

Perceptions of HIV-positive mothers towards 6 months of exclusive breastfeeding in Duncan Village



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Background: In South Africa, vertical transmission remains a prevalent method of human immunodeficiency virus (HIV) transmission among children, primarily through breastfeeding. Even though the benefits of exclusive breastfeeding by HIV-positive mothers surpass the risk of infection, adherence to this feeding practice often faces challenges because of various reasons and perceptions, which are examined in this study.

Methods: This qualitative study utilised in-depth interviews to explore the attitudes of HIV-positive mothers towards exclusive breastfeeding for 6 months. Employing a purposive sampling technique, interviews were carried out with 20 HIV-positive mothers presenting for postnatal care at a chosen healthcare facility.

Results: The study found that HIV-positive mothers expressed scepticism towards the recommendation of 6 months of exclusive breastfeeding and refrained from it because of several factors related to patients and healthcare providers.

Conclusion: The primary suggestion is to enhance education on exclusive breastfeeding for HIV-positive mothers during antenatal care and post-pregnancy, in some circumstances, with continuous support for all mothers, regardless of their feeding choice.

Contribution: This study highlights the potential of education to enhance exclusive breastfeeding for HIV-positive mothers during antenatal care and post-pregnancy to maintain a healthy family in resource-constrained settings.

Keywords: HIV; ART; breastmilk; exclusive breastfeeding; PMTCT; mothers.

Introduction

The origin of human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) has puzzled scientists ever since the illness first came to light in the early 1980s¹ and has been a persistent global health hazard for many years with no cure. Despite its continuous and severe impact on individuals, families, communities and nations at large, it remains a universal pandemic that affects individuals regardless of their socio-economic standing. The first recognised case of mother-to-child transmission (MTCT) occurred in 1983 in Australia through breastfeeding from a mother living with HIV.² Breastfeeding is the act of feeding an infant with breast milk to provide the developmental nutritional needs and shape the immune system of the newborn, especially in the first 6 months of life.³ The importance of breastfeeding has been conceded globally by public opinion, and the World Health Organization (WHO) supports it by concurring with the fact that breastfeeding is one of the most effective ways to ensure child health, survival, and good development.⁴ The WHO recommended that exclusive breastfeeding should be initiated within the first hour after birth and babies should be exclusively breastfed for the first 6 months of life.⁵

Despite the benefits of exclusive breastfeeding outweighing the risks of infection, mothers living with HIV are faced with the challenge of adherence to exclusive feeding practices because of various reasons and perceptions.⁶ Mothers are aware of the transmission risk of HIV to their babies through breast milk, which poses challenges to infant breastfeeding practices.^{7,8} A global decline in new HIV infections in children because of antiretroviral treatment

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(ART) programmes has been observed, but seroconversion to HIV during breastfeeding still occurs.⁹ However, it was reported to have been lower in infants who are exclusively breastfed during the first 6 months of life.^{10,11,12}

Although exclusive breastfeeding in South Africa was found to save infants' lives through the prevention of mother-to-child transmission (PMTCT) programme,^{13,14} breastfeeding rates are the lowest on the African continent, with just 44% of infants breastfed soon after birth, and 40% of those less than 6 months old exclusively breastfed globally.^{15,16} In 2011, the South African Government endorsed the Tshwane Declaration on Breastfeeding, which urged all women, including those living with HIV, to exclusively breastfeed their infants for 6 months, regardless of their HIV status.¹⁷ The same policy ruled out the provision of free formula milk to HIV-positive mothers who choose not to breastfeed, except when there is a medical contraindication for breastfeeding. South Africa has adopted policy changes replacing free infant formula feeding practices among women living with HIV with an exclusive breastfeeding (EBF) for 6 months policy.¹⁴ During this 6-month exclusive breastfeeding period, mothers are expected to comply with their antiretroviral medication to ensure their HIV viral load is undetectable, thus effectively reducing the likelihood of vertical transmission of the virus from breast milk.¹⁸

Over the past decade, South Africa has made commendable strides in curbing MTCT of HIV,¹⁹ primarily owing to advancements in antiretroviral medicines and widespread access to its PMTCT Programme. Without treatment, the risk of HIV transmission from an HIV-infected pregnant woman to her child is approximately 25%.²⁰ However, ART and other preventive measures, specifically exclusive breastfeeding, brought the risk of MTCT down to less than 5%.²¹

Despite evidence suggesting that breastfeeding maximises their babies' health prospects, South Africa is still hampered by social and cultural beliefs or norms that promote inappropriate breastfeeding practices. Mothers living with HIV might struggle to accept the exclusive breastfeeding method because of these cultural beliefs and norms. In view of the impact of infant breastfeeding practices in the context of HIV on the health of babies, it is important to explore their perception regarding exclusive breastfeeding so that it provides evidence-based information for improving and enhancing compliance with exclusive breastfeeding practices recommended by the South African health government.

Research methods and design

Research design

This was a descriptive qualitative study designed to determine the perceptions of HIV-positive mothers towards 6 months of exclusive breastfeeding using in-depth interviews at Duncan Village Day Hospital, East London, Eastern Cape.

Study setting

The target population for this study was HIV-positive mothers who attended postnatal care at Duncan Village Day Hospital, which is situated in East London, within the Buffalo City Metropolitan District in the Eastern Cape Province. Buffalo City is a metropolitan municipality situated on the east coast of the Eastern Cape Province, South Africa. It includes the towns of East London, Bisho, and King William's Town, as well as the large townships of Mdantsane and accounts for a total population of 884 000, or 12.2% of the total population in the Eastern Cape Province (Buffalo City Integrated Development Plan Review, 2020/2021). The study was focused on the East London area of Buffalo City Metropolitan Municipality. Duncan Village Day Hospital, where the study was conducted, is a Community Health Centre that serves an estimated total population of 45 000 people with a headcount of around 10 000 clients visiting the facility each month, as reported by the facility manager. About 40–50 of these clients are women who attend postnatal care services with their babies.

Population and sample

The sample of the study was HIV-positive mothers, 18 years and above, attending the health facility for their postnatal care and babies' routine immunisation scheduled visits, between 6 weeks and 6 months of the baby's age and must have opted for exclusive breastfeeding as a feeding method. Those who had opted for formula feeding from the onset and declined to breastfeed were excluded from the study.

As stated by Rice and Ezzy,²² the goal of qualitative research is not to ensure that the sample is statistically representative but that of finding information-rich cases. There was, therefore, no pre-determined sample size for the study; the researcher interviewed willing participants who met the study criteria until theoretical saturation was attained. A purposive sampling method was used to select the mothers who fit the study criteria. The researcher stopped seeking additional participants when a point of redundancy was reached, and no new information on the topic was forthcoming from the sampled individuals. A total of 20 HIV-positive mothers were interviewed.

Data collection and procedure

In-depth interviews were utilised in this study to collect data. An interview guide was used as a tool to elicit information from HIV-positive mothers in response to the research questions. The face-to-face, individual interview was deemed an appropriate method for gathering the necessary data from HIV-positive mothers about their perceptions of 6 months of exclusive breastfeeding. The benefit of in-depth interviews lies in their ability to draw out individual experiences, views and emotions, granting the researchers an interpretive perspective of the phenomenon at hand.²³ Furthermore, in-depth interviews are perceived to be a valuable experience for participants as they provide an outlet for self-expression that is often lacking in their daily lives.

Informed consent was obtained, and consent forms, which were prepared in both isiXhosa and English language accordingly were signed by all participants prior to the interview. Participants were clearly informed that their participation was entirely voluntary, and opting out would not adversely affect their current health services. Stringent coronavirus disease 2019 (COVID-19) protocols were followed, which included wearing masks throughout the interview and utilising hand sanitiser by both the participant and researcher. A window was opened in the room to facilitate ventilation.

The individual interview was conducted by the principal researcher in a room provided by the facility manager, and privacy was ensured. The research questions were posed using a semi-structured interview guide among key informants. To ensure a comprehensive collection of information, follow-up questioning and probing were utilised in response to the main questions. A key informant interview guide, with pre-determined questions, was used to get answers to the following broad research questions:

- Could you tell us about exclusive breastfeeding?
- How do you perceive 6 months of exclusive breastfeeding?
- What experiences do you have in trying to implement this feeding method?

In addition to the interview, field notes were taken, and pseudonyms were used to ensure confidentiality. With the participants' approval, the researcher audio-recorded the interviews. The researcher conducted the interviews during the months of June and July 2020.

Socio-demographic data such as the participants' age, marital status, education level, employment status and area of residence were also gathered at the end of the interview. This information proved beneficial in providing deeper insight into the participants' characteristics during the data analysis phase.

Data analysis

Thematic analysis is described as a flexible and useful research tool that can potentially provide rich and detailed data²⁴ and was employed to analyse the data in this study. Data analysis began after the data were collected, familiarised and managed. The data for the 20 participants were transcribed from isiXhosa into English-written scripts and entered in an electronic Excel table with columns for demographic data, questions and responses. The transcripts were read, and preliminary codes were identified. Data maps were developed to aid the coding and to illustrate relationships and contradictions in the collected data.²⁴ The codes were reduced systematically into code categories. Themes were generated inductively from the categorised code informed by existing knowledge from the literature. The researchers re-examined the themes until they were satisfied and reached a consensus on the final themes presented in this study.

Measures to ensure trustworthiness

Measures of trustworthiness criteria, namely, credibility, dependability, conformability and transferability, were employed to ensure the rigour of the study. A detailed description of the methodology to enable the study to be repeated if needed was ensured. Triangulation of the findings was carried out during the analysis phase; field notes were taken during data collection. An accurate transcription and translation of the data was verified by all the researchers. Prolonged engagement in the field was carried out by the researcher, with only three participants interviewed per week, and the principal researcher stayed in the field for at least 2 months to ensure that all data were collected from the study participants. The interview sessions were extended to 40–50 min. The researcher documented (audit trail) all the procedures followed throughout the entire fieldwork, from recruitment to the actual data collection process, until the study was concluded.

Ethical considerations

An application for full ethical approval was made to the WSU Faculty of Health Sciences ethics and biosafety committee, and ethics consent was received on 04 March 2015. The ethics approval number is 032/2014. The Eastern Cape Department of Health also granted permission (EC 2015RP24 783). A consent form was signed before the interview. An information leaflet summarising the study was also issued to the participants to ensure that they all understood what the study was about. Participants were informed that they were anonymous and that the researcher would guarantee the confidentiality of their responses, and was only accessible to the researcher to ensure POPIA was adhered to.

Results

A total of 20 breastfeeding mothers who were still within the first 6 months postnatal period participated in the study. Six participants were between the ages of 30–39-years-old, five were between 26–29-years-old, four were 40-years-old or older, and two were 18–21-years-old. Eighteen mothers were single, while a total of seven were living with their partners, and only two were married. Fifteen women were unemployed, whereas five were reported to be employed. Almost 18 mothers have reached the high school level. Most mothers were residing in a squatter camp and a township, except for two mothers who were from urban settlements. Among the total participants, most of their babies were exactly 6 months old (35%), followed by 14 weeks (20%) of age, respectively.

Table 1 presents the demographic data of the breastfeeding mothers who participated in the study.

The qualitative feedback of the participants was interpreted by identifying themes and supported by quotes. Pseudonyms are used in the quotes instead of participants' real names to ensure confidentiality. Six themes emerged: (1) inadequate education received; (2) perceptions of mothers towards exclusive breastfeeding and HIV-positive status; (3) fear of

TABLE 1: Socio-demographic characteristics of the study participants ($N = 20$).

Socio-demographic variable	<i>n</i>	%
Age of mother (years)		
18–21	2	10
22–25	3	15
26–29	5	25
30–39	6	30
40+	4	20
Marital status		
Single (not cohabitating with partner)	11	55
Single (cohabitating with partner)	7	35
Married	2	10
Level of education		
Never went to school	1	5
Primary school level	1	5
Secondary school (no matric)	11	55
Matric	7	35
Employment status		
Employed	5	25
Unemployed	15	75
Dwelling type		
Township	9	45
Squatter camp	9	45
Semi-urban	0	0
Urban	2	10
Age of baby at time of interview (aligned to EPI scheduled visits)		
6–9 weeks	3	15
10–13 weeks	3	15
14 weeks	4	20
15+ weeks	3	15
6 months	7	35

EPI, expanded programme on immunisation.

infecting baby with HIV; (4) HIV status disclosure issues; (5) antiretroviral medication for mother and baby; and (6) belief that baby is not getting enough from breastmilk.

Inadequate education received

The respondents expressed that the education received during pregnancy and even after delivery concerning exclusive breastfeeding was either not given at all or scanty. A significant number of mothers reported that they were never given education during antenatal care visits, the time when the HIV-positive mother should be educated and emotionally prepared for exclusive breastfeeding after delivery. One mother stated:

‘I was never taught at clinic during pregnancy that I can still breastfeed with my HIV status. I was never prepared by clinic for breastfeeding, only heard about this in hospital.’ (P06)

Another participant said:

‘I was not educated at clinic, and in hospital we were just told to breastfeed and take our ARV treatment.’ (P02)

Some mothers reported that they were given some education; however, it was very brief, and it was more about telling them that they should exclusively breastfeed rather than explaining to them what this means and how it works, that even though they are HIV-positive, they can breastfeed without infecting the baby. One participant had this to say:

‘I did not understand how I can’t give HIV to my baby even though I breastfeed, they did not really explain how it works.’ (P04)

The benefits to mother and baby were not explained. They felt it was more top-down than engaging, and they were not afforded time to freely ask questions. This was expressed by one of the participants, saying:

‘I was given some education but did not feel I had enough information; it was explained once and the sister recorded my “choice” of breastfeeding without allowing me time to ask questions. So, I had no choice but to stick to the breastfeeding option since she had written it down already.’ (P01)

Some mothers reported that this was carried out only once at the first visit during their antenatal care and was never repeated throughout the duration of pregnancy.

One participant responded that she attended antenatal care in the Private Sector health facilities, and she also never got any education concerning exclusive breastfeeding; she only received a pamphlet as expressed below:

‘I was given a pamphlet where I read this, the Dr. I attended gave me pamphlets. I did not really get education, the Dr. said all I needed to know was in the pamphlet and if I have questions I can ask.’ (P07)

Overall, mothers at least knew that exclusive breastfeeding means giving the baby breastmilk only and nothing else. Most of them were ‘told’ this either during pregnancy or after delivery in the hospital. What was lacking was a comprehensive understanding of what this means, how it’s completed, and the benefits for mom and baby.

There was also a lack of adequate education as to what mothers should do if their breasts don’t produce enough milk, or their perception of inadequate milk production. One of the mothers cited this to be a challenge, as stated below:

‘I was not prepared what to do if my breasts don’t produce enough milk. As this was my first baby I really struggled as my breasts were not producing enough milk and I knew I couldn’t add formula. So, I decide to stop breastfeeding at 2 weeks and give my baby formula.’ (P11)

There was also a lack of education reported about what to do if complications of breastfeeding, such as engorged breasts, happen. This is significant because conditions such as these increase the chances of HIV transmission to the baby, as there’s inflammation in the breast around the nipple. One participant reported that when this happened to her, she just stopped breastfeeding as she was not sure if the breastmilk was safe for the baby. This is what she had to say about this:

‘I was not told at hospital what to do if this happens, so I decided to stop because I was worried what kind of milk baby is getting and my breasts were very sore.’ (P13)

One of the participants also felt that they needed education and counselling on how to disclose their HIV status to partners, as some did not disclose because of the fear of being abandoned.

'I think clinics should empower us more on how to disclose to our partners.' (P03)

The importance of proper comprehensive education came strongly from participants and the lack of it clearly affected the ability of mothers to continue breastfeeding or not.

Perceptions of mothers towards exclusive breastfeeding and HIV-positive status

The way in which exclusive breastfeeding was regarded, understood or interpreted varied. There were both positive and negative perceptions about this practice. The positive experiences were more about understanding the value of breastmilk and its convenience, while the negative experiences were mostly about fears and concerns about infecting the baby, interference from family, as well as going back to work.

A few mothers felt positive about exclusive breastfeeding, as it was good for babies and helped them grow well. They felt that it was convenient and best for babies, as babies who are breastfed don't get sick often. It is also readily available and very convenient. Some also felt it's the right thing to do if you cannot afford to buy formula milk and have no financial support. One participant said:

'I think it's right especially if one can't buy formula milk like me. I broke up with the father of the baby when I was pregnant and don't have financial support.' (P12)

Fear of infecting the baby with HIV

Some mothers expressed that they were afraid of infecting their babies with HIV. Mothers want to love and protect their babies; however, they have a real fear of possibly infecting their babies with the virus versus trusting what the health workers say that the risk is low if on treatment. One of the mothers expressed this fear in the following manner:

'It's scary, you are worried that your child will get infected. I feel it's better how they did before that HIV positive mothers must not breastfeed.' (P18)

Another participant said:

'I could not do it for long because I was scared of infecting my baby.' (P09)

Mothers did not understand how it was possible for HIV not to be transmitted to their babies, while it was said to be present in breast milk. The inadequate education given to mothers also contributed to this fear, as it was not explained to them how the risk was far less if they were adherent to their HIV medication and virally suppressed. So even though some had agreed at birth that they would exclusively breastfeed, they stopped soon when they got home because of the fear that every time they fed their baby, there was a chance of infecting them:

'Even though I agreed to breastfeed since they were telling us to do so but I was still very scared that I would infect my baby.

I only breastfed 1 week and could not continue as I feared infecting him. Even during that one week I was just worried, and my milk was not coming out well, so I decided to stop.' (P05)

For some mothers, the fear factor was real every time they breastfed, as expressed by the participant below:

'Fear was the main challenge for me, I only breastfed for 1 month and stopped. I was always scared, every time I breastfed that my baby would get infected, so I stopped and gave formula.' (P17)

HIV status disclosure issues

From the data collected, it transpired that the lack of disclosure of HIV status was one of the challenges experienced by mothers as a hindrance to freely practising exclusive breastfeeding. Most mothers in the study lived with other family members, like parents, siblings or in-laws. Only two participants in the study were married, and another seven were cohabitating with the baby's father.

Non-disclosure was an issue for both extended family members, as well as immediate family-like spouses. In instances where a couple lived together and the mother did not disclose HIV status to the baby's father, it was very difficult to continue with exclusive breastfeeding, as expressed by the participant below:

'At home it was a challenge because I live with my boyfriend and he does not know my HIV status, I also don't know his. So, he also did not understand why I could not give baby anything else in those 2 weeks, that's why I just decided to stop as I could not explain to him why and he kept asking and I was making excuses [...] I was scared that if I told him he would dump me.' (P14)

There were also instances where the father of the baby also failed to disclose their HIV status to the woman until she got pregnant and discovered during antenatal care that she was HIV positive, only to find out that the partner knew all along but never disclosed. This was expressed by one participant as follows:

'Father of baby did not disclose his HIV status, I saw his pills and confronted him he said he was scared to tell me. I was upset that he put my baby's life at stake, even when he saw I was pregnant he did not tell me even after baby was born, he did not tell me.' (P08)

Most mothers in the study ($n = 11$) were single and living with other family members. This made it difficult to exclusively breastfeed as everyone had a say on how the baby was raised and fed, especially the maternal grandmother of the baby or mother-in-law. If the mother did not disclose to the family, they did not understand why the baby was only fed breastmilk and put a lot of pressure on the baby's mother to mix feed. One mother had this to say:

'As this was my first baby, my mother felt she knew best, and I didn't know what I was doing. And since I did not disclose my status to her, I couldn't convince her why we should do things my way, so I gave in. So, I just stopped out of frustration and asked the baby's father to buy formula and allowed my mother to give baby whatever she thought was best.' (P15)

In the African context, there's a saying that your child is not just your child but belongs to the community, and this begins in the home, where everyone has a say on how the baby should be raised. Sometimes mothers must leave the baby with a caregiver, and if the caregiver does not know the status of the mother, they feed the baby other solids as they feel the baby is crying because of hunger. This makes it difficult for exclusive breastfeeding to happen in the absence of the mother.

Antiretroviral medication for mother and baby

The success of prevention of vertical transmission of HIV during breastfeeding relies heavily on mothers taking their treatment well and being virally suppressed, as well as babies being given infant HIV prophylaxis after delivery to prevent HIV transmission. This means that all HIV-positive pregnant women should be started on lifelong antiretroviral medication and be supported to continue with it throughout the breastfeeding period. The goal of treatment must be to ensure that the level of virus in their system is very low and the chances of infecting the baby are also reduced. It was good to observe that all mothers were on antiretroviral medication, and their babies were also given medication at birth; however, some mothers stated that the medication was not explained well, as expressed below:

'At birth I was given medicine "Nevirapine" to give to baby which they said would be stopped at 6 weeks. The medicine was not explained well other than that I must give it to baby daily to prevent HIV.' (P16)

There were, however, mothers who expressed that they were taught about the medication and adherence was checked at every visit:

'Every time I went to book, they taught us, they also checked if I'm taking my ARV medication well.' (P20)

Another participant said:

'I think mothers should breastfeed but also give baby the medicine to prevent HIV and take their own medicine. That is what we were taught in hospital.' (P12)

Belief that the baby is not getting enough from breastmilk

It was a common response from mothers that breastmilk alone was not enough to feed the baby after the first few weeks of life. Most mothers felt that it was not doable for 6 months to give the baby breastmilk only. They reported that it was easier to do it from the first 2 weeks to a month, but as babies grow, they cry a lot and need more than just breastmilk.

As such, most mothers in the study only managed to exclusively breastfeed for the first week to about 3 months, after that, they either stopped breastfeeding completely or continued but added solids such as porridge as they felt that

breastmilk was no longer sufficient. This was expressed by different participants as follows:

'It went well first few weeks, but as baby was growing, I couldn't keep up, he was crying a lot and I felt he was not getting enough from my breast, so I decided to stop breastfeeding at 3 months and start porridge and formula milk.' (P13)

Another one stated:

'I breastfed but only for 2 weeks and changed to formula. I felt my baby was not getting enough breastmilk.' (P07)

Additionally, mothers also expressed that they were not empowered on what to do if their breasts were not producing enough milk. Some mothers felt that, despite baby demands, their breasts were just not producing enough breastmilk and this frustrated both mom and baby:

'I was not prepared what to do if my breasts don't produce enough milk ... As this was my first baby I really struggled as my breasts were not producing enough milk and I knew I'm not supposed to add formula. So, I decide to stop breastfeeding at 2 weeks and just give baby formula.' (P19)

Discussion

This qualitative study explored the perceptions of HIV-positive mothers regarding exclusive breastfeeding for 6 months in the context of Duncan Village Day Hospital, East London, Eastern Cape. The findings reveal a complex interplay of individual, sociocultural and health system factors that influence exclusive breastfeeding practices among HIV-positive mothers. Six key themes emerged from the data, each presenting unique challenges and opportunities for intervention.

Inadequate education received

The study revealed a significant gap in the education provided to HIV-positive mothers regarding exclusive breastfeeding. This finding aligns with previous research indicating that insufficient or inconsistent information can lead to confusion and poor adherence to breastfeeding guidelines.^{25,26} The lack of comprehensive education observed in this study is particularly concerning, given the critical role of knowledge in shaping breastfeeding practices.²⁷

Participants reported receiving limited or no information during antenatal care, with some only learning about exclusive breastfeeding at delivery. This highlights a missed opportunity for early intervention and preparation. Research has shown that early and repeated counselling on infant feeding practices can significantly improve exclusive breastfeeding rates.²⁸ The finding that even mothers attending private healthcare facilities received inadequate education suggests that this is a systemic issue, not limited to public health services.

The lack of practical guidance on managing breastfeeding challenges (e.g. perceived insufficient milk supply, breast

engorgement) further underscores the need for more comprehensive education. These findings call for a restructuring of antenatal and postnatal education programmes to ensure consistent, comprehensive and practical information is provided throughout the continuum of care.²⁹

Perceptions of mothers towards exclusive breastfeeding and HIV-positive status

The study revealed both positive and negative perceptions towards exclusive breastfeeding among HIV-positive mothers. The positive views, centred on the nutritional benefits and convenience of breastfeeding, align with global health recommendations.³⁰ However, the coexistence of negative perceptions, particularly fears related to HIV transmission, indicates a need for more targeted education and counselling.

These mixed perceptions reflect the complex decision-making process HIV-positive mothers face when choosing infant feeding methods. Previous studies have similarly found that mothers often struggle to balance the known benefits of breastfeeding with perceived risks in the context of HIV.^{25,31} This highlights the need for interventions that not only provide information but also address the emotional and psychological aspects of infant feeding decisions.

Fear of infecting the baby with HIV

The persistent fear of HIV transmission through breastfeeding, despite current evidence supporting its safety when mothers are adherent to antiretroviral treatment (ART), is a critical finding. This fear led some mothers to prematurely cease breastfeeding, potentially compromising infant nutrition. Similar concerns have been documented in other settings,^{32,33} suggesting that this is a widespread issue in HIV-affected populations.

The gap between current scientific evidence and mothers' perceptions indicates a failure to effectively communicate the concept of U = U (Undetectable = Untransmittable) in the context of breastfeeding.³⁴ This finding underscores the need for more effective risk communication strategies and continuous reinforcement of the safety of breastfeeding when viral load is suppressed.

HIV status disclosure issues

Non-disclosure of HIV status emerged as a significant barrier to exclusive breastfeeding, affecting mothers' ability to adhere to feeding recommendations in family and community settings. This finding is consistent with other studies that have highlighted the role of HIV-related stigma in influencing infant feeding practices.^{25,35}

The challenges faced by mothers in explaining their feeding choices without disclosing their HIV status reveal the pervasive nature of HIV stigma and its impact on health behaviours. This suggests a need for interventions that

address HIV disclosure in the context of infant feeding, as well as broader community-level interventions to reduce HIV-related stigma.^{28,36}

Antiretroviral medication for mother and baby

While all participants reported being on ART, the study revealed gaps in understanding the role of antiretroviral medications in preventing HIV transmission during breastfeeding. This finding is concerning, as adherence to ART is crucial for the safety of breastfeeding in the context of HIV.³²

The lack of a clear explanation about nevirapine prophylaxis for infants highlights a missed opportunity for education about PMTCT strategies. Previous research has shown that understanding the purpose of ART and infant prophylaxis can improve adherence and reduce anxiety about HIV transmission.³⁷ These findings suggest a need for more comprehensive counselling on the role of ART in enabling safe breastfeeding.

The belief that the baby is not getting enough from breastmilk

The widespread perception that breast milk alone is insufficient for infant nutrition beyond the first few months is a significant barrier to exclusive breastfeeding. This belief, leading to the early introduction of complementary foods, has been documented in various settings and is not unique to HIV-positive mothers.³⁸

However, in the context of HIV, this perception takes on added significance because of the increased risk of HIV transmission associated with mixed feeding. The finding that mothers lacked strategies to address perceived insufficient milk supply points to a gap in lactation support services. This suggests a need for interventions that combine education on the adequacy of breast milk with practical support to increase milk supply and manage breastfeeding challenges.³⁰

Conclusion

In conclusion, this qualitative study aimed to explore the perceptions of HIV-positive mothers towards 6 months of exclusive breastfeeding. Mothers were faced with numerous challenges that caused them not to properly adhere to EBF. Mothers reported not having adequate information that can help them sustain EBF. Moreover, they were also scared that breastfeeding their baby would result in MTCT.

Limitations

The applicability of the findings from this study may be limited because participants were drawn from one site that caters mainly to low-income women. It is not known how HIV-positive mothers of high socio-economic status would perceive 6 months of exclusive breastfeeding. Further research with a more diverse sample is therefore recommended to explore the perceptions of HIV-positive

mothers towards 6 months of exclusive breastfeeding, as well as the knowledge, perceptions and attitudes of healthcare workers towards this feeding method, as this also influences how they would engage and educate mothers on it.

The study may also have a methodological limitation, as the applicability of the study is reduced because of the limited sample size. The population sample was derived from only one health facility of one sub-district in the Eastern Cape Province; therefore, the findings cannot be generalised to the whole of the Eastern Cape Province or the Country as a whole.

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Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

Authors' contributions

O.O. and N.P.M. both contributed to the conceptualisation and methodology of the project; O.O. and M.P.L. contributed to the writing of the original draft of the manuscript. N.P.M. contributed to the formal analysis and project administration under O.O.'s guidance. O.O., M.C., D.R.P., and D.M. contributed to the reviewing and editing of the manuscript. All authors approved the final version of the manuscript. O.O. supervised N.P.M.'s MPH research project.

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Data availability

Interview recordings and scripts for this study are not publicly available. However, this could be shared by the corresponding author, O.O., upon reasonable request and with the permission of Walter Sisulu University.

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