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Research Article

Clients' Satisfaction with Services for Prevention of Mother-To-Child Transmission of HIV in Sagamu Local Government Area, Ogun State

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Abstract

This study evaluated client satisfaction with prevention of mother-to-child transmission (PMTCT) of HIV services in Sagamu Local Government Area, Ogun State, Nigeria. A cross-sectional descriptive design was employed among 280 female clients, including pregnant women, breastfeeding mothers, and their infants

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who accessed PMTCT services at Olabisi Onabanjo University Teaching Hospital (OOUTH). Participants were selected using simple random sampling across antenatal, delivery, and postnatal service points. Sample size was determined using the Kish-Leslie formula, and data were analyzed using SPSS version 26. Ethical standards were upheld through informed consent and confidentiality measures. Findings revealed that all respondents (100%) were satisfied with access to care, doctors' care, and nurses' care. High satisfaction levels were also reported for laboratory staff (92.2%), confidentiality (84.4%), pharmacy services (84.4%), adherence counseling (84.4%), and hospital environment (76.7%). However, dissatisfaction was recorded with waiting times, as 76.7% of respondents expressed concern in this regard. Overall, the results highlight strong satisfaction with PMTCT service delivery, although waiting times remain a critical gap in client experience. The study concludes that quality of PMTCT services is generally high, but urgent interventions are required to reduce waiting times and improve service efficiency. Recommendations include revising the service delivery system, increasing healthcare providers, adopting improved appointment scheduling, enhancing staff training in respectful communication, and organizing periodic health education workshops. Strengthening confidentiality and client-centered care will foster greater trust and utilization of PMTCT services in Nigeria.

Keywords: Prevention of mother-to-child transmission, HIV, Client satisfaction, Maternal health, Nigeria.

Introduction

Mother-to-child transmission of HIV stands as a prominent means by which children become infected with the virus globally and especially in sub-Saharan Africa [1,2]. Prevention of Mother-to-Child Transmission (PMTCT) programs operate to stop this transmission method [3]. A primary objective of PMTCT is to offer pregnant women with HIV proper treatment that prevents them from passing HIV to their babies during pregnancy [4]. Client satisfaction toward PMTCT services stands as a major influencing element which determines the effectiveness of these interventions [5]. The effectiveness of PMTCT programs depends heavily on client satisfaction because it influences how mothers and their children stay in care while continuing ART and experiencing better health outcomes [6,7].

The perception of how suitable and high-quality services match what clients expect during their experiences establishes client satisfaction [8]. The satisfaction of PMTCT clients consists of four main aspects: quality of services availability, acceptable service locations, healthcare provider expertise and supportive client interactions [9]. Client satisfaction levels toward PMTCT services affect their decisions about seeking treatment and participating in follow-up appointments as well as following medical care plans [10]. It is essential to identify the factors that influence the satisfaction of PMTCT clients because this knowledge allows for program improvement in reach and operational success [11].

A key factor in client satisfaction is the timely access to PMTCT services which must be available to patients without significant obstacles [6]. Numerous pregnant women in rural areas experience multiple barriers when accessing PMTCT services because they need to travel long distances to health facilities and confront

expenses for transportation as well as limited clinic operating times that fail to suit their needs [12,1,11]. Accessibility to PMTCT services involves qualified healthcare providers, essential medications and the delivery of ART treatment and preventive measures [13]. Clients show increased satisfaction with services when they are easily available, accessible and the disposition of the healthcare providers (doctors, laboratory staff, pharmacist, nurses, adherence counsellor) to HIV infected individuals [14].

PMTCT programs function at their optimal level due to client satisfaction being an essential component [15]. The provision of accessible high-quality services that meet pregnant women living with HIV needs directly enhances public and individual health results [16]. Healthcare providers who enforce accessibility improvements and quality service enhancement along with supportive environment development and confidential care protocols will boost patient satisfaction and help achieve the elimination of HIV transmission from mothers to children [17]. The success of PMTCT interventions alongside women living with HIV gaining better control of their health and child well-being relies heavily on achieving high client satisfaction rates [18]. The study examined the clients' satisfaction with services for prevention of mother-to-child transmission of HIV in Sagamu Local Government Area, Ogun State.

Materials and Methods

This study employed a cross-sectional descriptive design to evaluate client satisfaction with prevention of mother-to-child transmission (PMTCT) services at Olabisi Onabanjo University Teaching Hospital (OOUTH), Sagamu, Ogun State. Eligible participants included pregnant women, breastfeeding mothers, and their infants who accessed PMTCT services. The sample size was determined using the Kish-Leslie formula at a 95% confidence level and 5% margin of error, with an estimated satisfaction rate of 82.5%. This yielded 222 respondents; adjusting for a 20% non-response rate resulted in a final sample of 280 participants. Participants were selected using simple random sampling across antenatal, delivery, and postnatal care service points to ensure diversity in service utilization. Data were collected through structured questionnaires and analyzed using SPSS version 26.0. Ethical approval was obtained, and all participants provided informed consent. Confidentiality and voluntary participation were strictly maintained.

Results and Discussion

Thus two-hundred and eighty (280) copies of the questionnaire were distributed. They were two hundred and seventy (270) questionnaires that were collected making 96.4% response rate.

Table 1. Socio-demographic Characteristics of Respondents N=270.

Variable	Characteristics	Frequency (N= 270)	Percentage (%)
Age	Less than 20 years	21	7.8

(mean =	25-30 years	103	38.1
32.04 ± 0.37)	31-35 years	105	38.9
	36-40 years	41	15.2
Marital Status	Single	21	7.8
	Married	228	84.4
	Divorced	21	7.8
Religion	Christianity	123	45.6
	Islam	147	54.4
Ethnicity	Yoruba	146	54.1
	Igbo	83	30.7
	Hausa	41	15.2
Education	Primary	83	30.7
Level	Secondary	125	46.3
	Tertiary	62	23.0
Employment	Employed	145	53.7
Status	Unemployed	104	38.5
	Others specify	21	7.8
Occupation	Student	20	7.4
	Trading	167	61.9
	Civil Service	42	15.6
	House wife	41	15.2
Level of Income	Low income level (Below #33,000)	62	23.0

	Middle income (#34,000- #69,000)	208	77.0
Healthcare Facility	Primary Healthcare Facility	24	9.8
	Tertiary Healthcare Facility	246	91.2

The study revealed that the average age of the respondents is 32.04 years with a standard deviation of ±0.37, indicating that the respondents are mostly in their early 30s, which is typical for women seeking antenatal care services. Also, the largest group, 38.9%**,** falls within the 31-35 years age range, suggesting that this age group is more likely to access antenatal care and PMTCT services in Ogun State. A significant majority of respondents are married (84.4%)**,** which aligns with cultural expectations in many parts of Nigeria, where marriage is often a prerequisite for childbearing. A majority of respondents identify as Muslims (54.4%), followed closely by Christians (45.6%). Also, the Yoruba ethnic group represents more than half of the respondents (54.1%). The largest portion of respondents (46.3%) have secondary school education. More than half of the respondents are employed **(**53.7%) and **a** large proportion of respondents (61.9%) are involved in trading and the majority of respondents (77.0%) fall within the middle-income range. The study revealed that 91.2% of participants received care at tertiary healthcare facilities, while 9.8% attended primary healthcare facilities.

Table 2. The health profile of the respondents N=270.

Variable	**Characteristics**	**Frequency (N= 270)**	**Percentage (%)**
Parity	1-2	103	38.1
	2-4	84	31.1
	greater than 4	83	30.7
Year diagnosed with HIV	1-2 years	84	31.1
	3-4 years	104	38.5
	More than 4 years	82	30.4
HAART Duration	1-2 years	105	38.9
	2-3 years	144	53.3

	Above 4 years	21	7.8
HIV status of spouse	Positive	124	45.9
	Negative	146	54.1
Husband recieving HAART	Yes	21	7.8
	No	146	54.1
	I don't know	103	38.1
Number of children on HARRT	1	21	7.8
	Greater than 2	21	7.8
	None	228	84.4

Table 2 revealed that the largest group of respondents (38.1%) had 1-2 pregnancies, indicating that a significant proportion of the women in the study are relatively early in their reproductive years. A substantial portion of respondents **(**31.1%) was diagnosed with HIV in the last 1-2 years and the largest proportion of respondents (38.5%) was diagnosed 3-4 years ago. Nearly 39% of respondents have been on HAART for 1-2 years and majority (53.3%) of participants have been on HAART for 2-3 years. Nearly half of the respondents (45.9%) have a husband who is also HIV-positive. A small number of husbands **(**7.8%) are on HAART and a significant majority (84.4%) of children are not on HAART, which could be due to the success of PMTCT programs in preventing mother-to-child transmission (MTCT), or it may point to missed opportunities for treatment or diagnosis.

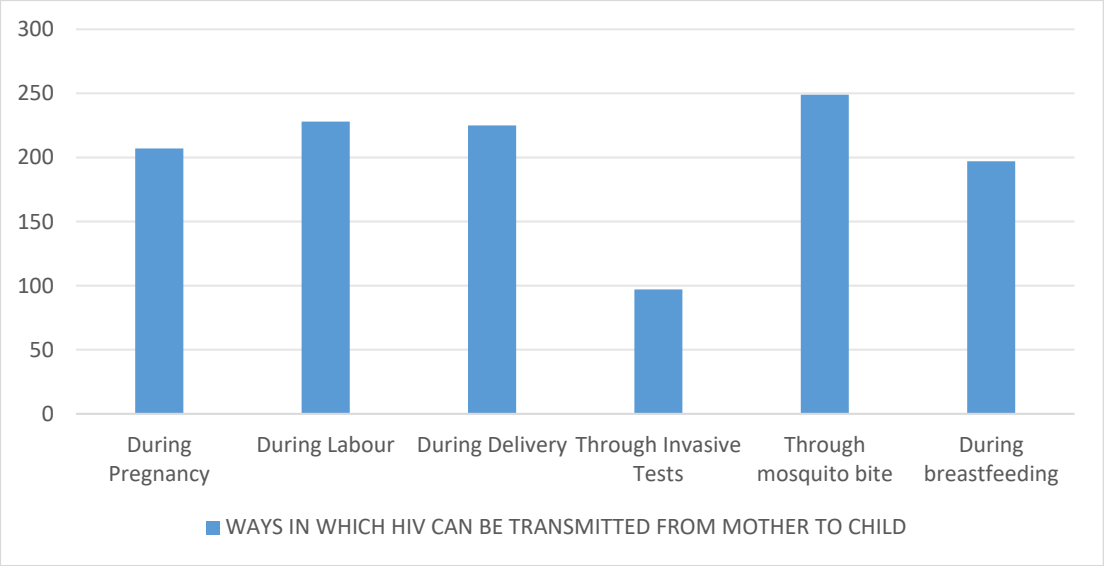

Figure 1. Ways of HIV transmission from mother to child.

The fig above shows that 207 respondents identified that HIV can be transmitted from mother to child during pregnancy. Also, 228 respondents identified transmission during labor highlights a reasonable awareness among patients and health providers about the risks at this stage. A large portion of respondents (225) recognizing delivery as a transmission route reflects understanding of how transmission can occur during childbirth, especially if precautions like the use of ART are not in place. This result suggests that fewer people (97 respondents) are aware that invasive medical procedures, such as amniocentesis or chorionic villus sampling, can pose a risk of transmitting HIV from mother to child. Also, 249 respondents mistakenly identified mosquitoes as a transmission route. Also, 197 respondents recognized breastfeeding as a transmission route indicates an awareness of the risks involved.

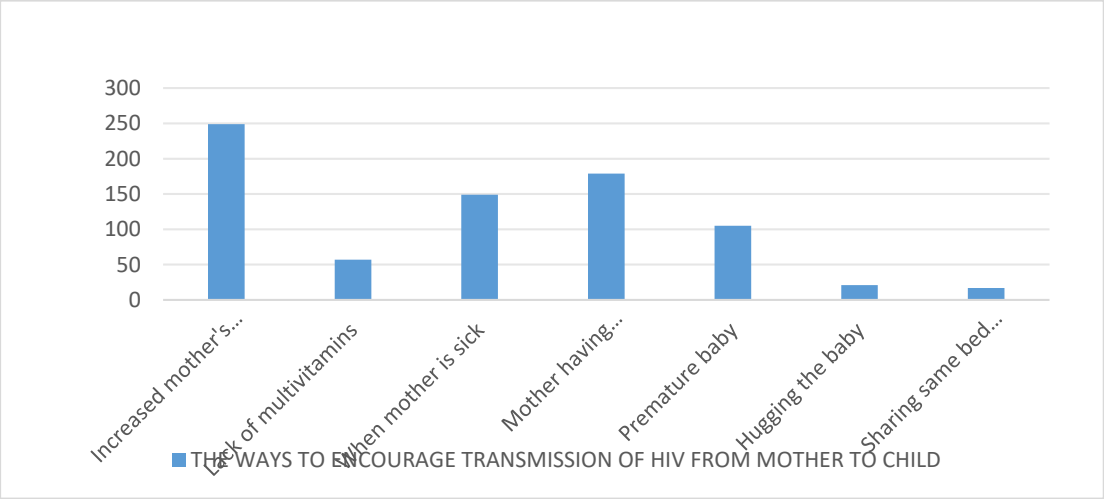

Figure 2. Ways that Encourage Transmission of HIV from Mother to Child.

Figure 2 identifies factors that could contribute to the transmission of HIV from mother to child, specifically in the context of antenatal care and the prevention of mother-to-child transmission (PMTCT) of HIV in Ogun State. The figure revealed that 249 respondents choose increased mother's viral load, mother having cracked nipples (179 respondents), when mother is sick (149 respondents), premature baby (105 respondents), lack of multivitamins (57 respondents), hugging the baby (21 respondents) and sharing same bed with baby (17 respondents).

Table 3. Level of Adherence and Retention to Management of Prevention of Mother-To-Child Transmission (PMTCT) a Respondents.

Variables	**Very Dissatisfied = 1**	**Not Satisfied = 2**	**Satisfied = 3**	**Very Satisfied = 4**
Satisfaction with Access to Care	0	0	270 (100%)	0
Satisfaction with Waiting time	0	207(76.7%)	63(23.3%)	0
Satisfaction with Doctor's care	0	0	270(100%)	0
Satisfaction with Nurse's care	0	0	270 (100%)	0
Satisfaction with care from Laboratory staff	21 (7.8%)	0	249(92.2%)	0

Table 3 revealed that all respondents (100%) expressed satisfaction with access to care, with no one reporting dissatisfaction or being very dissatisfied. A significant proportion of respondents (76.7%) were not satisfied with the waiting time, while 23.3% expressed satisfaction. Also, 100% of respondents were satisfied with the doctor's care and were satisfied with the care provided by the nurses. Most respondents (92.2%) were satisfied with the care they received from laboratory staff, while 7.8% were very dissatisfied.

Table 4. Level of Adherence and Retention to Management of Prevention of Mother-To-Child Transmission (PMTCT) among Respondents.

Variables	**Very Dissatisfied = 1**	**Not Satisfied = 2**	**Satisfied = 3**	**Very Satisfied = 4**
Satisfaction with care from	21(7.8%)	21(7.8%)	228(84.4%)	0

Pharmacy staff				
Satisfaction with care from the Adherence Counselor	42(15.6%)	0	228(84.4%)	0
Satisfaction with care from Records staff	42(15.6%)	0	228(84.4%)	0
Satisfaction with the Hospital environment	42(15.6%)	21(7.8%)	207(76.7%)	0
Confidentiality	42(15.6%)	0	228(84.4%)	0

Table 4 shows that 84.4% of the respondents were satisfied to pharmacy care, while only **7.8%** were very dissatisfied or not satisfied. Also, 84.4% of the respondents were satisfied with the adherence counselor's care, while 15.6% expressed dissatisfaction. Similar to the adherence counselor, 84.4% of respondents were satisfied, with 15.6% expressing dissatisfaction. Also, 76.7% of respondents were satisfied with the hospital environment, while 15.6% were very dissatisfied and 7.8% were not satisfied. Again, 84.4% of respondents were satisfied with the confidentiality of their care, while 15.6% were not satisfied.

Discussion of Findings

Demographically, the study findings revealed that the average age of the respondents is 32.04 years with a standard deviation of ±0.37, indicating that the respondents are mostly in their early 30s, which is typical for women seeking antenatal care services. The largest group, 38.9%, falls within the 31–35 years' age range, suggesting that this age group is more likely to access antenatal care and PMTCT services in Ogun State. The 25–30 years' group makes up 38.1%, while 15.2% are aged between 36–40 years. This distribution indicates that the majority of patients in antenatal care are in their prime reproductive years (late 20s to early 30s), a typical demographic for PMTCT programs.

A significant majority of respondents are married, which aligns with cultural expectations in many parts of Nigeria, where marriage is often a prerequisite for childbearing. The Yoruba ethnic group represents more than half of the respondents, which is expected, as Ogun State is part of the Yoruba-speaking region of southwestern Nigeria [6].

A majority of respondents identify as Muslims (54.4%), followed closely by Christians (45.6%). Given that Ogun State is predominantly Christian but has a sizable Muslim population, this data reflects the religious diversity in the region. The relatively even split suggests that PMTCT services are utilized across both religious groups [16].

The largest portion of respondents have secondary school education. This indicates that a significant number of antenatal care users have at least basic education, which is crucial for understanding health messages about PMTCT. More than half of the respondents are employed, which could influence their access to healthcare services, as employed individuals may have better financial means to seek antenatal care and PMTCT services [18]. The majority of respondents fall within the middle-income range, which likely represents individuals who have a reasonable level of disposable income to access healthcare services. The study revealed that 91.2% of participants received care at tertiary healthcare facilities, while 9.8% attended primary healthcare facilities.

The largest group of respondents had 1–2 pregnancies, indicating that a significant proportion of the women in the study are relatively early in their reproductive years. This group might be more likely to seek PMTCT services during their first pregnancies, possibly reflecting heightened awareness or first-time encounters with HIV care [17].

The largest proportion of respondents was diagnosed 3–4 years ago. This group may have more experience with the HIV care system, and their satisfaction levels could provide valuable feedback on long-term treatment and prevention efforts, especially in relation to PMTCT. The majority (53.3%) of participants have been on HAART for 2–3 years. These women might have experienced both the positive outcomes and challenges of ART, including the reduction in viral load and potential side effects. Their perspectives are likely to be valuable in understanding satisfaction with ongoing treatment and PMTCT services [9,11,14].

The majority (54.1%) of husbands are HIV-negative, suggesting that many respondents are in serodiscordant relationships. This could imply additional challenges in PMTCT, including the need for consistent communication about protection and prevention of transmission [1]. Over half of the husbands (54.1%) are not receiving HAART, highlighting a significant gap in male participation in HIV care. This may point to barriers like stigma, cultural norms, or lack of access to healthcare services for men. A significant majority (84.4%) of children are not on HAART, which could be due to the success of PMTCT programs in preventing mother-to-child transmission (MTCT), or it may point to missed opportunities for treatment or diagnosis [15].

All respondents (100%) expressed satisfaction with access to care, with no one reporting dissatisfaction or being very dissatisfied. This suggests that the accessibility of services for PMTCT is highly regarded among patients in the centers. A significant proportion of respondents (76.7%) were not satisfied with the waiting time, while 23.3% expressed satisfaction. This indicates a need for improvement in reducing the waiting time, as long waiting periods might affect patient experience and overall satisfaction [2]. Similar to access to care, 100% of respondents were satisfied with the doctor's care, which suggests that the physicians are meeting the expectations of the patients in terms of treatment and service delivery [18].

Again, all respondents (100%) were satisfied with the care provided by the nurses, highlighting the positive perception of nursing services in PMTCT management. Most respondents (92.2%) were satisfied with the care they received from laboratory staff, while 7.8% were very dissatisfied. The relatively high satisfaction

rate indicates that the laboratory services are generally well-received, though a small portion of patients may feel improvements are needed in this area. This is in agreement with a study conducted in Eastern Ethiopia that revealed that 82.5% were satisfied with the counseling room's privacy, and having pre-test and post-test counseling by the same person provided comfort for 98.9% of clients. In addition, 92.2% felt comfortable with the counselors' client handling/respect, and 91.5% were satisfied with the technical competence of the counselors [14].

The study revealed that 84.4% of the respondents were satisfied, while only 7.8% were very dissatisfied or not satisfied. This indicates a generally positive experience with pharmacy staff, with a high level of patient satisfaction regarding the services provided. Also, 84.4% of the respondents were satisfied with the adherence counselor's care, while 15.6% expressed dissatisfaction. The results suggest that the adherence counseling provided to the patients was well-received, contributing to good management of PMTCT services. Similar to the adherence counselor, 84.4% of respondents were satisfied, with 15.6% expressing dissatisfaction. This shows that the records staff were largely effective in assisting patients, fostering a positive relationship with the patients in maintaining their care records. Also, 76.7% of respondents were satisfied with the hospital environment, while 15.6% were very dissatisfied and 7.8% were not satisfied. Although the satisfaction level was still high, the slightly higher percentage of dissatisfaction here compared to the other areas suggests that some patients may have had concerns about the physical environment or facilities. Again, 84.4% of respondents were satisfied with the confidentiality of their care, while 15.6% were not satisfied. Confidentiality is a critical aspect in healthcare, especially for PMTCT services, and these results demonstrate that most patients felt secure and respected in this regard [14].

Conclusion

The study revealed high overall client satisfaction with PMTCT services, particularly in areas of access to care, confidentiality, and staff interactions, with over 80% of respondents reporting positive experiences with doctors, nurses, laboratory staff, pharmacists, and adherence counselors. However, dissatisfaction was notable regarding waiting times, which emerged as a major service gap. To strengthen PMTCT service delivery, the study recommends revising the service system to reduce waiting times, either by increasing the number of healthcare providers or by implementing improved appointment scheduling. Regular training for staff is essential to enhance communication, respect, and cultural sensitivity. In addition, periodic health education workshops should be organized to increase awareness of HIV transmission and encourage service utilization. Finally, strict adherence to confidentiality protocols must be upheld to sustain trust and improve client participation in PMTCT programs.

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