

## Original Research Article

# Preventing mother-to-child transmission of HIV: The perception and experiences of HIV positive mothers in Benin City, Edo State, Nigeria

### ABSTRACT

**Introduction:** Mother-to-child transmission of HIV remains a leading cause of preventable morbidity and mortality among under-five children in Nigeria.

**Aim:** This study examined the perceptions and experiences of HIV positive mothers who had accessed services for preventing mother-to-child transmission of HIV (PMTCT) in Benin City, Edo State, Nigeria.

**Methodology:** Data was collected through focus group discussions and in-depth interviews sessions held with HIV positive mothers accessing services for preventing mother-to-child transmission of HIV in Benin City, Edo State.

**Results:** The mothers in this study were happy that antiretroviral medications were provided free of charge at the clinics. They commended the friendly attitude of most health workers and were particularly delighted that they were now allowed to breastfeed their babies following the availability of antiretroviral medications for mothers and babies. The mothers however complained about the discriminatory attitude of some health workers in the antenatal clinic, the medical records department, the laboratory and the labour ward at some of the health facilities. The mothers also reported occasional stock-out of antiretroviral medications at some of the sites providing comprehensive services for preventing mother-to-child transmission of HIV.

**Conclusion:** The mothers' were generally positive in their perceptions of the programme for preventing mother-to-child transmission of HIV. However, some mothers reported negative experiences during their interactions with health workers at some of the health facilities providing comprehensive services for preventing mother-to-child transmission of HIV.

**Keywords:** PMTCT, HIV, mothers, perception, experiences, Nigeria

### 1. INTRODUCTION

Mother-to-child transmission (MTCT) of HIV is the transmission of HIV from a pregnant woman infected with HIV to her infant during pregnancy, labour/delivery or through breastfeeding.<sup>[1]</sup> Risk factors for MTCT of HIV include high maternal viral load of HIV, low CD4 count, advanced HIV disease, prolonged labour, instrumental delivery and mixed feeding.<sup>[1,2]</sup> The rate of mother-to-child transmission of HIV is between 20% and 40% in the absence of interventions for prevention of mother-to-child transmission (PMTCT) of HIV.<sup>[1,2]</sup> However, this rate can be reduced to less than 2% with the use effective interventions such as antiretroviral prophylaxis or antiretroviral therapy by pregnant women infected with HIV, active management of labour and the use of elective caesarean section when indicated.<sup>[1,3]</sup>

The national programme for preventing mother-to-child transmission of HIV (PMTCT) commenced in 2002 at eleven tertiary health facilities spread across the six geo-political zones of the country.<sup>[1]</sup> At present, the PMTCT programme is being implemented in over 684 sites across the country.<sup>[1,4]</sup>

The uptake of HIV testing among pregnant women in Nigeria remains unsatisfactory. Only 13% of pregnant women in the country were tested for HIV in 2009.<sup>[5]</sup> Reported reasons for the low uptake of HIV testing include fear of a positive test result and the stigma associated with HIV.<sup>[6,7]</sup> Few studies in Nigeria have examined the perceptions and experiences of mothers receiving PMTCT services. Studies conducted in other countries have reported discriminatory attitudes from health workers and unmet expectations from HIV positive women accessing services for preventing mother-to-child transmission of

HIV.<sup>[8-10]</sup> Factors promoting participation in PMTCT programmes identified from previous studies include availability of friendly and supportive health workers, family support and spousal support.<sup>[8,9]</sup> Others include the provision of antiretroviral medications and the availability of free infant formula for mothers infected with HIV.<sup>[11]</sup> Similarly, barriers to access of PMTCT services have similarly been identified in the literature. These include disbelief of the HIV test result, shame following the diagnosis of HIV infection and the lack of funds to travel to the PMTCT programme site.<sup>[8,11,12]</sup> Others include lack of spousal support and insufficient male involvement in the PMTCT programme.<sup>[8,12,13]</sup> The aim of this study was to describe patients' perceptions and their experiences of the PMTCT programme in Benin City, Edo State.

## 2. MATERIAL AND METHODS

This study was conducted in Benin City, the capital of Edo State, Nigeria. A total of seven health facilities in Benin City provide comprehensive services for preventing mother-to-child transmission of HIV including HIV counselling and testing, antenatal care, delivery services, provision of antiretroviral medications for HIV positive mothers and early infant diagnosis (EID) of HIV.<sup>[14]</sup> This was a descriptive cross-sectional survey conducted among HIV positive mothers who had accessed PMTCT services at health facilities providing comprehensive PMTCT services in Benin City. Only HIV positive mothers who had participated in the PMTCT programme at the different health facilities were included in the study as they had first-hand experiences of programme at the sites. HIV positive mothers who had not participated in the PMTCT programme at the various sites were not included in the study.

**2.1 Sampling Methodology:** Five of the seven health facilities in Benin City that provide comprehensive services for PMTCT of HIV had facilities for early infant diagnosis (EID) of HIV, support groups for HIV positive mothers (mother2mother support groups) or a paediatric antiretroviral therapy clinics. HIV positive mothers were recruited from these five health facilities for the study. HIV positive mothers attending the early infant diagnosis clinics or the monthly support group meetings were approached by the researcher with the permission of the health workers at the sites. The mothers were asked if they would like to participate in a research on their perception and experiences of the PMTCT programme at these sites. Those who agreed to participate in the research were included in the study.

**2.2 Method of Data Collection:** Data was collected through focus group discussion sessions and in-depth interview sessions held with HIV positive mothers accessing PMTCT services at the selected health facilities. A focus group discussion guide was used to conduct the focus group discussion sessions and in-depth interview sessions with HIV positive mothers accessing PMTCT services. The focus group discussion sessions and the in-depth interview sessions were held between July 2011 and October 2011. Information was obtained on the perception and experiences of mothers on the PMTCT programme at the sites. The focus group discussion sessions and in-depth interview sessions were recorded on tape with the permission of the study participants. The recorded sessions were transcribed and analysed using thematic analysis to identify recurrent themes on patients' perceptions and experiences of the PMTCT programme.

## 3. RESULTS AND DISCUSSION

Nine focus group discussion sessions and five in-depth interview sessions were held across five health facilities involved in the study. A total of fifty-five HIV positive mothers participated in the focus group discussion sessions during the course of the study while eighteen mothers participated in the in-depth interview sessions.

**3.1. Socio-demographic characteristics of study participants:** The mean age of the mothers was 31.6 years (SD=4.6 years) with a range of 22.0 years to 44.0 years. Majority of the mothers were married (93.2%) with trading being the predominant occupation (69.5%).

**3.2. Findings from the focus group discussion sessions and in-depth interview sessions:** The themes that emerged from the focus group discussions (FGD) and in-depth interview (IDI) sessions held with the HIV positive mothers include:

- I. Mode of enrollment into the PMTCT programme;
- II. Reactions to diagnosis of HIV infection;
- III. Challenges faced by HIV positive mothers;
- IV. Perception and experience of the PMTCT programme
- V. Benefits of the PMTCT programme;
- VI. Perceived limitations of the PMTCT programme;
- VII. Recommendations to improve the programme

- I. Mode of enrollment in the PMTCT programme:** Most of the mothers became aware of their HIV status through routine screening for HIV at the antenatal care clinics. Some of the mothers first received the diagnosis of HIV while in labour. A few mothers became aware of their HIV status after series of recurrent illness which prompted health workers to screen them for HIV. Some other mothers became aware of their illness following a diagnosis of HIV infection in their children or spouse which prompted health workers to screen the mothers for HIV.

*"When I got pregnant, then I came here to register, then now tell me to go and do test. Then when I did the test, they now told me it is positive. I now went home to discuss with my husband. Then they sent me to call my husband. Then my husband came. He did the test, he was negative. We thank God for everything." (Participant 5, FGD 7)*

*"That was in 2010 when I was pregnant. So, I was in labour, they rushed me down to this hospital. When they did the test, they found out that I was HIV positive." (Participant 3, FGD3)*

*"It was my daughter that was sick. I now rushed her to this place. They now told me to do investigations. When I got the results they now told me this, this, this. I said how come, how about me that is carrying her... because as that time she was a baby. So I said okay, let me go for my own. I now went for my own. That's how I got to know." (Participant 4, FGD3)*

## **II. Reactions to Initial diagnosis of HIV infection**

The mothers' reactions to the initial diagnosis of HIV ranged from anger, disbelief and denial of HIV test results to despair, suicidal ideation and depression. However, most mothers reported immediate psychological support provided by the health workers following the diagnosis of HIV.

*"When I found that I am HIV positive, I was thinking the whole world had gone. I had lost every hope for living. The doctors and the nurses, they calmed me down, they talked to us, and they made us to know that this thing is nothing. It's just like malaria." (Participant 5, FGD 6)*

*"After the HIV test, I took a bike home while my husband returned to his work. I was now telling the bike man that it just looks as if the bike should have an accident so that I will just die and from there just go." (Participant 2, FGD 2)*

*"I was afraid because I know that anybody that has the disease will surely die. Because of that, I was afraid." (Participant 3, FGD3)*

### **III. Challenges faced by mothers living with HIV/AIDS**

The HIV positive mothers reported experiencing physical, social, emotional and psychological problems. Some mothers reported breakdown of their families and being deserted by their husbands after being diagnosed with HIV. Others had difficulty disclosing their HIV status to their spouses or relations for fear of being stigmatised.

*"When I hold my handset to call my husband, I will drop phone. I will say no, I will not tell him. Let me first keep quiet and monitor the environment... Up till today, as I'm talking to you, my Oga don't know anything concerning it..." (Participant 1, FGD 7)*

*"Though, I will not lie o, anytime that I'm coming to this place, in fact that day is not a happy day for me. I'm always moody, even people around me will be asking me 'what is wrong?' I will say I just had a bad dream, like that. Even since, anything around me, I'm always angry. Until this time, I now had my baby." (Participant 7, FGD 7)*

*"Whenever I remember that I'm coming here, I do lean overnight, I do emaciate. I will feel that a week to my coming to this hospital, I will lean, I will think of it. As I'm talking to you, up till now, I haven't eaten. I will feel as if something move out from my body. But in all, when I'm about to go home or when I'm through with them, I will be feeling happy again and I will go home." (Participant 1, FGD 7)*

#### **a) Challenges with Infant Feeding:**

The mothers reported various challenges experienced with infant feeding. The mothers reported various challenges experienced with infant feeding. Many mothers complained of difficulties in sustaining replacement feeding due to the high cost of formula feeds. Others had to cope with pressure from their relations who urged them to breastfeed their babies who were on formula feeds.

#### **b) Cost of buying infant formula:**

*"Although it was not easy o, only God knows how many cartons of milk that I have bought." (Participant 1, FGD 7)*

*"This my baby now, ehn..., the food wey this my baby don eat, for that three months, I calculated it yesterday, almost forty something thousand. E never reach three months." (Participant 4, IDI 2)*

#### **c) Coping with pressure from relatives to practice mixed feeding:**

*"When I gave birth, I was sick. I was short of blood. We now use that as an excuse. If the brother or sister complains that 'can't you give your baby breast?' He (my husband) will tell them that 'don't you see that she is sick, that she cannot give baby breast? Is it someone that is sick that will breastfeed baby?'" (Participant 2, FGD 2)*

*"My first child, my second child, this third one, I did not breastfeed. His family were asking, questioning us. He (my husband) now told them 'This is my child. I will tell my wife what to do. I don't know what you mean. Give my baby "baby food". I want the baby to look big.' The family now stayed away. Initially, they were like they want to know what is wrong. When he started talking to them, shunning them off, telling them to stop asking too many questions, they now stopped." (Participant 1, FGD 2)*

*"I thank God for everything, for person like me, that's exactly what would have happened if not my smartness and everything. I'm not using force to breastfeed my baby. I'm hiding and using the drugs. I'm applying my wisdom. Eight o'clock morning, eight o'clock night. I will just drop the syringe in her mouth." (Participant 2, IDI 2)*

The mothers also expressed ambivalence about the infant feeding options. They desired to breastfeed their babies but were concerned about the risk of mother-to-child transmission of HIV through breastfeeding.

*"So, I'm happy, if dem do the medicine so that we can breastfeed because I want to breastfeed. I'm not happy sometimes, if I look at this child without giving her breast, I don't I don't feel happy, I don't feel happy." (Participant 5, IDI 2)*

#### **IV. Perceptions and Experience of the PMTCT Programme**

The mothers were generally positive in their perceptions of the PMTCT programme. They unanimously agreed that the programme was beneficial to pregnant women, the family and the society as a whole. The mothers praised the Federal Government of Nigeria and the programme sponsors for making the drugs, treatment, follow-up and laboratory monitoring for HIV/AIDS available free of charge for persons living with HIV/AIDS. The mothers were also unanimous in their perception of the technical competence of their health care providers. They believed that their health care providers were well trained and had the technical competence to properly manage their illness.

##### **a) Positive Perceptions of the PMTCT Programme**

*"I am still thanking the people that are supplying these drugs for us, God will reward them. God will continue blessing them in abundance..." (Participant 1, FGD 7)*

*"They are perfect. The doctors and the nurses know their work very well. If they did not know their work, they won't know the actual drugs they will give us. So we are feeling fine." (Participant 1, FGD6)*

*"...I love all the nurses. They are encouraging us, both the doctor; how to take our drugs, how to feel free. They encourage us that we should not think about anything; that this thing would soon be over." (Participant 8, FGD 7)*

##### **b) Perception of waiting time for services and the attitude of health workers:**

The mothers' perception of the waiting time for services and the attitude of health workers varied across the sites. At some of the health facilities, the mothers were pleased with the waiting time for services and the attitude of the health workers at the sites. At some other sites, however, the mothers were not happy with the waiting time for services, the attitude of health workers as well as the quality of care provided at the health facilities. Specifically, the mothers complained about the delay experienced while trying to retrieve their folders from the medical records department.

*"In every way, they do encourage. They don't stigmatise. They don't commonise people. They see people as they are. They see you as just as they are. They don't commonise people. They tell you what to do, the things to avoid. They are really caring. They are trying." (Participant 1, IDI 6)*

*"They're trying o. They come to the house to visit, the way they encourage somebody. Even when your husband will discourage you, they will advise your husband. Your husband will be the next person that will tell you, go and take your drugs. If he is a man that is harsh, when he comes to this place, he will be cool. The way they will talk to him. They are trying in this place. Even their drugs, the way they will give you, they will ask you if you're taking it regularly, normal. They are trying in this place, even the matron; the way there will attend to you. They will attend to you politely, they will not shout on you. Actually, I like this place and I thank God that there are drugs." (Participant 4, FGD 7)*

##### **c) Experience in the Medical Records Department**

*"It's not easy like that, most especially coming to where you will drop your card here. For them to carry the thing go up, they will just say you a word like if to say you are nobody. That place, those*



234 *people wey dey inside... Like the one wey dey just do me last time when I come hospital; I cried, I*  
 235 *shed tears. And wetin me tell dem be say, 'no be their fault' .” (Participant 1, IDI 2)*

236  
 237 **d) Experience in the Pharmacy**

238 *“The experience, I will not say that it is bad. It is okay. It’s just that they are trying...” (Participant*  
 239 *2, FGD 6)*

240 **e) Experience in the laboratory:**

241 *“That is eh, they don’t give us hope. They discourage us. Even the way they attend to us. They*  
 242 *make us feel bad...Even when they make us feel bad, our Mama (the counselor) here will*  
 243 *encourage us. She will tell us, don’t worry. But they’ve changed those people now. They’ve*  
 244 *changed the particular woman there. The people there now, they’re okay. When I did my baby’s*  
 245 *test, we did the test and the result came out that day. There was no stress. It was negative. Even*  
 246 *when I did my CD4 count, very high 1,000 plus.” (Participant 5, FGD 6)*

247 **f) Experience of PMTCT services:**

248 Some of the mothers had to shuttle between hospitals as they booked for antenatal care (ANC) at one  
 249 hospital and obtained antiretroviral medications from another hospital. Some other mothers had to  
 250 register for ANC at more than one health facility in order to access ARVs.

251 *“They have too much population in the antenatal (clinic). It is too high. People will go there; three*  
 252 *(p.m.), you will still be there, four (p.m.), you will still be there. To even attend to somebody is a*  
 253 *war there. And there is discrimination there. If you have somebody there, they will attend to you*  
 254 *first before other people you met there.” (Participant 6, FGD 2)*

256 *“No problem at all. Those people in the antenatal department, they don’t even know if you’re*  
 257 *positive or negative... But there some nurses, they will use this kind eye if they know that the card*  
 258 *is for someone that has this virus. They will use finger to pick the card like this but they do not*  
 259 *know that there is nothing there.” (Participant 1, FGD 6)*

261 *“They’re trying. The nurse, she has been trying. Because even the first day they told me that I am*  
 262 *positive, the way I feel. She is the one that encouraged me. I don’t know how to tell my husband.*  
 263 *She said that I should call him that she will discuss with him. She’s the one that is encouraging*  
 264 *us. There is no problem in the pharmacy, because I’ve collected drugs twice, there was no*  
 265 *problem; no problem in the lab as well.” (Participant 7, FGD 6)*

266  
 267 **g) Experience in the Pharmacy**

268 The mothers agreed that there were long queues at the pharmacy but that the staff were friendly and  
 269 polite.

271 *“When I come to the pharmacy, if I come early, I will go early. If I don’t come early, I will not go*  
 272 *early. Sometimes, I spend two hours, three hours.” (Participant 3, FGD3)*

274 **h) Experience in the laboratory**

275 The mothers reported both positive and negative experiences in the laboratories across the sites.  
 276 Challenges reported by the mothers were long waiting times at the laboratory and missing results of  
 277 laboratory investigations.

278 *“They attend to us very well in the lab. They attend to us well in the pharmacy...” (Participant 2,*  
 279 *FGD3)*

280 *"When I went to the lab, I only went to the lab to do my CD4 count. But they attended to me well.*  
 281 *There are many people there, children. But anytime I carry my baby there, they give respect, they*  
 282 *pet her..." (Participant 4, FGD3)*

283 *"I did my CD4 (count), they now said they misplaced it. They didn't put it inside my file. They*  
 284 *looked for it, they didn't see it. Next coming Wednesday again, I will do it again so that I will know*  
 285 *the normal number. I don't know the normal number." (Participant 2, FGD6)*  
 286

#### 287 **i) Experience in the labour ward**

288 The mothers reported mixed experiences of their interactions with health workers at the time of their  
 289 delivery in the labour ward.

290 *"I was shouting, crying, shouting, shouting, nobody answered me. That thing they're doing is not*  
 291 *good o. It's not good at all...One lady told me about it, I thought she was lying until I experienced*  
 292 *it myself." (Participant 4, FGD3)*

293 Another mother agrees:

294 *"Your own good, I pushed myself, the baby was on bed crying, even that placenta before they*  
 295 *came and cut it." (Participant 3, FGD3)*

296 In contrast, another mother reported positive experiences during the birth of her children at another health  
 297 facility:

298 *"My children, this is the third one, they are all (HIV) negative... When I'm in labour, they will*  
 299 *give me that pill that I will insert inside my private part. That's how I got the three of them.*  
 300 *(Participant 1, FGD2)*

#### 301 **V. Benefits of the PMTCT Programme**

302 The mothers reported several benefits of the PMTCT programme. These include increased knowledge  
 303 about HIV, their improved quality of life and psychological support from health workers and other PLWHA  
 304 attending support group meetings. The fact that HIV positive mothers can give birth to babies not infected  
 305 with HIV was identified by the mothers as a major benefit of the PMTCT programme in Benin City.

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#### 309 **a) Prevention of mother-to-child transmission of HIV**

310 *"I breastfed my baby for 6 months, after six months I stopped. Last month, I did my*  
 311 *baby's test. It was negative." (Participant 5, FGD6)*  
 312

#### 313 **b) Improved quality of life, reduced morbidity and mortality:**

314 *"Then secondly, with these drugs, when you're taking it, when your body system has*  
 315 *already been already destroyed, it will restore everything. Everything will return to normal.*  
 316 *In my own case, when I was rushed to the hospital when they noticed about this thing, so*  
 317 *it was a wheel chair I used to walk there. But now, let me say eight months back that I*  
 318 *know that this thing is in me, my body has changed. And for the past three years, I've not*  
 319 *been able to get pregnant but now I'm carrying a baby." (Participant 1, FGD 6)*  
 320

#### 321 **c) Successful pregnancy out comes, healthy babies:**

322 *"I thought that it's only me that will carry baby. I'm surprised that we're many. Not only me*  
 323 *that has twins... We are almost two or three. One quality in it, God is blessing us with*  
 324 *twins. Double blessings, to show you that 'madam don't cry, take this.'" (Participant 1,*  
 325 *FGD7)*  
 326  
 327

**d) Improved knowledge of HIV and prevention of MTCT of HIV among the mothers**

*"I really gain a lot. When they were talking about this HIV, I thought it was a common illness. I thank God it's not too dangerous like tuberculosis sickness. My advice and my experience have been extensive. I gain a lot from the advice and encouragement they give us. They tell us how to make ourselves happy, be of courage. (Participant 1, IDI 6)"*

**VI. Perceived limitations of the PMTCT Programme**

The mothers identified several limitations of the programme. These included inadequate manpower, stock-outs of antiretroviral medications, laboratory reagents, etc. The lack of a permanent cure for HIV/AIDS was identified by the mothers as a major limitation of the PMTCT programme. The mothers in the programme desired that a permanent cure be found for HIV/AIDS as this would eliminate the requirement for daily intake of drugs. It would also provide a cure for children living with HIV/AIDS. They implored researchers and the Nigerian government to do more to find a drug that would completely cure the illness. The mothers were hopeful that the discovery of such a medication was near.

**a) Stock-outs of Antiretroviral medications:**

*"Yes, for the pharmacy now, sometimes dem go say drugs no dey. We want make dem dey bring the drug fast so we go dey see to collect the drug, fast...and two make dem still try to bring the real drug out, the one way go cure am... for myself, for the sake of the baby, for the sake of everybody." (Participant 4, FGD3)"*

**b) Lack of universal access to HIV Counselling and testing services:**

*"In the village now, where my female friend gave birth, they did not do test for her. They didn't ask her to do test on the first day she registered for antenatal..." (Participant 6, FGD 2)"*

*"Not all hospitals do tests for pregnant women even here in Benin." (Participant 2, FGD 2)"*

**VII. Recommendations to improve the PMTCT Programme:**

The mothers had several recommendations for improving the PMTCT programme. These included finding a cure for HIV/AIDS and simplifying regimens for antiretroviral medication to once daily medications or weekly/monthly injections. The mothers further recommended improved training of health care workers to reduce fear and discrimination exhibited by the health workers. In addition, the mothers advocated for increased funding of the PMTCT programme to address manpower shortages and stock-out of medications of antiretroviral medications.

**a) Desire for a cure for HIV/AIDS:**

*"My prayer be say, make the real drugs come out. Make drug wey go just kill am, maybe if person just take the drug like three, six months, maybe the sickness go just go and it go just finish kpata kpata, e no come again. Like TB now, before e dey kill but now, now, e no dey kill again because e don get treatment. So this, if this HIV still get cure like that, I will thank my God, well, well because of sake of the babies; not only my baby o, all the babies... That is why, I'm praying about it day and night."*

*(Participant 3, FGD3)"*

*"We need the next medicine that will cure this sickness." (Participant 6, IDI 6)"*

*"Make dem still put effort to bring that rightful drug for cure because we cannot continue to be taking drugs, everyday, for life..." (Participant 3, FGD3)"*



**b) Provision of stipends and loans to set up small business enterprises:**

*"We women, we need money to start up a business. Like our sister that is a student, she has many things she needs money for. She cannot wait for only her husband. Since she's ready to work, we will still need to support her, you understand. As she's a student now, she can be doing a trade, if she wants to pay school fees and other things, she can take from there. We need help." (Participant 5, FGD6)*

*"It is the same thing that they talked, government is still trying. But they should even still dey help women, even payment to men; giving them money for buying something that they will need to be more healthy. Helping them, like if they have problem, they will give them (money)." (Participant 2, FGD6)*

**c) Promotion of partner counselling and testing at ANC clinics:**

*"The only thing I will also say, if you're a woman, you have to drag your husband to this place. It is very compulsory. No matter, I know that it's very difficult but there's a way you will put it as a woman. There's a way you will arrange it. There's away you will pet your husband, your husband will be like 'okay, let me follow this woman to this place.' If you can pet your husband, your husband will just decide one day. Maybe he has not agreed to follow you, maybe you have dropped the letter (letter inviting patient's spouse for VCT), you have tried many best, just pet him and put it prayer." (Participant 4, FGD 7)*

## DISCUSSION

This study evaluated the PMTCT programme in Benin City, Edo State from the patients' perspective. The mothers who participated in the study were generally positive in their perceptions of the PMTCT programme. They were happy that care and follow-up of patients living with HIV was provided free of charge at the health facilities. Some of the mothers however reported negative experiences following their interactions with health workers at the sites. The discriminatory attitude of health workers may be borne out of a judgmental attitude towards persons living with HIV infection. It may also result from fear of becoming infected with HIV infection among health workers. Training and re-orientation of health workers is required to prevent discrimination and stigmatization of persons living with HIV.

A major challenge facing the PMTCT programme in Benin City is the declining funds from donor agencies supporting the programme. This situation threatens the sustainability of the PMTCT programme in the country particularly in the absence of adequate government funding. The recent introduction of user fees (e.g. consultation fees) at some health facilities providing care for persons living with HIV may discourage mothers from utilising the PMTCT services at the sites thus jeopardising the goal of reducing mother-to-child transmission of HIV.

Availability of services for care and support of persons living with HIV has increased tremendously over the years. This has resulted in an upsurge of patients accessing ART services at health facilities. However, the increased utilisation of ART services has not been matched by expansion of the infrastructure or human capacity at the health facilities resulting in long queues and lengthy waiting times for patients accessing these services. Long queues and lengthy waiting times may discourage mothers from accessing PMTCT services and hinder the goal of reducing mother-to-child transmission of HIV. Expansion of facilities for HIV counselling and testing as well as care and support of persons living with HIV/AIDS is necessary to address the health system challenges posed by the increased utilisation of these services.

## 4. CONCLUSION

The mothers accessing PMTCT services in Benin City, Edo State generally had a positive perception of the programme in the state. Some however reported negative experiences during their encounter with health workers at some of the sites. Such negative experiences may discourage the mothers from utilising services for preventing mother-to-child transmission of HIV in future thus negating the goal of the PMTCT programme.

## CONSENT

Informed consent was obtained from all the study participants. The mothers were informed that participation in the study was voluntary. They were assured of confidentiality and informed that their responses would only be used for the purpose of the research.

## ETHICAL APPROVAL

Approval for the conduct of this study was obtained at various levels. These included the ethical committee of the University of Benin Teaching Hospital, the ethical clearance committee of the Edo State Ministry of Health in Benin City. In addition, institutional assent was obtained from the head of each health facility involved in the study. 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 mothers who participated in the focus group discussions and the in-depth interview sessions received counselling on safer sex practices, infant feeding and treatment adherence. The researcher also conducted interactive health education sessions with HIV positive mothers attending support group meetings at the sites.

## REFERENCES

1. Federal Ministry of Health. National Guidelines on Prevention of Mother-To-Child Transmission of HIV (PMTCT) in Nigeria. Abuja: Federal Ministry of Health, 2010:3-91.
2. Decherney AH, Goodwin TM, Nathan L, Laufer N, editors. Current Diagnosis & Treatment: Obstetrics & Gynecology. 10th ed. New York: McGraw-Hill, 2007: 691-694.
3. Federal Ministry of Health. National Guidelines on Prevention of Mother-To-Child Transmission of HIV (PMTCT) in Nigeria. Abuja: Federal Ministry of Health, 2007: 6-68.
4. Federal Ministry of Health. Fact Sheet on Prevention of Mother to Child Transmission. HIV/AIDS Division- Federal Ministry of Health, 2011:1-3. Available at:[http://naca.gov.ng/index2.php?option=com\\_docman&task=doc\\_view&gid=108&Itemid=999999](http://naca.gov.ng/index2.php?option=com_docman&task=doc_view&gid=108&Itemid=999999) 99. Access date: 4/1/2012.
5. WHO, UNAIDS, UNICEF. Towards Universal Access: Scaling up priority HIV/AIDS interventions in the health sector. Progress report, 2010. Geneva: World Health Organisation; 2010: 87-90. Available at:[http://whqlibdoc.who.int/publications/2010/9789241500395\\_eng.pdf](http://whqlibdoc.who.int/publications/2010/9789241500395_eng.pdf)
6. Orji EO, Sotiloye D, Fawole AO, Huyinbo KI. Attitude of Abeokuta pregnant women to routine human immunodeficiency virus screening. Niger J Med 2001; 10(4):173-6.
7. Okonkwo KC, Reich K, Alabi AI, Umeike N, Nachman SA. An evaluation of awareness: Attitudes and beliefs of pregnant Nigerian women toward voluntary counselling and testing for HIV. AIDS Patient Care and STDS 2007; 21(4):252-260.
8. Painter TM, Diaby KL, Matia DM, Lin LS, Sibailly TS, Kouassi MK, et al. Women's reasons for not participating in follow up visits before starting short course antiretroviral prophylaxis for prevention of mother to child transmission of HIV: Qualitative interview study. BMJ 2004; 329(7465):543-547.
9. Peltzer K, Skinner D, Mfecane S, Shisana O, Nqeketo A, Mosala T. Factors influencing the utilisation of prevention of mother-to-child transmission (PMTCT) services by pregnant women in the Eastern Cape, South Africa. Health SA Gesondheid 2005; 10(1):26-40.
10. Nguyen TA, Oosterhoff P, Ngoc YP, Wright P, Hardon A. Barriers to access prevention of mother-to-child transmission for HIV positive women in a well-resourced setting in Vietnam. AIDS Research and Therapy 2008; 5:7-18.
11. Kebaabetswe PM. Barriers to participation in the prevention of mother-to-child HIV transmission program in Gaborone, Botswana a qualitative approach. AIDS CARE 2007; 19(3):355-360.

- 483 12. Chinkonde JR, Sundby J, Martinson F. The prevention of mother-to-child HIV transmission  
484 programme in Lilongwe, Malawi: why do so many women drop out. Reproductive Health Matters  
485 2009; 17(33):143-151.  
486
- 487 13. Levy JM. Women's expectation of treatment and care after an antenatal HIV diagnosis in  
488 Lilongwe, Malawi. Reproductive Health Matters 2009; 17(33):152-161.  
489
- 490 14. Edo State Agency for Control of AIDS. List of facility providing HIV/AIDS and Sexual  
491 Reproductive Health services. Benin City: Edo State HIV/AIDS programme Development Project,  
492 2010:1-2.