

Quality of Prevention of Mother to Child Transmission (PMTCT) Services in Dessie Referral Hospital, Dessie City Administration, Ethiopia: Client Perspective

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Abstract

Introduction: Ethiopia is one of the country's most severely hit by HIV/AIDS epidemic. Besides the dominant heterosexual transmission, vertical virus transmission from mother-to-child accounts for more than 90% of pediatric AIDS. It is estimated that over 90% of childhood HIV infections result from the transmission of the virus from mothers to their children during and soon after birth.

Objective: The objective of the study was to assess clients' satisfaction on the quality of PMTCT services they received in Dessie referral hospital, Dessie city administration, Ethiopia.

Methods: A hospital based cross-sectional study was used in Dessie referral hospital, Dessie administrative city. A total of 240 clients were participated in exit interviews to assess the quality of the services delivered based on informed consent. To achieve the desired sample size, the clients were included from the hospital consecutively. Data were collected by interviewer administered questionnaires. Data were cleaned, coded and fed to SPSS version 20. Descriptive statistics were computed to summarize the findings and presented using frequency tables.

Result: Of 240 clients who accessed PMTCT services, 208 (86.7%) of the clients were overall satisfied with the PMTCT services they received. Two hundred ten (87.5%) of the respondents were satisfied with the waiting time of the services.

Conclusion and recommendation: Even if clients were highly satisfied with the PMTCT services they received, there are clients who were not satisfied with the counselling services they received, privacy, waiting time they spent while accessing services. Inadequate confidentiality was reported from the participants. The hospital should renovate the PMTCT clinic to have additional rooms for maintaining privacy and reducing the waiting time of the services as a recommendation.

Keywords: Quality; PMTCT; Mother to child transmission

Introduction

United Nations Programmed on HIV/AIDS (UNAIDS) estimated that approximately 370000 children were infected with HIV in 2007. More than 90% of these infections were caused by vertical transmission from mother to infant and approximately 90% occurred in Sub Saharan Africa. Prevention of mother to child transmission (PMTCT) interventions such as antiretroviral (ARV) prophylaxis have dramatically reduced the risk of vertical transmission from around 40% to less than 5% in some research and pilot settings in Sub Saharan Africa [1].

According to 2010 report, towards universal access: scaling up priority HIV/AIDS interventions in the health sector by the World Health Organization (WHO), significant progress in the area of PMTCT has been made during the past several years. In 2009, 53% [40-79%] of the estimated HIV-infected pregnant women worldwide received at least some antiretroviral (ARV) drugs to prevent HIV transmission to their child [2].

Ethiopia is one of the country's most severely hit by the epidemic. Besides the dominant heterosexual transmission, vertical virus transmission from mother-to-child accounts for more than 90% of pediatric AIDS. It is estimated that over 90% of childhood HIV infections result from the transmission of the virus from mothers to their children during and soon after birth [2].

Although the Government of Ethiopia has given high priority to PMTCT, and progressive improvements have been made in the coverage and quality of PMTCT services, the national coverage remained persistently low. In 2010, five years after large scale implementation of PMTCT programs, only 6,990 HIV+ pregnant mothers received ARV prophylaxis. This was just 18.7% of the annual planned target. Analysis of the cascaded PMTCT services can reveal the advancements made and the biggest hurdles faced during the implementation. Furthermore, such analysis can highlight future directions of program outcomes and uncover factors of important consideration for enhanced future achievements [2].

Studies has shown that various socio-cultural, health systems, basic infrastructure, and other challenges contribute to poor maternal health

services in general and low PMTCT service coverage in particular in most developing countries including Ethiopia [3].

Early childhood intervention services for families affected by HIV/AIDS begin during the prenatal period with adequate access to prenatal care and effective programs to prevent and treat mother-to-child transmission of HIV [4].

HIV continues to have a significant impact on children. In 2008, an estimated 2.1 million children were living with HIV worldwide; there were 4300,000 new HIV infections in children, and 280,000 HIV-related deaths among children. Children, according to these estimates, constitute about 6% of all people living with HIV, 16% of new infections, and 14% of all AIDS-related mortality. The majority of children living with HIV are in Sub-Saharan Africa [5].

Across the sub-Saharan region women bear a disproportionate part of the AIDS burden; not only they more likely than men to be infected with HIV. UNICEF estimated that about 1 Million HIV infected women are pregnant every year and deliver roughly 600,000 to 700,000 HIV infected infants annually [6].

Accordingly, about 200,000 to 350,000 infected by HIV through breast feeding each year and there are 2.5 million under 15 years of age children infected with HIV globally. Mother to child transmission of HIV is the major source of HIV infection in children [6].

The MTCT of HIV in prenatal transmission of HIV is below 2% with antiretroviral treatments, safe delivery, safe infant-feeding; in the absence of these critical interventions the risk ranges from 20-45%. But because low income counties often lack the infrastructure to deliver even relatively modest interventions, progress in expanding access has been slow [7].

The most important component of the PMTCT program is voluntary counseling and testing for HIV and counseling for infant feeding. There is essential for success: done well, it will result in significant reduction in child mortality through decreased postnatal HIV transmission and improved infant feeding practices; done badly, it could lead to deaths from diarrhea and other infections drug resistance, and the spread of poor infant feeding practices in the general population [7].

Assessment of the quality of service delivery in health facilities is receiving growing recognition as a strategy for monitoring and evaluation of primary health care program in developing countries. With the rapid scale-up and investment in PMTCT services, it is important to evaluate the quality of the services. This study, therefore, tries to assess the quality of PMTCT services in terms of counselors' competence/skills, content of discussion/topics and duration of pre- and post-test counseling provided to pregnant mothers through the program to prevent mother-to-child transmission of HIV.

Review of existing literatures strongly suggest that the quality of services provided are an important determinant of acceptance and continuation rates, and therefore a major contributor to increase PMTCT service use.

Therefore, this survey was intended to assess the quality of service provided at individual and service level by assessing such elements like waiting time, privacy, hours of opening time and so on and also tried to examine the availability and functionality of logistics and supplies of PMTCT service delivery points. Finally, the result might provide important information to PMTCT providers, program managers and

concerned bodies to improve the quality of PMTCT service in the future.

Methods and Materials

Study area and period

The study was conducted in Dessie referral hospital which was found in Dessie city Administration, Amhara regional state, Ethiopia. The study was conducted from February to April 2016.

Study design

Hospital based cross-sectional study was used.

Population

The source population were all women attending PMTCT service in Dessie referral hospital where as the study population were selected women attending PMTCT services in the hospital during data collection period.

Women equal and above 18 years of age attending PMTCT services during data collection period and who gave consent were included in the study whereas women who were seriously sick and unable to respond were excluded from the study.

Sample size determination and sampling technique

A total of 240 mothers were interviewed during the data collection period. Study subjects were included in the study by using consecutive sampling method.

Data collection instrument

Data were collected using a pre-tested data collection tools. The questionnaire included socio-demographic characteristics, attributes of structure, process (technical and interpersonal aspects) and outcome (client satisfaction) to assess the quality of PMTCT services. The questionnaire was developed by the researcher from different literatures.

Study variables

The dependent variable was clients' satisfaction with PMTCT services whereas the independent variables were socio-demographic variables (age, sex, educational status, religion, marital status, occupation, place of residence), waiting time, privacy and confidentiality.

Data collector training and pre-testing

The principal investigator and trained data collectors were involved to collect data from the study subjects. Pre-testing of the translated Amharic version of data collection tools were done in Borumeda hospital and based on the findings of the pretest modification on the questionnaires was done.

Data collection process

After identifying the study subjects, interviewer-administered data collection method was employed and the study subjects were interviewed by the data collectors in a separate and quite room.

Data processing and analysis

The data were checked for completeness, coded and fed to SPSS version 20 and cleaned for inconsistencies and missing values. It was processed, tabulated, and analyzed to generate frequency tables and graphs. Descriptive statistics was computed to determine the rate of satisfaction and other variables.

Data quality control

Questionnaire was prepared initially in English by the investigator and translated to the local language (Amharic) and back translated to English by other translator to compare its consistency. The questionnaire was pre-tested on 10 PMTCT service users in Borumeda hospital. The principal investigator checked the collected data for completeness and corrective measures was taken accordingly on a daily basis.

Ethical considerations

Ethical clearance letter was obtained from Wollo University Ethical Review Committee in order to conduct the study at Dessie referral hospital. Permission from Dessie referral hospital was secured. All the study participants were informed about the purpose of the study and finally their verbal consent was obtained before interview. The respondents were informed of the right to refuse participation or terminate their involvement at any point during the interview. The information provided by each respondent was kept confidential.

Operational Definition

Client satisfaction

The state of being pleased or contented by clients about the overall PMTCT services they received or the specific attributes they received during the care.

Counseling

Is confidential dialogue between a client and a counselor.

Mother to child transmission

Transmission of HIV from an HIV-positive woman to her child during pregnancy, delivery, or breastfeeding.

Privacy in counseling rooms

Involve maintaining confidentiality so that information regarding HIV status remains between the client and the counselor.

Provider competence

Possession of the required skills and knowledge to perform the service.

Communication

Keeping client informed in language they can understand and listening. Waiting time was considered as the time from the client arrived at the health facility through the services until the exit.

Client-provider interaction

Are related in the received effective content of contacts between providers and clients. The notion here is that client should feel positive about the service system, particularly the personnel with whom they interact, and should trust their capacity and have their good will.

Results

Socio-demographic characteristics of the respondents

In the exit interview, a total of 240 clients were interviewed. The age of respondents ranges from 18-43 years. Among the respondents, 93.8% of them were married and 51.3% were Muslim followers. While 30.8% of the respondents grade 5-8. Concerning their occupational status, about 47.8% were housewives. Amhara was the major (95%) of the ethnic group while majority (78.3%) of the respondents is urban dwellers (Table 1).

Socio-demographic characteristics	Frequency	Percent
Age		
15-20	39	16.3
21-25	95	39.6
26-30	72	30
31-35	20	8.3
36-40	10	4.2
41 and above	4	1.6
Marital status		
Single	7	2.9
Married	225	93.8
Divorced	6	2.5
Widowed	2	0.8
Religious affiliation		
Orthodox Christian	99	41.3
Muslim	123	51.3
Protestant	18	7.4
Educational level		
Unable to read and write	7	2.9
1-4 grade	66	27.5
5-8 grade	74	30.8
9-12 grade	58	24.2
Diploma and above	35	14.6
Occupation		
Housewife	115	47.8
Civil servant	45	18.8

Farmer	39	16.3
Merchant	33	13.8
Student	8	3.3
Ethnicity		
Amhara	228	95
Tigre	8	3.3
Oromo	4	1.7
Residence		
Urban	188	78.3
Rural	52	21.7

Table 1: Socio-demographic characteristics of the respondents. Dessie referral hospital.

Client satisfaction with the counselling services

Almost all (97.9%) Of the clients believed that the duration of the counselling session was adequate which made the (94.1%) of the clients satisfied with the counselling session. Majority (92.1%), of the respondents believed that the counselling room was comfortable and 94.2% of the clients stated that the counselling room had privacy during counselling session.

The majority (83.8%) of the respondents said that the waiting room had enough sitting chairs while 217 (90.4%) of the respondents were reported that the waiting room was clean and 204 (85%) of them reported that the waiting room was comfortable. Two hundred ten (87.5%) of the respondents were satisfied with the waiting time of the services (Table 2).

Variables	Satisfied		Unsatisfied	
	No	%	No	%
Adequacy of the duration of the counselling session	235	97.9	5	2.1
The counselling session received	226	94.1	13	5.9
Comfort of the counselling room	221	92.1	19	7.9
Privacy of the counseling room	226	94.2	14	5.8
Sitting chair of the waiting room	201	83.8	39	16.2
Cleanliness of the waiting room	217	90.4	23	9.6
Comfort of the waiting room	204	85	36	15
Waiting time of the services	210	87.5	30	12.5

Table 2: Respondents were satisfaction with the counseling session, counseling room, waiting room and waiting time.

Clients perception about counsellors

Regarding the counselors' characteristics, 96.7% of the respondents felt that the counselor warmly welcomed while (92.1%) of the clients believed that the counselor maintains confidentially and (97.9%) of them thought that counselors understood personal concerns.

Clients satisfaction with the PMTCT services

Based on clients' rate of satisfaction, from 240 clients who utilized PMTCT services, 208 (86.7%) respondents were satisfied with the PMTCT services they received (Table 3).

Variables	Satisfied		Unsatisfied	
	No	%	No	%
Wellcomeness of the counsellor	232	96.7	8	3.3
Confidentiality of the counsellor	221	92.1	19	7.9
Counsellor understood of personal concern	235	97.9	5	2.1
The overall PMTCT services	208	86.7	32	13.3

Table 3: Clients satisfaction with the characteristics of the counsellors and the overall quality of PMTCT services, Dessie referral hospital, Ethiopia, 2016.

Discussion

This study attempted to assess the quality of PMTCT services provided from clients' perspective. This study has focused on views of users of PMTCT services and has identified areas in the PMTCT services that need to be addressed for better management. Client satisfaction is one of the desired outcomes of health care, a measure of the quality of care, and essential to assessments of quality. Client satisfaction by the services they received is a proxy indicator for quality of service and it influences utilization of service as well as compliance with health workers' recommendation [8]. There were limited studies for appropriate comparison.

This study revealed that most clients were satisfied with the comfort ability and privacy of the counselling room as well as the confidentiality of services which is similar with the findings of the study done in Gebretsadiq Shawo Memorial Hospital, Kafa Zone [8]. In addition, this finding is consistent with a study conducted in Kenya, 97% of the clients found the privacy in counselling of PMTCT to be good [9]. The similarity of findings might be due to the fact that maintaining the privacy and confidentiality of the services as requirements for the clients to seek to receive as well as for satisfaction. But on the contrary from a study conducted in rural Bangladesh has revealed that privacy was maintained for less than half (45.1%) of these clients [9]. This discrepancy of findings could be due to differences in the study settings, due to shortages of rooms maintaining privacy in rural setting is very difficult as a result satisfaction with privacy with services received in hospital is higher than health centers clients.

In this study, 94.1% of the respondents were satisfied with the counseling session they received. This finding is consistent with a study done in Kafa zone [8] and a study done in Kenya [10] which revealed that majority of the HIV positive pregnant women felt that the PMTCT counseling services they received were good but this finding is higher than the study done in Dodoma rural district [9] which has shown that 75.2% of the clients were satisfied with counselling they provided. This finding is different from study finding conducted in South Africa, which has shown client satisfaction with counselling of 100% for those seen by nurses and satisfaction been 80% for those seen by community volunteers [9]. This discrepancy might be due to difference in the study settings. It could have been explained by the difference of study population, the difference of profession of the

counsellor involved and time of the study period as well as this could be due to the fact that counsellors were overwhelmed with large numbers of clients in rural health centers so that they ignored the prescribed counseling procedures.

This study found that 87.5% of the clients were satisfied with the waiting time of PMTCT services which is higher than the study finding which was done in Dodoma Rural district [9] indicated that 71.7% of clients accessing PMTCT of HIV service was satisfied with the waiting time spent for the service; A study conducted in rural Bangladesh has also revealed that a significant proportion of users (34%) not satisfied with the time they wait to receive the service [9]. This difference could be explained with the fact that there is shortage of man powers in the remote rural centers.

This study showed 94.2% of the clients who accessed PMTCT of HIV services were satisfied with the privacy in the counselling session which is higher than a study done in Dodoma Rural district [9], which showed that 76% of clients were satisfied with privacy when accessing services and a study done in Adama town [11], which showed that 73.8% of the clients were perceived presence of enough privacy. The difference of the findings might be due to difference in the study settings; hospital based study vs. health centers in which health center clients are less satisfied with the services they received because less skilled health workers are working in the rural health centers.

In this study, 92.1% of the respondents reported that health workers maintained confidentiality while the rest reported that they might not kept information confidential. Similarly, in a study done in Dodoma rural district [9] indicated that inadequate confidentiality was drawn from the experiences in focus group discussion. Similar information was found in a study conducted in South Africa [9]. In light of lack of trust of clients with health workers trust, seeking the services as well as satisfied the services are impossible. When where was inadequate privacy during counselling session which violates clients' rights to confidentiality about their information.

Regarding to perception of clients about characteristics of counsellor, 96.7% of them reported that counsellors warmly welcome and 97.9% of them perceived that counsellors understand personal concern which is higher than finding from a study done in Kenya [10] which reported that most clients felt that they were warmly welcomed (80.7%) and 89.9% felt that the counsellors understood personal concerns. This difference of findings could be explained that district health workers have more caseloads as compared with health workers of hospital which might reduce the buildup of client-health works interaction.

Overall clients' rate of satisfaction with the PMTCT services was high which is comparable with the finding from a study done in Kafa zone [8], which revealed level of satisfaction with the PMTCT service provision was very high whereas this finding is higher than a study done in Adama town [11,12] which indicated that 74.5% of the clients were satisfied with the PMTCT services during their stay at the service delivery facility. This difference could be explained by the fact that clients from health centers are less satisfied with the services they received as compared from clients from hospital considering that the

competency of service providers in the health centers are less skillful and less competent.

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Ethics Approval

The research has been approved by Wollo University Ethical Review Committee.

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