



RESEARCH ARTICLE

Disclosure Challenges among Women who Defaulted Option B+ HIV Treatment at Chitungwiza Municipality Clinic, Zimbabwe

Dhlakama Patricia Mae¹, Constance Matshidiso Lelaka², Azwihangwizi Hellen Mavhandu-Mudzusi³

^{1,3}Department of Health Studies: Office of Graduate Studies and Research, University of South, Pretoria, Gauteng Province, South Africa

²The Discipline of Social Work, School of Human & Community Development, University of the Witwatersrand, Johannesburg 2000, South Africa

ARTICLE INFO

ABSTRACT

Received: Jan 11, 2025

Accepted: Feb 14, 2025

Keywords

Disclosure
HIV
Option B+
Pregnant
Treatment default
Women

*Corresponding Author:

tshidi.lelaka@wits.ac.za

The study explored the disclosure challenges among women who defaulted Option B+ HIV treatment at Chitungwiza Municipality clinic, Zimbabwe. The study followed an interpretive phenomenological analysis (IPA) design. Data were collected from twelve purposively selected HIV-positive breastfeeding women defaulted Option B+ HIV treatment using semi-structured individual face-to-face interviews stemming from a grand tour question. Data were analysed using the interpretive phenomenological analysis framework. Three themes emerged from data analysis, namely: 1) impact of disclosure to family members among the parents, siblings, and extended family members, 2) Barriers to disclosure and 3) Status acceptance. To reduce the negative impact of disclosure and enhance smooth and add value to disclosure, education on the following levels should be enhanced and strengthened: family and community level, community education, adherence and awareness should be ongoing, PLWHIV should be empowered and encouraged to talk about HIV openly and confidently. Disclosure counseling services should be integrated as standard of care services in all HIV, PMTCT and other HIV programs.

INTRODUCTION

The Human Immuno-deficiency Virus (HIV) treatment access is vital to the global effort to end AIDS as a public health threat. People living with HIV (PLWHV) who are aware of their status, take antiretroviral treatment (ART) as advised, and get and retain an undetectable viral load can live long healthy lives and will not transmit HIV to their HIV-negative partners through sex (Global HIV/AIDS Overview Updated: July 20, 2023). Women's HIV-positive status disclosure plays a crucial part to attain the goal of preventing mother-to-child transmission (PMTCT) among pregnant women (Mosisa, Mulisa, Oluma, Bayisa, Merdassa, Bayisa, Tamiru, Tolossa, Diriba, Fetensa & Waluma 2022). In sub-Saharan Africa, women's HIV status disclosure to others may affect their use of services for the PMTCT of HIV and maternal and child health, including antenatal care, antiretroviral drugs (ARVs) for PMTCT, and skilled birth attendance (Spangler, Onono, Bukusi, Cohen & Turan 2014). In the study conducted by Spangler et al (2014) in Kenya, women living with HIV who had not disclosed to anyone had the lowest levels of maternity and PMTCT service use. The HIV status disclosure, defined as telling another person either directly or indirectly about one's HIV status, is a problem at any period, worse during difficulties during the vulnerable period of pregnancy and the postnatal period (Spangler et al 2014).

LITERATURE REVIEW

Disclosure of an HIV status is important to prevent the spread of HIV and preserve the health of people living with HIV, their spouses, and the community. However, HIV disclosure to male partners presents great source of stress for pregnant women (Watt, Knippler, Knettel, Sikkema, Ciya, Myer & Joska 2018). Disclosure of HIV status is a difficult emotional task creating chances for both support and rejection (Yoshioka & Schustack 2001). Despite the benefits of disclosure, many people living

with HIV delay disclosing their status to those close to them there by increasing the risk for disease transmission (Ismail, Matillya, Ratansi & Mbekenga 2021; Lelaka, Tshivhase, Moyo & Mavhandu-Mudzusi 2022). HIV-infected pregnant women face difficult choices about whether and how to disclose their HIV-positive status. Previous studies have shown that HIV status disclosure is linked with better care engagement, emotional adjustment to the disease, and reduced risk of HIV transmission, but women face both real and perceived barriers to disclosure (Knettel, Minja, Chumba, Oshosen, Cichowitz, Mmbaga & Watt 2019). Disclosing HIV test results is not an easy thing; it is a complex and hard personal issue that comprises communication about a possibly life threatening, stigmatized, and transmissible infection. A study conducted in Zimbabwe with young pregnant women with HIV found high rates of depression and other common mental disorders (Stranix-Chibanda, Chibanda, Chingono, Montgomery, Wells, Maldonado, Chipato & Shetty 2005). A study in the US found rates of perinatal depression among pregnant women with HIV to be closer to 31%. (Kapetanovic, Christensen, Karim, Lin, Mack, Operskalski Frederick, Spencer, Stek, Kramer & Kovacs 2009). These studies are two examples that point to the heightened stressors for pregnant women with HIV.

The choices to disclose sometimes differ with time, a person's experiences with HIV/AIDS, and they also depend on the state of health of the person (Lugalla, Yoder, Sigalla & Madihi 2012). In the study conducted by Spangler et al (2014) in Kenya, women living with HIV who had not disclosed to anyone had the lowest levels of maternity and PMTCT service use. Supporting women in HIV status disclosure during pregnancy and the early postpartum period is a vital component of comprehensive, effective PMTCT programmes. Thus, it is important to understand the situations of women's lives, their relationships with others, and their disclosure challenges including decision-making processes, to respond in a patient-centred manner (Watt et al 2018). (Lukyamuzi, Ssuna, Mirembe, Mawanda, Kinkumu, Nalugo, Adikin, Namisango, Nakalega, Atuhaire, Musoke & Butler, 2023) contends that people need to be managed on a case-by-case basis, as people have different personalities and backgrounds. The aim of this study was to report on the disclosure challenges among women who defaulted Option B+ HIV treatment at Chitungwiza Municipality clinic, Zimbabwe.

Disclosure has been described as a process of revealing one's HIV status, whether positive or negative to a sexual partner, family members, and in one's social networks over time. HIV status is usually disclosed voluntarily by the index person, but it can also be revealed by others with or without the index person's consent (Obermeyer, Baijal & Pegurri 2011; Gari, Habte & Markos 2010). Goodwin, Gregson, Maswera, Moorhouse and Nyamukapa (2021); Norman, Chopra, and Kadiyala (2007) define disclosure of an HIV-positive status as sharing of an HIV-positive status. It is a personal and intimate process that engages the soul, the mind, and the body that shapes the self-image, self-efficacy, self-perception, and confidence of HIV-infected individuals, Tshisuyi (2014) elaborates. Disclosure of an HIV status can be done by the people living with HIV (PLHIV) themselves or by other people such as health workers on behalf of the PLHIV following their consent (Lukyamuzi et al 2023). Non-disclosure of an HIV-positive status (NDHPSS) is the individual's experience of hiding their HIV status from other people or groups.

For women enrolled in prevention of mother-to-child transmission (PMTCT) programs, nondisclosure of their HIV status can be an important barrier to continuous HIV care engagement (Watt, Knippler, Knettel, Sikkema, Ciya, Myer & Joska 2018). People who fail to reveal their HIV-positive serostatus risk catching the virus again, not receiving the best available care, and dying (Tessema, Bune & Mamo 2023). In studies conducted by Dhlakama, Lelaka, & Mavhandu-Mudzusi, (2023) the findings suggested that following disclosure of their HIV status to their partner, women experienced negative reactions that impacted their sexual relationships their relationships were strained in their marriages. Furthermore, women faced fears of divorce, violence and experienced physical abuse, abandonment and rejection, blame, verbal abuse, infidelity of partners, lack of partner support, partner interference, partner refusal for testing and partner refusal for protection which disrupted the family entirely. These experiences were also reported in other studies and were described as women experiencing physical, verbal, and psychological abuse by their husbands or other family members because of their disclosure of HIV-positive results and participation in the PMTCT programme and this led to the stopping of treatment, (Flax et al., 2017). This study seeks to explore the disclosure challenges among women who defaulted Option B+ HIV treatment at Chitungwiza Municipality clinic, Zimbabwe.

METHODOLOGY

Research Method

The researcher adopted qualitative approach to explore and understand the disclosure challenges among women who defaulted Option B+ HIV treatment at Chitungwiza Municipality clinic. According to Creswell, (2014), qualitative approach is used to better understand the perceptions, opinions and experiences of individuals facing challenges. This approach was also relevant because it is reliant in the lives of the participants and gathers non-standardised data, examines text and images with the aims to analyse the subjective meaning of social interactions and events, emphasising how individuals make sense of their experiences (Rahman, 2020).

Study Design

The study adopted an interpretive phenomenological analysis to explore and describe the disclosure challenges among women who defaulted Option B+ HIV treatment at Chitungwiza Municipality clinic. This design was chosen because it is flexible and is suitable for this research since it will enable the researcher to engage with participants to better gain an in-depth and the interpretive of the meaning of an experience from the participant's point of view (Magnussen et al. 2008). Christensen, Welch & Barr (2017) asserts that this design is well known, and it is widely implemented in the social science research as a method to explore and describe the lived experiences of individuals.

Study Population, Sampling and Study location

Study Population and Sampling

The population of the study included HIV-positive pregnant or breastfeeding women who were on Option B+ HIV treatment since the 1 January to 31 December 2019. These population had defaulted Option treatment. A total 12 participant met the inclusion criteria study took part in the study. According to Kvale (2018), a sample of six participants or more could be regarded as adequate for an interpretative phenomenological design since it is acceptable. The number was only limited to 12 participants because of data saturation due to no new data emerged. The sample size for this study was determined by data saturation. According to Polit & Beck (2021), data saturation can be reached at the stage where no new data emerged and there was redundancy of data already collected. The inclusion and exclusion for the study was as follows:

Inclusion Criteria

Females aged 18 years and above

Diagnosed with HIV and accessing healthcare services at Chitungwiza Municipality clinics

HIV-positive pregnant or breastfeeding women enrolled in Option B+ from 1 January 2019 to 31 December 2019

HIV-positive pregnant or breastfeeding women who defaulted treatment for 30 consecutive days or more

Physically healthy, able to consent and be audio recorded.

Exclusion Criteria

Females less than aged 18 years of age

Not accessing healthcare services at Chitungwiza Municipality clinics

HIV-negative pregnant or breastfeeding women

Breastfeeding women not enrolled in Option B+ from 1 January 2019 to 31 December 2019

HIV-negative pregnant or breastfeeding women who did not default treatment for 30 consecutive days or more

Physically weak, unable to consent and be audio recorded.

Study Location

The study was conducted at Zimbabwe in two municipality clinics of Chitungwiza town. Chitungwiza was the second largest city of Zimbabwe (World Urban Campaign 2017). These clinics were reported to have high defaulter rate of women on Option B+ HIV treatment and data was seen in the green books; these are patients' medical records referred to as green books. The study was conducted in Seke South and Zengeza clinics with the highest defaulter rate.

Method of Gathering Data

The researcher used a qualitative interview in the form of an interview guide as a data collection instrument to get an account of an individual's experiences, thoughts, and perspectives (Degeling and Rock 2020). The interview questions focused on the phenomenon under study. The interview guide consisted of two sections, namely: the demographic data and the second section on the grand tour question. All interviews were face-to-face, and data was collected using unstructured interview guide. All the interviews were tape-recorded with 48 hours. The interviews took place between the 04 September - 12 October 2020. Participants were enrolled in Option B+ during their antenatal sine the 01 January 2019 to 31 December 2019, delivered and were all breastfeeding at the time. All the interviews took place at the clinic in private rooms to allow privacy and confidentiality. All the interviews were conducted using the main local language which was Shona to ensure understanding of the question. The grand tour question asked was: *"Kindly share your disclosure challenges on taking Option B+ treatment at Chitungwiza municipality clinics"*. For the researcher to get more rich information from the participants, the use of prompts and probes were implemented. According to Moser & Korstjens (2018), prompts and probes are helpful for participants because they help researchers to get more and rich addition data and help participants to reflect on what they are saying and share more in talking. and talk). All participants' names were pseudonyms names to protect their identity. For all the interviews that took place, participants provided consent to take part in the study and to be audio-recorded. The participants interview all lasted between 30 minutes and 45 minutes and were translated into English and transcribed within 48 hours.

Data Analysis

According to Lewis (2015), data analysis refers to preparing, organizing, and reducing of the data into themes and the interpreting of the results through a repetitive process that moves in analytic circles rather than a fixed linear approach. Post the interviews, data analysis followed Colaizzi (1978) seven steps as described by Praveena, Sasikumar (2021) and Mackenzie (2009). This happened during the data collection process to confirm what participants said was correct. Furthermore, this was done during the data analysis phase by means double checking emergent themes did not distorting the experiences of the participants. The process was implemented by researchers to ensure they agree on the final table of the themes and sub themes.

Ethical Considerations

Ethical clearance to conduct the study was granted by the Department of Health Studies Research Ethics Committee from the University of South Africa and the Ethics clearance number is HSHDC/952/2020. Permission for conducting the study at Seke South and Zengeza clinics in Chitungwiza was obtained from the Chitungwiza Municipality Health Department Ethics Committee and the Director of Health Services. Ethical clearance and approval to carry out the study was also sought from the Medical Research Council of Zimbabwe (MRCZ) and was granted.

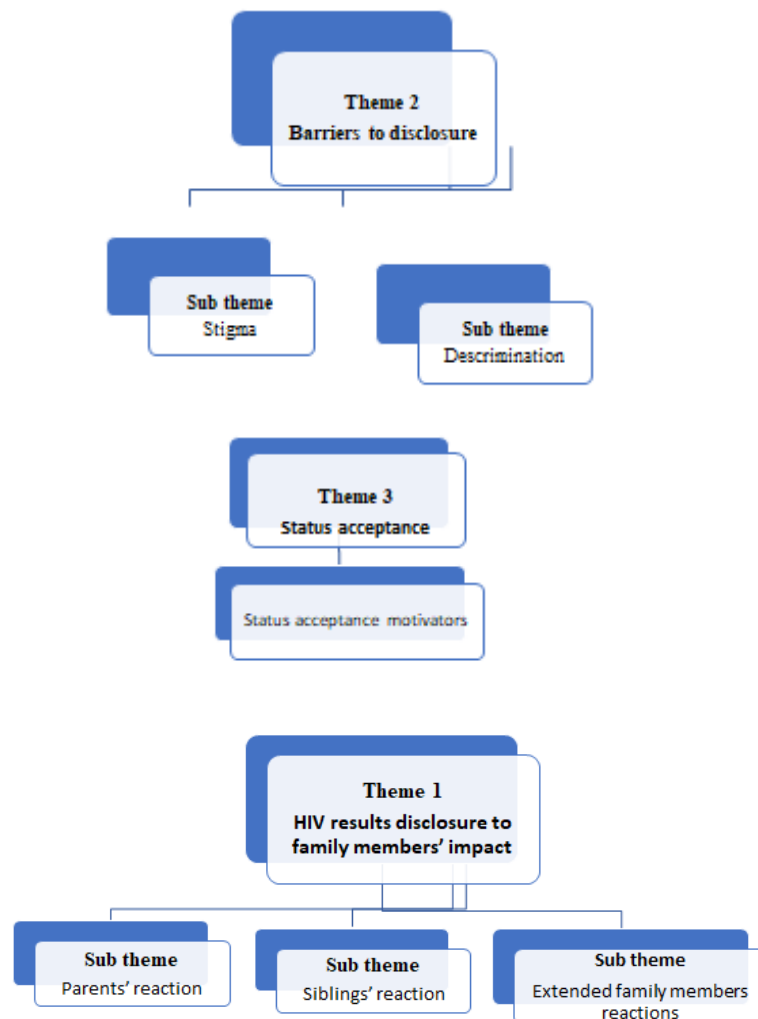
RESULTS AND DISCUSSIONS

Participants' Biographical Data

A total of twelve participants who enrolled in Option B+ HIV treatment when pregnant from 01 January 2019 to 31 December 2019. The participants' ages ranged from 18 to 40 years. Nine participants were married, and two were divorced, while one had eloped and then separated from the partner. One of the divorced participants re-married. Three participants had two children each, four participants had three children each, two had four children each, and three had one child each. Regarding education, seven participants completed secondary school. Three participants did not complete secondary school, and two participants completed only primary school. Regarding employment, five participants were housewives. Five were vendors, one was a hairdresser who plaited people's hair, and the last one was a clothes designer and tailor.

Table 1 depicts the themes and sub themes emerged from the data analysis findings. A total of three themes emerged namely, disclosure to family members' impact, barriers to disclosure, and status acceptance. Each theme is supported by various sub themes as depicted below in Table 1.

Table 1. Summary of themes



Theme 1: HIV Results Disclosure to Family Members' Impact

This theme focuses on the impact on the participant of disclosing HIV results to family members. Across all interviews, it was noted that all the participants had disclosed to their partners. However, only one couple disclosed to an extended family composed of the partner's aunt and her husband. The rest of the participants disclosed to their own family members only and their partners. As a result of the disclosure, the participants experienced varied reactions from family members. Some reactions were supportive, encouraging, empathetic, compassionate, and loving to the participants. Whereas some reactions experienced by participants from family members were painful. The theme has four sub-themes: parents' reaction, siblings' reaction, and extended family's reaction.

Parents' Reaction

For most participants, their disclosure was received with love and compassion, especially from their own families as the narratives below illustrate:

Flora's Parents Were Compassionate, and They Normalized the Situation For Her.

"When I told my parents, they are the ones who counselled me, and they said, it does not matter, just take your treatment. I have my aunt who is on treatment, so they said, you take, isn't it that your aunt is also taking." (Flora).

Similarly, Idah's disclosure to her mother was met with empathy, love, and compassion.

"But I was able to disclose to my mother and sister. My mother said, "My daughter, you are not the first one to go through this. There are many who went through this." (Idah).

Siblings' reaction

"I also told my sisters. They said, it happens in life, just follow the instructions about taking your tablets as you were advised." (Betty).

"She (the sister) accepted it and said, that is what has happened, just follow instructions that you were given." (Helen).

"Ah, my sister accepted it. She sat down with us, and she is the first person who counselled us after we tested HIV positive. She counselled us because she is also positive, and her husband passed away because of this infection." (Jane).

For some participants, reactions they experienced from important people in their lives were painful and unexpected. The following are the participants' narratives of their experiences:

"She scolded me calling me, a moving grave, and it pained me, and I said, if I am a moving grave, why should I continue to live in this world? What is painful is to be scolded by one you call your own. It is better to be scolded by an outsider. It would not matter. But, if the one you call your own, whom you lean on, tells you hurtful words, it is difficult to forget them. You continue to ponder upon them. They keep on coming and coming on. (Edina).

Similarly, Leah had a painful experience with her sister to whom she disclosed to. She explained how disclosing to her sister had caused her to isolate herself from family members because she said her sister disclosed to people at home, and their home is like a village.

"In disclosing to my sister as I did, she went on to disclose to people at home to the extent that almost everybody knows about it. It affected me so much that even going home now. I find it difficult. I just sent children only by a bus while I am here." (Leah).

Extended family's reaction

Asked whether she disclosed to her husband's relatives, Jane replied:

"They did not know anything. But, with time, we disclosed to them (partner's aunt and her husband), because, in case in future, any one of us will fall sick, they will wonder what the illness is. So, we showed them the cards and the treatment. They accepted it well." (Jane).

Theme 2: Barriers to Disclosure

This sub-theme deals with the stigma and discrimination that the participants experienced during pregnancy and after delivery due to their HIV-positive status that they disclosed. To the study, this refers to a disgrace associated with something a person has that is negative and often unfair belief the belief that a group of people have about something. One participant stopped treatment because she felt stigmatized as described below:

Stigma

"I would ask for water to drink. After drinking the water, you would hear the child being instructed, saying; put that cup in that dish. Showing that I was repulsing all the people even in the neighbourhood I stayed. So, I have seen that the issue of taking pills is not important. I am leaving it if I could take my pills while the baby was in the womb and breastfeeding the way I was instructed. We are now in September, so it is going to the third month without me taking treatment." (Getty).

"My husband's sisters and other relatives used to visit me and even send their children to my home. Now, they are no longer visiting me. At the same time my husband started not staying at home." (Anna)

"(When I got back home, and I told my husband that I tested positive, he started to shout at me saying, "It is your illness, myself I do not have any illness." (Idah).

Some participants were intentionally discriminated purposely and were excluded from benefiting from the household food to boost their health and improve their quality of lives. This is supported by the below except:

Discrimination

"Furthermore, there was the issue of food. They were saying, you want to eat a lot, this is not for you, and yours is this. They would dish little food for me. Since I no longer had the strength to work, my sister was the only one who was now working and providing the bulk of what was needed. So, she was saying, you have a queue of children, and you want this and that. So, when I thought of all those words I was pained. So, I said, let me leave the treatment." (Edina).

"That is your own problem; I am going to look for another woman who does not have that infection." (Leah).

Theme 3: Status Acceptance

The participants received a positive HIV diagnosis that they were not expecting and got started on lifelong ART contrary to their expectations of that day. Although the participants eventually accepted their HIV-positive status, most of them testified how hard, difficult, and troubling it was to accept. This theme deals with the acceptance of the positive HIV status by the participants. This theme has one sub-theme, namely: Acceptance motivators.

Status Acceptance Motivators

During the interviews, it was apparent that acceptance of the HIV status was a process that the participants went through rather than a step. Some participants testified how partners, friends, and certain family members motivated them to accept.

Delia testified how she was motivated to accept her status as follows:

"I accepted it after seeing many other people who were also there. I saw that some of them looked healthy and strong, and after talking with others who were saying, 'we have many years, but you have just started, you will survive. Now, aah, I do not think very much about it. But I now say, 'It is up to God, aren't others surviving?'" (Delia).

Similarly, the participant below shared her experience on how she was motivated to accept her status and to take her treatment:

"I was able to collect the treatment, but it was difficult for me to accept my status, saying, is what is happening true? But, because of the counselling I had been given, I said, 'but this happens. I had an aunt who was positive in our family, she later died, but she lived for many years taking these treatments and survived. So, this was what sort of made me strong. I would accept then feel sort of doubting again. I was in denial while taking the treatment.'" (Edina).

Another participant described her experience on how her partner and her own sister motivated her to accept her positive HIV status as follows:

"Aaaah, it was hard for me, for me to be positive! Where did I get it from? I was troubled. But, my husband said, it may be an injection. Maybe we were pricked by a needle or razor blade and not a sexual transmission. So, that is when I started to accept. Ah, my sister accepted it. She sat down with us, and she was the first person who counselled us after we tested HIV-positive. She counselled us because she is also positive, and her husband passed away because of this infection." (Jane).

DISCUSSION

In this study, it was found that women experienced disclosure challenges of HIV results to family members. It is evident that participants in the study were able to manage their HIV status by taking their ART and adhering to medication to stay healthy and improve the quality of their lives. Despite that, they face disclosure challenges in their respective lives. Disclosure of an HIV-positive status can have both positive and negative consequences. Participants from studies conducted described immediate or short-term responses to disclosure of their HIV status across all social target groups. Positive supportive responses, behavioral change such as using condoms, and negative responses were reported by participants. This included encouragement to get tested and disclose results,

financial support, sexual partner's acceptance to use condoms after the participants had disclosed their HIV status and receipt of advice on avoiding multiple sexual partners to prevent transmitting the HIV. From a study conducted in Moshi, Tanzania, the experiences of those who had disclosed their status were generally positive, accepting, and supportive. These included a sense of relief that the relationship was open and built on a foundation of trust, being reminded of clinic visit days and being accompanied to the clinic (Knettle et al 2019). In a Ugandan study, spousal support for adherence to ART was present among many who disclosed their status. This type of support involved women being escorted to collect their medications and reminders to take their medication on time.

Participants in this study experienced varied reactions as some family members' reactions were supportive, compassionate, and empathetic, while others were painful, hostile, and hurting with name-calling. In a study conducted in Maseru, Lesotho, disclosing reduced the pain of the HIV diagnosis and the certainty of living with HIV and brought about open discussions about HIV and adoption of safe sexual practices and enabled the women to accept their HIV-positive result and to adhere to ART as well as antenatal care. A sense of relief and a feeling that a heavy burden was got rid of from the women's shoulders was felt after disclosure (Madiba and Putsoane 2020). This is in line with Norman et al (2007) who reports the unburdening effect of disclosure, that is unburdening oneself of the worry of keeping the HIV status a secret that allowed both the release of psychological stress and the potential for positive life changes and social support as narrated by participants in the study done in South Africa. Women who disclosed their HIV status in a study conducted in Cape Town, South Africa, narrated noting important positive results in the form of increased emotional support, instrumental support for care engagement, and improved self-acceptance (Watt et al 2018).

For some people, disclosure could be a dilemma, a situation where if one decides to disclose, one may be subjected to stigma and discrimination, and if one does not disclose, one may put others at risk of infection, as Liamputtong and Haritavorn (2014) assert from their study findings in Thailand. Flax et al. (2017) further points out that disclosure is a no-win situation for some women since disclosing their status, if their families are unaccepting, it is hard for them to stay in the program. Likewise, if they do not disclose their status, they do not get the support they need to participate in the programme. Studies have shown that people who disclose their HIV-positive test results face negative experiences. Decisions made by PLHIV about whether to disclose their status were made after considering the perceived gains and dangers, report Sanga, Nampewo, George PrayGod and Wring (2023) from their study in Tanzania. Disclosure can be associated with negative outcomes such as blame, abandonment, and separation (Achilla 2010) as observed in a study in Uganda. Negative experiences reported by Yonah et al (2014) in Tanzania following disclosure of HIV-positive status included stigma and discrimination and divorce. Negative short-term outcomes of HIV disclosure noted in a study in Kampala, Uganda included negative emotional reaction and rejection or outburst (Atuyambe, Ssegujja, Ssali, Tumwine, Nekesa, Nannungi, et al. 2014). To remove themselves from people who stigmatize after disclosure, women isolated themselves (Naigino et al 2017).

HIV is laden by an association of stigma and discrimination (Liamputtong 2013). The goal of disclosure of one's HIV status is to share one's challenges and get the support that enhances access to care participants reported barriers to disclosure including negative name calling, stigma and discrimination which contributed to their isolation. One participant reported being called a moving grave and discriminated against by being given small portions of food by her sister, which made it difficult for her to take her treatment. Similarly, the other participant in this study experienced stigma, discrimination, and isolation when her sister to whom she had disclosed in confidence disclosed to other relatives. She was forbidden from doing house chores like cooking at family gatherings. These findings relate to a study conducted by Kohli et al. (2012) which found that discrimination in the home was reported by the HIV-positive women who were barred from doing jobs that involved cutting or slicing in the kitchen. Chanda et al. (2018) concurs with the finding of this study in that, from their study in Lusaka, they postulate that 30% of women still experience HIV-related stigma and discrimination from their partners and families, which may affect the acceptability of life-long ART. In the Lusaka study, participants reported that some relatives of their partners who used to visit them with their children no longer visited them. A study in Malawi revealed that some relatives of the male partners who used to visit the participants with their children no longer visited those (Cataldo et al. (2017) From a study conducted in Ethiopia by Lifson et al. (2012), stigma and discrimination were cited by all participants and one male partner reported that once his wife was

known to have HIV infection, neighbours did not allow her to fetch water from a common water tap. It was further reported in the Ethiopian study that a child from the HIV-infected family was not allowed to play with other children, and the landlord stopped them from using their latrine. Liamputtong (2013) affirms that HIV is laden by an association of stigma and discrimination. There is need for more education and awareness in most families regarding HIV and to destigmatise. This is because there are strong cultural and social norms that are impacting on families with HIV members. This, HIV related topics in many African cultures are a taboo and this also includes issues related to HIV concerns. The HIV disclosure continues to affect many families due to cultural and social norms. This is supported by studies conducted by Lelaka, Moyo, & Mavhandu-Mudzusi, (2022), that a significant number of interviewed individuals from the HIV-sero discordant couples had not disclosed their status to close family members and relatives at all, and further to that, some participants had selective disclosure due to fear of further disclosure and this was highly influenced by the stigma, discrimination, and lack of acceptance HIV individual in families and society attached to the phenomenon.

Accepting HIV status is not easy, to some – there are various motivators and some this is based on the support they anticipate post the disclosure. Some participants reported to have accepted their status after some time due to several factors. It was evident in the findings that disclosure was linked to acceptance of the HIV status. This is because people tend to share their results to people whom they trust and have strong social ties with, mostly relatives. Lugalla et al (2012) reports from their study in Tanzania that the relationship of people is likely to provide positive responses to those infected by HIV by their supported. Achilla (2010) reported that most participants in the Ugandan study received understanding and support following disclosure. An earlier Ugandan study by King R, Katuntu D, Lifshay J, Packel L, Batamwita R, Nakayiwa S, Abang B, Babirye F, Lindkvist P, Johansson E, Mermin J, Bunnell R. (2008) noted positive outcomes that included risk reduction behaviour, partner testing, increased care-seeking behaviour, anxiety relief, increased sexual communication, and a drive to plan. The feeling of freedom from a guilty conscious, and not “living a lie” were perceived as benefits of disclosure, Sanga, Nampewo, George PrayGod and Wringe (2023) reported from their study in Tanzania. In a study conducted by Yonah, Fredrick & Leyna (2014), following disclosure of the HIV-positive status, participants reported experiencing positive outcomes which include emotional support, freedom to use ART as opposed to hiding and financial support. The study conducted was successful and the researcher was able to report on the research findings of the study.

CONCLUSION AND RECOMMENDATIONS

This study explored the disclosure challenges among women who defaulted Option B+ HIV treatment at Chitungwiza Municipality clinic, Zimbabwe. The study found that participants experienced different reactions from family members which included the parents, siblings as well as the extended family members. Following disclosure of their results, they also had challenges facing the stigma and discrimination associated with HIV. Moreover, there were status acceptance motivators such as initiating HIV treatment once one can overcome the denial and shock stage. This had the positive benefits such as working constantly on improving one's quality of health, ensuring good adherence, and employing safe HIV behavioural practices. Taking into cognizance women's disclosure challenges might lead to positive and strengthened support system among family members. This study indicated the need for the importance of psychosocial support for participants, strengthened, strong teamwork among family members and couples. There is also a need for family programmes with individuals infected and affected by HIV to mitigate the impact of stigma and discrimination as this are necessary since family play a significant role in people living with HIV.

Based on the overall findings of this study, the following recommendations could assist in developing interventions to mitigate disclosure challenges among women who defaulted Option B+ HIV treatment. The findings of this study suggest improving family support through sensitization and involvement of families and communities in the PMTCT of HIV programmes to encourage disclosure of HIV results and acceptance and adherence to ART as identified by Chadambuka et al. (2018). Generally, the aim of disclosure counseling is to ensure that one is empowered to live a stress-free life by not keeping the HIV status a secret and getting HIV care and treatment from healthcare providers. Encouraging and enforcing HIV disclosure counseling will encourage acceptance of HIV status and use of protection and also reduce the psychological effects resulting from a new

unexpected HIV-positive result as shown in a Malawian study conducted by [Wesevich et al \(2017\)](#). Addressing stigma and discrimination through community sensitisation and education involving family members, couples, community members and various stakeholders on correct information about HIV infection and disease, including modes of HIV transmission and the benefits of Option B+ HIV treatment in an interactive discussion where people can ask questions and express their views may help reduce community-based stigma and discrimination. Since the research was done in clinics based in urban areas. It is therefore recommended that a mixed method study on such related research in future should be explored in different cultures and other healthcare settings including tertiary and regional hospitals. This is essential for mitigating factors associated with disclosure challenges among women who defaulted Option B+ HIV treatment to expand more knowledge and finding solutions to practical problems and for building a better future. Furthermore, future research should be done to other geographic scope to include more diverse settings and enhancing generalizability. Also, future research should be done on the longitudinal studies to track the long-term outcomes of disclosure or comparative studies between urban and rural experiences since can contribute positively to a more nuanced understanding of disclosure processes.

Author Contributions

PMD Conception of study area, data collection, data analysis, interpretation, conception of design, data collection, analysis, drafting of manuscript. CML conception of design, drafting of manuscript, review, restructure of the content, and editing of the manuscript. AHM critical review and revision for intellectual content.

Acknowledgement

The authors thank the participants, University of Zimbabwe, the healthcare staff at the clinics and Department of Health Services of Chitungwiza Municipality Head Office for providing permission to conduct the study.

REFERENCES

- Achilla T. (2010). Disclosure of HIV status to sexual partners amongst people who receive antiretroviral treatment in Kampala, Uganda. *Etd.uwc.ac.za / Achilla...MPH_201pdf*.
- Ahmed, SI, Farooqui, M, Syed Sulaiman, SA, Hassali, MA & Lee, CKC. (2019). Facilitators and Barriers Affecting Adherence among People Living With HIV/AIDS: A Qualitative Perspective. *Journal of Patient Experience*, 6(1):33–40.
- An, SJ, George, AS, LeFevre, A, Mpembeni, R, Mosha, I, Mohan, D, Yang, A, Chebet, J, Lipingu, C, Killewo, J, Winch, P, Baqui, AH & Kilewo, C. (2015). Program synergies and social relations: implications of integrating HIV testing and counselling into maternal health care on care seeking. *BMC Public Health* 15. 24.
- Anoya, D, Sineke, T, Brennam, AT & Long, LC. (2017). Timing of pregnancy, postpartum risk of virologic failure and loss to follow-up among HIV-positive women. *AIDS* 31(11):1593-1602.
- Asiamah, N, Mensah, HK & Oteng-Abayie, E. (2017). General, Target, and Accessible Population: Demystifying the Concepts for Effective Sampling. *The Qualitative Report* 22(6):1607-1621.
- Atanga, PN, Ndetan, HT, Achid, EA, Meriki, HD, Hoelscher, M & Kroidl, A. (2017). Retention in care and reasons for discontinuation of lifelong antiretroviral therapy in a cohort of Cameroonian pregnant and breastfeeding HIV-positive women initiating 'Option B+' in the South West Region. *Tropical Medicine and International Health* 22(2):161-170.
- Atuyambe, LM, Sseguija, E, Ssali, S, Tumwine, C, Nekesa, N, Nannungi, A, Ryan, G & Wagner, G. (2014). HIV/AIDS status disclosure increases support, behavioural change and, HIV prevention in the long term: a case for an Urban Clinic, Kampala, Uganda. *BMC Health Service Research* 14. 276.
- Avert. (2017). Prevention of Mother to Child Transmission (PMTCT) Global information and education on HIV and AIDS. From <https://www.avert.org/about-us-hub>.
- Avert. (2020). HIV and AIDS in Zimbabwe. (Last updated: 24 August 2020). From: <https://www.avert.org/professionals/hiv-around-world/sub-saharan-africa/zimbabwe>.
- Besada, D, Van Cutsem, G, Goemaere, E, Ford, N, Bygrave, H & Lynch, S. (2012). The case for Option B and Optional B+: Ensuring that South Africa's commitment to eliminating mother-to-child transmission of HIV becomes a reality. *Southern African Journal of HIV Medicine* 13(4):178-181.

- Brink, H, van der Walt, C & van Rensburg, G. (2012). *Fundamentals of Research Methodology for Healthcare Professionals*. Third edition. Juta, Cape Town, South Africa.
- Buregyeya, E, Naigino, R, Mukose, A, Makumbi, F, Esiru, G, Arinaitwe, J, Musinguzi, J & Wanyenze, RK. (2017). Facilitators and barriers to uptake and adherence to lifelong antiretroviral therapy among HIV infected pregnant women in Uganda: a qualitative study. *BMC Pregnancy Childbirth* 17(1):94.
- Burns, N & Grove, SK. (2011). *Understanding Nursing Research. Building an Evidence-Based practice*. 5th edition. Maryland Heights, United States of America: Elsevier Saunders.
- Burns, N & Grove, SK. (2021). *The Practice of Nursing Research: Appraisal, Synthesis, and Generation of Evidence*. Ninth edition, St. Louis: Saunders, Elsevier. <https://read-book-download-2021-s.blogspot.sg/?servers1=0323673171>.
- Cataldo, F, Seeley, J, Nkhata, MJ, Mupambireyi, Z, Tumwesige, E & Gibb, DM. (2018). She knows that she will not come back: tracing patients and new thresholds of collective surveillance in PMTCT Option B+. *BMC Health Services Research* 18. 76.
- Cataldo, F, Chiwaula, L, Nkhata, M & Lettow, M. (2017). Exploring the experiences of women and health care workers in the context of PMTCT Option B Plus in Malawi. *Journal of acquired immune deficiency syndromes* 74(5):517.
- Chadambuka, A, Katirayi, L, Muchedzi, A, Tumbare, E, Musarandega, R, Mahomva, A & Woelk, G. (2018). Acceptability of lifelong treatment among HIV-positive pregnant and breastfeeding women (Option B+) in selected health facilities in Zimbabwe: a qualitative study. *BMC Public Health* 18(1): 57.
- Chadambuka, A & Midzi, N. (2019). Determinants of treatment adherence and retention in care among HIV positive pregnant and breastfeeding women in a rural district in Zimbabwe. *Texila International Journal of Public Health* 7(4):2520-3134.
- Chanda, BC, Likwa, RN, Zgambo, J, Tembo, L & Jacobs, C. (2018). Acceptability of option B+ among HIV positive women receiving antenatal and postnatal care services in selected health centres in Lusaka. *BMC Pregnancy Childbirth* 18(1):510.
- Chirambo, L, Valeta, M, Banda Kamanga, TM & Nyondo-Mipando, L. (2019). Factors influencing adherence to antiretroviral treatment among adults accessing care from private health facilities in Malawi. *BMC Public Health* 19.1382.
- Chitungwiza History. (2017). From: <https://www.discoverworld.com/Zimbabwe/Harare-Province/Harare/Chitungwiza:In-depth>.
- Christensen, M, Welch, A. & Barr, J. (2017). Husserlian Descriptive Phenomenology: A review of intentionality, reduction, and natural attitude. *Journal of Nursing Education and Practice* 7(8):113.
- Cogma, ML, Fernandez, SB, di Corrado, P, Obiols, MJ. (2013). Pregnancy and motherhood in narratives of women with HIV infection living in the metropolitan area of Buenos Aires, Argentina. In: Liamputtong, P. (ed.), *Women, Motherhood and living with HIV/AIDS: A Cross-Cultural Perspective*. DOI 10.1007/978-94-007-5887-2_3, © Springer Science+Business Media Dordrecht pp 47-6.
- Connelly, L. M. (2016). Trustworthiness in qualitative research. *MedSurg Nursing*, 25(6), 435+. <https://link.gale.com/apps/doc/A476729520/AONE?u=googlescholar&sid=bookmark-AONE&xid=d5cf03d0>.
- Conroy, AA, McKenna, SA, Comfort, ML, Darbes, LA, Tan, JY & Mkandawire, J. (2018). Marital infidelity, food insecurity, and couple instability: A web of challenges for dyadic coordination around antiretroviral therapy. *Social Science and Medicine* 214. 110-117.
- Conroy, AA & Wong, LH. (2015). How reliable are self-reports of HIV status disclosure? Evidence from couples in Malawi. *Social Science and Medicine* 144. 28-37.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage Publications Ltd.
- Degeling, C & Rock M. (2020). Qualitative Research for One Health: From Methodological Principles to Impactful Applications. *Frontiers in Veterinary Science* 7. 70. From: <https://doi.org/10.3389/fvets.2020.00070>.
- Dhlakama, P. M., Lelaka, C. M., & Mavhandu-Mudzusi, A. H. (2023). The Psychosocial Profile of Women Who Defaulted Option B+ HIV Treatment: An Interpretive Phenomenological Analysis Study. *HIV/AIDS (Auckland, N.Z.)*, 15, 583-598. <https://doi.org/10.2147/HIV.S401336>.

- Ebuy, H, Yebyo, H & Alemayehu, M. (2015). Level of adherence and predictors of adherence to the Option B+ PMTCT programme in Tigray, northern Ethiopia. *International Journal of Infectious Diseases* 33:123-129.
- Erekaha, SC, Cornelius, LJ, Bessaha, ML, Ibrahim, A, Adeyemo, GD, Fadare, M, Charurat, M, Ezeanolue, EE & Sam-Agudu, NA. (2018). Exploring the acceptability of Option B plus women engaged and not engaged in the prevention of mother to child transmission of HIV cascade: a qualitative study. *Journal of Social Aspects of HIV/AIDS* 15(1):128-137.
- Extended Zimbabwe National HIV and AIDS Strategic Plan. 2015-2020. Commitment towards fast tracking 90-90-90 by 2020 ending AIDS by 2030. From: [Error! Hyperlink reference not valid.](#)
- Flax, VL, Yourkavich, J, Okello, EL, Kadzandira, J, Katahoire, AR & Munthali, A. (2017). "If my husband leaves me, I will go home and suffer, so better cling to him and suffer this thing": The Influence of Gender on Option B+ prevention of mother-to-child transmission in Malawi and Uganda. *PLoS ONE* 12(6): e0178298.
- Global Network of People Living with HIV (GNPLHIV). (2013). Understanding the perspectives and/or experiences of women living with HIV regarding Option B+ in Uganda and Malawi. From: <https://www.gnpplus.net/assets/2013-Option-B+-Report-GNP-and-ICW.pdf>.
- Government of Zimbabwe (2015a). Extended Zimbabwe National HIV AND AIDS Strategic Plan III (ZNASP) 2015–2020. From: http://procurement-notices.undp.org/view_file.cfm?doc_id=114051.
- Gray, JR, Grove, SK & Southerland, S. (2017). *Burns and Grove's the practice of nursing research: appraisal, synthesis, and generation of evidence*. Eighth edition. St louis, Missouri: Elsevier.
- Groove, SK, Burns, N & Gray, JR. (2013). *The practice of nursing research: Appraisal, Synthesis, and generation of evidence*. Seventh edition, Elsevier Saunders, St Louis.
- Gugsa, S, Potter, K, Tweya, H, Phiri, S, Sande, O, Sikwese, P, Chikonda, J & O'Malley, J. (2017). Exploring factors associated with ART adherence and retention in care under Option B+ strategy in Malawi: A qualitative study. *PLoS ONE* 12(6): e0179838.
- Haberer, JE, Sabin, L, Amico, KR, Orrell, C, Galarraga, O, Tsai, AC, Vreeman, RC, Wilson, I, Sam-Agudu, NA, Blaschke, TF, Vrijens, B, Mellins, CA, Remien, RH, Weiser, SD, Lowenthal, E, Stirratt, MJ, Sow, PS, Thomas, B, Ford, N, Mills, E, Lester, R, Nachega, JB, Bwana, BM, Ssewamala, F, Mbuagbaw, L, Munderi, P, Geng, E & Bangsberg, DR. (2017). Improving antiretroviral therapy adherence in resource-limited settings at scale: a discussion of interventions and recommendations. *Journal of the International AIDS Society* 20(1):21371.
- Helova, A, Akama E, Bukusi, EA, Musoke, P, Nalwa, WZ, Odeny, TA, Onono, M, Spangler, SA, Turan, JM, Wang, I & Abuogi, LL. (2017) [Health facility challenges to the provision of Option B+ in western Kenya: a qualitative study](#). *Health Policy Plan* 32(2):283-291.
- Joint United Nations Programme on HIV/AIDS. (2014). The gap report. From: https://www.files.unaids.org/en/media/unaids/contentassets/documents/unaidspublication/2014/UNAIDS_Gap_report_en.pdf.
- Joint United Nations Programme on HIV/AIDS (UNAIDS). (2019). The global HIV/AIDS epidemic key facts. From: <https://www.kff.org/global-health-policy/fact-sheet/the-global-hiv-aids-epidemic/t>.
- Joint United Nations Programme on HIV/AIDS (UNAIDS). (2019). Global HIV/AIDS overview/HIV.gov.The Global HIV/AIDS Epidemic. From: <https://www.hiv.gov/federal-response/pepfar-global-aids/global-hiv-aids-overview> Google Scholar.
- Joint United Nations Programme on HIV/AIDS. (2014). Reduction of HIV-related stigma and discrimination. From: https://www.unaids.org/sites/default/files/media_asset/2014unaidsguidancenote_stigma_en.pdf.
- Joint United Nations Programme on HIV/AIDS (UNAIDS) DATA. (2019). From: https://www.unaids.org/sites/default/files/media_asset/2019-UNAIDS-data_en.pdf.
- Joint United Nations Programme on HIV/AIDS (UNAIDS) Global HIV & AIDS statistics — Fact sheet. 2020. <https://www.unaids.org/en/resources/fact-sheet>.
- Katirayi, L, Chouraya, C, Kudiabor, K., Mahdi, MA, Kieffer, MR, Moland, KM & Tylleskar, T. (2016). Lessons learnt from the PMTCT program in Swaziland: challenges in accepting lifelong ART for pregnant and lactating women-a qualitative study. *BMC Public Health*. 16(1):1119.

- King R, Katuntu D, Lifshay J, Packel L, Batamwita R, Nakayiwa S, Abang B, Babirye F, Lindkvist P, Johansson E, Mermin J, & Bunnell R. (2008). Processes and outcomes of HIV serostatus disclosure to sexual partners among people living with HIV in Uganda. *AIDS Behaviour* 12(2):232–43. doi:10.1007/s10461-007-9307-7.
- Kiragu, K, Collins, L, Von Zinkermagel, D & Mushavi, A. (2017). Integrating PMTCT into maternal, newborn and child health and related services: experiences from the Global Plan Priorities Countries. *Journal of Acquired Immune Deficiency Syndromes* 75(1): S36-S42.
- Kohli, R, Purohit, V, Karve, L, Bhalerao, V, Karvande, S, Rangan S, Reddy S, Paranjape, R & Sahay S. (2012). Caring for caregivers of people living with HIV in the family: a response to the HIV pandemic from two urban slum communities in Pune, India. *PLoS One* 7(9): e44989.
- Kotze, M, Visser, M, Makin, J, Sikkema, K & Forsyth, B. (2013). "Psychosocial variables associated with coping of HIV-positive women diagnosed during pregnancy." *AIDS and Behaviour* 17(2):498–507.
- Lelaka, C. M., Moyo, I., Tshivhase, L., & Mavhandu-Mudzusi, A. H. (2022). Psychosocial support for HIV serodiscordant couples. *Health Psychology and Behavioral Medicine*, 10(1), 537–556. <https://doi.org/10.1080/21642850.2022.2084098>.
- Lewis, S. (2015). Qualitative inquiry and research design: Choosing among five approaches. *Health Promotion Practice* 16(4):473-475
- Liamputtong, P & Haritavorn, N. (2014). My life as Mae Tid Chua [mothers who contracted HIV disease] Motherhood and women living with HIV/AIDS in central Thailand. *Midwifery* 30(12):116-1172.
- Liamputtong, P. (2013). *Women, Motherhood and Living with HIV/AIDS: A Cross-Cultural Perspective*. Netherlands: Springer. <http://www.springer.com/public+health/book/978-94-007-5886-5...mmc=NBA--Mar-13EAST12558363--product--978-94-007-5886-5>.
- Lifson, AR, Demissle, W, Tadesse, A, Katema, K, May, R, Yakobo, B, Natekia, M, Slater, L & Shenie, T. (2012). Barriers to retention in care as perceived by Persons living with HIV in Rural Ethiopia: Focus Group Results and recommended strategies. *Journal of the international association of providers of AIDS care* 12(1):32-38.
- Lincoln, Y & Guba, E. (1985). *Naturalistic Inquiry*. London: Sage.
- Lugalla, J., Yoder, S., Sigalla, H., & Madihi, C. (2012). Social context of disclosing HIV test results in Tanzania. *Culture, Health & Sexuality*, 14(Suppl. 1), S53–S66. <https://doi.org/10.1080/13691058.2011.615413>.
- Lumbantoruan, C, Kermode, M, Giyai, A, Ang, A & Kelaher, M. (2018). Understanding women's uptake and adherence in Option B+ for prevention of mother-to-child HIV transmission in Papua, Indonesia: A qualitative study. *PLoS One* 13(6): e0198329.
- Mackenzie, N. (2009). A phenomenological study of women who presented to a physiotherapy-led continence service with dyspareunia and were treated with trigger point massage. *Journal of the Association of Chartered Physiotherapists in Women's Health* 105:24-39.
- Magnussen, L, Amundson, MJ & Smith N. (2008). Through the eyes of women: cultural insights into living as a battered woman in Hawaii. *Nursing and Health Sciences* 10 (2):125–130.
- Marshall, C & Rossman, G. (2016). *Designing qualitative research*. 6th Edition. Thousand Oaks: SAGE.
- Masquillier, C, Wouters, E, Mortelmans, D & van Wyk, B. (2015). On the Road to HIV/AIDS competence in the household: Building a health-enabling environment for people living with HIV/AIDS. *International Journal of Environmental Research and Public Health* 12(3):3264-3292.
- McCoy, SI, Buzdugan, R, Mushavi, A, Mahomva, A, Cowan, FM & Padian, NS. (2015). Food insecurity is a barrier to prevention of mother-to-child HIV transmission services in Zimbabwe: a cross-sectional study. *BMC Public Health* 15. 420.
- Mclean, E, Renju, J, Wamoyi, J, Bukenya, D, Ddaaki, W, Church, K, Zaba, B & Wringe, A. (2017). 'I wanted to safeguard the baby': a qualitative study to understand the experiences of Option B+ for pregnant women and potential implication for 'test-and-treat' in sub-Saharan Africa. *Sexually Transmitted Infections* 17(3): e052972.
- Mengistie, A, Birhane, A, & Tesfahun, E. (2019). Assessment of Adherence to Antiretroviral Therapy among Adult People Living with HIV/AIDS in North East, Ethiopia. *Journal of Applied Microbiological Research* 2(2):21-27.

- Minnaar, P & Bodkin, C. (2009). The mourning process of HIV-positive pregnant women. *African Journal of Nursing and Midwifery* 11(2):5-7.
- Ministry of Health and Child Care Zimbabwe. (2020). [‘Zimbabwe Population-Based HIV Impact Assessment \(ZIMPHIA\) November 2019-March 2020’](https://zw.usembassy.gov/national-hiv-survey-zimphia-2). From: <https://zw.usembassy.gov/national-hiv-survey-zimphia-2>.
- Moser, A & Korstjens, I. (2018). Series: Practical guidance to qualitative research. Part 3: Sampling, data collection and analysis, *European Journal of General Practice* 24(1):9-18.
- Moule, P & Goodman, M. (2014). *Nursing research. An introduction*. 2nd edition. California: Sage.
- Mulewa, P, Satumba, C, Kandiato, J, Malenga, T. & Nyondo-Mipando, AL. (2019). Perception of utilization of Option B+ services at the health center in Malawi. *Journal of the International Association of Providers of AIDS Care*. 18.1-10.
- Nasuuna, E, Kigozi, J, Muwanguzi, PA, Babirye, J, Kiwala, L, Munganzi, A, Sewankambo, NK & Nakanjako, D. (2019). Challenges faced by caregivers of virally non-suppressed children on the intensive adherence counselling program in Uganda: a qualitative study. *BMC Health Services Research* 19:150.
- Ndaimani, A, Chitsike, I, Haruzivishe, C. & Pendersen, BS. (2019). An exploration of barriers and enablers of retention in a program to reduce vertical transmission of HIV in Zimbabwe. *International Journal of Preventive Medicine* 10(1):74.
- Njunga, J & Blystad, A. (2010). ‘The divorce program’: gendered experiences of HIV-positive mothers enrolled in PMTCT programs—the case of rural Malawi. *International Breastfeeding Journal* 5(1):14.
- Ongaki, D, Obonyo, M, Nyanga, N & Ransom J. (2019). Factors Affecting Uptake of PMTCT Services, Lodwar County Referral Hospital, Turkana County, Kenya, 2015 to 2016. *Journal of International Association of Providers of AIDS Care* 18.1-4
- Orlando, S, Palla, I, Ciccacci, F, Triulzi, I, Thole, D, Sangaré, HM, Marazzi, MC, Nielsen-Saines, K, Turchetti, G & Palombi, L. (2021). Improving Treatment Adherence and Retention of HIV-Positive Women Through Behavioral Change Interventions Aimed at Their Male Partners: Protocol for a Prospective, Controlled Before-and-After Study. *JMIR Research Protocols* 10(1): e19384.
- Piece, A. (2019). The emotional impact of an HIV diagnosis. Everyday health. From: <https://www.everydayhealth.com/hiv-aids/hiv-diagnosis-emotional-impact.aspx>.
- Polit, DF. & Beck, CT. (2014). *Essentials of nursing research. Appraising nursing evidence for nursing practice*. 8th edition. London: Lippincott, Williams & Wilkins.
- Polit, DF & Beck, CT. (2016). *Nursing research: generating and assessing evidence for nursing practice*. Ninth edition. Philadelphia: Lippincott, Williams & Wilkins.
- Polit, DF & Beck, CT. (2017). *Nursing research: Generating and assessing evidence for nursing practice*. 10th ed. Philadelphia (PA): Lippincott, Williams & Wilkins.
- Praveena, KR & Sasikumar, S. (2021). Application of Colaizzi’s Method of Data Analysis in Phenomenological Research. *Medico-legal Update*, 21 (2):914-918.
- Rahman, S. (2020). The Advantages and Disadvantages of Using Qualitative and Quantitative Approaches and Methods in Language “Testing and Assessment” Research: a Literature Review. *Journal of Education and Learning*, 6(1), 102–112. <https://doi.org/10.5539/jel.v6n1p102>.
- Sanga, ES, Mukumbang, FC, Adiel, K, Mushi, AK, Lerebo, W & Zarowsky, C. 2019. Understanding factors influencing linkage to HIV care in a rural setting, Mbeya, Tanzania: qualitative findings of a mixed methods study. *BMC public health* 19(1):383.
- Sanga, E, Nampewo, Z, George PrayGod, G & Wringe, A. (2023). HIV Positive status disclosure to sexual partners: a qualitative study to explore experiences and challenges among clients attending HIV care services in North-Western Tanzania, *AIDS Care* 35:7 953-960, DOI: [10.1080/09540121.2021.2012555](https://doi.org/10.1080/09540121.2021.2012555).
- Sariah, A, Rugemalila, J, Protas, J, Aris, E, Siril, H, Tarimo, E & Urassa, D. (2019). Why did I stop? And why did I start? Perspectives of women lost to follow-up in Option B+ HIV care in Dar es Salaam, Tanzania. *BMC Public Health* 19. 1172.
- Scott, K, Campbell, C, Madanhire, C, Skovdal, M, Nyamukapa, C & Gregson, S. (2014). In what ways do communities support optimal antiretroviral treatment in Zimbabwe? *Health Promotion International* 29(4):645–654,

- Shet, A, DeCosta, A, Heylen, E, Shastri, S, Chandy, S & Ekstrand, M. (2011). High rates of adherence and treatment success in a public and public-private HIV clinic in India: potential benefits of standardized national care delivery systems. *BMC Health Service Research* 11. 277.
- Simpson, BJ & Forsyth, BWC. (2007). State-Mandated HIV testing in Connecticut: Personal Perspectives of women found to be infected during pregnancy. *Journal of the Association of Nurses in AIDS Care* 18(5): 34-35.
- Sinunu, MA, Schouten, EJ, Wadonda-Kabondo, N, Kajawo, E, Eliya, M, Moyo, K, Chibwandira, F, Strunin, L & Kellerman, SE. (2014). Evaluating the Impact of Prevention of Mother-to-child Transmission of HIV in Malawi through Immunization Clinic-Based Surveillance. *PLoS ONE* 9(6): e100741.
- Skovdal, M, Campbell, C, Nyamukapa, C & Gregson, S. (2011). When masculinity interferes with women's treatment of HIV infection: a qualitative study about adherence to antiretroviral therapy in Zimbabwe. *Journal of International AIDS Society* 14(1):29
- Tagutanazvo, OB, Nolte, AGW & Temane, A. (2019). Experiences of women enrolled in a prevention of mother to child transmission of human immunodeficiency virus infection programme in Zimbabwe. *Health SA Gesondheid- Journal of Interdisciplinary Health Sciences* 24(0):1-7.
- Taherdoost, H. (2016). Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research. *International Journal of Academic Research in Management* 5(2):18-27.
- Tobin, GA & Begley, CM. (2004). Methodological rigour within a qualitative framework. *Journal of Advanced Nursing* 48. 388-396.
- Treisman, K, Jones, FW & Shaw, E. (2014). The experiences and coping strategies of United Kingdom-based African women following an HIV diagnosis during pregnancy. *Journal of the Association of Nurses in AIDS Care* 25(2):145-157.
- Yonah, G., Fredrick, F. & Leyna, G. (2014). HIV serostatus disclosure among people living with HIV/AIDS in Mwanza, Tanzania. *AIDS Research and Therapy* 11, 5 <https://doi.org/10.1186/1742-6405-11-5>.
- Wesevich, A, Mtande, T, Saidi, F, Cromwell, E, Tweya, H, Hosseinipour, MC, Hoffman, I, William, C, Miller, WC & Rosenberg, EN. (2017). Role of Male Partner Involvement in ART Retention and Adherence in Malawi's Option B+ Program. *AIDS Care* 29(11):1417-1425.
- Wirihana, L, Welch, A, Williamson, M, Christensen, M, Bakon, S & Craft, J. (2018). Using Colaizzi's method of data analysis to explore the experiences of nurse academics teaching on satellite campuses. *Nurse Res* 25(4):30-34.
- World Health Organization. (2015). Guideline on When to Start Antiretroviral Therapy and on Pre-exposure Prophylaxis for HIV. Geneva, Switzerland: WHO Press.
- World Urban. 2017. Executive summary: From [Error! Hyperlink reference not valid.](#)
- World Health Organization. (2016). Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection: recommendations for a public health approach, 2nd ed. World Health Organization. <https://apps.who.int/iris/handle/10665/208825> (30 March 2024).
- World Health Organization. (2021). HIV/AIDS key facts. From <http://www.who.int/news-room/fact-sheets/detail/hiv-aids>.
- Yah, CS & Tambo, E. (2019). Why is mother to child transmission (MTCT) of HIV a continual threat to new-borns in sub-Saharan Africa (SSA)? *Journal of Infection and Public Health* 12(2):213-223.
- Yates, C, Partridge, H & Bruce, C. (2012). Exploring information experiences through phenomenography. *Library and Information Research* 36(112):96-119.
- Zhao, G, Li, X, Fang, X, Zhao, J, Hong, Y, Lin, X & Stanton, B. (2011). Functions and sources of perceived social support among children affected by HIV/AIDS in China. *AIDS Care* 23(6):671-679.
- Zhou, ES. (2014). Social Support. In: Michalos, AC. (eds) Encyclopedia of Quality of Life and Well-Being Research. Springer, Dordrecht. https://doi.org/10.1007/978-94-007-0753-5_2789.
- Zimbabwe National HIV and AIDS Estimates Report. (2017). Ministry of Health and Child Care, Zimbabwe; 2018. From: [Google Scholar](#).
- Zimbabwe Population-based HIV impact assessment (ZIMPHIA). (2020). Summary sheet | December 2020. National HIV Survey (ZIMPHIA 2020). From: <https://zw.usembassy.gov/national-hiv-survey-zimphia-2>.

- Zimbabwe National Network of PLHIV (ZNNP+), (2014). Zimbabwe people living with HIV stigma. Zimbabwe stigma index research report December 2014. From: <http://nac.org.zw/wp-content/uploads/2019/04/Final>.
- Zimbabwe National and Sub-National. HIV Estimates Report, (2017). AIDS & TB Programme. Ministry of Health and Child Care. July 2018. Zimbabwe-HIV-Estimates-Report- 2018.pdf- National AIDS From: [Error! Hyperlink reference not valid.](#)
- Zimbabwe National Statistics Agency. (2012). Zimbabwe population census 2012, Harare. From: <https://www.zimstat.co.zw/wp-content/uploads/publications/Population/population/Harare.pdf>.