care workers is mandatory task for every government to achieve nationally and globally set health goals. The number and professional mix of these health care workers is also a key variable to ensure quality and accessible health services. A study reveals that improved maternal and child health (MNCH) outcomes were directly linked with increased availability of skilled health workers. However, there is tremendous variation across countries not only in availability and distribution but also of the services provided by health workers with the same occupation. In 53 of the 68 WHO priority countries, including Ethiopia, the national ratio of health professionals to population falls below the minimum threshold established by WHO for selected priority MNCH interventions. Therefore, Group-8 nations committed to support developing countries to ensure comprehensive and integrated approaches to accelerate the progresses towards the achievement of Millennium Development Goals with respect to maternal and child health (goals 4 and 5). The initiative was targeted to accelerate delivery of key interventions for improved MNCH outcomes along the continuum of care (Gupta et al, 2011).

Another study stated that there was a shortage of different groups of health professionals in Ethiopia. An uneven distribution of professionals between regions, urban and rural setting, and governmental and non-governmental/private organizations was another challenge that the Ethiopian health care systems is facing. The ratio of health workers to population was much lower than that of the average for Sub-Sahara Africa (Samuel et al, 2007). Another study conducted at Arba Minich Hospital also confirmed that the performance of PMTCT program implementation was poor due to shortage of skilled manpower, health care staff turnover, and

poor quality of counseling, lack of monitoring and poor quality of service delivery (Adedimeji, Abboud, Behailu, & Miriam, 2012).

Performance improvement of healthcare workers is a crucial factor to achieve intended objectives in MNCH services including PMTCT. A research has shown that performance outcomes in MNCH clinics in turn are influenced by job expectations; performance feedback; environment and tools; motivation and incentives; and knowledge and skills. The findings also suggested that a set of incentives could help in introducing and scaling up effective PMTCT programs (Touré, Audibert, & Dabis, 2010).

2.4. Multidisciplinary approaches in MNCH

The term “multidisciplinary” has many contextual meanings across a broader professions and respective interests of professionals. Wikipedia Free Encyclopedia (April 20, 2013) explain the term “multidisciplinary approach as “... involves drawing appropriately from multiple disciplines to redefine problems outside of normal boundaries and reach solutions based on a new understanding of complex situations”. According to this source, multidisciplinary approach is a fundamental expression of being guided by holism rather than reductionism. And, one of the major barriers to the multidisciplinary approach is the long established tradition of highly focused professional practitioners favor a protective (and thus) boundary around their area of expertise. This tradition has sometimes been found not to work to the benefit of the wider public interest; and the multidisciplinary approach has recently become interest to government agencies and enlightened professional bodies who recognize the advantages of systems thinking for complex problem solving.

In health care systems, the concept “multidisciplinary approach” has been applied in many health related literatures; and, these approaches are advocated by researchers. A study

showed that integration of health care services through multidisciplinary approaches achieved significant improvements to physical and psychological well-being of individuals dealing with multiple chronic illnesses. Using a collaborative and whole-person approach rather than having various professionals treat conditions in relative isolation resulted in a significant reduction of health care costs. Such intervention process also satisfies health care services users. As to this study, not only health care systems would profit from adopting multidisciplinary and whole-person approach to provide health care services to individuals with multiple chronic conditions. But also the approach enhances both physical and psychological functioning of users as well as an increases work satisfaction of health care services providers (Krause et al, 2006).

Nicholson, Artz, Armitage, & Fagan (2000) also indicated the beneficial effect of multidisciplinary approach. As to these scholars, outcomes of inter-professional team efforts are considerably greater in scope and value than the cumulative effects of the performances done by individual practitioners working separately; particularly in healthcare; and, benefits of collaboration extend to practitioners, too. In this regard, practitioners reported that they enjoy better communication and relationships with their colleagues, focus on the entire patient, increased efficiency and effectiveness, productivity, satisfaction, and develop the ability to provide holistic care. They also explained the approach facilitates the opportunity to share experiences with other professionals expands their knowledge and expertise while providing support, dividing responsibility, and mitigating the effect of failure.

2.5.Integration of PMTCT service into other programs

Though it was not new in health care services, definition of the term “integration” has been contested for long. Its definition is subjected to variations as models and approaches of

integration do so. World Health Organization (2008) identified six forms of conceptual usage for the term in service delivery. *First*, the term “integrated services” refers to package of preventive and curative health interventions for a particular population group. *Secondly*, “integrated” health services can refer to multi-purpose service delivery points i.e. a range of services for a catchments population is provided at one location and under one overall manager. *Thirdly*, “integrated” services means achieving continuity of care over time. This may be about lifelong care for chronic conditions such as HIV/AIDS, or a continuum of care between more specific stages in a person's life-cycle. *Fourth*, “integration” can also refer to the vertical integration of different levels of service; for example, district hospitals, health centers and health posts. In this form of integrated health services, an overall manager is in charge of a network of facilities and personal and non-personal health services. From the clients’ perspective, a key feature of this type of integrated health service is well-functioning procedures for referrals up and down the levels of the system, and between public and private providers. Key issues include what services should be provided where, and how to ensure that clients are efficiently referred.

Fifthly, “integration” can also refer to integrated policy-making and management which is organized to bring together decisions about different parts of the health service, at different levels. Lastly, “integration” can mean working across sectors when there are institutionalized mechanisms to enable cross-sectoral funding, regulation or service delivery. This approach is mostly applied in industrialized countries to coordinate the health and social services. WHO, in general recommended the definition of “integration” as “the organization and management of health services so that people get the care they need, when they need it, in ways that are user-friendly, achieve the desired results and provide value for money”. WHO emphasized that this definition reinforces the fact that integration is a means to an end, not an end in itself.

Another study revealed that integration has occurred at differing extents and dimensions. According to this study, the first dimension of integration is across the continuum of care (e.g. maternal, newborn, child) with respect to key health problems such as family planning, maternal & newborn care, case management of common epidemics. The second dimension of integration brings together population-oriented health actions with individually-directed clinical actions covering promotive, preventive and curative domains. These include social protection, water access nutrition, immunization information education, and gender and disease treatment. The third dimension of integration is vertical, comprising linkages between different levels of the health system, primarily between community and first level health facilities (Harmonization for Health in Africa, 2011).

2.6. Community participation

Though the concept of “community participation” is contested for many definitions, as to world health organization:

Community participation is a process by which people are enabled to become actively and genuinely involved in defining the issues of concern to them, in making decisions about factors that affect their lives, in formulating and implementing policies, in planning, developing and delivering services and in taking action to achieve change (WHO, 2002).

It is, therefore, argued that community participation in health is most advocated for providing a mechanism for potential beneficiaries of health services to get involved in the design, implementation and evaluation of activities, with the overall aim of increasing the responsiveness, sustainability and efficiency of health services (Mubyazi & Hutton, 2012).

Other literature also showed that community participation has got an impetus of emphasis after WHO member states ratified primary health care as a key strategy and policy at the Alma Ata in 1978. The declarations of the Alma Ata conference clearly stated that communities have the right to participate in their health care and the added values of their participation (UNAIDS 2012). UNAIDS further elaborated that community engagement in PMTCT program is important to scale up and achieve the goals set for 2015. Furthermore, strong linkages between community and facility services are considered to be foundation of an effective PMTCT program; and full integration of PMTCT services includes establishing strong link between the two. Community engagement for PMTCT, therefore, must work hand in hand with efforts to improve PMTCT services at health facilities. Besides, demand creation must be linked to adequate, stigma-free and client-sensitive PMTCT service delivery systems. Facilities must also engage with communities to address demand-side barriers and ensure provision of the full package of service for every client. Health care providers and policy makers should, therefore, understand differences in available resources, health-care infrastructure, health work cadres, leadership systems and socio-cultural factors greatly affect PMTCT services uptake.

Availability and use of ANC and facility delivery, gender norms, beliefs and practices around pregnancy, childbirth, family planning and nutrition are a few of the important variables to be consider in PMTCT scale-up. Since there is no single community engagement strategy and set of practices will work equally well in all contexts selection and adaptation of the better fit to the detailed understanding of the local environment is required.

The concept of community is multidimensional in nature and involves a complex of horizontal and vertical relationships between people and organizations. The roles of civil society organizations like local and international NGOs, faith based institutions, professional and

voluntary associations and grassroots institutions (Iddirs etc) have great role in advocating PMTCT services within communities.

2.7.Opportunities to implementing the PMTCT program

The intervention of PMTCT to curbing new infection among infants and children was one of the biggest success stories in fighting HIV and AIDS. Following the introduction of this innovative intervention, the international community and multi lateral agencies showed their commitment to support the program in low and resources limited settings of the globe. WHO, USAID, UNICEF, took the lead to advocate and develop important guidelines to strengthen and scale-up best practices (UNICEF, 2003; WHO, 2006; 2010). The following statement from high ranked American official signifies that the global community has a commitment, at least in principle, to achieve the goal of HIV-free children by 2015. “The goal of an AIDS-free generation may be ambitious, but it is possible with the knowledge and interventions we have right now. And that is something we’ve never been able to say without qualification before. Imagine what the world will look like when we succeed” (Clinton, November 8, 2011).

The design and discovery of potent antiretroviral drugs and treatment has allowed many people with HIV including pregnant women improved their life conditions and led to enjoy relatively healthy and longer lives. Through optimal adherence for ART, reduction in mother to-child transmission has been observed over the past decades even for a woman chose to breastfeed her child (Chibwasha, 2011).

Following the global movement against the transmission of HIV from mothers to their infant (MTCT), the government of Ethiopian adopted the first national PMTCT guidelines (policy) in 2001. Consequently, the guideline was updated up on the advances to intervention has been done to accommodate recent improvements to the program. Hence, the government has

endorsed the “option B+” strategy that would have an opportunity to all HIV positive pregnant women to access full ART treatment regardless of CD4 count or clinical staging, keeping in mind the arguments for and against this option.

Moreover, the expansion of primary health care facilities where PMTCT service is potentially integrated, is an opportunity for child bearing mothers. This movement has a great potential to address the sexual and reproductive needs of Ethiopian women, though weak integration of the program with other services poses critical challenges. The health extension program in line with health facility expansion has been recognized as an exemplary approach in improving access to demand for health services.

2.8.Challenges to implementing the PMTCT program

Many literature revealed that there are challenges that hamper smooth implementation of the PMTCT program include, not limited to, poor linkage of PMTCT services with other related programs, loss to follow up, stigma and discrimination, poor demand for the existing MNCH services and other socio-cultural barriers. Therefore, related literatures with respect to the challenges associated with PMTCT program implementation are discussed accordingly.

2.8.1. Poor linkage of PMTCT to MNCH and other HIV/AIDS care and treatment services

It is a common observation of recommendations favoring linkage and integration of maternal and child health programs into HIV/AIDS care and treatment. These approaches are highly advocated particularly in resource limited settings to reposition family planning, voluntary HIV counseling and testing, PMTCT, ART/Sexuality transmitted infections treatment and infant feeding counseling to integrate with primary health facilities and communities.

As a matter of fact, linkage of PMTCT services with MNCH and other HIV/AIDS response programs is not successful in many developing countries. Quality of services is compromised due to different reasons. A study conducted in Uganda, for instance, showed that HIV testing for PMTCT service was carried out without consent of the pregnant women. It was also revealed that some health care providers favored family planning for HIV positive women. Instead of enhancing the decision making ability of clients make informed decision about their choices of child bearing, care providers simply encourage them not to have a child at all. This attitude reflects prioritizing prevention of pregnancies and protecting women's reproductive rights that leads to provider-client tension and missed up of service demands. In worse scenario, these researchers also observed that HIV positive women were routinely offered sterilization in the Dominican Republic, India, and Thailand (Leslie et al, 2010).

These studies highlight that non-consent for HIV testing, limited quality of counseling for non-disclosure of HIV status and infant feeding have posed challenges to the program. Moreover, lack of early infant diagnosis and shortages in staff, space and resources for more effective implementation, follow-up and monitoring and inadequate local leadership hampers the quality and coverage of the services.

The Ministry of Health (2012) reported that Ethiopia celebrates success stories in overall progress towards HIV/AIDS response. On the other hand, there was very low PMTCT coverage, reflecting the inadequacy of access to PMTCT services as well as poor integration with MNCH services. Furthermore, the performances in ANC lag behind the targets because of low utilization and limited availability only in 54% of all health facilities. Among those who attended ANC clinics at health facilities where PMTCT services are accessible, more than a quarter were not tested for HIV. These were compounded with limited access to and utilization of early infant

diagnosis and low percentage of deliveries at health institutions. While only 40% of identified HIV positive pregnant women received ARV prophylaxis (24% of estimated need), less than a quarter of newborns to HIV positive women received prophylaxis. Weak referral linkages, poor male partners involvement, inadequate awareness on the benefits and availability of PMTCT services were exacerbating factors to the poor performance.

As far as service linkage and integration, the role private health facilities played is important. Private health facilities serve a significant number of women who present for reproductive health services which could be a good entry point for a comprehensive PMTCT services. The sectors are ever expanding from time to time and so need government support in the area of MNCH in general and PMTCT in particular. A study revealed, however, that the availability and quality of PMTCT services in the private health facilities was not sufficient that none of the health providers in the facilities were providing a complete package of the PMTCT services to their clients; while only 46.5% had ever provided at least one of the PMTCT services (Eyasu, Tigist, & Abdulfetah, 2010).

2.8.2. Loss to follow up (LTFU)

Recent study shows that in Sub-Saharan Africa an estimated 60% of people living with HIV are women at their reproductive age group. Each year approximately 1.4 million HIV positive women become pregnant. Among ANC, the proportion of women living with HIV ranges from 5% to 30% in this region. This condition calls for intervention of comprehensive PMTCT program including continued follow up and treatment for HIV positive mothers and their children (Kalembo1 & Zgambo, 2012).

This study also, highlighted that follow up of known HIV exposed infants and children is not only necessary to identify infants with HIV and to ensure the timely initiation of treatment and care, but also to avoid postpartum HIV transmission and improve overall infant health outcomes. Follow-up greatly helps to treat possible opportunistic infections for mother and baby and referral to psychosocial support and home-based care services. However, higher dropout rates (LTFU) within PMTCT programs were observed in the region with an estimated cumulative losses range from 20–28% during antenatal care, up to 70% at four months of postpartum and close to 81% at six months after birth in the overall PMTCT programs.

The same study revealed that poor monitoring of PMTCT services by health workers was one of the reasons. That is because health facilities did not have registered information on HIV positive mothers who were enrolled in PMTCT but failed to return for follow-up care. The major health related factors that contribute to this high dropout due to LTFU includes fear of HIV test, stigma and discrimination, home deliveries and other socioeconomic reasons.

2.8.3. Stigma and discrimination

Stigma and discrimination is one of the barriers to effective HIV prevention and treatment programs. It results in low uptake of and poor adherence to prevention and treatment services including PMTCT. Pregnant women may avoid participating in PMTCT programs due to fear of stigma, discrimination, and violence, particularly from partners when disclosing their HIV status (Mahajan et al, 2008). Mahajan et al further elaborated that stigma and discrimination may be found in families, communities, institutions including health care facilities and places of employment, media and government policies, laws and legislations. Stigma and discrimination in healthcare facilities is severe to PLHIV. This will prevent individuals from accessing important

health services; a basic human right for all. Health facilities, supposed to be places of healing, can instead inflict additional pain and trauma on some of the most disadvantaged patients in this scenario.

Another study also indicated stigma and discrimination in healthcare settings may be refused access to facilities, tested for HIV without consent, and a lack of confidentiality. This study further elaborated that grounds of health workers to stigmatize and discriminate HIV positive people may vary from incorrect and insufficient information, inadequate resources to prevent and treat patients, fear of contracting disease, a misunderstanding of patients' rights, social and moral beliefs, and stress due to heavy workloads. This is more evident in health facilities constrained with resource limited settings, where there are frequent shortages of medical supplies, limited or no up-to-date trainings, poor infrastructure facilities and poor or non-existent motivation systems (Alphonse, 2011).

2.8.4. Poor demand for MNCH services

A study shows that utilization of maternal health care services is inadequate in Ethiopia, as clearly depicted by the major maternal health care indicators. In this study, demographic and socio-cultural factors including maternal education, marital status, and place of residence, parity, and religion were the major factors greatly affecting MNCH services in Ethiopia. Attained level of educational, for instance, was found to have an impact on the utilization of maternal health services. Health programs need lacks focus to attracting women with little or no education for the available services for short term scenario (Yared & Asnaketch, 2002).

According to an assessment conducted on reproductive health information needs, only 29% of women use modern contraception (a remaining 25% of women have an unmet need for

family planning). Infant and maternal mortality rates found to be 59/1000 live births and 676/100,000 live births, respectively. The report also revealed that only 34% of women receive ANC and 10% of births, respectively, were attended by skilled health care providers (Samson, 2012).

2.8.5. Other socio-cultural barriers

A study revealed that combined use of traditional and biomedical health methods is common in many developing nations. In such communities, community members viewed child birth as a natural process which should ordinarily require little intervention. As a result, mothers often present late in pregnancy for ANC and home births are common. These social and cultural beliefs compounded with high levels of HIV and AIDS stigma and denial are associated with delayed or no uptake for maternal health services, poor adherence to prevention services and institutional births. Hence, all of those must be addressed to achieve sustainable PMTCT outcomes (Maphangisa, 2012).

A woman's level of education and specific knowledge about the importance of pregnancy and delivery care and awareness where to receive them plays a role in uptake of MNCH services. Families and peer influences pregnant women's choices and can lead to little control over their own fertility and health care choices. Relationships with male partners also play important roles to how family structure can affect women's health. Effective health services should address reproductive and maternal health along a continuum of care that adheres for rights to health, wherein health care is accessible, affordable, acceptable, and of high quality. Unless fully implemented, the introduction of policies and guidelines will not in themselves be sufficient for effecting positive change (UNDP, 2011).

Another study indicated that the concept and application of exclusive breastfeeding and weaning is debating between biomedical and socio-cultural advocators. The argument posed by sociologists and anthropologist that breast feeding is a debate whether it is a natural (Moland, 2004).

The concept of PMTCT is based on medical knowledge defining breastfeeding in terms of nutrition, disease prevention and mother-child attachment. Moland stated that breastfeeding should be replaced by other feeding methods when breastfeeding becomes a risk to the health of the baby. The replacement feeding is promoted as the safest option for HIV prevention, most PMTCT guidelines recognized that medical and nutritional superiority of breastfeeding and the potential risks involved in other methods in terms of hygiene, knowledge, access to money to buy replacement foods, and convenience. At the same time, exclusive breastfeeding and immediate weaning is a strange phenomenon in an area where prolonged breastfeeding and early introduction of supplements have been a common practice. Neither of the promoted options is easily implemented; both pose major challenges particularly for poor women.

In the next chapter, I discussed issues including study site, study participants, rationale of the method, processes of data collection and analysis, limitations of the study and ethical dimensions considered during the study period.

Chapter 3: Research Method

This chapter focuses on the research method and design which is used in this study. Series of explanation are given on the study method including data collection, data analysis, inclusion criteria, ethical considerations and limitations of the study.

The research methodology I preferred is based on the purpose of the study and nature of the research questions (Yin, 2003, p.14). The main objective of this study is to assess implementation of the PMTCT guideline (policy) and explore opportunities and challenges associated with the policy implementation.

3.1.Study sites selection

The study was conducted in three public hospitals run by Addis Ababa City Government Health Bureau. The inclusion criterion of study sites in this study was availability of PMTCT program at these public hospitals. In this regard among six public hospitals run by Addis Ababa City Government Health Bureau, the PMTCT service was available only in three hospitals during the study period. The other two (Minilik II and Ras Desta Memorial Hospitals) had no MNCH department, hence there was no PMTCT service provision at all; while one (Tirunesh Beijing hospital) was newly established, hence, MNCH services were not well organized. Therefore, only Zewditu, Ghandi and Yekatit hospitals were selected.

3.2.Description of participants and their selection criteria

The respondents were health care providers who were assigned and working in ANC/PMTCT clinics at each health facility. These health care providers were assumed to have

basic understanding, knowledge and practical exposure to the issue under the study. Besides, focal persons having a specialist knowledge and understanding about PMTCT program/coordination at the Federal Ministry of Health, Addis Ababa Health Bureau and Federal HAPCO were interviewed as key informants.

Therefore, the selection criteria primarily, were the knowledge/ understanding of the respondents about PMTCT intervention and associated opportunities and challenges. Willingness and voluntary participation were also crucial to the successful participation in the study. Service providers at facility level were interviewed about the implementation of the program in their respective institutions. These were also health professionals, except the volunteer MSG coordinator who have a basic knowledge and understanding about maternal and child health issues in relation to PMTCT program.

3.3.Rational of qualitative approach

The rationale for selecting qualitative methods is that qualitative method is employed when the issue needs to be explored and a complex detail understanding about it is sought with actual words of different individuals with different perspectives (Creswell, 2007, p.31-41).

Previous researches on the issue of PMTCT in Addis Ababa have mainly focused on quantitative measures to uptake and coverage of the services. This has included examining barriers to rolling out a minimum package of services for pregnant women mainly from the perspectives of users, infrastructure and biomedical variables. Besides, the policy dimension of the program was, as compared to issues related to the behavior of users and providers, not sufficiently studied too. The nexus between policy provisions on the one hand and performance of these provisions and implementation systems on the other, fundamentally impacts on the

degree to which a pregnant woman is able to benefit from prevention and treatment interventions. Against that background, qualitative methods were employed to understand the implications of policy (the PMTCT guideline) provisions and their implementation at the ground.

3.4.Data collection

3.4.1. Primary data

Two methods of data collection namely key informant interview (KII) and site inventory of inputs were employed to gather primary data for this study. The KII was held based on unstructured interview guide that was developed based on the thematic components of the PMTCT policy document. Inventory of inputs and related services were also conducted through pre-formulated checklists. The checklists were adapted from the PMTCT policy document itself.

Six KIIs were conducted with program specialists of PMTCT at the Federal Ministry of Health, FHAPCO and Addis Ababa Regional Health Bureau. Besides, three service providers were interviewed as key informants; one per facility. One coordinator of mother support group (MSG) was involved in the KII. This volunteer woman had rich experiences about the program being one of the first HIV pregnant mothers participated in the pilot PMTCT project (Nigat project) at Black Lion Hospital in 2004.

Relevant data were also collected through service/input inventory checklists in the three hospital facilities in which PMTCT service provision was available. This was done by interviewing PMTCT service providers at these facilities. These methods were very important to gather optimum primary data for the study.

3.4.2. Secondary data

To complement the primary data, document reviews were held. In this regard, the 2001 and 2007 PMTCT policies as well as the 2011 PMTCT policy (guideline) and 2011 PMTCT Implementation manual, annual plans versus performance reports and related studies in the area were considered. Both the 2011 PMTCT guideline and implementation manual were the benchmarks of this study.

3.5. Nature of the research project

Qualitative social work research has many contributions to program and intervention design for all vulnerable mothers and their children in general and for PMTCT program in particular. It helps researchers to obtain detail and informative data about specific issues of the program. This study, hence, will provide in-depth information on the subject under the study. It will also help decision makers and practitioners to devise workable and contextually appropriate implementation strategies to improve the service delivery systems in a manner that every eligible citizen has easy access to the services.

3.6. Data analysis

Data analysis followed the thematic framework processes based on the themes under the guidelines provisions, the guiding questions and newly emerging themes during KII.

Consequently, issues were summarized in to eight themes, namely: participation in PMTCT policy formulation, service integration, community involvement, multidisciplinary approach, human resources, opportunities, challenge and monitoring and evaluation (M and E) of PMTCT programs were identified. Analysis, discussion and conclusions were made accordingly.

Data analyses started concurrently with data collection. After each interview the notes was scrutinized for missing information and deficiencies and further clarifications were asked during subsequent interviews regarding the newly emerging themes. Prior to the actual data analysis, short notes were rewritten to full details. Doing the rewriting was an opportunity to immerse into the data and to get a holistic understanding of the material.

At the initial steps of a qualitative data analysis, it was tried to manage and make sense of the huge material by reading and re-reading the notes taken during the interviews to get an overall impression of the material. Then, I identified recurring themes. The interview guides were found instrumental to make preliminary labeling of the themes. The third step was reading and re-reading again and again then removing relevant texts and merging under the respective themes.

The fourth step was thorough reading of the texts under each theme followed by removing irrelevant texts. Coming back and forth was common throughout the analysis process. In the analysis concepts like integration, competency, multidisciplinary approach, motivation and training, community involvement, male involvement, monitoring and evaluation and lost to follow up were used.

3.7.Ethical consideration

Ethical clearance was obtained from Addis Ababa Health Bureau after the study permission was given by school of social work, Addis Ababa University. All of the respondents, except one, were professionals and officials of health care system in general, and PMTCT programs in particular. Children were not involved in the research. There was no power relation between the researcher and the respondents.

Confidentiality was maintained in a way that information gained from the Hospital and staff was not used for purposes other than this research. Names of individuals didn't appear in any document records. After the completion of the research purpose, all records of the data would be destroyed. It was assumed that respondents wouldn't face any potential physical or psychological risk because of their participation in the research. Respondents to this study were informed that they wouldn't benefit by participating in this study.

3.8.Limitations of the study

This study involved only nine health professionals working in public hospitals: two Medical doctors, two public health officers, four nurses and a volunteer mother support group coordinator. Six key informant interviews were held with the two medical doctors, two public health officers a nurse and a volunteer mother support group coordinator. The other three nurses were dedicated to complete the checklists for this study. Key informant interview with a representative of the NGOs was not conducted due to lack of willingness to participate in the study. This has influenced the quality of the study findings, as the experience of NGOs may be unique.

It would have been better if there had been participants both from health centers and private health facilities as well as community representatives to get full picture about PMTCT program implementation, opportunities and challenges. This couldn't be materialized due to time and other resource limitations which made it impossible to include potential key informants to participate in the study.

It would also be good if the study were incorporated quantitative data and method of analysis to complement the limitations of qualitative study. The coverage (scope) of the study

was limited only to Addis Ababa public hospitals; it did not include health centers, private health facilities and other areas outside Addis Ababa due to resources constraints.

In this study, qualitative method of research through key informant interview complimented with checklists was done. However, it would have been good if the study had incorporated both qualitative and qualitative approaches.

In the next chapter, I discussed major findings of the study including background of key informants, PMTCT guideline formulation processes, human resources, multidisciplinary approaches in maternal health and child health, integration of PMTCT services to other health care systems, community participation, major opportunities and challenges of PMTCT program implementation in the study health facilities.

Chapter 4: Findings of the study

4.1. General

The total population of Addis Ababa city was estimated to be 3,038,096 where 52.4% were females and 65.5% were in the age group of 15-49 in 2011/12. Health services in the city are provided in health facilities run by the Federal government, Addis Ababa regional health bureau, private and NGOs. There were a total of 53 hospitals, out of which 36, 14 and 3 were private, government and NGO owned, respectively, during the year 2011/12. About 57 (50 owned by the regional health bureau and the rest 7 by NGOs) health centers and 827 (796 private and 31 NGO owned) clinics found in the city. Among the 14 government hospitals and 57 health centers in the city, 6 and 50 of them respectively were administered by Addis Ababa Health Bureau. Out of all health facilities, PMTCT services were available in 109 (11.6%) of them (Addis Ababa Health Bureau, 2012).

According to the 2011/2012 annual report from Federal HAPCO, PMTCT services were available in 1900 health facilities in the country. The number of ART sites was increased to 838 by the same year. Among these, 109 PMTCT and 58 ART sites were found in Addis Ababa. The report also revealed that it was planned to expand the PMTCT and ART sites to 2544 and 1052 respectively, nationwide by the same year. It was also learned from this report that there is a mismatch between the number of available ART and PMTCT sites. This situation compounded with the treatment regimen changes from option A to full ART lifelong treatment in option B+ would pose a challenge to expand the services for all eligible groups (Federal HAPCO, December 2012).

4.2. Background of Key informants

In this study, a total of nine respondents were participated. From the three public hospitals, six participants were selected, of them three participated in KII and the rest three participated in completing checklists. The rest three KIs were represented from MOH, Federal HAPCO and Addis Ababa Health bureau. With respect to sex, five of the participants were women and the rest were men. Four of them were PMTCT service providers, of whom three had nursing background; two of the male were general practitioners (Medical Doctors) and the other two were public health officers. One of the women had a diploma and provides voluntary service in coordinating mother support group. Being one of the participants in the pilot PMTCT program, this woman had an ample amount of experiences in the program since the beginning of the service in Ethiopia. All of the health professionals have attended basic training in PMTCT at least once in the previous five years. Three of them were PMTCT program experts at national level. All of the participants had more than five years of experiences in either PMTCT program coordination or at the level of service provision.

4.3. The PMTCT guideline and its formulation process

Participatory policy formulation process is a crucial step if the policy has to be realized into practice across all concerned parties. Participation during formulation process of the policy, among others, is an important step to share responsibilities and inspire concerned parties towards the achievement of commonly set goals. Scholars like Mara S. Sidney (2007) argued that the causal chain to understand why policies succeed or fail should to be evaluated starting from the formulation process. Because, as to him, the original policy formulation processes and the policy designs themselves significantly contribute to implementation outcomes. In this respect, Ministry

of health indicated that “extensive consultations” were held with “all relevant partners” during the formulation process of the 2011 PMTCT guideline (MOH, 2011).

The 2011 guideline was the revised version of the 2007 guideline where the revision was undertaken by the National TWG which comprised of sixteen participants represented from twelve organizations. These are Ministry of Health (4), Federal HAPCO (1), Pharmaceutical Fund and Supply Agency, PFSA, (1), WHO (2), UNICEF (1), UNAIDS (1), USAID (1), John Hopkins University, JHU (1), University of California San Diego, UCSD (1), American Center for Disease Control, CDC (1), International Capacity building for HIV/AIDS program, ICAP (1) and Intra-Health (1). Five of the members were females and twelve were medical doctors. Out of the twelve organizations, only three were governmental institutions (MOH, FHAPCO and PFSA); others were either bilateral (6) or multilateral (3) donor agencies. Intention of the 2011 PMTCT guideline development was to achieve the global movement towards the elimination of Pediatric HIV as per the 2010 WHO recommendations (MOH, 2011).

In this national PMTCT guideline, PMTCT service expansion and integration, among others, were given due attention. Therefore, it was targeted to promote services expansion and integration with potentially available MNCH and HIV/AIDS programs both at facility and community levels. To achieve these ends, the Ministry set strategies including PMTCT data integration into routine registers, training of all MNCH service providers, strengthening referral systems, coordination of program partners, mobilizing resources and monitoring and evaluation. Through these approaches, the Ministry intended to achieve universal provision of HIV/AIDS prevention, treatment and care services. Such efforts would contribute to succeed Millennium Development Goals 4, 5 and 6 with the overall vision set “to see HIV free generation by 2020” (MOH, 2011, p. 1).

The guideline had its own specific objectives among which assisting service providers and communities in delivering comprehensive PMTCT services and increasing ownership, respectively, were the major ones. These objectives were further elaborated in the guideline to involve strengthening of referral systems including community linkages and demand creation for the available services (MOH, 2011, p. 1).

To ensure full implementation, the Ministry also emphasized dissemination of the printed copy of the guidelines to each health care facilities providing PMTCT services and potential sites. Moreover, conducting training and orientation sessions on the contents and principle of the guidelines for all potential users from community to policy maker levels were sought as an important strategy. In this guideline, community participation and mobilization, male involvement and family focused interventions were identified as key guiding principles of the PMTCT program (MOH, 2011, p. 2).

According to the guideline, the PMTCT program had four major components. The first component focuses on primary prevention of HIV through universal prevention packages to benefit all women who have a child bearing potential. The second component of the program is about prevention of pediatric HIV infection mainly through family planning and preventing unintended pregnancies among women living with HIV. The third component gives due attention for prophylactic treatments to pregnant women living with HIV and their infants after birth. The last component focuses on provision of appropriate HIV/AIDS treatment, care and support to women living with HIV and their children and families (MOH, 2011, p.3)

The implementation manual of this guideline also highlighted strategies to each components and interventions at the level of facilities and communities. Besides, it describes the packages of services and approaches to HIV counseling and testing, inputs including human

resources, infrastructural arrangements, logistics and supply and laboratory facilities (MOH, 2011, p. 5-6).

With respect to PMTCT program management and coordination, the roles and responsibilities of concerned bodies from national to kebele levels of administration were discussed in the implementation manual of the guideline. Besides the existing structures of the Ethiopian health system, from MoH to health extension workers, establishment of TWG at each level was recommended in the guideline. Members of the TWG were also identified at each level of the structures though the national level members of the TWG were not explicitly identified in the manual (MOH, 2011, p. 13-14).

Ministry of health stated the copies of the 2011 guideline should be available at each facility to facilitate easy communication and implementation. It was expressed as: “to ensure its full implementation, printed copies of the guidelines must be available in all health care facilities providing PMTCT services and to those planning to provide the service. Moreover, orientations/trainings on the guidelines have to be given to all potential users from community to policy maker levels (MoH, 2011, p. 2). However, regardless of the policy intent of the Ministry to replace the 2007 guideline by the revised version, a printed copy of the 2011 version was found at neither of the health facilities included in this study. Neither of the service providers did clearly explain about which guideline was in use during the study. It was observed that service providers have been using the 2007 guideline as a job aid. Any copy of the new version was not found at the Ministry’s website too.

4.4.Human resources

The 2011 PMTCT guideline recommended that most of the service providers at each facility should be trained in comprehensive PMTCT services delivery including HIV counseling and testing, safe abortion practices, infant feeding and family planning counseling. To this end, therefore, it was emphasized in the guideline that a minimum of six health care providers shall have a basic training in these packages; and all of the MNCH service providers should be trained in PMTCT program. Besides, importance of both in-services and pre-service training was clearly stipulated in the implementation manual of the 2011 guideline. In this manual, supportive supervision and mentoring were also identified as additional strategies to update the knowledge and skills of PMTCT service providers (MOH, 2011, p. 6, 9 & 37).

In this study, it was observed that all of the respondents have attended the basic training in PMTCT once in the previous five years; however, respondents from health facilities explained that up-to-date training about the program was not provided for them. These respondents explained that there was little or no opportunity to refresh their knowledge and skills so as to capture the necessary proficiency as per the advancements in the program. One respondent discussed the issues as: “I have attended the basic training on PMTCT before six years when I joined the PMTCT clinic. I have got no chance to refresh and update my knowledge in this regard. I need to update myself if I am expected to provide up-to-date and quality services for my clients” (KI IV).

Respondents also pointed out that the supportive supervisions done and mentoring given, particularly from Health Bureau and facility management, were not sufficient to update their knowledge and skills. One respondent expressed the experiences as:

The management body, particularly Health Bureau, is not responsive of our needs; we send reports to Health Bureau every month, or as deemed necessary. But, they [Health Bureau] didn't come to us to observe our burden and weaknesses; the facility management is also irresponsive of our needs, they always give top-down orders only to do this and that (KI IV).

With respect to providers' competencies, respondents have reflected different views. One of the respondents expressed that the existing PMTCT service provision workforce have sufficient level of training and work experiences for the program. He expressed his views as:

All providers are at least a diploma holder with a minimum of more than five years of work experiences in clinical services provision. Moreover, they have got the basic training based on the 2007 PMTCT guideline. So, the remaining task will be to provide refresher training based on the new guideline. However, their competencies could not be improved unless they motivate themselves and being ready to their personal development (KI III).

Another respondent emphasized that as far as the PMTCT program was successfully integrated, there is no need of facilitating specific training and staff motivation only for PMTCT providers; they should be evaluated through similar mechanisms that are applied for other service providers in the facility. This respondent pointed out his views as:

No need of facilitating special training schemes for the PMTCT providers as far as the program is integrated. On the job supportive supervision may be appropriate. Also special motivation packages must not be designed to motivate PMTCT providers only. The motivation scheme must be based on the performance evaluation criteria called business process reengineering-balanced score card (KI II).

In the 2011 PMTCT guideline, however, it was explicitly stated that appropriate capacity development schemes based on the categories of community, associations of HIV positive people, health extension workers, clinicians and facility managers should be facilitated (MOH, 2011, p. 38).

4.5. Multidisciplinary approaches in health care

The 2011 PMTCT guideline implementation manual emphasized that multidisciplinary approaches are important for the successful accomplishment of PMTCT programs. It states: “Partnership and multidisciplinary approaches are among the prerequisites for comprehensive PMTCT program success” (MOH, 2011, p. 35).

However, the list of ‘multidisciplinary’ professionals recommended for the program was limited only to those who have a biomedical background. It was stated in the manual as:

Regional health bureaus shall ensure the involvement of professionals with a multidisciplinary background notably managerial, clinical, pharmacy, and laboratory services in the assessment and supportive supervision processes... a team of health care providers including physicians, health officers, nurses, pharmacists, laboratory personnel should be trained to provide PMTCT services (MOH, 2011, p. 5,35).

4.6. Integration of PMTCT services into other health programs

The term ‘integration’ has been common in many health related literatures since the approach is believed to have a potential of enhancing citizens’ access to universal services. A service usually provided by standalone and/or vertical programs has, therefore, perceived less effective than that of an integrated / pooled resource with other services. In the era of HIV and AIDS also the concept of integrating prevention and care service to other health care packages

including family planning and MNCH, has gained importance. The strategy assumed to combine components with the goal of maximizing coverage and health outcomes for the client and optimizing the wise use of scarce resources. In this regard, integration was prioritized as a primary strategy in the 2011 guideline though the issue of integration had been discussed in the 2007 PMTCT guideline. Participants also discussed their views and perceptions about the effectiveness of PMTCT services integration strategies. One respondent, for instance, had indicated that health extension program and inter and intra-facility referral systems were a major strategies for successful integration.

We can say that the integration of PMTCT services to other related programs is successful. Integration of PMTCT is expected mainly with MNCH programs; but different mechanisms have been designed to integrate the program to other services too. MNCH and FP programs are already integrated; so, PMTCT is easily integrated with these services. There are also intra-facility referral systems at each health facility to integrate PMTCT to other services like ART, laboratory and pharmacy (KI II).

This respondent further pointed out that HDA was a very good approach to involve community in the PMTCT program. He expressed as:

... health extension program and health development armies (HDA) played a crucial role to enhance participation and ownership of community in the overall health systems, including HIV/AIDS comprehensive services. The system of HDA is an excellent strategy to mobilize community members at each household level. Besides HDA, health extension workers have the responsibility to educate, mobilize and provide some services to the community including referring each pregnant woman to health facilities. Moreover, the mothers support group (MSG) strategy is very important particularly for PMTCT.

Another participant has expressed that though the strategies to integrate the overall health programs, including PMTCT, into facility and community levels are in place, their efficacy is dubious.

Health extension workers are overburdened; they lack specific knowledge and skills and are in short of important inputs. Moreover, the health extension program in urban settings, particularly in Addis Ababa, is not as effective as was expected. At facility level also, efficacy of PMTCT services provision depends on the provider's capacity and approach to the client which greatly impacts the program success; and that is why variation of performances commonly observed. Facility level integration is not well understood by facility management and providers. Facility management mostly perceived "integration" as if it is "merging"; and, providers did not consider the PMTCT services as one of their routine activities at clinics (KI III).

One of the participants critically expressed that intra-facility integration is not yet successful.

Besides the conceptual misunderstanding to 'integration', providers are resistant to accept additional tasks that are beyond the traditional routines. Since the human resources development strategies of most facilities are poor, providers are not well motivated to accomplish 'additional' tasks like PMTCT. I am not sure whether intra-facility integration is successful, except with ART. Inter-facility integration is too far behind; it needs too much effort and comprehensive approaches. Incorporation of HIV/AIDS responses in to pre-service curricula, for instances, is not yet comprehensive; other relevant governmental and private sectors as well as civil society organizations are not well advocated in doing so (KI VI).

4.7. Community participation

As per the 2011 PMTCT guideline, community participation and mobilization were key guiding principles for the PMTCT program consequently, community level intervention strategies were identified. Primary prevention strategies like community conversation, message development, promotion of male involvement, alleviation of stigma and discrimination need community participation and ownership (MOH, 2011, p.2-6).

Respondents also emphasized the roles community ownership and participation can play towards the successful accomplishment of intended objectives to PMTCT programs. These respondents pointed out that there were many challenges in relation to community participation. All of the respondents agreed that the current level of community participation and ownership for PMTCT program was not sufficient. This implies that much has to be done to achieve the set objectives. One of the respondents explained health extension system as excellent strategies to address community participation and associated challenges as:

The most important strategy to reach community is health extension program through health development army (HDA). However, in urban settings, the situation was not conducive for health extension program; turnover of extension workers was high.

Moreover, in the Ethiopian community, male involvement in MNCH is not common.

There is no strategy that was designed to facilitate hospital-community interaction; hospital management was confined only in routine activities within the facility (KI I).

One of the key informants also explained that HDA was the most appropriate strategy that must be strengthened. He further clarified that the intention of the government was to facilitate better working environment for PLHIV associations in which members could finally be transferred into HDA and then to model households.

Ministry of health has started to work closely with PLHIV associations and there was a plan to involve members in the provision of voluntary services to the community to minimize the cost burden for paid services. This may need strong and coordinated efforts; health service managers, planners and providers are expected to work hard and able to transfer PLHIV association members to HDA.

Another participant also emphasized that the current strategy (HDA) was not effective in achieving objectives with regard to PMTCT. This is attributed to the overburdened assignment of health extension workers. He explained his views as:

Health Extension Workers are expected to be members of too many committees within the community. Also, they have been given a responsibility of addressing more than twelve primary health care packages among which HIV/AIDS prevention and treatment is one (KI VI).

The aforementioned key informant also highlighted other major challenges associated with community involvement in PMTCT program as:

Male involvement is poor in the program; the services lack quality and involvement of local NGOs (including professional associations) in advocating and mobilizing community against HIV/IDS in general, and PMTCT program, in particular. The current law of the country restricted involvement of Civil Societies Organizations in advocacy and mobilization activities. Moreover, inter-sectoral collaboration among Ministry of Health, Ministry of Education and Ministry of Women's, Children and Youth Affairs and others in this regard was not sufficient.

Besides, another key informant discussed that though community involvement was a key principle, uniformly structured and systematic implementation strategy was not in place to

accommodate the role communities should play in this program. He pointed out his observations as follows.

There were no uniform implementation strategy to undertake successful community participation; nor were consistent and sustainable activities planned. Demand creation activities for the services were not yet sufficient to pull service users to the program. The role played by PLHIV, mother support group (MSG) and regional bureaus were not sufficient and efficient in this regard. We successfully addressed only the service sites expansion; demand creation lags behind the set target in our accelerated plan.

4.8.Major opportunities in the implementation of the PMTCT program

Respondents were asked to discuss what opportunities were there in implementing the PMTCT program. Accordingly, they explained that there were many opportunities that could facilitate successful implementation of the program. Results from these interviews revealed that the program has shown an improvement though performance was not reached to the level of expectation.

The performance was poor till 2010/2011; the coverage was only 9%. In 2011, however, it was realized that the 2007 guideline had to be revised and new accelerated plan needed. This was a great move against the low performance observed in the program. The guideline was revised and option “A” approach was introduced to achieve site expansion, coordination of partners and integration of the program with MNCH. By the end of 2012, the coverage reached to 41% and about 2000 health facilities integrated the program with their existing MNCH services (KI II).

In general, respondents indicated opportunities that help improve the performance of PMTCT program improve forward. Global commitment to eliminate new infection of HIV

among infants and children has inspired developing countries to formulate their own policies on PMTCT. As to the respondents, these global and national movements were the key opportunities that facilitate interventions to eliminate pediatric HIV infection in our country.

The government has given due attention to MNCH including PMTCT. Besides, the inspirational elimination plan of pediatric HIV infection, integration of PMTCT with other programs has a great potential if concerned bodies are successful in doing so. There are many multilateral, bilateral and international agencies and NGOs providing supports to the program. The PMTCT guideline also gives important directives to the implementation modalities. The mere presence of policy, however, is not an end by itself; it must be changed into practices (KI VI).

Other respondent discussed the merits of PMTCT program as:

We have many opportunities both to implement and by implementing the PMTCT program as was recommended in the guideline. The government had formulated the [PMTCT] policy and its implementation manual; following the approval of the accelerated plan; many sites started to provide PMTCT services. Health extension program is another promising strategy to improve health care services, particularly of maternal and child health including PMTCT (KI II).

4.9. Major challenges in the PMTCT program implementation

The obstacles facing PMTCT programs are multifaceted. The major challenges that were identified by respondents include slow integration of PMTCT programs to traditional MNCH services, loss to follow up, poor system of monitoring and evaluation, stigma and discrimination, poor demand due poor community involvement, poor health infrastructure, shortage of resources including trained staffs, home delivery and poor adherence for PMTCT services.

The respondents indicated that the updated PMTCT program was launched in 2011 in response to the national scale up plan without adequate preparation of the health facilities. Although the national PMTCT guidelines states full integration of PMTCT program into existing MNCH programs, the PMTCT services were not considered as one of the basic and necessary services which brought about the failure to prioritize PMTCT like other maternity care services. At this junction, one of the respondents discussed the experiences as follows.

Though importance of integration was repeatedly promoted in the program, the reality was different; providers themselves resisted the practices in some instances. Substantial reforms and behavioral changes are needed within the health facilities themselves (Respondent VI).

A respondent from mother support group also (MSG) supported the above observation, and explained the challenges associated with health care workers as:

Some of the health care providers lose interest and commitment to help HIV positive pregnant mothers; sometimes they ignored their clients to give the PMTCT services. This may be due to the work load that they handle, but as to my knowledge, that was not the right way out. Unless this situation is improved, meeting targets might be far reaching (Respondent V).

Another respondent indicated that loss to follow up and poor adherence were among the major challenges that hamper implementation as: “even if women do enroll in PMTCT programs or HIV care, fears of unwanted disclosure, stigma, and discrimination make it difficult for them to adhere to lifelong ART or prophylaxis during pregnancy and postnatal” (Respondent VI).

Limitation of resources available for the program was identified as one of the challenges in PMTCT program implementation. The sources of such resources were mostly from aid and

donation; no local resources mobilization strategy for the program was designed. Therefore, sustainability strategies backed with local resources were not systematically established. A respondent discussed the issues as follows:

Most of the resources for HIV/AIDS alleviation programs were mobilized from foreign sources; sometimes programs even became donor driven/dependent. We failed to sustain such programs after aid/donation cuts occurred, because we didn't have the optimum resources bases locally. Almost all of the logistics, including ART drugs, were fully funded through foreign aid/donation; unless we establish strategies to mobilize local resources it will be difficult to sustain the program. (KI III).

Another respondent also pointed out that drug interaction among drugs of ART, family planning (FP) and opportunistic infection (OI) posed critical challenges against implementations of PMTCT programs. He discussed the issues as follows:

Drug interaction needs a serious attention; administration of one or a group of drugs for one purpose highly affects the efficacy and potency of others. Simultaneous administration of ART drugs, for instances, reduces the efficacy and potency of opportunistic infections and combined oral contraceptive drugs. This might lead to services drop out, poor adherence and overall treatment failures. This challenge will be serious particularly in option 'B+', a regiment that all HIV positive pregnant women will be enrolled into full ART packages irrespective of their CD4 counts (KI VI).

Gender issues were also discussed as complicating factors for retention; these are particularly important for pregnant women. Practically, the choices of women to engage in PMTCT care were influenced by what their husbands or fathers expect with their contexts. In most of the cases, the husband is the breadwinner who holds the greatest power over health care

decision-making for the family. So, unless these issues have been addressed properly, gender hierarchy could hamper the retention of women in the program. A respondent from the MSG discussed the situation as:

I have so many experiences that many women were frustrated to gain from the PMTCT program; because their husbands might abandon them if they know their status. In the worst scenario of discordance, having an HIV positive status unlike their husbands, many women became victims of stigma and discrimination (KI V).

Home delivery, as opposed to deliveries at health facilities assisted by skilled birth attendants, was another important limiting factor for PMTCT program implementation as discussed by respondents.

Antenatal and postnatal care coverage is not more than 10% and 7%, respectively, in our experiences so far; only about 19% of pregnant mothers completed the recommended four antenatal visits to the health facilities. These factors hamper the implementation against the targets to eliminate new pediatric HIV infection by 2020 (KI VI).

Another challenge to the program was related with logistics and supplies. The PMTCT guideline implementation manual has clearly identified the logistics and human resources needed to initiate a minimum package of PMTCT services at health facilities. Equipments including clinical chemistry machine, CD4 counting machine and most importantly, Deoxynucleic acid-polymerase chain reaction (DNA-PCR) analyzers should be in place at hospital level (MOH, 2011, p. 8). As per the guideline and its implementation manual, DNA-PCR test for HIV exposed infants was a critical component, among others, of the PMTCT package. Respondents indicated that the service was previously provided at a regional laboratory; however, the service in Addis Ababa has been interrupted for the last two months from the time of interview held on

10 May 2013. One of the respondents discussed the situation as “there have been shortages of test kits for HIV; clients were sometimes told that some important drugs to treat opportunistic infections are out of stock. Most importantly, dried blood sample for DNA-PCR test has not been collected and done within the last three to four months” (KI V).

Another important challenge with regard to the PMTCT program was poor system of monitoring and evaluation plan and practices. Monitoring and evaluation systems are important to track performance records to help stakeholders judge their results and concert their efforts towards improving the program. These systems must be designed to measure inputs, outputs, productivity, efficiency, service quality, outcomes and impact. In this regard, therefore, Ministry of Health recommended that the national monitoring and evaluation tools for multi-sectoral response to HIV shall be used (MOH, 2011, p. 32). However, respondents indicated that there were some challenges with respect to PMTCT monitoring and evaluation practices. One of the respondents discussed the issue as:

Our monitoring and evaluation system doesn't support the option “A” regimen recommended by the 2011 guideline; progress was tracked by formats developed at facilities. With regard to evaluation, no any formal evaluation was done so far; the 2011 guideline was developed without a baseline study about previous efforts. Due to the urgency of the matter, we have started to conduct refresher training for service providers based on the new (2013) guideline. But, the guidelines document is not yet developed and distributed; only implementation manual and training curriculum have been developed. This situation is not conducive to capturing performance records and our databases will be poor in tracking advances in implementation (KI III).

Another respondent pointed out that the M and E system so far was poor in capturing and tracking performance results for appropriate decision as: “our M & E system was poor; the HMIS has been redesigned in a manner to capture data about the integrated PMTCT” (KI II).

One of the respondents also added that:

The current M & E system faces challenges in tracking program performance; the HMIS system couldn't accommodate the PMTCT indicators. Unless solutions are sought we couldn't evaluate the program whether it was successful or not. Changing the previous guideline (the 2011) without valid evaluation system may not be productive (KI VI).

4.9.1. Stigma and discrimination

Fear of stigma and discrimination results in large dropouts in uptake and retention in PMTCT services at each step in the complex PMTCT cascade. A respondent discussed the situation as follows:

Women may defer to enroll to the PMTCT service at the time of HIV testing, often citing a need to go home and confer with their husband, and then never return back to the health facility due to fears of HIV-related stigma and discrimination. Adherence becomes difficult if women need to hide her visits to HIV clinic or medications from her neighbors. Many women described the need to take measures to assure that family and neighbors did not find out about their HIV-positive status during pregnancy, and that this adversely affected their adherence to PMTCT services. I had a bad experience of my own when I used to dispense the nevirapine syrup to my child, my neighbor at next door complained about the stinky smell that the syrup had (KI V).

4.9.2. Integration of PMTCT services into other programs

Family planning, VCT, ART and MNCH including PMTCT, services were available at the three health facilities. Pharmacies and laboratory services were well integrated to other services through intra-referral systems. As to the respondents from those facilities, family planning counseling was provided to all women attending ANC. HIV counseling and testing for pregnant women was done during ANC visits, and the clients knew their HIV status on the same day that they undertook the test. These respondents reported that all women who have unknown HIV status were tested at labor and delivery clinics; pretest counseling was provided in the MNCH clinic on individual and group sessions; while the post test counseling was provided on individual basis.

These respondents also reported that “psychosocial support system” was in place to help clients disclose their status to their partners or important others; the PMTCT counselor and the mothers support group (MSG) provide these services. They also reported that it was difficult to offer routine HIV testing for partners of all pregnant women.

Respondents indicated that there were infrastructure related challenges to counseling and testing for HIV. Counseling rooms were not sufficiently equipped with the necessary facilities including water supply and counseling rooms with doors and windows to ensure auditory and visual privacies. It was evident that the PMTCT counseling room at one of the hospitals has no doors; counseling was offered within same room where other clients were examined; and hence, no confidentiality was maintained.

4.9.3. Human resources

At each hospital, two nurses were assigned to provide the PMTCT services. Providers were complaining about the work load that they managed. With respect to training needs, all of the respondents at the study facilities explained that refresher trainings were not conducted sufficiently and timely to meeting their growing needs. This implies that program success in general and quality of service in particular was negatively impacted. Besides, shortage of human resources increasingly affected the rollout of PMTCT programs too. The ever increasing staff turnover particularly high mobility of trained staffs was also affecting the already established PMTCT programs. It was observed that none of the hospitals under this study assigned psychologists, social workers and other community workers to facilitate psychosocial support and community engagement into the PMTCT program.

4.9.4. Community participation

The role of community involvement in the PMTCT program has been given due attention though the concept of “community” was not fully addressed. In the 2011 PMTCT guideline implementation manual, it was clearly stipulated that community members need to have different trainings in demand creation, resource mobilization and assisting facility managers and providers for successful implementation of the program. It was stated as:

Community level training on basic facts of PMTCT and HIV/AIDS should be given to HDA, PLHIV, traditional birth attendants, community based organizations, NGOs and faith based organizations focusing on demand creation & mobilization, awareness creation, services linkage, feedback and follow up, resources mapping, recording, working with health care providers and facility managers etc (MOH, 2011, p. 34).

Respondents from facilities indicated that absence of referral system to community was one of their daily challenges they faced at their workplaces. They emphasized that if community referral systems were strengthened, many clients could be enrolled successfully into the program.

In the next chapter, I presented the discussion part of the study. In this part, major findings against related literatures were briefly discussed as per the thematic issues.

Chapter 5: Discussion

This study was intended to evaluate the PMTCT program implementation as per the 2011 PMTCT guideline and to identify major opportunities and challenges in the implementation process at facility levels. Accordingly, key informant interviews with program specialists at the Ministry of Health, Federal HAPCO and Addis Ababa Health Bureau (Macro and Mezzo level respondents) and service providers at public hospitals in Addis Ababa (micro level respondents) were conducted. Besides, structured checklists and document reviews were used to capture relevant data for the study. In this chapter, therefore, the results obtained from these tools along with the reviewed literatures are discussed as follows.

5.1. The PMTCT guideline and its formulation process

Following the 2001 UN General Assembly, the global community committed to reduce MTCT by 20% by 2005 and 50% by 2010. Consequently, PMTCT services utilization in Sub-Saharan Africa has significantly increased over the past decade, though the goal was not achieved (Hampananda Hampananda, 2013). Bilateral agencies like WHO and UNICEF had played the leading role in providing technical supports and advocating the program. Countries, in their part, were motivated to adopt the program with their existing health care systems based on country level guideline/policy to stipulate to address their intentions and manage investment towards alleviating human suffering, improve health care and prevent illnesses resulted from MTCT (Cheung K., Leeder S. & Mirzaei M., 2010).

As a national response to MTCT, Ethiopia developed the first PMTCT guideline in November 2001. But, the comprehensive package with clearly stipulated guidelines was developed in 2007 after the successful completion of the pilot program started in 2003. The

Ministry of Health, again, revised the 2007 guideline in 2011 based on the 2010 WHO recommendations. The 2011 PMTCT guideline of Ethiopia incorporated a four-component approach to PMTCT which pregnant women could either be enrolled for lifelong ART treatment, or take prophylactic treatments as per the recommendation in the guideline.

The process of any policy formulation is a crucial step if the policy has to be realized into practice across the sphere of all concerned parties. In this respect, Ministry of Health prepared the 2011 PMTCT guideline involved “extensive consultations with all relevant partners” with a strong belief to make the guideline useful to all health care providers and partners involved in PMTCT interventions.

The formulation process, however, did not exhaustively involve all concerned parties that would have a lions’-share impact in implementation. The national technical working group of the guideline development was not inclusive of representatives from Universities, relevant professional associations, most relevant ministries, faith based organizations and influential community members. Members of the technical committee incorporated representatives only from donor agencies (multilateral, bilateral and international NGOs) and some staff members of the Ministry itself. Moreover, the national level members of the TWG were not explicitly identified in the manual (MOH, 2011, p. 13-14). This may have an implication to the process which did not involve all concerned parties for the agenda.

This guideline was developed with the objectives to assist service providers and communities in delivering comprehensive PMTCT services and increasing ownership for the program. Furthermore, it was planned to strengthen referral systems including community linkages and demand creation for the available PMTCT services. Although availability of a copy of the guideline was emphasized in the guideline, neither the health care facilities nor providers

of PMTCT services had the printed copy of the guideline. None of the service providers had the knowledge about which version of the guideline was contemporarily in use. This might be due to lack of orientation and absence of training sessions about the guidelines to all potential users of the policy, unlike the emphasis given in the guideline for such activities.

Moreover, community participation and mobilization, male involvement and family focused interventions were identified in the implementation manual as key guiding principles of the PMTCT program. However, the concept of ‘community’ was reduced only to ‘individuals living in the community but without formal health related training but who have general orientation on HIV (MOH, 2011, p. 4 and 21). Therefore, this policy did not comprehensively address the concept of community. Unless the concept of community was clearly understood in the guideline, would be difficult to devise strategies to community participation which in turn negatively impacted implementation outcomes. Broader efforts to improve PMTCT services at health facilities must work hand in hand with community participation and ownership.

Availability and use of ANC and facility delivery, gender norms, beliefs and practices about pregnancy, childbirth, family planning and nutrition are a few of the important variables to be considered in PMTCT scale-up activities. These variables in turn, could not be addressed with partial and/or single community engagement strategy. Set of practices rather work equally well in all contexts, selection and adaptation based on a detailed understanding of the complex community (UNAIDS, 2012). This, of course, needs detail understanding of what ‘community mean’ in the policy development context; which was not well addressed in the PMTCT guideline development process.

5.2.Human resources

To achieve nationally set health care goals, development and assignment of motivated and competent health care workers with optimum number and mix of professionals is crucial. Evidences showed that optimum skilled health workforce is directly related to improve maternal and child health outcomes (Gupta et al, 2011). Cognizant of this fact, the 2011 PMTCT guideline recommended that service providers at each facility should be trained in comprehensive PMTCT services delivery. It was also recommended that a minimum of six health care workers shall have a basic training in these packages; and all of the MNCH service providers should be trained in PMTCT program. Besides, importance of both in-services and pre-service training was clearly stipulated in the implementation manual of the 2011 guideline. In this implementation manual, supportive supervision and mentoring were identified as additional strategies to update the knowledge and skills of services providers (MOH, 2011, p. 37, 6 & 9).

In this study, it was revealed that all of the respondents have attended the basic training in PMTCT once in the previous five years; however, respondents from health care service facilities explained that up-to-date training about the program was not provided for them. They further discussed that there was little or no opportunity to refresh their knowledge and skills so as to capture the necessary proficiency in line with the advancement of clinical practices.

This study also revealed that service providers were not satisfied with the supportive supervisions and mentoring given to them particularly from Health Bureau and facility management. PMTCT program specialists, however, insisted in that as long as the program was successfully integrated with other relevant programs, there was no need of considering facilitation of specific training and motivation packages only for PMTCT providers. The position of these respondents, however, is contrary to the 2011 PMTCT guideline that explicitly stated

appropriate capacity development schemes to be provided to community, associations of HIV positive people, health extension workers, clinicians and facility managers (MOH, 2011, p. 38).

5.3. Multidisciplinary approaches

The concept of “multidisciplinary” approaches in health care systems has been cited in numerous literatures. A study demonstrates that not only health care systems would profit from adopting an integrated and multidisciplinary approach but also it improves clients’ physical and psychological functioning and increases satisfaction with health care services (Krause et al, 2006).

The 2011 PMTCT guideline implementation manual also emphasized that multidisciplinary approaches are important for the successful accomplishment of PMTCT programs. Practically, the recommended list of ‘multidisciplinary’ professionals was limited only to those who have a biomedical background. This includes physicians, health officers, nurses, pharmacists, laboratory personnel (MOH, 2011, p. 5 and 35).

5.4. Integration of PMTCT services into other programs

The conceptual application and principles of integration in health care contexts have been contested for long. World Health Organization (2008) identified the most important forms of the concept when it is used in health care delivery systems. Although there is no unified and commonly agreed upon conceptual model for integration of health care systems, scholars associated a number of principles with successful integration processes and models (Suter E., Oelke N., Adair C. & Armitage G., 2009). Integration has, therefore, occurred to differing extents and dimensions. The first dimension of integration is across the continuum of care with respect to key health problems such as family planning, maternal and newborn care. The second

dimension of integration brings together population-oriented health actions with individually-directed clinical actions covering promotive, preventive and curative domains. These include social protection, nutrition, immunization, and gender and disease treatment. The third dimension of integration is vertical, comprising linkages between different strata of the health system, primarily between community level and first level health facilities (Harmonization for Health in Africa, 2011)

This research also identified that the concept of integration was discussed in the 2007 PMTCT guideline. However, in the 2011 guideline, practice of integration approaches has been discussed as a priority strategy, among others (MOH, 2011, p. 1). Research participants have also pointed out different strategies of integration that the PMTCT program has. Inter and intra-facility referral systems and health extension program assisted by HDA were identified to be the major strategies in this regard. But, the participants reflected different views about the effectiveness of the strategies designed to integrate the program.

The findings suggested that PMTCT service integration across the continuum of care (intra-facility) was somehow successful which is expected mainly with MNCH programs. As MNCH and FP programs have been already integrated, PMTCT is easily integrated with these existing services. There are also intra-facility referral systems at each health facility to integrate PMTCT to other services like ART.

Participants also indicated that the overall integration of PMTCT services into community was not successful. This is attributed to overburdens assigned to health extension workers, health extensions' lack of specific knowledge and skills and shortage of inputs. In urban settings particularly in Addis Ababa, the health extension program has faced many challenges

including staff turnover. Therefore, the program couldn't mobilize the larger community to accelerate PMTCT program as was intended.

Findings of the study also revealed that inter-facility integration (integration of PMTCT program with sectors other than health) was poorly coordinated or non-existent at all.

5.5. Community participation

Community participation and mobilization was identified as one of the key guiding principles of the program in the 2011 PMTCT guideline. Community level intervention strategies including community conversation, message development, promotion of male involvement, alleviation of stigma and discrimination were discussed (MOH, 2011, p.6). no matter what many challenges in relation to community participation. All of the respondents agreed on that the current level of community participation and ownership for the program was not sufficient.

In Addis Ababa, the settings were not conducive for health extension program, as was expected to reach community through HDA. Moreover, the culture of male involvement in MNCH is not yet well developed in the community. As to the respondents, strategies were not designed to facilitate hospital-community interaction; hospital management was confined only in routine activities within the facility (KI I).

Besides, the findings highlighted the major challenges associated with community involvement in PMTCT program are poor male involvement, poor involvement of local NGOs, professional associations and other important community groups in guideline development process. Involvement of local NGOs in advocating and mobilizing community against HIV/IDS in general and PMTCT in particular was restricted by the government's law of Civil Societies Organizations. Moreover, sectoral integration with, for instances, the Ministry of Education and

the Ministry of Women's, Children and Youth Affairs were not sufficient. The concept of community in general, was not properly addressed to its comprehensive senses. Community ownership, therefore, was reported too poor to address the problem.

5.6. Opportunities to implementing the PMTCT program

PMTCT intervention in curbing new infection among infants and children was one of the biggest success stories in the fight against HIV and AIDS. This innovation inspired the international community and multilateral agencies to support the program in low and resources limited settings of the globe. World Health Organization, USAID and UNICEF took the lead to advocate and develop important guidelines to strengthen and scale-up best practices with the goal of HIV free generation (UNICEF, 2003, WHO, 2006, 2010). Optimum adherence to antiretroviral treatment resulted dramatic reduction of mother-to-child transmission over the past decades (Chibweshu C., 2011).

Collaborative efforts of the global community against MTCT initiated the Ethiopian government to adopt national PMTCT guidelines (policy) since 2001. Consequent updating and revisions of the guideline up on advances in the intervention has been done to accommodate recent recommendations in the program. This momentum also encouraged the government to endorse the “option B+” approach by revising the 2011 guideline.

According to the findings, PMTCT program implementation has the following opportunities. First, commitment of the global community to eliminate new infection of HIV among infants and children was the greatest stride in the movement against HIV/AIDS. Secondly, those developing countries, where burden of HIV/AIDS found to be high like in Ethiopia, were inspired to formulate their own policies on PMTCT. Thirdly, the existing health care structure, from national to community health levels, of Ethiopia was identified as an

opportunity to integrate the PMTCT service from institution to community levels. Fourthly, the government of Ethiopia has been committed to expand health facilities in which the PMTCT program could be effectively integrated. Fifth, the government has given due attention to MNCH including PMTCT. Last but not least, there are many multilateral, bilateral and international agencies and NGOs that give back up supports to the program.

5.7. Major Challenges to implementing the PMTCT program

Performance reports from MoH (2012) revealed that, Ethiopia has been celebrating success stories in overall progress in HIV/AIDS response. However, there was a very low coverage of PMTCT service, reflecting inadequacy of access to the services as well as their poor integration with MNCH services. In this study, findings also showed that integration of PMTCT services to MNCH programs was too slow and weak to achieve intended results. In other Sub-Sahara African countries, dropout rates due to lost to follow up were among the major challenges to PMTCT programs(Kalembo1 F. & Zgambo M., 2012). In this study also LTFU was one of the critical challenges in Ethiopia in general and Addis Ababa in particular. Socioeconomic factors like gender inequality lower level of education and illiteracy of women, early weaning (common in Addis Ababa), mixed feeding and perception of child bearing etc impacted the PMTCT program negatively.

Furthermore, the study identified that the PMTCT service users face challenges including stigma and discrimination against service users, poor demand for the existing services, poor quality of service provision (poor counseling) and limited resources. Drug-drug interaction among medications of ART, contraceptive and opportunistic infections were indicated as the emerging challenges of the program. Respondents also pointed out that those drug-drug adversities among ART and other drugs could hamper the efficacy and efficiency of PMTCT

programs. As to the findings, this challenge might be aggravated by the advent of upcoming option “B+” approach which recommends for all HIV positive pregnant women to enroll with the lifelong full ART regimens.

5.8. Monitoring & Evaluation of PMTCT program

The PMCT program needs strong evaluation and monitoring (M & E) systems to tracking important results with routine and periodic reports to enable stakeholders judge their successes and challenges with regard to implementation. Monitoring & evaluation systems must be designed to measure resource use, outputs, productivity, efficiency, service quality, outcomes and/or impact. Findings of the study showed that the existing M & E system didn’t support the option “A” regimen recommended by the 2011 guideline; progress was tracked only through formats developed by service providers at facilities. The current health management and information system (HMIS) couldn’t accommodate the PMTCT indicators.

The study also reveals that the 2011 guideline was revised in 2013. However, the revision was done with no formal evaluation of the outcomes of the previous guideline. This experience may not, therefore, lend itself to devise appropriate strategies for the successful implementation of the upcoming PMTCT guideline.

I discussed conclusion and implications of the study in the next chapter. Social work, research and policy implications of the study were briefly presented.

Chapter 6: Conclusion and Implication

6.1. Conclusion

This study provided insights about the opportunities and challenges towards the implementation of PMTCT guideline at government health facilities in Addis Ababa. The study focuses on the participation process of the 2011 PMTCT guideline development, its implementation and associated opportunities and challenges when it was implemented in hospitals owned by Addis Ababa City government. It explored the 2011 PMTCT guideline formulation process, issues related with human resources, integration, community involvement and M & E system of the program.

The study revealed that the concern of MTCT in Ethiopia was a priority before the formulation of the National HIV/AIDS Prevention and Control Policy. It was reported that Ministry of Health had developed the first PMTCT guideline in 1996. This guideline again was revised in 2001 before the approval of ART medications for the program in Ethiopia. Later, by the support of multilateral, bilateral and non-governmental agencies, Ministry of Health launched the first pilot PMTCT program of treatment at selected Hospitals in 2003. The full-fledged package of PMTCT services were later started in 2007 when the previous guideline was revised and internationally recommended treatments regimens were incorporated in the program. With tremendous advances in clinical trials and promotion of affiliated international agencies, the Ministry again revised the previous guidelines and the 2011 PMTCT guideline was in place after December 2011.

Though the program has relatively a long history of recognition in Ethiopia, performance in this regard lagged behind targets set. One of the major challenges in the program has been found to be limited and/or poor implementation of the guidelines as per the recommended

provisions in it. Moreover, the HIV/AIDS alleviation in general and PMTCT program in particular depended on foreign resources; hence donors had played a lion's-share role in the development of guidelines. This condition in turn limits the appropriate involvement of local stakeholders that have crucial responsibilities in realizing ownership of the program.

The study indicated that provisions in the 2011 PMTCT guideline were not fully implemented at health facilities where the service is available. None of the service providers who participated in this study were able to mention the complete package of strategies, principles and contents of the 2011 PMTCT guideline. These professionals had no knowledge about which guideline was contemporarily in use. This might imply that the Ministry of Health and its regional bureaus and facilities along with other stakeholders in the sector had limitations in advocating, orientation, dissemination of enough copies of the guideline and training activities. In addition, results of the study showed that capacity development activities were not conducted as per the recommendation in the guideline.

It was found that participants of the guideline development committee were represented from a few organizations; the committee didn't comprise members from other relevant institutions including higher learning institutions, professional associations, the Ministry of Education and the Ministry of Women, Children and Youth Affairs.

The study revealed that integration approach was strongly recommended by the 2011 PMTCT guideline. However, the concept of integration in the guideline was not clearly and operationally defined. There was no recommendation to which principles and forms of integration would in the guideline be incorporated. This study also indicated that importance of community involvement was emphasized in the guideline. However, the concept of community was narrowly defined; community participation strategies were not clearly stipulated in this

policy. Similarly, the study revealed that the concept of multidisciplinary approach was not visible in the guideline in that it narrowly included those professionals having biomedical backgrounds.

Findings of the study showed that the existing monitoring and evaluation system didn't support option "A" regimen recommended by the 2011 guideline; progress was tracked only through formats developed at facility level. This in turn will hamper to devise appropriate implementation strategies and policy directives in the future.

Commonly known opportunities in the implementation of the PMTCT program were also identified by the study. These include, but not limited to, invention of effective and /or potent ART drugs, global commitment to eliminate new HIV infection through technical and financial supports. Moreover, the government of Ethiopian was committed to improve MNCH in general, to adopt the WHO recommendations of specific guideline to address MTCT challenges in particular.

Major challenges of PMTCT program were also identified as: weak integration, LTFU, gender inequality lower level of education/illiteracy of women, stigma and discrimination, poor quality of service provision including poor counseling, early weaning (common in Addis Ababa), limited resources and drug-drug interaction among medications of ART, medications of family planning and opportunistic infection, mixed feeding.

6.2.Implications

Findings of the study indicated that the PMTCT guideline was not properly implemented at health facilities. Hence, performance of the program was low. There is a need to provide appropriate capacity building, advocacy, awareness raising and service quality and coverage improvements. These demands have to be addressed using comprehensive approaches. As well

as to devise a multidisciplinary and holistic intervention strategies that help mobilize community, create demand for the services and build capacity of health care system. Also, it is important for facilitation of conducive working environment for health care providers; establish user friendly service provision and strong M and E.

6.2.1. Social work Implications

Social policies need to ensure social justice, promotion of social change and solving human suffering, this in turn are the values of the social work education. Health policies should be clearly stipulated to address the specified objectives in order to prevent and rehabilitate effects of social problems against human beings to attain the maximum possible equity and quality in health care. Particularly; women and children need to be seen as vulnerable groups, who are affected by various socio-economic challenges. Therefore, social work interventions in the health care environment are mandatory.

Social work approaches like bio-psychosocial-spiritual and strengths based models could be applied in tandem with the biomedical model of health care systems. As this study indicated, however, the contribution of social workers and social work practice in health care systems needs further advocacy. Social workers can play vital roles in providing counseling of client, in conducting training in socio-emotional support of the health professionals, on stress management, client handling, assertiveness and collaborative team working. Besides, social workers have a role in community mobilization and advocacy of health interventions. Health care social workers do have a role of advocacy for the patients; provide psychosocial, as well as facilitate material supports for clients. All of these roles are targeted towards making the client outcomes good.

6.2.2. Research Implications

Much of the previous studies about PMTCT program mainly focused on quantitative surveys at health facility levels and evaluate the services uptake from the clients' and provider's perspective. Mixed methods of quantitative and qualitative explorations are not common in this regard. In this, structural dimensions of the program at policy and facility levels of provisions of the services were explored based on qualitative approaches. However, the sample size of the study was small that it has included only government hospitals run by Addis Ababa City Government. Therefore, a broader study inclusive of health centers and private health facilities through mixed method of research would be helpful to better understand the guideline implementation for the PMTCT services.

6.2.3. Policy Implication

The PMTCT policy focuses on maternal and child health services. This is an important tool that needs to be developed through comprehensive and multidisciplinary approaches. The strategies have to be clear and workable in the Ethiopian contexts as well as the policy provisions need to be implemented as per the recommendations underlying it. In this regard, therefore, all concerned bodies need to give due attention and take corrective measures based on exploration of major gaps and limitations.

References

- Adedimeji A., Abboud N., BehailuMerdekios,& Miriam Shiferaw. (2012). A Qualitative Study of Barriers to Effectiveness of Interventions to Prevent Mother-to-Child Transmission of HIV in Arba Minch, Ethiopia. *International Journal of Population Research*. Article ID 532154 doi:10.1155/2012/532154
- Alana F. H., Emily A. B., & Christian S. P.(2012). Towards the Elimination of Pediatric HIV: Enhancing Maternal, Sexual, and Reproductive Health Services. *International Journal of MCH and AIDS (1)1:6-16*
- Alemayehu Mekonnen & Woldemedhin T/Tsadik. (2009). A Case Study on Decentralization of HIV/AIDS Services in Ethiopia (Unpublished Assessment Report). Federal HIV/AIDS prevention and control offices, Addis Ababa.
- Alemnesh Hailemariam. (2011). Successes and challenges of the national programme for the prevention of mother-to-child HIV transmission (PMTCT) in Addis Ababa. (Unpublished PH.D Dissertation). University of Burgen, Norway.
- Alphonse G. (November 2011). Health workers stigmatize HIV and AIDS patients. *South Sudan Medical Journal*, 4(4). Retrieved from www.southsudanmedicaljournal.com
- Both J & van Roosmalen J. (2010). The impact of Prevention of Mother to Child Transmission (PMTCT) programmes on maternal health care in resource-poor settings: looking beyond the PMTCT programme—a systematic review. *BJOG*, 117, 1444–1450.
- Central Statistics Agency. (2008). Summary and Statistical Reports of the 2007 Population and Housing Census. Addis Ababa, Ethiopia.
- Central Statistics Agency. (2011). Ethiopian Demographic and Health Survey 2011. Retrieved from <http://www.measuredhs.com/pubs/pdf/FR255/FR255.pdf>

- Cheung K., Leeder S. & Mirzaei M. (2010). Health policy analysis: a tool to evaluate in policy documents the alignment between policy statements and intended outcomes. *Australian Health Review*, 34: 405–413. doi: 10.1071/AH09767 0156-5788/10/040405
- Chibwesa C. (2011). Optimal Time on HAART for Prevention of Mother-to-Child Transmission of HIV. *Journal of Acquir Immune Deficiency Syndrome*, 58,224–228.
- Creswell, J. W. (2007). (2nd ed.). *Qualitative inquiry and research design: Choosing among five approaches*. USA: SAGE.
- Crowther J. & Kavanagh K. (1995). *Oxford Advanced Learners Dictionary of current English*. New York: Oxford University Press.
- Ethiopian Health and Nutrition Research Institute & Federal Ministry of Health. (August, 2012). *HIV Related Estimates and Projections for Ethiopia – 2012*. (Unpublished Annual Report). Addis Ababa.
- Eyakuze C., Jones D., Starrs A. & Sorkind N. (2008). From PMTCT to a more comprehensive aids response for Women: a much-needed shift. *Developing World Bioethics* 1471-8847. doi:10.1111/j.1471-8847.2008.00230.x
- Eyasu Mesfin, Tigist G/Egziabher & Abdulfetah Abdulkadir Abdosh. (2010). Assessment of the status of PMTCT services in private for-profit health institutions in Ethiopia. *Ethiopian Journal of Reproductive Health*, 4(1), 26-36. Ethiopian Society of Obstetricians and Gynecologists.
- Federal Democratic Republic of Ethiopia Ministry of Health (May 2013). Policy and practice: Information for action. *Quarterly Health Bulletin*, 5(1)34-38.
- Federal HAPCO. (December 2012, p. 37-50). *Multi-sectoral HIV/AIDS Response Monitoring and Evaluation Report*. (Unpublished). Addis Ababa

- Federal HAPCO. (July 2011). Multi-sectoral HIV/AIDS Response Monitoring and Evaluation Report from July 2010-June 2011. (Unpublished). Addis Ababa
- Federal HAPCO/MOH. (February 2010). Strategic Plan II for intensifying multi-sectoral HIV and AIDS response in Ethiopia 2010/11-2015/14.
- Federal HIV/AIDS Prevention and Control Office/Federal Ministry of Health. (July 2007). Guidelines for Prevention of Mother-to-Child Transmission of HIV in Ethiopia.
- Federal Ministry of Health /Federal HIV/AIDS prevention & Control Office. (2012). *Country Progress Report on HIV/AIDS Response.*(Unpublished)
- Federal Ministry of Health. (December 2011). Guideline for prevention of Mother-to-Child Transmission of HIV in Ethiopia.
- Gagliardi A., Brouwers M. & Bhattacharyya O. (2012). The guideline implementability research and application network (GIRAnet): an international collaborative to support knowledge exchange: study protocol. *Implementation Science*, 7 (26). Retrieved from <http://www.implementationscience.com/content/7/1/26>
- Gupta N., Maliqi B., França A., Nyonator F., Pate M., Sanders D.... Belhadj H. (2011). Human resources for maternal, newborn and child health: from measurement and planning to performance for improved health outcomes. *Human Resources for Health*, 9 (16). Retrieved from <http://www.human-resources-health.com/content/9/1/16>
- Hampana K. (2013). Vertical Transmission of HIV in Sub-Saharan Africa: Applying Theoretical Frameworks to Understand Social Barriers to PMTCT. *ISRN Infectious Diseases*. Volume 2013, Article ID 420361. Retrieved from <http://dx.doi.org/10.5402/2013/420361>

- Harmonization for Health in Africa. (2011). Integrated Community-based Maternal, Newborn and Child Health and Nutrition interventions. Retrieved from http://www.hha-online.org/hso/system/files/hhameeting_ccm_report_final_sept.pdf
- Hillary Rodham Clinton, November 8, 2011 (Speech)
- Kalembo F. & Zgambo M. (2012). Loss to Follow-up: A Major Challenge to Successful Implementation of Prevention of Mother-to-Child Transmission of HIV-1 Programs in Sub-Saharan Africa. *International Scholarly Research Network*, article ID 589817, doi:10.5402/2012/589817
- Krause C., Joyce S., Curtin K., Jones C., Murphy L., Boan B.... Lucas D. (2006). The impact of a multidisciplinary, integrated approach on improving the health and quality of care for individuals dealing with multiple chronic conditions. *American Journal of Orthopsychiatry*, 76(1), 109-114. DOI: 10.1037/10002-9432.76.1.109
- Kurth A., Wasserheit J., Baeten J., Celum C. & Vermund S. (2011). Combination HIV Prevention: Significance, Challenges, and Opportunities. *Current HIV/AIDS Rep.*, 8(1), 62–72. Doi: 10.1007/s11904-010-0063-3
- Leslie J., Munyambanza I.E., Adamchak S., Janowitz B., Grey T., & Kirota K. (2010). Without Strong Integration of Family Planning into PMTCT Services in Rwanda, Clients Remain with a High Unmet Need for Effective Family Planning. *Africa Journal of Reproductive Health*; 14(4), 151-153.
- Mahajan A., Sayles J., Patel V., Remien R. & Ortiz D. (2008). Stigma in the HIV/AIDS epidemic: A review of the literature and recommendations for the way forward. *AIDS*, 22(2), S67–S79. doi:10.1097/01.aids.0000327438.13291.62

- Maphangisa D. (2012). Addressing PMTCT Social and Behavioral Risk through Community Dialogue: An implementer's guide based on EGPAF/Swaziland's experience. Retrieved from www.pedaids.org
- Marconi & B.Roca. (2012). Vertical Transmission of HIV in Sub-Saharan Africa: Applying theoretical frame work to understand social barriers to PMTCT. *ISRN Infectious Diseases*. Hindawi Publishing Corporation. University of Colorado Denver, Department of Health & Behavioral Sciences.
- Marie M. K. (2004). Mother's Milk, An Ambiguous Blessing in the era of AIDS: The case of the Chagga in Kilimanjaro. *African sociological review*, 8(1),83-99
- Marion S. (2008). From HIV prevention to reproductive health choices: HIV/AIDS treatment guidelines for women of reproductive age. *African Journal of AIDS Research* 2008, 7(3), 353–359.
- Miller G. & S. Sidney M. (2007). Handbook of Public Policy Analysis: Theory, Politics, and Methods. P. 80-87.
- Ministry of Health. (2001). National guideline on the prevention of mother to child transmission of HIV Ethiopia. Addis Ababa, Ethiopia.
- Mubyazi G. & Hutton G. (2012). Rhetoric and Reality of Community Participation in Health Planning, Resource Allocation and Service Delivery: a Review of the Reviews, Primary Publications and Grey Literature. *Rwanda Journal of Health Sciences*, 1(1), 51-65. Retrieved from www.ajol.info/index.php/rjhs/article/view/82343/72499
- Nabyonga J., Wavamunno B., Bakeera S. & Criel B.(2012). Do guidelines influence the implementation of health programs? Uganda's experience. *Implementation Science*, 7(98). Retrieved <http://www.implementationscience.com/content/7/1/98>

- Nicholson D., Artz S., Armitage A., & Fagan J. (2000). Working Relationships and Outcomes in Multidisciplinary Collaborative Practice Settings. *Child & Youth Care Forum*, 29(1),39-7
Retrieved <http://link.springer.com/article/10.1023%2FA%3A1009472223560>
- Pizer. H. & Kenneth H. M. (2009). HIV Prevention: A comprehensive approach. London and California: Elsevier Inc.
- Samson E/Hailegiorgis. (2012). Ethiopia Family Planning/ Reproductive Health Information Needs Assessment and network mapping. Retrieved http://www.k4health.org/sites/default/files/Ethiopia_FPRH_Net-Map_FINAL_May_21_2012.pdf
- Thyssen A., Lange J.,& Emil R.(2013). Reconceptualizing and Integrating Prevention of Mother to Child Transmission (PMTCT) With Pediatric Antiretroviral Therapy Initiatives. *J Acquired Immune Deficiency Syndrome*, 62,127-128.
- Touré H., Audibert M. & Dabis F. (2010). To what extent could performance-based schemes help increase the effectiveness of prevention of mother-to-child transmission of HIV (PMTCT) programs in resource-limited settings? A summary of the published evidence. *BMC Public Health*, 10(702). Retrieved from <http://www.biomedcentral.com/1471-2458/10/702>
- UNAIDS. (2010). Global Report. UNAIDS report on the global aids epidemic| 2010
- UNAIDS. (2011). World AIDS Day Report How to get to zero: faster. Smarter. Better.
- UNAIDS. (2012). Promising practices in community engagement for elimination of new HIV infections among children by 2015 and keeping their mothers alive. (Unpublished Report)
- UNDP. (2011). A Social Determinants Approach to Maternal Health: Discussion Paper

- UNFPA.(n.d). Reducing Maternal Mortality the contribution of the right to the highest attainable standard of health. Retrieved http://www.unfpa.org/webdav/site/global/shared/documents/publications/reducing_mm.pdf on March 29, 2013
- United Nation. (1995). Report of the International Conference on Population and Development. Cairo, 5-13 September 1994.
- United Nation. (2001). Declaration of commitment on HIV/AIDS UN General Assembly Special session on HIV/AIDS. Retrieved from http://data.unaids.org/publications/irc-pub03/aidsdeclaration_en.pdf
- World Health Organization. (2002). Community participation in local health and sustainable development: Approaches and techniques. Retrieved from www.euro.who.int/_data/.../E78652.pdf
- World Health Organization. (2008). Technical brief No.1 May 2008. Integrated health services- what and why? Retrieved from http://www.who.int/healthsystems/technical_brief_final.pdf
- World Health Organization. (2010). Antiretroviral drugs for treating pregnant women and preventing HIV infection in infants. Recommendations for a public health approach 2010 version. Retrieved from http://whqlibdoc.who.int/publications/2010/9789241599818_eng.pdf
- World Health Organization. (2010). PMTCT strategic vision 2010–2015. Retrieved from http://www.who.int/hiv/pub/mtct/strategic_vision.pdf
- World Health Organization. (2012). A Methodology Reader Health Policy and Systems Research

Yared Mekonnen & Asnaketch Mekonnen. (2002). Utilization of Maternal Health Care Services in Ethiopia. Calverton, Maryland, USA: ORC Macro. Retrieved from

<http://www.measuredhs.com/pubs/pdf/FA38/01-mekonnen.pdf>

Yin, R. K. (2003). Case Study Research: Design and Methods. Thousand Oaks, CA: Sage.

Annexes

Annex One

Consent Form for PMTCT service providers

I would like to thank you for taking your time to discuss some issues regarding PMTCT services in this hospital.

My name is *Fantahun Gobezie*. I would like to talk to you about the opportunities, strengths, challenges etc of PMTCT program in your setting, city wide and country level impacts and effects, if any, of the services. Also we will discuss about the availability of resources required and compliance of PMTCT to the national standard. Therefore, we will evaluate the PMTCT service provision in order to identify the strong and weak points in this regard. The interview will take less than an hour. I will be taking some notes during the session. Please be sure to speak up so that I do not miss your comments.

All response will be kept confidential; that means your interview response will only be shared with evaluation team members & I will ensure that any information I include in my report does not identify you as respondent. I assure you that I shall destroy all the recorded information after the grading system is completed. Remember, you do not have to talk anything you do not want to & you may end the interview at any time.

Is there any question about what I have just explained?

Are you willing to participate in this interview?

Interviewee

Data collector

Date

General Information for PMTCT service providers

This interview is prepared by me, a student in social work masters at Addis Ababa University. I am a graduating class of the school. For my master's thesis, I have intended to study about PMTCT services in government Hospitals at Addis Ababa. The research is expected to produce constructive recommendations to how improve the service delivery of PMTCT in order to achieve the “zero-HIV infection rate” among children. Your Hospital is selected to participate in this study. So, you kindly requested to tell about the PMTCT services you are providing. The information you provide is very important, it will help the health bureau & Hospital to improve the quality of services delivery. The information you provide is completely confidential & will not be shared with anyone else without your consent.

Annex Two

Consent Form for program specialists

I would like to thank you for taking your time to discuss some issues regarding PMTCT services in this hospital.

My name is *Fantahun Gobezie*. I would like to talk to you about the opportunities, strengths, challenges etc of PMTCT program in your setting, city wide and country level impacts and effects, if any, of the services. Also we will discuss about the availability of resources required and compliance of PMTCT to the national standard. Therefore, we will evaluate the PMTCT service provision in order to identify the strong and weak points in this regard. The interview will take less than an hour. I will be taking some notes during the session. Please be sure to speak up so that I do not miss your comments.

All response will be kept confidential; that means your interview response will only be shared with evaluation team members & I will ensure that any information I include in my report does not identify you as respondent. I assure you that I shall destroy all the recorded information after the grading system is completed. Remember, you do not have to talk anything you do not want to & you may end the interview at any time.

Is there any question about what I have just explained?

Are you willing to participate in this interview?

Interviewee

Data collector

Date

General Information for PMTCT program specialists

This interview is prepared by me, a student in social work masters at Addis Ababa University. I am a graduating class of the school. For my master's thesis, I have intended to study about PMTCT services in government Hospitals at Addis Ababa. The research is expected to produce constructive recommendations to how improve the service delivery of PMTCT in order to achieve the “zero-HIV infection rate” among children. You are selected to participate as a key informant interviewee in this study. So, you kindly requested to tell about the PMTCT program you are coordinating. The information you provide is very important, it will help the health bureau & Hospitals to improve the quality of services delivery. The information you provide is completely confidential & will not be shared with anyone else without your consent.

Annex Three

Guiding questions for key informant interviews with service providers

1. Sex -----
2. Educational level -----
3. Year of service -----
4. Which guideline is now in use to provide the PMTCT services here in your facility?
5. What looks like the performance of the PMTCT program implementation so far?
6. How about the human resources dimension of PMTCT program implementation?
 - Competency /Work load/Multidisciplinary/Training/Motivation
7. Do you think that integration efforts so far are successful?
 - With FM/MCH/ART/VCT/community
8. Is the current community involvement in the implementation of PMTCT program sufficient?
 - Strategies designed to involve community/Challenges in this regard/Male involvement ‘Civil society and other sectors than health
9. What are the major opportunities in the implementation of the PMTCT program?
 - Nationally and internationally accessibly for further exploitation
10. What are the major challenges that hamper PMTCT program implementation?
 - With respect to integration, human resources, adherence, technical, logistics, infrastructure etc
11. How do you monitor/evaluate your successes and obstacles for further decision making?

Annex Four

Guiding questions for key informant interviews with program specialists

1. Sex ----- Educational level ----- Year of services -----
2. Which guideline is now in use to provide the PMTCT services here in your facility?
3. What looks like the performance of the PMTCT program implementation so far?
4. Historical overview about the PMTCT program in Ethiopia:
 - When was the PMTCT service provision started? How were the process, challenges, actions and acceptance?
 - What was the process of guideline development? /What are the great success stories in this regard? /Which guideline is now in implementation?
5. Do you think that integration efforts so far are successful?
 - With FM/MCH/ART/VCT/community
6. How about the human resources dimension of PMTCT program implementation?
 - Competency /Work load /Multidisciplinary/Training /Motivation
7. Is the current community involvement in the implementation of PMTCT program sufficient?
 - Strategies designed to involve community /Challenges in this regard
 - Male involvement /Civil society and other sectors than health
8. What are the major opportunities in implementing the PMTCT program?
 - Nationally and internationally accessibly for further exploitation
9. What are the major challenges that hamper PMTCT program implementation?
 - With respect to integration, human resources, adherence, technical, logistics, infrastructure etc
10. How efficient is the existing monitoring and evaluation system of the PMTCT program in tracking successes and obstacles for further decision making?

Annex Five

Checklists

1. What guidelines for PMTCT does this facility use?
 - A. The 2007 National Guidelines of Ethiopia
 - B. The 2011 National guideline of Ethiopia
 - C. The 2013 National guideline of Ethiopia
 - D. Do not know
 - E. Other (describe): -----
2. When (in what month and year) was PMTCT first initiated at this facility?
 - A. -----
 - B. Do not know
3. Is HIV testing done within the ANC unit during a woman's first prenatal care visit?
 - A. Yes
 - B. No
 - C. Do not know
 - D. Other (describe)-----
4. Are all women of unknown HIV status tested at labor and delivery?
 - A. Yes
 - B. No
 - C. Do not know
5. Is HTC offered to all women who come for ANC?
 - A. Yes
 - B. No
 - C. Other-----
6. How is pre-test counseling provided?
 - A. Individual session
 - B. Group session
 - C. Written Information only
 - D. Not provided
 - E. Do not know
 - F. Other (describe): -----
7. Where is post- test counseling for HIV testing provided?
 - A. At the ANC/MNCH facility
 - B. In a different building within this facility

- C. At a designated VCT site
- D. Do not know
- E. Other (describe):-----

8. What kind of psycho-social support, if any, is provided to women for disclosing status to partners?

- A. Support to women who test positive
- B. Disclosure support
- C. Do not know
- D. Other (describe): -----

9. If psycho-social support is provided to women, who provides it?

- A. PMTCT staff
- B. Trained peer counselors
- C. Social workers
- D. Psychologists
- E. Do not know
- F. Other (describe) -----

10. Are husbands/partners routinely offered HIV testing as part of the PMTCT program here?

- A. Yes
- B. No
- C. Depends
- D. Do not know
- E. Other (describe):

11. What challenges has the facility faced in adopting the testing and counseling practices that are in place here?

12. Is FP counseling offered to every woman who comes for ANC?

- A. Yes
- B. No
- C. Other (describe) -----

13. Are off-facility referrals issued for services tracked within the ANC?

- A. Yes (describe method)-----
- B. Do not know

14. What kind of difficulties have you had with referrals?

15. What challenges have this facility faced in providing PMTCT services to women who are HIV-positive?

16. What do you think are the facility's key achievements in providing PMTCT provision?

17. What challenges have you faced in integrating PMTCT services within ANC or other programs?
What areas do you feel need strengthening?

18. What kind of assistance might you need to improve integration?

Is the PCR analyzed on facility or is it sent out?

- A. Blood drawn and all testing and confirmations done is on facility
- B. Blood drawn on site; testing carried out in lab off site
- C. Do not know
- D. Other (describe): -----

19. What is the most common infant feeding method chosen by HIV-positive women at this facility?

- A. Exclusive breastfeeding
- B. Formula feeding
- C. Mixed feeding
- D. Do not know
- E. Other (describe): -----

20. Do you have linkages to community organizations that follow up on women who are lost to follow up?

- A. Yes
- B. No
- C. Do not know

21. When the last time supervision was provided to the clinical nursing staff that provides PMTCT services?

- A. Within the past 3 months
- B. Longer than 3 months ago, but less than 6 months
- C. Longer than 6 months ago, but less than 1 year
- D. Do not know
- E. Other (describe) -----

22. What kind of supervision was provided at round of supervision? The supervisor.

- A. Observed staff at their work
- B. Provided feedback on your performance
- C. Discussed any problems you have encountered
- D. Checked your records or reports
- E. None of the above
- F. Do not know
- G. Other (describe):

23. What challenges with logistics management information systems (LMIS) have you encountered?

24. How often do you provide data on PMTCT and Infant Feeding indicators to the Health Bureau?

- A. Monthly
- B. Quarterly
- C. Bi-annually
- D. Annually
- E. Do not know
- F. Other (describe) -----

25. How do you record data on PMTCT clients?

- A. General ANC register
- B. Separate PMTCT register
- C. Individual patient files
- D. EMR (electronic record)
- E. Do not know
- F. Other (describe): -----

26. Is the monitoring data reviewed/discussed by staff at the ANC/MNCH here?

- A. Yes (Every how often?) -----
- B. No
- C. Do not know

27. Apart from providing reports to Health Bureau, how is the data that is collected on PMTCT being used in this facility?

Thank you
Declaration

I, the undersigned Fantahun Gobezie, hereby confirm that this study in the title “Assessment of Opportunities and Challenges towards the Implementation of PMTCT Guideline in Government Hospitals of Addis Ababa City Government” is carried out by me, and any materials used in this study are properly acknowledged.

Name Fantahun Gobezie Signature_____ Date: 05 July 2014

Addis Ababa University