JMBR: A Peer-review Journal of Biomedical Sciences
December 2013, Vol. 12 No.2 pp 150-165

ASSESSMENT OF CLIENTS' SATISFACTION WITH THE PMTCT COUNSELLING SERVICE IN BENIN CITY, EDO STATE, NIGERIA

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ABSTRACT

The PMTCT counselling service is an important entry point into the national programme for the prevention mother-to-child transmission of HIV (PMTCT). This study assessed clients' satisfaction with the PMTCT counselling service provided at health facilities in Benin City, Edo State. The study design was a descriptive cross-sectional survey. New ANC attendees were recruited from seven health facilities providing comprehensive PMTCT services in Benin City. Satisfaction with the counselling service was assessed using exit interviews. A total of 259 new ANC attendees were recruited for the study. Majority of the new ANC attendees (60.7%) were dissatisfied with the PMTCT counselling service. Satisfaction with the service was significantly associated with waiting time and the type of counselling received. Reducing waiting time for PMTCT counselling is crucial to improving client satisfaction.

INTRODUCTION:

Mother-to-child transmission of HIV (MTCT) is a major challenge to the health and well-being of children in Africa as it contributes to severe morbidity and mortality in children below the age of five years.1 MTCT of HIV can occur during pregnancy, labour/delivery and through breastfeeding.2,3 The rate of MTCT of HIV is between 20% and 40% in the absence of interventions for prevention of mother-to-child transmission of HIV (PMTCT).4,5 However, this can be reduced to less than 2% with the use of appropriate interventions. The National PMTCT programme commenced in Nigeria in the year 2002 with the goal of reducing the transmission of HIV through MTCT by 50% by the year 2010 and increasing access to quality HIV counselling and testing (HCT) services by 50% by the same year.6,7 Having exceeded the target year 2010, the 2010-2015 National PMTCT scale up plan was instituted with the aim of improving maternal health and child survival in the country through the accelerated provision of comprehensive PMTCT services.5,7 The national guidelines for HIV Voluntary Counselling Testing (VCT) services in Nigeria specifies the standards for HIV counselling and testing services in the country and contains recommendations on the workload of counsellors and the waiting time for HIV test results.8 In line with the above, a study was conducted in Benin City, Edo State to assess patients' satisfaction with the PMTCT counselling services provided for patients' registering for antenatal care at different health facilities. Few studies assessing patients' satisfaction with PMTCT counselling services have

KEYWORD: *Client Satisfaction, PMTCT, HIV Counselling and Testing, Nigeria*

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been conducted in Nigeria. Studies conducted in other African countries among Antenatal Clinic (ANC) clients have reported satisfaction with various aspects of the PMTCT counselling process including privacy, service time and the quality of the counselling received.9-12

METHODOLOGY:

This study was conducted in Benin City, the capital of Edo State which has a population of 1, 085, 676 and spans three Local Government Areas, namely: Oredo, Egor and Ikpoba-Okha.13 Seven health facilities in Benin City provide comprehensive services for PMTCT including HIV counselling and testing, antenatal care, delivery services, antiretroviral prophylaxis and early infant diagnosis of babies exposed to HIV during pregnancy, delivery or through breastfeeding.14

Sampling methods:

The seven health facilities providing comprehensive PMTCT services in Benin City were included in this study i.e. a total population survey of these health facilities was conducted. Results from a previous study conducted in Tanzania reported that 75.2% of women were satisfied with PMTCT counselling given at a health facility.9 Based on this observed prevalence, applying the sample size formula for prevalence studies and the finite population correction, the sample size of 227 newly booked ANC clients was determined for the study.9,15,16 Newly booked ANC clients were recruited across the seven sites in proportion to the monthly average bookings for ANC at the sites. At each site, consecutive recruitment of pregnant women registering for ANC was carried out until the sample size for each health facility was achieved. Exit interviews were conducted with the clients after the PMTCT counselling sessions.

Data was collected using a researcher administered questionnaire adapted from a tool designed by the Joint United Nations Programme on HIV and AIDS (UNAIDS) for evaluating VCT in the context of PMTCT.17 Prior to the commencement of data collection, the questionnaire was pre-tested to assess the clarity, brevity and time required to administer the study instrument. Data was collected on clients' socio-demographic characteristics and their satisfaction with the different dimensions of PMTCT counselling, namely: waiting time for counselling, service time, privacy during counselling and the quality of counselling received. Waiting time in this study was defined as the interval from when the client arrives at the health facility, obtains services until she walks out of the facility exit gate. The service time was defined as the time taken from when the provider delivered the specific service (PMTCT counselling) sought by the client to the time they parted.

Privacy in counselling rooms involved the process of maintaining confidentiality so that information regarding HIV status remains between the client and the counsellor. Only the counsellor and the client are expected in the counselling room.

Clients' satisfaction with the PMTCT counselling service was graded on a five-point likert scale of 0 to 4; from very dissatisfied to very satisfied. The assessment of clients' satisfaction with the PMTCT counselling process was carried out in two stages. For ease of comprehension, the clients of the ANC clinic were asked if they were happy, sad or indifferent about different aspects of PMTCT counselling. Next, they were asked to state how happy or sad they were with each aspect. This two-stage assessment of clients' satisfaction with a health service had been used in a previous study where it was found to provide more reliable and accurate information than a direct

assessment of the levels of satisfaction.18 Interviews with the clients were conducted in a quiet room within the health facility out of the ear-shot of the health care providers.

A scoring system adapted from an existing tool was used to grade clients' satisfaction with the PMTCT counselling service.17 Summary scores were computed for each client based on their satisfaction with the four aspects of PMTCT counselling service to determine their overall level of satisfaction with the service. The minimum and maximum scores on overall satisfaction with the PMTCT counselling service was zero and sixteen marks, respectively. Percentage scores were computed for each client based on their overall satisfaction with the PMTCT counselling service. Clients with percentage scores on satisfaction with the counselling service at 75% and above were classified as being satisfied with the counselling service overall. Those with percentage scores less than 75% were classified as being dissatisfied with the counselling service overall. Similar cut-off points for classifying clients' satisfaction with PMTCT counselling had been used in a previous study. 9 Data was analysed using the Statistical Programme for the Social Sciences (SPSS) version 16.0.

Ethical Consideration: Permission for the conduct of this study was obtained at different levels. Ethical approval for the study was obtained from the Ethical Committee of the University of Benin Teaching Hospital, Benin City, Edo State. Similarly, ethical approval and permission to use health facilities belonging to the Edo State Government was obtained from the Ethical Clearance Committee of the Edo State Ministry of Health, Benin City. A summary of the research proposal was submitted to the head of each health facility for ethical consideration and to the ethical committees of the health facilities where applicable. The ANC clients were informed that participation in the study was purely voluntary and that refusal to participate in the study would not affect their access to health services at the sites. Informed consent was obtained from all the patients that participated in the study. In addition, the exit interviews were conducted in a quite room within the health facility out of the ear-shot of the health care providers to reduce courtesy bias and to ensure privacy. Information leaflets for pregnant women on PMTCT prepared by the researcher were distributed to newly booked ANC clients at the sites whether or not they had participated in the study. The researcher also counselled newly booked ANC clinic clients who had been referred for HIV testing without pre-test counselling at the health facilities.

RESULTS:
A total of 259 newly booked ANC clients were recruited for the study from the seven health facilities providing comprehensive PMTCT services in Benin City. Twelve ANC clients did not receive pre-test counselling prior to being tested for HIV and were not assessed for their satisfaction with the PMTCT counselling received at the site.

Table 1 shows the socio-demographic characteristics of newly booked ANC clients across the seven health facilities. The mean age of the respondents was 29.3 years (SD = 4.75). Two hundred and fifty-five of the new ANC attendees were married (98.5%) and four of them were single (1.5%). The predominant ethnic groups among the respondents were Benin (n = 108, 41.7%), Esan (n = 39, 15.1%) and Igbo (n = 28, 10.8%). The predominant occupations among the newly booked ANC clients were trading (n = 87, 33.6%), house wives (n = 35, 35.5%) and hair dressing (n = 32, 12.4%).

Table 1: Socio-demographic characteristics of new ANC attendees (N=259)

Variables	N	(%)
Age Group (years)		
15-19	4	(1.5)
20-24	29	(11.2)
25-29	103	(39.8)
30-34	90	(34.7)
35-39	24	(9.3)
40-44	9	(3.5)
Marital Status:		
Married	255	(98.5)
Single	4	(1.5)
Ethnic Group		
Benin	108	(41.7)
Esan	39	(15.1)
Igbo	28	(10.8)
Etsako	15	(5.8)
Urhobo	11	(4.2)
Owan	10	(3.9)
Yoruba	9	(3.5)
Isoko	8	(3.1)
Igbanke	7	(2.7)
Akoko-Edo	5	(1.9)
Ijaw	4	(1.5)
[a]Others	14	(5.4)
Level of Education		
Primary	21	(8.1)
Secondary	128	(49.4)
Tertiary	110	(42.5)
Occupation		
Trading	87	(33.6)
Housewife	35	(13.5)
Hair dressing	32	(12.4)
Tailoring	24	(9.3)
Teaching	24	(9.3)
Student	18	(6.9)
Catering	7	(2.7)
Nursing	5	(1.9)
Civil servant	5	(1.9)
Banking	4	(1.5)
[b] Others	17	(6.6)

[a] Others: Idoma (n=3),Ukwuani (n=3), Itsekiri (n=2), Ibibio, Anan, Yache, Anioma, Efik, Caribbean (one, each).

[b] Others: Youth Corper (n=2), farming (n=2), Auxiliary Nurse (n=2), Cleaner (n=2), Call Centre Operator, Television Broadcaster, Police Officer, Computer Operator, Interior

Decorator, Optometrist, Cleaner, Aviation Worker, Accountant, Community Health Worker (one, each).

Table 2: Services received by new ANC clients

Services received at the booking clinic	No. of new ANC Clients	(%)
Physical examination and checking of vital signs	259	100.0
Counselling on infant feeding	259	100.0
Pharmacy	259	100.0
Other laboratory investigations	256	98.8
HIV testing	255	98.5
HIV counselling	248	95.8
Health education	243	93.8
Consultation with doctor	144	55.6
Received family planning counselling	144	44.0

***Multiple responses**

Table 2 shows the services received by newly booked ANC clients at the sites. ANC clients received several services at the booking clinic including physical examination and checking of vital signs (n=259, 100%), pharmacy services (n=259, 100.0%) and HIV testing (n=255, 98.5%).

Table 3: Type of PMTCT counselling assessed among new ANC clients (N=259)

Type of counselling assessed by the researcher	No of patients (%)	
Individual post test counselling	170	(65.6)
Individual pre test counselling	60	(23.2)
Group Pre-test counselling	17	(6.6)
No pre test counselling received (Patient excluded from assessment of satisfaction with counselling)	12	(4.6)
Total	259	(100.0)

Table 3 lists the types of counselling assessed among the new ANC clients. One hundred and seventy new ANC clients were (65.6%) assessed for their satisfaction with individual post test counselling for HIV/AIDS.

Table 4 shows the waiting time for PMTCT counselling among the newly booked ANC clients. The waiting time for PMTCT counselling reported by the clients ranged from one minute to nine and a half hours and varied by the type of PMTCT counselling assessed by the researcher.

Table 4: Waiting Time for PMTCT Counselling

Type of counselling assessed	Waiting time (minutes)	N (%)
Individual pre test counselling (N=60)	1-30	11 (4.2)
	31-60	7 (2.7)
	61-90	6 (2.3)
	91-120	13 (5.0)
	121-150	8 (3.1)
	151-180	5 (1.9)
	181-210	3 (1.2)
	211-240	1 (0.4)
	241-270	5 (5.9)
	271-300	1 (0.4)
Group pre test counselling (N=17)	1-30	5 (1.9)
	31-60	1 (0.4)
	61-90	4 (1.5)
	91-120	3 (1.2)
	121-150	1 (0.4)
	151-180	2 (0.8)
	181-210	1 (0.8)
Individual post test counselling (N=170)	1-30	0 (0.0)
	31-60	4 (1.5)
	61-90	2 (0.8)
	91-120	6 (2.3)
	121-150	4 (1.5)
	151-180	4 (1.5)
	181-210	2 (0.8)
	211-240	2 (0.8)
	241-270	2 (0.8)
	271-300	7 (2.7)
	301-330	6 (2.3)
	331-360	11 (4.2)
	361-390	19 (7.3)
	391-420	15 (5.8)
	421-450	31 (12.0)
	451-480	30 (11.6)
	481-510	16 (6.2)
	511-540	6 (2.3)
	541-570	2 (0.8)
	571 and above	1 (0.4)

Table 5 depicts the service time for PMTCT counselling by the type of counselling received. The median service time for individual pre-test counselling was 5.0 minutes. The median service time for individual post-test counselling was 2.0 minutes.

Table 5: Service time for PMTCT Counselling

Type of PMTCT Counselling received	Service Time for PMTCT Counselling (minutes)	No. of patients (%)	
Individual Pre-test counselling (N=60)	**1-5**	**38**	**(14.7)**
	6-10	**14**	**(5.4)**
	11-15	**5**	**(1.9)**
	16-20	**2**	**(0.8)**
	21 and above	**1**	**(0.4)**
Group Pre test counselling (N=17)	**1-5**	**1**	**(0.4)**
	6-10	**2**	**(0.8)**
	11-15	**2**	**(0.8)**
	16-20	**5**	**(1.9)**
	21 and above	**7**	**(2.7)**
Individual Post-test counselling (N=175)	**1-5**	**162**	**(62.5)**
	6-10	**4**	**(1.5)**
	11-15	**3**	**(1.2)**
	16-20	**1**	**(0.4)**
	21 and above	**0**	**(0.0)**
Total		**247**	**(100.0)**

Table 6: ANC Clients' satisfaction with the different aspects of PMTCT counselling (N=247)*

Different aspects of PMTCT counselling	Client's level of satisfaction									
	Very Dissatisfied		Dissatisfied		Undecided		Satisfied		Very Satisfied	
	N	(%)	N	%	N	%	N	%	N	%
Waiting time	32	(13.0)	39	(15.8)	72	(29.1)	83	(33.6)	21	(8.5)
Service time	2	(0.8)	3	(1.2)	13	(5.3)	197	(79.8)	32	(13.0)
Level of privacy	2	(0.8)	4	(1.6)	24	(9.7)	200	(81.0)	17	(6.9)
Quality of counselling received	1	(0.4)	0	(0.0)	33	(13.4)	195	(78.9)	18	(7.3)

* Two hundred and forty-seven patients received counselling for PMTCT.

One hundred and four ANC clients (42.5%) were satisfied or very satisfied with the waiting time for PMTCT counselling. Similarly, two hundred and twenty-nine respondents (92.8%) were either satisfied or very satisfied with the service time for PMTCT counselling. The clients' satisfaction with the different aspects of PMTCT counselling is depicted in Table 6.

Overall satisfaction with the PMTCT Counselling Service

The median and modal scores on overall satisfaction with the PMTCT counselling service were 11.0 marks and 12.0 marks, respectively with a range of 5.0 marks to 16.0 marks. The mean score on the overall satisfaction with PMTCT counselling was 11.0 marks (SD=1.68). Overall, 97 ANC clients (39.3%) were satisfied with the PMTCT

counselling service as a whole while 150 ANC clients (60.7%) were dissatisfied with the service.

Table 7: Factors influencing satisfaction with the PMTCT counselling service (No of patients =247)

	Satisfaction with the PMTCT Counseling Service					
	Satisfied		Dissatisfied		Total	
Factors affecting satisfaction with the PMTCT counselling service	**N**	**(%)**	**N**	**(%)**	**N**	**(%)**
Type of health facility						
Private	**23**	**(51.1)**	**22**	**(48.9)**	**45**	**(100.0)**
Public	**74**	**(36.6)**	**128**	**(63.4)**	**202**	**(100.0)**
X_2 = 3.23, df = 1, P = 0. 072						
Type of counselling						
Individual pre test counselling	**33**	**(55.0)**	**27**	**(45.0)**	**60**	**(100.0)**
	8	**(47.1)**	**9**	**(52.9)**	**17**	**(100.0)**
X_2 = 9.51, df = 1, P = 0.009						
Age Group						
Below 35 years	**84**	**(38.9)**	**132**	**(61.1)**	**216**	**(100.0)**
35 years and above	**13**	**(41.9)**	**18**	**(58.1)**	**31**	**(100.0)**
X_2 = 0.11, df = 1, P = 0.75						
Level of education						
Primary	**11**	**(55.0)**	**9**	**(45.0)**	**20**	**(100.0)**
Secondary	**46**	**(39.0)**	**72**	**(61.0)**	**118**	**(100.0)**
Tertiary	**40**	**(36.7)**	**69**	**(63.3)**	**109**	**(100.0)**
X_2 = 2.38, df = 2, P = 0.30						
Waiting Time for PMTCT Counselling						
≤120 minutes	**38 (61.3)**		**24 (38.7)**		**62**	**(100.0)**

> 120minutes	**59 (31.9)**	**126 (68.1)**	**185 (100.0)**

X^2 = 16.83, df = 1, P = 0.000

Table 7 shows the factors that influence overall satisfaction with the PMTCT counselling service. There was a highly significant association between the waiting time for PMTCT counselling and clients' overall satisfaction with the PMTCT counselling service (P=0.000). ANC clients who waited for longer than two hours for the PMTCT counselling service (68.1%) were more likely to be dissatisfied with PMTCT counselling overall compared with those who waited for 120 minutes or less for the service (38.7%).

Similarly, 55.0% of the ANC clients who received individual pre-test counselling were satisfied with the PMTCT counselling service overall compared to 47.1% of the clients who received group pre-test counselling. This difference was found to be statistically significant (P=0.009).

The following factors did not significantly influence clients' satisfaction with the overall PMTCT counselling service in this study: age-group, level of education and the type of health facility (public or private).

Table 8: ANC clients' likes and dislikes about the counselling received

ANC Clients' likes and dislikes about the counselling received	No. of patients (%)
ANC Clients' likes about the counselling received	
Information on the methods of HIV prevention	143 (57.9)
Polite manner of counsellor	39 (15.8)
Pleased with HIV test result	30 (12.1)
Counselling on the need for partner testing	22 (8.9)
Information on prevention of MTCT of HIV	11 (4.5)
Opportunity to know HIV status	8 (3.2)
Awareness on HIV	7 (2.8)
Opportunity to do HIV testing	6 (2.4)
Clarity of message	6 (2.4)
Counselling session was educative	5 (2.0)
Level of privacy during the counselling session	4 (1.6)
Nothing in particular	4 (1.6)
Brief counselling session	2 (0.8)
Information that treatment available for patients living with HIV	1 (0.4)
Counselling session was interesting	1 (0.4)
Comfortable environment	1 (0.4)
ANC Clients' dislikes about the counselling received	
Nothing in particular	244 (98.8)
Noisy environment, interruptions during the counselling session	2 (0.8)
Increased Frequency of HIV testing for research purposes	1 (0.4)

*** Multiple responses**

ANC Clients' likes and dislikes about the PMTCT counselling service

With respect to the PMTCT counselling service, the ANC clients' liked the information on HIV prevention (n = 143, 57.9%) and the polite manner of the counsellor (n = 39, 15.8%). Two hundred and forty-four (98.8%) of the clients surveyed disliked nothing in particular about the PMTCT counselling received. Three patients (1.2%) had complaints about the PMTCT counselling received. The complaints were interruptions during the PMTCT counselling (n = 2, 0.8%) and increased frequency of HIV testing for the purpose of research (n = 1, 0.4%).

All the clients (n = 247, 100.0%) felt comfortable with the counsellor during the PMTCT counselling service. Fifty-eight patients who received individual post test counselling (34.1%) saw the same counsellor before and after the HIV test. The clients' likes and dislikes about the PMTCT counselling service are presented in Table 8.

All the ANC clients in this study (n = 259,100.0%) would recommend the PMTCT HIV counselling service to their friends and family members. Table 9 lists the ANC clients' reasons for recommending the PMTCT counselling service to their friends and relatives. The most frequent reason for recommending the HIV counselling and testing service was to enable people to know their HIV status (n = 166, 64.1%).

Table 9: ANC clients' reasons for recommending the PMTCT HIV counselling service

Reasons for recommending the PMTCT HIV counselling service	N	(%)
It will enable people know their HIV status	166	(64.1)
To obtain information on HIV prevention	32	(12.4)
It is good to do the test	21	(8.1)
It will help people access treatment for HIV	11	(4.2)
To prevent MTCT of HIV	10	(3.9)
It is good for the health	9	(3.5)
It will reduce the spread of HIV	8	(3.1)
It will enable people know their health status	6	(2.3)
It is important to do the test	6	(2.3)
Pleasant manner of counsellor	5	(1.9)
The test is compulsory	4	(1.5)
Happy with HIV test result	3	(1.2)
The test is free	2	(0.8)
To obtain information on the benefit of HIV testing	2	(0.8)
For personal protection	2	(0.8)
Pleasant comfortable surroundings	1	(0.4)
Treatment for HIV is available	1	(0.4)

*Multiple responses

DISCUSSION

The long waiting times observed in this study could be due to the fact that some of the sites studied conduct booking clinics for ANC once a week. This results in a large number of pregnant women congregating at the clinics on the days for the booking clinics and the consequent long waiting times for the PMTCT counselling service. The same sites provided same-day HIV test results with individual post-test counselling for the patients. Though commendable, this further lengthened the patients' waiting time at the sites.

The proportion of ANC clients in this study who were satisfied with the PMTCT counselling service as a whole was much lower than that reported in a previous study.[9] This may be due to the longer waiting time for the service reported by the patients in this study in this study. It may also be due to the fact that the waiting time for the service was much longer than the actual time spent receiving the service. Similar findings have been documented in the literature.[9]

With regards to privacy during counselling sessions, most of the newly booked ANC clients in Benin City were satisfied or very satisfied with the level of privacy during counselling sessions. Some clients however complained of interruptions during the counselling process in keeping with findings from previous studies.[9,10]

The high proportion of clients reporting satisfaction with the quality of PMTCT counselling in this study may be due to the fact that the quality of the counselling session met their expectation in terms of the content. On the other hand, it may have been influenced by the patients' reluctance to speak negatively about their health care providers. Previous studies have reported similar findings among ANC client receiving PMTCT counselling.[9,11]

More than half of the clients in this study (60.7%) were dissatisfied with the PMTCT counselling service as a whole. Dissatisfaction with the PMTCT counselling process can negatively affect the uptake of other PMTCT services and contribute to missed opportunities for PMTCT. Majority of the clients in this study (75.3%) reported waiting for more than two hours for PMTCT counselling contrary to the standards specified in the National Guidelines for HIV/AIDS VCT services in Nigeria.[8] The long waiting time reported in this study could constitute a barrier to the utilisation of PMTCT services in Benin City and may hinder the achievement of the PMTCT programme goal of reducing MTCT of HIV.

The long waiting time for PMTCT counselling observed in this study may be due to the large number of patients registering for ANC at some health facilities. It may also be due to shortage of counsellors and inadequate number of counselling rooms at the sites relative to the number of ANC Clients receiving PMTCT counselling at the sites. The heavy workload of counsellors at some of the sites also contributed to long waiting times for PMTCT counselling services. These factors may have contributed to clients' dissatisfaction with the PMTCT counselling service as reported in this study.

A small proportion (4.6%) of new ANC clients in this study did not receive pre-test counselling for HIV prior to being tested for HIV. This situation may have occurred as a result of a shortage of trained counsellors at the sites. In addition, the client flow at the sites may have resulted in some patients missing out on the counselling process. The observed practice of not counselling clients prior to testing them for HIV is contrary to the recommendations in the national

guidelines which requires informed consent prior to being tested for HIV testing.[5,8] It also violates clients' rights to consent to HIV testing.[5,8] Similar findings have been reported in the literature.[9,12]

CONCLUSION:

Overall, 60.7% of the newly booked ANC clients in Benin City were dissatisfied with the PMTCT counselling service. Factors contributing to dissatisfaction with the service were waiting times for PMTCT counselling and the type of counselling received (group vs. individual pre-test counselling). The heavy workload of counsellors at some of the sites studied also contributed to lengthy waiting times as reported by the clients. The problem of long waiting times for PMTCT counselling and the heavy workload of counsellors should be addressed to promote the utilisation of PMTCT services and reduce missed opportunities for PMTCT. The waiting time for PMTCT counselling at the health facilities should be reduced by training more health workers to provide PMTCT counselling at the health facilities, employing lay-counsellors to relieve shortage of counsellors and providing more counselling rooms within the health facilities to cater for more clients at a time. Where feasible, booking clinics should be conducted daily at the health facilities as this would also reduce the waiting time for PMTCT counselling. In addition, ANC clients should not be referred for HIV testing without pre-test counselling as this deprives them of essential information on HIV and PMTCT and negates their right to consent to HIV testing.

Acknowledgement: We sincerely thank the management, staff and patients of the health facilities that participated in this study.

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