The Open Public Health Journal

Content list available at: https://openpublichealthjournal.com

RESEARCH ARTICLE

Perceptions and Experiences of Participating in PMTCT Option B Plus: An Explorative Study on HIV-positive Pregnant Women in Eswatini

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Abstract:

Background:

Eswatini has adopted the PMTCT Option B+ approach as a strategy for the prevention of mother-to-child transmission of HIV.

Objective:

This study aimed to explore how pregnant Swazi women perceived and experienced PMTCT Option B+ and examined challenges they faced in disclosing their HIV status to their male partners.

Methods:

We interviewed 15 HIV-positive pregnant women selected using purposeful sampling from the PMTCT programme in Manzini Region, Eswatini. The data were analysed thematically.

Results:

The women had to deal with the pregnancy, the HIV-positive test results, the immediacy of the antiretroviral treatment (ART), and disclosure issues, all in one visit. They perceived the mandatory HIV testing and the same-day ART initiation as coercive. Regardless, they perceived PMTCT in a positive manner and as a gateway to early treatment for them. The drive to enroll in and remain in PMTCT was motivated by the belief in the efficacy of ART and the desire to protect their unborn babies from HIV infection. Their anticipation of rejection and violence from their partners led to their delaying disclosure and initiation of ART. Following disclosure, some of them were stigmatised, blamed for the infection, and abandoned by their partners.

Conclusion:

As Eswatini continues to roll out Option B+, there is a need to consider providing individualised counselling sessions to meet the individual needs of women.

Keywords: Eswatini, PMTCT OptionB+, HIV, Pregnant women, Lifelong ART, Experiences, Disclosure.

Article History	Received: January 26, 2021	Revised: June 29, 2021	Accepted: June 30, 2021

1. INTRODUCTION

Globally, the uptake of the prevention of mother to child transmission (PMTCT) programme has significantly improved from 49% in 2010 to 82% in 2018 [1]. To achieve the elimination of mother-to-child transmission (MTCT), HIV-positive women and their babies must be enrolled and retained in PMTCT programmes and must adhere to ART [2]. In 2013 the World Health Organization (WHO) recommended that countries consider moving from Option A or B to Option B+, an option advocated for developing countries. In Option B+, women are initiated on life-long combined antiretroviral therapy (ART) as soon as they test positive, regardless of their CD4 count or clinical staging. Option B+ differs from previous policies in that PMTCT services are integrated into routine antenatal care (ANC) to strengthen linkages between reproductive health and ART programmes at all service delivery levels for HIV-positive and HIV-negative women. In Option B+, there is a complete integration of ART and PMTCT programmes, and lifelong ART is offered to all pregnant and breastfeeding women with HIV. HIV-exposed infants also receive Nevirapine from birth until 6 weeks [3]. Many countries across sub-Saharan Africa (SSA) have shifted

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towards the Option B+ strategy [4].

Eswatini is one of the countries that adopted the PMTCT Option B+ approach as a national strategy for the prevention of mother-to-child transmission of HIV in 2013. Following the roll-out of PMTCT option B+, the country has made significant progress in increasing the uptake of PMTCT among HIV-positive women [5, 6]. However, there are concerns in relation to initiation into care, retention in care once initiated on ART though option B+, and adherence to ART [7]. In a pilot study on the implementation of PMTCT option B+ in the first implementation regions in Eswatini, only half of the women initiated on ART had been retained at two years [8].

Research conducted in SSA has documented several challenges encountered during the early implementation of PMTCT option B+. Studies have reported that the initiation of ART on the same day as the HIV diagnosis was associated with a higher risk of disengagement from care in pregnant women in the first six months after ART initiation [8 - 11]. The same-day HIV testing and ART initiation also contributed to the low uptake of ART under Option B+ [12]. Additionally, early ART-related side effects influenced women's ART adherence [11, 13, 14].

Studies conducted in countries such as Malawi and Tanzania have identified various barriers to the implementation of PMTCT Option B+ [11, 13, 14]. The lack of male involvement has been considered one of the main barriers against the utilisation of PMTCT services in several studies [7, 12, 13, 15]. The stigma associated with HIV is a key social barrier against the successful implementation of PMTCT interventions. Stigma and discrimination from significant others decrease the willingness to undergo HIV testing, the uptake of PMTCT and adherence to ART, and negatively affect retention in PMTCT care [14, 16 - 21]. Women are afraid of unintended disclosure or of being publicly identified as living with HIV because they are receiving PMTCT and of subsequently being stigmatised by community members [15].

Suryanti *et al.* [21] concluded that it would be challenging to implement the PMTCT programme if HIV-positive pregnant women did not disclose their HIV status to significant others. Disclosure to partners and family leads to social support, increased retention in care, increased adherence to ART, increased adherence to breastfeeding regimen, and facilitated childbirth [22 - 25]. However, many HIV-positive women in PMTCT experience difficulty disclosing their HIV status to their partners [11, 13, 21, 26]. The reasons most commonly given for non-disclosure are fear of anticipated rejection by the partner, fear of being blamed for introducing the infection into the family, fear of HIV-related stigma, fear of domestic violence, and fear of divorce [15, 23, 24, 27]. Non-disclosure, particularly to male partners, is a factor that may contribute to the non-retention of women in PMTCT Option B+ [7, 12]. It is important that issues of partner disclosure are taken seriously when scaling up PMTCT option B+ [27].

Interactions between HIV-positive women and Health Care Workers (HCWs) play a pivotal role in PMTCT service use and contribute to retention to care [28]. Yet, several studies report that HIV-positive women receive discriminatory care and harsh, undignified treatment from HCWs, which leads to disengagement from care [13, 17, 20, 28, 29]. Women who initiated treatment during Option B+ found traveling to health facilities difficult because of the long distances involved and their lack of transport money [11, 28]. Furthermore, evidence suggests that long waiting time is a barrier against the uptake of and retention in PMTCT care [15, 16, 18].

Several studies have noted that women perceive PMTCT as a good programme that protects their babies from acquiring HIV and preserves their own health [10, 30 - 33]. These benefits motivate women to enroll in PMTCT and come for follow-up care, especially postpartum [13, 17, 20, 34]. The integration of services in the PMTCT option B+ prevents accidental disclosure and promotes retention in PMTCT [20]. In contrast, some women reported negative experiences during their participation in PMTCT. They felt obliged and overwhelmed to test for HIV and started ART on the same day [29, 35].

A Zimbabwean study suggests that the perceptions and experiences of women about the PMTCT programme influence their uptake in PMTC and their retention to care [20]. But, little is known about the perceptions and experiences of HIV-positive women after the adoption of the PMTCT Option B+ approach in Eswatini. Previous research on Option B+ conducted elsewhere in SSA provided context for the current study. However, women in Eswatini, a country with strong patriarchal norms and cultural practices which subordinate women [36], may possibly experience the PMTCT option B+ approach differently. The Kingdom of Eswatini is a small Southern African landlocked country of about 1.25 million people. Its two neighbouring countries are Mozambique and South Africa. The HIV prevalence in Eswatini is estimated at 31% among adults (18–49 years old) and 41.1% among pregnant women [5].

Studies on the early implementation experience of PMTCT B+ in Eswatini used quantitative data to assess the challenges related to lifelong ART initiation [37 - 39]. Therefore, this study explored how Swazi pregnant women perceive the option B+ PMTCT programme, their experiences while participating in the programme, and the challenges they faced in disclosing their status to their partners. Understanding what Swazi women are concerned about will assist in strengthening PMTCT interventions by making it possible to design appropriate and effective counselling structures [26]. This is particularly important in a country such as Eswatini, where women are regarded as minors and their minority being reinforced by marriage and deeply entrenched beliefs about the role and position of women in society [36].

2. MATERIALS AND METHODS

2.1. Study Design and Setting

This was an exploratory qualitative study conducted with HIV-positive pregnant women in a health facility in the Manzini region, one of the four regions of Eswatini. The facility is located in a semi-urban area about 8 kilometres from Manzini town, the capital of Eswatini. The facility offers comprehensive primary health care, including PMTCT services, to a catchment population of about 10,900 people. Ten health facilities in the Manzini and Lubombo regions transitioned from Option A to Option B+ between 2013 and 2014 [4]. In Option B+, pregnant women are encouraged to

make their first ANC booking by 12 weeks, and all of them are routinely offered individual HIV counselling and testing. Those found to be HIV-positive are initiated on ART. The women are seen every 2 weeks for the first month, and after that, every 2 months.

The study population comprised HIV-positive pregnant women who were enrolled in the PMTCT programme at the time of the study. Participants for the research study were selected from among those attending the selected health facility using purposive sampling. The selection process continued until data saturation had been achieved. In purposive sampling, the researcher selects participants who can provide in-depth and meaningful information about the topic of the study [40]. Participants in this study were selected if they had been diagnosed HIV-positive in the current pregnancy, were 18 years old or above, and had been enrolled in the PMTCT for more than 2 months. Eligible women were identified with assistance from the staff of the clinic. After describing the objectives to prospective participants, they were invited to participate in an interview after consultation with the nurses.

2.2. Data Collection

Data were collected by the lead author from August to December 2017 using a semi-structured interview guide. The guide consisted of open-ended questions followed by probing questions. The interviews were conducted using the local language (SiSwati) to enable the participants to provide detailed information from their point of view [41]. The interview guide covered topics about the participants' views of PMTCT option B+, their views about HIV testing and counselling, their views about starting ART immediately after testing positive, their reactions to receiving an HIV-positive test result, and their experiences of disclosing their HIV status to their partners. In addition, the interviewer, who is trained in qualitative methods, used probes and follow-up questions to clarify or verify the participants' responses. The participants' permission was sought to audio record each interview, which lasted for approximately 45 minutes. The interview was conducted in the clinic in a separate room for purposes of privacy. Overall, fifteen interviews were conducted. Thematic saturation was achieved when the interviews were no longer generating any new themes to contribute towards understanding the topic [41]. The participants provided signed informed consent, were assured of confidentiality, and were informed that their participation was entirely voluntary.

In addition to the open-ended questions, a brief socio-demographic questionnaire was administered at the end of the interviews, dealing with the age, marital status, level of education, employment status, gravida status, and duration of PMTCT programme of the participants, among other variables. The participants were not compensated but were offered refreshments at the end of the interview.

2.3. Data Analysis

The data were analysed using the inductive and deductive thematic approach outlined by Braun and Clarke [42]. The lead author first transcribed the audio-recorded interviews verbatim in SiSwati. This was followed by a translation into English. The translated interviews were checked for accuracy by the other authors. The transcripts were subsequently uploaded into NVivo 10, which is a computer-assisted qualitative data analysis software [43] for coding. All authors were involved in the data analysis. First, they independently read a few transcripts repeatedly in order to gain familiarity with the data. A priori codes from the interview guide were used as the first step in the analysis of data, followed by the authors identifying codes as they emerged from the data. Next, the authors refined and agreed on a set of codes and themes relevant to the aims of the study to develop a codebook to aid in the analysis of data. This was achieved over a number of debriefing sessions. Codes with similar meanings were combined and organised into broad themes and subthemes. The final themes and subthemes were used to present the findings, using verbatim quotes.

A number of strategies were used to attain the credibility of the findings of the study. All the authors analysed the data to reduce investigator bias. The interviews were conducted in the local language, debriefing sessions were held after each interview, and an audit trail of the research process was documented. Moreover, time was spent on the field so that the lead researcher could familiarise herself with the research context. A good digital recorder was used to facilitate transcribing all interviews verbatim, and computer software was used to code the data [44].

3. RESULTS

The sample consisted of 15 HIV-positive pregnant women, five of whom were pregnant for the first time. Their participation in PMTCT ranged from two to seven months. Their ages ranged from 21 to 38 years. Seven were single, and eight were living with their parents or in-laws. Just above half (8) were employed, and nine had attained high school education. Most (13) had disclosed their status to their partners, but nine of them did not know their partners' HIV status. Of those who knew the partner's status, two of them were in a serodiscordant relationship (Table **1**).

3.1. Themes

Three themes, such as (1) responses to learning of their HIV status, (2) perceptions of the PMTCT programme, and (3) experiences related to disclosing to their partners and several subthemes that emerged from the analysis of the interviews reflect the participants' experiences and challenges of the Option B+ (Table **2**).

3.1.1. Response to Learning of their HIV Status

When women enrolled in the PMTCT programme, they were tested for HIV. The participants described how difficult it was to accept their HIV status. Receiving an HIV-positive result evoked unpleasant emotions such as denial of the HIV-positive test results, anger towards their partners, pain, confusion, and hopelessness. The narratives revealed that for some of the participants, it was their first pregnancy when they received HIV-positive results.

Table 1. Socio-demographic characteristics of the participants.

Variables	Categories	Frequency	Percentage
Age group	21-25 Years	6	40
	26-30 Years	5	33
	31-35 Years	1	7
	36-40 Years	3	20
Marital status	Single	7	47
	Married	5	33
	Cohabiting	3	20
Educational attainment	Primary education	4	27
	Secondary education	9	60
	Tertiary education	2	13
Employment status	Employed	9	60
	Unemployed	6	40
Gravida status	First pregnancy	5	34
	Not the first pregnancy	10	67
Duration on PMTCT	2-3 months	7	47
	4-5 months	4	26
	6-7 months	3	20
	More than 7 months	1	7
Partner's HIV status	HIV-positive	4	27
	HIV-negative	2	13
	Unknown	9	60
Disclosed status to the partner	Yes	13	87
	No	2	13

Table 2. Summary of themes, subthemes, and categories.

Themes	Sub-theme	Category
Response to learning of their HIV status.	Pain	
Perceptions of the PMTCT programme	PMTCT is a lifesaver	
	PMTCT is coercive	
	Long waiting times	
	Good counselling	
	Positive attitudes of health workers	
	Benefits from integrated services	
Experience of disclosing to their partners	Challenges of disclosure	Delayed disclosure
		Delaying taking ART
	Outcome of disclosure	Separation
		Stigma and discrimination
		Partner tested for HIV

It was very painful. It is my first pregnancy, and now I am positive. Eyee, so it was painful. I just cried. I felt like dying. (21 years old.)

I just cried. I even thought of killing myself. It was not easy to accept it. It was difficult. It was as if I am losing my mind. I felt like I will die-something like that. I had no hope that I will continue to live. (32 years old.)

With some participants, the pain and anger stemmed from the fact that they felt a sense of betrayal, as they had been faithful to the partner. At the same time, there was a feeling of self-blame, and they questioned themselves even though they knew they had been faithful to their partners.

I felt like I am losing my mind. I cried and felt angry at the same time. It was so sad. How can I have such a disease? How did it happen because I do not sleep around? My partner will think I am sleeping around like a prostitute (22 years old.).

3.1.2. Perceptions of the PMTCT Programme

The interviews explored how the participants experienced participating in the programme.

They perceived PMTCT as a lifesaver, and some believed the programme to be coercive. Furthermore, they raised a concern about the long queues at the clinics and regarded the PMTC staff as offering good counselling. They viewed the attitude of the health care staff positively, and they found the integration of the services to be beneficial.

3.1.3. PMTCT is a Lifesaver

The narratives revealed that most of the participants perceived PMTCT as a good programme that brings life and

hopes to HIV-positive women by protecting their babies from acquiring HIV. This positive outlook towards PMTC became a strong motivator for their uptake of the programme and their adherence to treatment.

I can say PMTCT is a very good programme. It is a programme that brought life to us HIV-positive women, even if we had lost hope about life. It just raised our hopes about life in a way that even the babies we are carrying are safe, and we do not have fear or doubt that we might both die. I know that the baby is protected and because I am taking the tablets, I am also protected. If this programme was not there, maybe we would continue dying, that is, children, parents, and everyone (30 years old.).

Eish, it is a very good programme. It advocates for innocent souls. I can say it is the voice of the babies who cannot talk for themselves. As for the baby, if I did not do this enrolling in the PMTCT programme, I would not be able to protect her or him from getting HIV. Now, when I do blood tests, they would tell me that the virus is suppressed. This makes me very happy. I am sure I will give birth to a negative baby (28 years old.).

Over and above viewing PMTCT as a lifesaver for their babies, the participants also felt that the programme was preserving their own lives by giving them an opportunity to know their HIV status early and start treatment early before they got sick.

It is an opportunity for you to know your HIV status early, and you start the medication when you are healthy and fit. No-one will go around pointing at you, that you are like this… You are on ARVs. You just do not show any signs that you are on treatment because you start them when the body is still healthy and strong, and you are still able to walk unassisted. No matter how much my CD4 is, they will just initiate me on treatment, unlike starting treatment when I am bed-ridden (30 years old.).

3.1.4. PMTCT is Coercive

Whilst most of the participants viewed PMTCT as a good programme, others did not share the same sentiments. They perceived some of the services offered in the PMTCT programme unfavourably. They regarded the mandatory HIV testing and same-day ART initiation as coercive. They felt they were not given enough time to think about whether or not they should take ART.

I was not ready. However, it was this situation that now I am pregnant, and I should test to protect my baby as I was taught. They do not give you an opportunity to go and think; they just tell you to test, take tablets, and start drinking. Because you are protecting the baby, there is nothing you can do. Yes, protecting our babies is the main goal; otherwise, without the baby, I was not going to accept this. It was going to be difficult, very difficult (28 years old.).

What is not good is that you do not have time to accept. They do not even ask you if you want to test. In addition, they do not say go and think because before that they would do your CD4 that's why some people find it difficult like me. I found that it was difficult for me to start the tablets. I was not even ready to test. But because I wanted to protect my baby, there was nothing I could do. I had no choice (37 years old.).

3.1.5. Long Waiting Times

Prolonged waiting times can result in patients not coming back or not coming back regularly for the services, and this has the potential to be a barrier against continued participation. Whilst the narratives of the participants showed that they enjoyed good counselling and benefited from the integrated services, as already mentioned, they were concerned about the long waiting time at the clinic and said:

"It is just the queues. You wait for a long time. Eish! We wait for a long time before we get services. We just want our things to be done fast so that we go back home to rest (30 years old).

The problem with this clinic is that it is usually full of patients. It usually takes a lot of time before you get help. At times you come in the morning around 8 am, but you will find that you go back home around 12 noon because there are lots of patients in the queue before you (27 years old)."

3.1.6. Good Counselling

The participants were asked how they felt about the counselling services they received in the PMTCT. They reported them good and had been instrumental in helping them to accept their HIV-positive status.

"Their counselling is good. I was helped by frequently coming to the clinic to attend support groups to get health education and counselling. They would teach us and counsel us. I also saw that I was not the only one HIV-positive. We are many. I then got the courage that someone else is living with it (30 years old).

They are very good at counselling. I continued to get counselling here in the clinic. I came back even if it was not my appointment date, and they would welcome me and provide counselling. I was helped a lot by being truthful to the staff, getting counselling and reading (28 years old)."

3.1.7. Positive Attitude of Health Workers

The participants found a positive interaction with HCWs in the PMTCT programme. They described the atmosphere in the health facility as welcoming and noted that the HCWs gave them individual attention. The positive attitude of the HCWs facilitated a good provider-patient relationship and gave them satisfaction and a good feeling about participating.

They are treating us well. If you ask something, they respond. They take time in the consultation room, they do not rush to finish the queue, and they give each one of us enough time. They also examine us well, with tender care, such that we cannot hide anything. You just talk freely (28 years old.).

Their attitude is very good. They are supportive. They just help you, and they do not get tired, even if you ask them questions. You go home satisfied and happy all the time (22 years old).

Whilst the majority of the participants described enjoying the positive attitude of the health workers, one participant was not satisfied.

Even though the nurse does not say much, but the actions. Yohh! You can see that they do not like us, you know. You can even feel it! She would touch your cards as if they are dirty. I feel so bad (25 years old.).

3.1.8. Benefits from Integrated Services

The participants were impressed by the consistent availability of PMTCT services and the integration of other services with the PMTCT. They reported that the integration of services helped maintain privacy and minimise stigma and discrimination, which are often barriers to participation.

We just get into one consulting room. One cannot notice that you are pregnant and you have come to refill medication. The nurse who attends you is the one who does antenatal care services and gives you your ARVs and other services you need in one room (27 years old).

They do not send you from pillar to post. You report everything in one room. They do ANC, give you your ARVs, and even treat you if you are sick. All in one room. The nurse who attends you does everything. It is so easy. We are happy about it (25 years old).

3.1.9. Experiences About Disclosing to their Partners

Disclosure is an important aspect of women's successful participation in the PMTCT programme. In general, the participants found it difficult to disclose and experienced some challenges in disclosing.

3.1.10. Challenges to Disclosure

The interviews explored the challenges encountered by the participants in disclosing their HIV-positive test results to their sexual partners. Two subthemes emerged: delayed disclosure and delaying taking ART.

3.2. Delayed Disclosure

Of the thirteen participants who had disclosed their status to their partners, the data revealed that some had delayed their disclosure because of fear of the consequences. The delay affected their initiation into treatment.

It is very difficult to come back to your man and tell him that you are pregnant, let alone telling him that you are HIV-positive. It was difficult for me to tell him that I am HIV-positive because I did not know what would happen thereafter. It took me time. Let us say a week. I did not know where to start. I was scared he will leave me (27 years old).

It took some time. Yah! It took some time. I was still trying to find ways on how to tell him. It was difficult to tell him there and then. I was so stressed because I asked myself how I would enter the house with this news…, with these containers. How will I tell him? (38 years old)

3.2.1. Delaying Taking ART

Delayed disclosure affected the initiation of the ART medication, resulting in the participants initiating their ART late after the diagnosis. The data suggest that the participants delayed taking ART because of their fear of partners' reactions to disclosing their HIV-positive status.

They gave me 15 tablets because they wanted to see how the medication would treat me and told me that I should come back after 2 weeks. I came back without taking the medication. When I got home, I could not take them because I was afraid of my husband. I came back to the clinic and explained that the biggest challenge is that even at the time I have to take the medication, my partner would already be in the house, so I was afraid. I was afraid about how I would explain the story of the tablets to him (37 years old).

3.2.2. Outcome of Disclosure

For those participants who disclosed their HIV-positive status to their partners and significant others, the outcomes of the disclosure were both positive and negative. In some cases disclosure led to separation from their partners, and experiences of stigma and discrimination, whereas for others, disclosure led to their partners testing for HIV.

3.2.2.1. Separation

The narratives of some of the participants revealed that their partners had abandoned them following the disclosure. Others were chased out of the family homes they shared with their in-laws and accused of having brought death to the family.

At times when we are just seated, talking about it, I would see that this thing does not go down well with him. He was always quiet. He always said I still owe him an explanation about where I got this thing (HIV). He said that I should tell him who infected me. He eventually left me (28 years old).

The day I managed to tell him, he told his mother the news. They chased me from his house. His mother blamed me for bringing the deadly disease to the home to infect her son because her son did not have this disease. She said I was the one who brought death to her home. I was so hurt (38 years old).

After telling my boyfriend that I am HIV-positive, I saw that he was not happy. He was not at ease. Sometimes he would not talk to me. He stopped calling me and supporting me financially. He eventually left me (28 years old).

3.2.2.2. Stigma and Discrimination

Some of the narratives of the participants revealed that they experienced stigma and discrimination from their partners and in-laws.

My mother-in-law told her son not to use the plates and spoons that I use. They would buy me plastic spoons, and they would use the metal ones. Even if I were in her kitchen, she would tell me not to wash her dishes; I should only wash my dishes and those of my children. I was living that kind of difficult life (30 years old).

3.2.2.3. Partner Tested for HIV

The data revealed that although the initial outcome of disclosure was not positive for some participants, it eventually turned out to be positive and motivated the partner to be tested for HIV.

At first, he ignored me and sort of left me. However, after

some time, he came back, and we sat down and talked. He said, 'I don't know why I am running away because if you are like this, I also have to go and test' (21 years old).

4. DISCUSSION

This study describes the experiences of HIV-positive pregnant Swazi women participating in PMTCT Option B+ in Eswatini and the challenges they experienced in disclosing their HIV-positive test results to their sex partners. HIV testing serves as an entry point to the PMTCT programme and is being routinely offered to all pregnant women on their first ANC visit [45]. The participants perceived HIV testing on their first ANC visit as a mandatory entry requirement to access PMTCT services. Other studies also reported that pregnant women perceived HIV testing during their first ANC as compulsory and a prerequisite to receiving any ANC services [10, 46 - 48].

The pregnant women in this study perceived the routine HIV testing and same-day ART initiation as coercive, and felt that it took away their ability to make an informed decision about testing. In a recent study conducted in Lesotho, pregnant adolescents and young women felt that they had no choice in HIV testing in the PMTCT option B+ [47]. Researchers from studies conducted elsewhere in SSA argue that women view the mandatory HIV testing and prompt ART initiation in the PMTCT programme as violating their rights to autonomy [10, 27, 35, 46, 49]. HIV-positive women who struggle to accept their new HIV status and need to initiate ART may require additional counselling sessions to accept their HIV status. As Eswatini continues to roll out Option B+, there is a need to consider providing individualised counselling sessions to meet the individual needs of women [26].

Despite the participants' discontent with the mandatory testing, overall, they viewed PMTCT as a good programme that protects their babies from acquiring HIV and provides a gateway to early treatment for the mothers. The positive perception about PMTCT served as a motivation for them to enroll in PMTCT. In this study and prior studies in SSA, the drive to enroll in PMTCT arose from the mother's desire to protect their babies from HIV infection [7, 19, 20, 34, 48]. The women enrolled in PMTCT understood that they could prevent HIV from transmitting from the mother to the baby by taking and adhering to ART. Health care providers should use the women's desire to protect the unborn infant from HIV transmission to develop appropriate health messages around PMTCT B+.

Similar observations were reported elsewhere in SSA [49 - 52]. Being diagnosed with HIV and receiving HIV-positive test results during pregnancy is a traumatic experience for women, as they also had to deal with the pregnancy, the immediate ART treatment, and issues of disclosure – all in one visit. Some of the participants in the current study experienced feelings of anger and shock, which stemmed from a sense of betrayal by their partners, as they regarded themselves as having been faithful to them. The patriarchal culture in Eswatini affords women little or no power to protect themselves from HIV infection [36]. Research suggests that women who test HIV-positive during pregnancy experience more psychological distress than those who knew about their status prior to the pregnancy [38, 53].

The participants commended the positive attitude of the HCWs, which facilitated a good provider-patient relationship, helped them to cope with the HIV-positive test results, and encouraged their continued participation in PMTCT. Similar observations were found in other studies as well [19, 28, 29]. The study found that the integration of PMTCT with other antenatal services helped to minimise the stigma associated with living with HIV. Attending antenatal care with HIV-negative women removed the stigma associated with PMTCT services rendered for HIV-positive women. Concerning negative experiences of participating in PMTCT, long waiting times due to staff shortages were a common negative experience for most of the participants. Other studies also reported similar findings [18, 30].

Even though thirteen of the women in this study had disclosed their HIV status to their partners, they did not disclose immediately after testing positive and had to delay taking their ART. A prior study on PMTCT under Option B+ in Eswatini found that the fear of disclosing one's HIV status was one of the many challenges of accepting and initiating lifelong ART [38]. Many Swazi women continue to face gender inequality, economic dependency, and patriarchal social factors that influence accepting and initiating lifelong ART [8]. In the current study, the participating women feared accidental disclosure, whereby the partners might recognize their pills and link them to HIV. Other studies reported similar observations [7, 22].

The two women who reported that they had not disclosed to their male partners were afraid of the potential negative consequences of disclosure. The patriarchal norms and cultural practices which subordinate women in Eswatini [36, 54] might have influenced their position about withholding disclosure. The fear of negative consequences of disclosure was reported in prior studies in SSA [7, 12, 21, 27, 47]. For some of the women, the reality is that the consequences of disclosure were negative; some had been blamed for bringing the infection into the house and consequently abandoned by their partners. Research shows that increasingly, women are abandoned after disclosure [18, 38]. Stigma and discrimination from their partners and in-laws was a common reaction received by the participants following disclosure.

Some of those who had disclosed reported positive experiences of disclosure. They were accepted by their partners and helped to adhere to their ART medication and PMTCT attendance. Support from partners and significant family members has a positive impact on adherence and retention in care in PMTCT [7, 47]. Madiba and Putsoane [47], in a recent study conducted in Lesotho, reported partner's support in the form of reminders to take their ART, providing transport money for attendance at the clinic, and accompaniment to the clinic for antenatal care. Following disclosure, the participants reported that some male partners tested for HIV and enrolled in care.

5. LIMITATIONS

This study was limited to HIV-positive women who were currently pregnant and excluded HIV-positive women who had

delivered. Including this group could have enriched the findings since post-natal women had engaged with the programme for much longer, and their experiences might have been different. Furthermore, the results may not represent health facilities outside the Manzini region and may not represent all HIV-infected women engaged in PMTCT Option B+. One other limitation of the study is that the views of women who had disengaged from the programme were not captured. They would have shed light on some of the issues that led to their disengagement from care.

CONCLUSION

This study has found that being diagnosed with HIV during pregnancy is a traumatic experience for women participating in the Option B+ programme in Eswatini. However, their drive to protect their unborn babies from HIV infection motivated their participation in and adherence to the PMTCT interventions.

The anticipation of rejection and violence from their partners led to their delaying disclosure and delaying the initiation of ART. Healthcare professionals should pay special attention to education around PMTCT Option B+ when introducing same-day ART. The PMTCT programme should consider providing additional counselling sessions before initiating ART with pregnant women newly diagnosed as HIV-positive in the PMTCT option B+ strategy to prepare them for the uptake of and adherence to ART and other interventions. Providing additional counseling sessions before initiating ART may reduce disengagement from care among women who are newly diagnosed as HIV-positive. This is crucial since, with Option B+, considerable numbers of women will begin lifelong ART.

Since disclosure is critical in the successful implementation of the PMTCT programme, health messages and education around PMTCT under Option B+ need to be shared beyond pregnant women receiving services at the facility, but also engage the community and men about the importance of lifelong ART. This underscores the increased efforts to develop culturally and practically acceptable messaging targeting Swazi men.

AUTHORS' CONTRIBUTIONS

ND, BN, and SM contributed to conceptualization, methodology, validation, and formal analysis. ND performed the analysis through software and contributed to the investigation, data curation, and writing and preparing original draft preparation. Writing, reviewing, and editing were done by SM and BN. BN supervised the study. ND contributed to project administration. All authors have read and agreed to the published version of the manuscript.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

Ethical approval was obtained from the Ethics Committee of Sefako Makgatho Health Sciences University (SMUREC/H/70/2017: PG) and the National Review and Ethics Board of Eswatini.

HUMAN AND ANIMAL RIGHTS

No animals were used in this research. All human research procedures followed were in accordance with the ethical standards of the committee responsible for human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2013.

CONSENT FOR PUBLICATION

Written informed consent was obtained from the participants, and participation was voluntary.

AVAILABILITY OF DATA AND MATERIALS

The qualitative transcripts supporting the findings of this study are available from the corresponding author [N.D] upon request.

FUNDING

None.

CONFLICTS OF INTEREST

The authors declare no conflict of interest, financial or otherwise.

ACKNOWLEDGEMENT

The authors are grateful to all the women who participated in this study.

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