IOSR Journal of Business and Management (IOSR-JBM)
e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 21, Issue 3. Ser. I (March. 2019), PP 28-47
www.iosrjournals.org

Factors Contributing to High Default Rate to Option B+ of Postnatal PMTCT Mothers

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Abstract: *Despite the fact that ARVs help to prolong life, a lot of defaulting by postnatal PMTCT mothers at Kuwadzana Clinic in Zimbabwe went up to 20.6% of all those who were commenced on ART during pregnancy in 2015, in the first year of their commencement. PMTCT Option B+ puts all pregnant mothers who test HIV positive on full ART irrespective of CD4 Count or Viral Load. The objective of this study was to establish the factors associated with high default rate to Option B+ of postnatal PMTCT programme. A qualitative approach was used and in-depths interviews were steered to a sample size of 10 participants for about 45 minutes to I hour at the selected and agreed meeting places. The sample size included the defaulting mothers and medical staff. The selection of participants was done through simple non-probability sampling technique which is convenience. The interviews were tape-recorded. The study established that lack of proper counselling at the ART clinic due to shortage of was the major driving factor, the community has an avalanche of prophets and traditional healers who believe that HIV was attributed to witchcraft causing participants to stop treatment once they suspected the evil spirits were exorcised away and the prophets also associated everything to evil spirits and claimed that after praying, the evil spirits would disappear. The study recommended the need to recruit adequate counsellors, increase supply of ARVs, sensitizing the community and increase the number of working staff.*

Key Words: *Default, Postnatal, Anti-Retroviral Treatment, Mother, Option B+, Clinic*

Date of Submission: 20-02-2019 Date of acceptance: 06-03-2019

I. Introduction and Background to the Study

According to Brown and Bussell (2011), Human Immunodeficiency Virus (HIV) has wreaked havoc worldwide and more than thirty million people are surviving with the deadly virus. Zimbabwe has a total population of around 14 million people of which 14.7% of the population is affected with the deadly virus, making it one of the worst affected countries in Africa amongst countries like South Africa, Mozambique, Lesotho, Zambia and Swaziland. Stanley (2006) claims that pregnant mothers have not been spared either to the extent that

approximately 16.7% of all pregnant mothers in 2015 were HIV positive, with approximately 6843 new paediatric infections of HIV. The situation was compounded by the fact that more than 100000 children were in need of Anti-Retroviral Treatment (ART) as of 2015 which was a burden on the country economically (Caudi, 2015). Considering high fertility rate in Zimbabwe, firm action has to be taken to combat the spread of the deadly virus during pregnancy if generations to come are to be free from the deadly virus (Painter, 2001). Without ART in pregnancy, maternal to child transmission of HIV can be as high as 30% in some countries but with ART in pregnancy, transmission can be reduced to between 1% and 5%. Brown and Bussell (2011) note that in the year 2010, World Health Organisation (WHO) came up with new treatment and management guidelines for HIV positive pregnant mothers. These guidelines were named Option A. According Stephen (2016), on option A, pregnant mothers with CD4 cells less than 350 or those that are in stage 3 or 4 were instantly started on Anti-Retroviral Treatment which was not going to be stopped for life. Those with CD4 cell count of more than 350 and those that are in stage 1 or 2 are put on Zidovudine alone from 14 weeks of pregnancy plus single dose Nevarapine during labour. Medically, and according to WHO (2016), after delivery, the baby would be put on Nevarapine oral for the succeeding six weeks.Caudi (2015) also states that year 2014 saw a change in HIV guidelines in Zimbabwe, with the country adopting Option B+ which was meant to reduce HIV transmission further down. Stephen (2016) notes that Malawi was the first country in Africa to implement the new guidelines, coded Option B+. The notion to have new guidelines was driven by the fact that cessation of Anti-Retroviral Treatment as previously the case after pregnancy, would increase the chances of resistance to ART in life hence the health of these pregnant mothers would be compromised in the long run. Option B+ therefore state that once a pregnant mother is found to be HIV positive, then the commencement of ART is sudden and there is no cessation of treatment forever irrespective of the CD4 cell count or the Viral Load (VL). The mothers are encouraged to continue breastfeeding while their babies are still on Anti-Retroviral Treatment. However, Option B+ came out with its own challenges as many women who were asymptomatic thought after delivery; there was no need to continue taking ART. Adherence became a big challenge, many people are usually lost to follow up and some of the patients' whereabouts have never been known after delivery (WHO, 2010).Kuwadzana Clinic is a polyclinic located in the western suburbs of Harare. The clinic is controlled by council, which offers a wide range of services that include maternity services, outpatient services, admission, family planning, ultrasound scans, ART, ambulance services to mention but a few. On maternity issue, according to Ministry of Health and Child Welfare Report (2016), the year 2015 saw the clinic registering about 800 pregnant women for delivery. Of these 157 were found to be HIV positive, 60 of which were already on Anti-Retroviral treatment. The Prevention of Parent to Child Transmission of HIV (PPCT) is an entry point to lifelong Anti-Retroviral Treatment. The adopted new guidelines code named, Option B+ in Zimbabwe meant to reduce HIV transmission to babies by initiating all pregnant mothers on ART irrespective of their CD4 count levels or Viral Load, has resulted in a lot of mothers lost to follow up after delivery. Kuwadzana Clinic initiated 97 pregnant mothers on ART in the year 2015 but by the end of 2016, only 53 mothers were still coming to collect their ART drugs which meant that 20 were lost to follow up, signifying 20.6% of

the total. This is in sharp contrast to other local council clinics which recorded an average of merely 11% default rate for the same period. If the high default rate on ART for postnatal mothers is not contained, that will be detrimental to them as it encourages serious drug resistance to ART which in the long run might cause treatment failure with resultant deterioration of maternal health postnatal hence: the need to investigate factors that were behind the high default rate to lifelong ART amongst postnatal mothers.

II. Literature Review

Mother-to-Child Transmission (MTCT)

According to Nduati et.al (1997), mother-to-child transmission (MTCT) is considered an overwhelming source of HIV infection in young children. The virus may be transmitted during pregnancy, labour, delivery or after the child's birth during breastfeeding. On the other hand, Newell (1998) claims that among infected infants who are not breastfed, most MTCT occurs around the time of delivery (just before or during labour and delivery). In populations where breastfeeding is the norm, breastfeeding may account for more than one-third of all cases of MTCT transmission. AIDS in infants can be difficult to diagnose because some symptoms of HIV infection, such as diarrhoea, are also common in infants and children who are not infected. Therefore, these symptoms cannot be considered a reliable basis for diagnosis. There are blood-based tests that allow early diagnosis of HIV infection in infants. These tests are quite expensive and are not readily available in developing countries. Most people cannot afford to pay for the blood tests (Nduati et.al, 1997).

Importance of HIV Testing and Counselling

Courlay (2012) emphasizes on the significance of HIV testing of individuals as the growth of new infections continues to pose serious health risks. Early detection of HIV in the body can lead to early treatment and better outcomes. Ferguson (2012) claims that many people live long, normal lives with early detection and proper care, because the advancements in HIV options have been significant. It is advisable for individuals' people to get tested for HIV depending on their circumstances. The Centers for Disease Control and Prevention (CDC) recommends being tested at least once a year should they be any other things happened that can result in HIV infection for example, sex (vaginal, oral or anal) with multiple sex partners, sex with someone who is HIV positive or whose HIV status is not known, sex between a man and another man, using illegal injected drugs or steroids, shared needles or syringes, exchanging sex for money and a diagnosis or treatment for hepatitis, tuberculosis or a sexually transmitted disease like syphilis. According to Summer (2000), VCT programmes have both individual and public health benefits. Those who test negative have their minds put at rest, can be encouraged to reduce their risk and can be referred to supplemental prevention services. Individuals who test positive can be referred to appropriate follow-up services and have their health monitored. Treatments, such as HAART, mean that VCT programmes and early diagnosis play an important role in accessing potentially life-saving care. Painter (2001) also says that individuals who learn of their positive status are also likely to reduce risk-taking behaviors; thereby reducing the risk of onward transmission or becoming infected with other sexually transmitted infections (STIs).

Individual prevention strategies to reduce onward transmission of infection have obvious public health benefits. It was also noted by Summer (2000) that VCT programmes are cost-effective since late identification of infection is often associated with increased treatment costs and hospitalization. Additionally, effective antiretroviral therapy reduces mother-to-child transmission and HIV viral load (which in turn reduces the risk of heterosexual transmission). As a primary prevention tool VCT can be effective in helping people reduce their risk behaviors for HIV and other STIs. It has been demonstrated that counseling, as opposed to basic health information in the form of a culturally appropriate video, leads to a lower incidence of STIs and longer periods of HIV/STD risk reduction. There are different counseling strategies available that potentially increase the efficacy of VCT as a prevention intervention. Short-term, client-centeredcounseling has been shown to be more effective in reducing unsafe behaviors' than brief, didactic counseling. In some instances, pre-test counseling may act as a barrier to testing, by making it difficult to access a test. In most clinics HIV testing is now a normal part of the antenatal booking procedure, where it is offered with the routine antenatal blood tests. There is a pre-test discussion but no pre-test counseling is provided (Painter, 2001).

Function of Option A Drugs

According to Chingoka (2012), the efficacy and safety of Options A and B to prevent HIV transmission through breastfeeding are equivalent, they equally significantly reduce transmission during pregnancy and during breastfeeding, and both are safe. The main differences are in implementation.Option A is cheaper, and for some women it may be easier to give the infant a single medicine once per day rather than taking medicines herself. If for whatever reason the mother omits doses to the infant, either because she forgets or because there are stock-outs at the clinics, then the long half-life of neviripine (NVP) will continue to provide some protection. (It takes several days for the level in the body to drop even if NVP is not given again.).The maternal component of Option A is possibly more complex, requiring a postnatal 'tail' of AZT and 3TC and giving NVP to the infant. The Option A drugs are taken as follows:

- Mother: Antepartum twice-daily AZT starting from as early as 14 weeks of gestation and continued through pregnancy; at onset of labour, single-dose Nevirapine and initiation of twice-daily AZT + 3TC for 7 days postpartum.
- Breastfed infant: daily NVP from birth for a minimum of 4 to 6 weeks and until 1 week after all exposure to breast milk has ended (Ferguson, 2012).

Courlay (2013) emphasizes on the urgent need to find a safe, effective means of preventing mother-to-infant HIV transmission that would also be applicable and affordable in developing-country settings. He further says that the frequency of vertical HIV-1 transmission is estimated to be 25 percent. The proposed trial specifically will test the hypothesis that chemoprophylaxis of the foetus/neonate during labour and delivery and the first week of life may significantly reduce the risk of perinatal HIV-1 transmission. The pregnant women infected with HIV-1 are randomized to 1 of 4 study arms and receive either NVP or its placebo, or AZT or its placebo. Mothers in the NVP group receive a single dose of

NVP or placebo at the onset of labour and are followed to 6 to 8 weeks after delivery. Infants born to these mothers receive at 48 to 72 hours post-delivery or discharge, whichever comes first, a regimen of the same treatment (NVP or placebo) given to the mother. Infants are followed for 18 months post-delivery by clinical and laboratory evaluation to determine toxicity, evidence of HIV-1 infection, and clinical disease progression (Ferguson, 2012). According to Courlay (2013), the mothers in the AZT group receive either a bolus of AZT or its placebo at onset of labour, then doses every 3 hours until delivery, with follow-up to 6 to 8 weeks. Infants begin receiving either a lower dose of AZT or placebo as soon as they can tolerate liquids by mouth, twice daily for 7 days, and are followed for 18 months as in the NVP group. For the goal of eliminating HIV infection in infants and young children to be achieved, all pregnant women eligible for ART would be put on treatment, and pregnant women who do not yet need ART would be given highly effective ARV prophylaxis to prevent MTCT.

This option includes maternal ante partum twice-daily AZT starting from as early as 14 weeks of gestation (or as soon as possible thereafter) and continued during pregnancy. At the onset of labour, single-dose NVP (sd-NVP) should be administered with initiation of twice-daily AZT + 3TC, which should be continued for 7 days postpartum. If maternal AZT was provided for more than 4 weeks antenatal, the omission of the sd-NVP and AZT + 3TC tail can be considered, while continuing maternal AZT during labour and stopping it at delivery. For breastfeeding infants, maternal prophylaxis should be coupled with daily administration of NVP to the infants from birth (within 6−12 hours) or as soon as feasible thereafter, until 1 week after all exposure to breast milk has ended or, if breastfeeding stops before the age 6 weeks, for a minimum of 4 to 6 weeks following birth. In infants receiving replacement feeding only, maternal ARV prophylaxis should be coupled with daily administration of infant NVP or sd-NVP plus twice-daily AZT from birth (within 6−12 hours), or as soon as feasible thereafter, until 4−6 weeks of age (Ferguson, 2012).

Option B and B+ and Drugs Involved

According to Courlay (2013), Option B includes giving mothers triple ARVs from 14 weeks until 1 week after all exposure to breast milk has ended. Regimens may include AZT + 3TC + LPV/r, AZT + 3TC + ABC, AZT + 3TC + efavirenz (EFV) or TDF + 3TC (or FTC) + EFV. When stopping any NNRTI-based regimen, guidelines recommend stopping the NNRTI first and continuing the 2 NRTIs for 7 more days to reduce the chance of NNRTI resistance. All infants receive AZT or NVP from birth until 4–6 weeks, regardless of whether they are breastfeeding or not. There is a clear preference for EFV as part of first-line ART, including among pregnant women and those who may become pregnant (WHO, 2012). Such recommendations account to the cumulative evidence indicating the EFV superior efficacy of EFV and tolerability compared with NVP; substantial reductions in the price of EFV, and increased availability as part of once-daily fixed-dose combinations (Caudi, 2015). Muranga (2012) expresses concern on low risk of birth defects associated with EFV use during the first trimester of pregnancy; and programmatic experience highlighting the complications associated with switching from EFV to NVP for HIV-positive pregnant women and those who may become pregnant. Muranga (2012) further expresses that Option B drugs might be

more resilient to resistance, but suboptimal adherence and no staggered interruption of NNRTIs might lead to resistance selection as well. In another study conducted by Gull (2013) reflects on the use of M184V mutation that can be detected using bulk sequencing in 28.7% of women receiving 3-drug pregnancy-limited ART at 2–6 months postpartum (51.6% by ASPCR).

According to Courlay (2013), Option B+ drugs, when included to all pregnant women in lifelong ART therapy regardless of $CD4^+$ lymphocyte counts, would eliminate resistance selection in women due to planned ART interruptions and potentially provide other public health benefits. Gull (2013) highlights on the problems of adherence to lifelong ART, ART stock-outs, and inadequate retention during pregnancy and the postnatal period would not be resolved by offering lifelong ART to all pregnant women. The study conducted by Taller (2014) reveals that no an evaluation of the rates of uptake of or resistance selection with Option B+ is available. In fact, HIV drug resistance surveillance should be used to evaluate the risk for selection of drug resistance under the B+ approach which should be planned alongside implementation at the country level (Caudi, 2015). Gull (2013) highlights on the significance of considering Option B+ approach to lifelong ART in all HIV-infected pregnant women, regardless of CD4 count, over both Options A and B (if viral suppression is maintained). He says that further simplification of PMTCT programme requirements has no need for CD4 testing to determine ART eligibility (as required in Option A) or whether ART it should be stopped or continued after the risk of mother-to-child transmission ceased); extended protection from mother-to-child transmission in future pregnancies from conception; strong and continuing prevention benefit against sexual transmission in sero-discordant couples and partners and benefit the woman's health of earlier treatment and avoiding the risks of stopping and starting triple ARVs, especially in settings with high fertility.

The Effects of Defaulting to Medication on Pregnant Mothers

According to Mleya (2013), defaulting means failure to fulfil an obligation set. John (2013) challenges pregnant mothers to adhere to medication as prescribed by the doctors. There are implications that may negatively affect pregnant mothers should they not adhere to prescribed medication. Mleya (2013) advises pregnant mothers to be aware of and understand the risks of viral rebound and warns them on acute retroviral syndrome, increased risk of HIV transmission, decline of CD4 count, HIV disease progression, development of minor HIV-associated manifestations such as oral thrush or serious non-AIDS complications (e.g., renal, cardiac, hepatic, or neurologic complications), development of drug resistance that can negatively affect their health. John (2013) indicates that discontinuation of therapy could lead to an increase in viral load with possible decline in immune status and disease progression as well as adverse consequences for the foetus, including increased risk of *in utero* transmission of HIV. HIV/AIDS may be vertically transmitted from a mother to her child. This means the infection may be spread during pregnancy, labour, delivery, or breastfeeding. 70% of transmissions are believed to occur during delivery when the baby comes into direct contact with the mother's infected blood or genital secretions/fluid in the birth canal. 30% of infections occur in utero during the pregnancy with 66% occurring within the last 14 days of

a pregnancy. The mechanism for in utero infection is not well understood, but the current belief is that infected maternal secretions may cross the placenta during the pregnancy.

Benefits of Adhering to Medication on Pregnant Mothers

Mleya (2013) describes adherence as the extent to which a person's behaviour of taking medication, following a diet, and/or executing lifestyle changes corresponds with agreed recommendations from a health care provider. Medication Adherence is a collaborative process of communication and understanding between the patient and their health care professionals that promotes optimal usage of medication therapies. Adherence can be difficult for many reasons. For example, side effects from some HIV medicines can make it hard to stick to an HIV regimen, or a medication dosing schedule might not fit well into a person's routine (WHO, 2003). John (2013) claims that taking HIV medicines every day prevents HIV from multiplying, which reduces the risk that HIV will mutate and produce drug-resistant HIV. On the other hand, Mleya (2013) argues that skipping HIV medicines allows HIV to multiply, which increases the risk of drug-resistant HIV developing, thus making it difficult for the prescribed treatment to work. The study conducted John (2013) shows that a person's first HIV regimen offers the best chance for long-term treatment success of which adherence should be considered important from the start when a person first begins taking HIV medicines.Mleya (2013) suggests that to those diagnosed positive but having negative partners to stick to the drug regiments prescribed as this lower the risk of infecting the other partner. As the viral load can decrease to undetectable levels, it does not mean that the patient will not infect others through unprotected sexual intercourse but the chances are decreased in those patients who adhere to their medication. John (2013) also says that adherence to medication in pregnant mothers helps improve their immune system and thus lowering the viral load in their blood.This in turn reduces chances of transmission of the virus from mother to child. Not only does it benefit the child in lowering transmission but it also allows the mother to live a healthy life. According to WHO (2013), increasing the effectiveness of adherence interventions may have a far greater impact on the health of the population than any improvement in specific medical treatments.

III. Methodology

The study was conducted in Zimbabwe. Data was collected from Kuwadzana Clinic is a polyclinic in situated in the western suburbs of Harare. It is a council clinic that offers wide range of services include, maternity services, outpatient services, admission, family planning, ultrasound scans, ART, ambulance services to mention but a few. The clinic has a bed capacity of 25 which includes maternity beds and is manned by 22 nurses, 14 nurse assistants, 2 clerks, one pharmacy assistant on top of 2 doctors.The study used qualitative approach because of its potential to provide thick and rich descriptions of how participants experienced their problems and come up with motivations, perceptions, feelings and behaviours of the subjects. Qualitative approach adopts an interpretive approach to data, studies things within their context and considers the subjective meanings that people bring to their situation (Bless and Higson-Smith, 1999). The target population involved entirely defaulters to Option B+ of postnatal PMTCT mothers' and medical staff members. On

maternity issue, empirical evidence has shown that in year 2015, the clinic registered approximately 800 pregnant women for delivery. However, 157 mothers were found to be HIV positive, 60 of which were already on Anti- Retroviral treatment. This meant that 97 pregnant mothers were started on ART during the course of their pregnancy. Files had to be opened for them and full ART initiated on all the mothers using Option B+.

The study employed non-probability sampling techniques known as convenient. The participants involved were selected due to their proximity and accessible to the researcher. The sample size of study comprised of seven defaulters to Option B+ of Postnatal PMTCT mothers, one medical doctor and two registered general nurses (RGN). The in-depth interviews were used to enable researcher to probe further. Before the collection of data using interviews, the participants were told that only those who were not willing to be involved in the study, were not coerced to participate. The study was only accommodating participants that were willing to be involved in the study without being prejudiced or coerced. This was done to make sure that when people were free from any coercion, intimidation and threats, they can express their opinions and views clearly (Cohen, 2008). Though there was time allocation for each participant interviewed, the researcher also quizzed more questions until he was satisfied that all his questions were answered. The interviews at the clinic were done in unmarked rooms so that issues of stigma would be phased out and no-one knew that the entirely participants who were going through the rooms were HIV positive postnatal mothers who had defaulted on their treatments after having previously enrolled for Option B+ while they were still pregnant.The entirely interviews were tape-recorded to facilitate permanent storage of data in case of some misunderstanding and misinterpretation typically appearing during the interviews. Content analysis was used to analyse the qualitative data

IV. Results

Age Composition of Participants

Table 1: Age Range and Gender of Nurses

Age	Gender	Frequency
Below 25 Years	Female	1
Between 25 to 35 Years	Male	1
Total		**2**

Table 1 exhibited the composition of nurses involved in the study. There was an equal representation of nurses, in which was a male and a female whose ages ranged from below 25 years up to 35 years.

Table 2: Age Range and Gender of Participants

Age	Gender	Frequency
Below 25 Years	Female	4
Between 25 to 35 Years	Female	2
Between 36 to 45 Years	Female	1
Total		**7**

Table 2 presented the age range and gender of patients involved in the study. Among the seven patients, the majority of them were below the age of 25years, seconded by two patients whose age ranged from 25 to 35 years and lastly one patient whose age ranged from 36 to 45 years. The information provided exhibited that high default rate to option B+ of postnatal PMTCT mothers were among the young women whose age ranged from 25 to 35 years.

Counselling Sessions Conducted at Kuwadzana Clinic

The interviews were conducted using the languages of choice of the participants. The entirely ten participants were assigned identities in the form of P1, P2, P3…… P10. The interviews comprised of scripts that enquired about the highest qualifications of the participants.

Counselling Sessions

The majority of respondents contracted that there was a gap in counselling. Participants indicated that they did not even know if they ever saw a counsellor at the clinic but only remembered one or two nurses in uniform who addressed them when they started to enrol for the program.

"*…. to be honest with you, the clinic had no single counsellor after the last one to be there left in 2014 for South Africa. When I came here last time, I was just addressed by the nurse who appears to have little knowledge on counselling sessions" (P5).*

The female participants complained that there was no longer a single counsellor at Kuwadzana clinic. She also indicated that she used to be addressed by the nurses that had little knowledge on counselling techniques. Participant 8 suggested the following;

"…. I think counselling sessions should be a minimum of 3 times before taking ART which is not the case at Kuwadzana clinic, but only one session is conducted before, medication is started" (P8)

The participant suggested that counselling should be conducted at least 3 times before taking ART, but this was not done at Kuwadzana clinic. Failure to access adequate counselling sessions became disadvantage to patients because they missed important information for the continuation of their treatments thus increasing high defaults rate. In PMTCT, the benefit may be short term or may be long term but defaulting on medication is not only detrimental to the patient involved but to the babies as well. Babies can end up getting infected by the deadly virus hence high morbidity and mortality rates amongst them. Mothers who defaulted on medication risked high chances of resistance to Anti-Retroviral Treatment later in life thus putting their lives in danger (Thomas, 2008). Understanding PMTCT Option B+ including all its guidelines is very important (John, 2013). Option B+ involves putting all HIV-positive mothers on full Anti-Retroviral Treatment (ART) regardless of the CD4 count. Participant 4 admitted that;

"*… despite the fact that we sometimes receive counselling sessions at the clinic, but, I do not know what is meant by Option B+ and all the necessary steps that are supposed to be followed to bring health even to the baby. More so, I do not know that the ARVs are supposed to be taken for the rest of my life, but I thought that since the respective pregnancy is gone, it was time to stop the treatments" (P4).*

The narration given by participant 4 exhibited that she had no idea on the significance of taking the drugs. She thought that the drugs were only relevant when she was still pregnant and then after pregnant, it was over. More information was needed to pregnant mothers so that they keep health. In support of what participant 4 had revealed, participant 1 also indicated that;

" *…. truly speaking, I was not sure of the repercussions of stopping the treatments midway especially when you have not noticed any withdrawal effects, because sometimes I even get better upon stopping treatment". (P1).*

The participant 1 indicated that she was not even aware of the implications of stopping the treatments midway. It showed that lack of counselling sessions could have attributed to lack of knowledge on how to constantly adhering to medications. There was need to ensure that participants received adequate information on adherence. Participant 10, who was in the medical field emphasised on the need to conduct counselling sessions at the clinic as indicated;

"…. I have understood that patients indeed need to be counselled so that they understand and be able to follow instructions carefully to avoid defaulting on medication which could be detrimental to their health" (P10).

The participant 10 who was in the medical field, acknowledged that there was need for patients to be counselled to enable them to understand and be able to follow instructions. It was also established that lack of counselling sessions at the clinic had some negative implications on the health of patients.

Socio-Cultural Factors Associated with High Default Rate to Option B+ of Postnatal PMTCT

Stigma and Discrimination

Stigma and discrimination are prodigious barriers to preventing further infections in providing adequate care, support and treatment. Some participants felt that they were treated less favourably in a particular situation than other persons that would have been, because of specific characteristics, resulting in some participants failing to disclose their HIV status thinking that they would be embarrassed or cursed. Participant 5 stated that;

"*… I am no longer taking the drugs because my friends and family members no longer want to associate with me. I ended up lying to them that I had been exposed to HIV due to the sharp instruments that I had once used. From that time, I abandoned taking the drugs".*

The narration provided by participant 5 was so compassionate. When she disclosed her status to her friends and family members, it was not accepted. She felt rejected by the community and family members. The way she was treated was no longer fairly as equated to other family members. Instead, she had to lie to them that, she had been taking the drugs as

prevention measures of being exposed to high risk of HIV, because she had once shared sharp instruments that were believed to have been used by suspected HIV positive person, resulted in her abandoning taking up the drugs. This narration was also supported by participant 4 who also indicated that;

"*…. truly speaking, my husband is no longer treating me the way he used to do. He is always telling me that I was the one who brought the disease in the family. This is because when we went together for HIV testing, my husband was found negative and I was found positive. I no longer have peace at home, and I decided to abandon taking the drugs"*

The narration provided by participant 4, showed that stigma and discrimination played a pivotal role in the high default rate to option B+ of postnatal mothers at Kuwadzana clinic. The information provided indicated that disclosure became the problem, especially if the husband is HIV negative. There was a misconception that when the wife is HIV positive and the husband is HIV negative, the wife becomes the victim of circumstances. She is alleged to have brought the disease in the marriage hence the need to have adequate counselling sessions in order to clearly understand. Participant 7 also specified that;

"... I can see the way I have been treated before at this clinic is different. The health staffs seem to no longer friendly to me and to others that are in the same predicament".

The information provided by participant 7 revealed that the way in which she was now treated by the health workers at the clinic, was now different. The participant felt rejected, isolated, not supported and cared. Participant 2 quantified that,

".... truly speaking, I believe that involving my family members other than my husband can be treated as a taboo". (P2)

The information provided by participant 2 showed that, disclosing HIV status to family members other than her husband was tantamount to taboo. [12] argues that people have different perception on different things, taking cognisance of the narration provided by participant 5.

Due to stigma and discrimination, participant 3 also admitted that; "…*I have not told anyone about my HIV status, other than my husband"*

The information provided by participant 3 indicated that disclosing HIV status to everyone other than a husband was suicidal. As most participants were not comfortable to disclose their HIV status to either family members or other relatives, participant 6 also admitted that;

"*.. I am trying to seek comfort and counselling from some close relatives, some of whom had been on HIV treatment for some time. I am of the belief that with advice from those who had seen a lot in HIV treatment and care, I would be fine and hope the same will going to be the same to my only child".*

Subsequently, the other postnatal mother participants indicated that;

"*… I feel so much stigmatized that it would be absurd to disclose my HIV status to relatives especially from their husbands' side as they would become a laughing stock". (P3).*

It was therefore prudent to them that they keep it to themselves. They implied that it would be embarrassing if their babies would be seen taking anti-retroviral treatment by their peers in public places so they saw it necessary to totally ignore the treatments which they were taking and those ones of their respective kids. Physical judgement and evaluation of the kids

according to the respondents made them so convinced that their babies were very much HIV negatives hence no need to continue on treatment. During pregnancy, it is the clinic policy that both the pregnant mothers and their respective husbands be tested for HIV. This means that the husbands have to accompany their respective wives to antenatal clinics where they have to undergo tests together. The participants were asked about the involvement of other close relatives who included husbands and participant 7 admitted that;

"…*I came with my husband to the clinic and got tested together".*

The information provided by participant 7 indicated that she went to the clinic together with her husband for testing, which was an ideal. However, participant 6 had a negative response contrasting to participant 7, which she specified that;

"…*I avoided involving my husband to go together to the clinic because I was afraid of conflicts at home. (P6).*

Majority of participants viewed it necessary to remain mum on the issue while secretly taking Anti-Retroviral Treatment which they went on to stop a few weeks later lest they could be seen taking the treatment. Subsequently, participant 8 also clarified that;

"… *I did not find enough and expected cooperation from husbands of the pregnant mothers as most of them did not appear at clinics as expected, some husbands were even violent when HIV testing was supposed to be done so they would end up leaving their wives to do the tests alone".*

The response that was given by the health worker indicated that the husbands were sometimes violent before the tests were conducted to the extent that the wives were left behind alone. Participants felt that once some other people knew their status, they would be embarrassed in the society and community.

Culture, Beliefs and Religion

Religion and some cultural beliefs played significant roles in the acceptance and denial of the HIV and the subsequent treatments. While the majority of the respondents admitted that they were Christians, it was only participant 4 who clearly signposted that;

"…*I have never liked going to church".*

Kuwadzana Suburb is one of the oldest suburbs in Harare where there are many residents of foreign origin especially of the Chewa Tribe. The Chewa tribe follows a lot of traditional beliefs and there are so many of the traditional healers coming from this tribe. Moreover, because of cheaper rentals being one of the oldest suburbs, many unemployed youths moved to stay there and small churches have just mushroomed with all kinds of prophets. There are more than 90 different and recorded churches within a radius of 15 kilometres. Participant 4, who said she never liked church further, itemized that;

"... I believe that all my transgressions and tribulations in my life are emanating from the evil spirits that started long back when I failed to proceed with my school after failing to secure school fees".

Although P4 took her husband to the clinic for HIV testing, she further quantified that;

"..I only took ART for 2 days after delivery and ignored thereafter, I then consulted a traditional healer who told me that all the calamities surrounding me were a creation of the

some of her jealous relatives who wanted to see me down so I ought to be cleansed at a traditional ceremony. As a result, I have gone to the extent of preparing two functions where I called for traditional healers appeared to cleanse me and I was told that there was no need to take any pills since all the evil spirits were chased away. The baby is also supposed to stop treatment also after going through some of the traditional rituals because she is now very health after the rituals and therefore I have seen no reason why she should employ any other ways of treatments since all the bad omen are now a thing of the past".

The existence of the HIV was now doubted from the beginning. Participant 4 did not believe in medication but valued traditional healers as the only people who can cure treat diseases among affected people. The participant believed that bad omen were the main causes of her illness hence: was no need to visit the health facilities for medication. On enquiring about what some churches were doing when dealing with chronic cases such as HIV, Diabetes, Hypertension, participant 9 indicated that;

"*… I am sure there is a lot of confusion which is perpetuated by false prophets who are in the habit of spreading false reports that such and such diseases have disappeared after praying for the patients".*

The narration provided by participant 9 was also supported by participant 2 who also specified that;

"*… I was at one of the respective churches here in Harare and I heard the first Pastor telling the congregants that after he prays for everyone in the church, all numerous chronic conditions would have disappeared completely from the system and there was no longer need for the affected patients to continue taking treatments and this is the reason I defaulted on ART because I believed that the disease has already disappeared from my body".*

For those who would not go for re-test of the HIV after the church sermons, they would remain in their state assuming that they were now free from the virus yet these were just fictitious creations. It would be disaster for patients in the long run as they would end up getting serious resistance to treatment with resultant mortalities and serious morbidities. The traditional healers and prophets were giving misleading information to the people in regard to different ailments. Feguson (2012) argues that medication conditions need to manage at health facilities.

Distance

The results also showed that high default rate to Option B+ of postnatal PMTCT mothers were attributed to distance to health facilities from people's homes this is because some participants relocated somewhere a bit far from Kuwadzana clinic. However, one health worker lamented that;

"…. you would find that a mother is 7 kilometres away from the clinic, and sometimes she would not have money for transport, which sometimes resorted to walking to and fro, this actually affects most participants especially to those that relocated to some other places." (P8).

A female respondent complained about distance being a reason for not adhering to medication. Distance made it impossible for participants to travel and get medication when it is finished. However, participant 3 admitted that;

"*… I am now staying about 140 kilometres away from the clinic after we relocated to the farms after having failed to secure a decent job while we still in the town".*

What it meant was that, since her file was at Kuwadzana clinic; she was left with no option except to stop coming to the clinic every month to collect her medication. She admitted that she surely had no money for bus fare since both her and her husband were not working but merely survived on some little farm produce. However, other than the money for travelling to the clinic, there was no other expense that was required as the registration and collection of the ART at the clinic was done free of charge. This showed that accessibility to the clinic was the only big challenge. All other participants also indicated that they had no problems with bus fare as most of them stayed within a radius of 10 kilometres which meant that there was easy accessibility to the clinic. They only required two dollars for local bus fare to the clinic.

Social Standing in the Society

Social standing in the society was said to be a hindrance to ART compliance. The health workers also admitted that since they had dealt with so voluminous patients before, they noted that patients who are famous or popular in the community faced a lot of challenges in following up on ART. Participant 2 admitted that;

"*… truly speaking, some of us are affected by our social standing, especially when you look so beautiful and your husband is working, or you come from a well-up family, you just feel that going to collect ART drugs is something amiss."*

The sentiments by participant 2 were also echoed by participant 4, who admitted that;

"*… at one point, I felt that it was not necessary to go to the clinic and get HIV drugs because of my beauties, I felt that men would reject me because I still need pleasure in this earth",* she laughed.

It was established that social standing negatively affected women from taking the prescribed drugs at the clinic. Though some participants were married, it was also noted that women who viewed themselves as beauty, were so sceptical to take HIV drugs as they feared being rejected by other men. The registration of mothers for ART at Kuwadzana Clinic is done in a special antenatal unit that only deals with HIV issues in pregnancy. The section of the clinic is code-named the 'Blue Section' because the inside is painted blue and it is almost obvious that those ladies who frequent that section would be visiting on issues pertaining to HIV. The famous and popular in the society like school teachers, politicians, shop owners, do not wish to be recognized by the common people and participants admitted that after some few months of showing brevity while coming monthly to collect ART, such patients would end up defaulting. Social stigma was therefore a factor that was noted as contributing to failure to observe what the clinic people wanted to be observed.

Lack of Adequate Knowledge

The majority of participants had no idea and knowledge on Option B+, which was believed to have contributed to default rate. It was earlier noted that due to inadequate counselling sessions conducted at the clinic, participants were not getting appropriate and adequate information pertaining Option B+ participant 1 indicated that;

"*… truly speaking, the information that I was given in regard to Option B+ seems to be inadequate. I do not have much idea on how the drugs are taken."*

The information provided by participant 1 was also confirmed by the majority of participants. The participants admitted that they were not provided with enough information, which then goes back to the issue of counselling sessions. It was earlier on established that the clinic had a critical shortages of critical key staff such as; counsellors, doctors and nurses. Counsellors are the right people who can clearly articulate issues and give accurate information. Even the health staff also admitted that patients were not getting adequate information as indicated by participant 8;

"…. It is true that most patients are not getting adequate information in regard to Option B+ drugs, but this is not because nurses have no idea, but because nurses have limited time to explain to patients. Instead, the task that was supposed to be done by the counsellors is now done by the nurses, which I think is giving more burden to the nurses"

The information provided by participant 8 was also confirmed by other health workers who were part of the study. It was established that lack of counsellors at the clinic contributed much to patients getting inadequate information regarding to Option B+ drugs.

Economic Factors Associated with High Default Rate to Option B+ of Postnatal PMTCT Mothers

Some economic problems sufficed due to treatment failure as treatments required high costs and majority of patients especially those who were unemployed and those who came from the rural areas could not afford the treatments because of the costs surrounding the higher lines of treatments. There were so many things that were required to reach the hospitals and clinics. As Kuwadzana clinic is an urban clinic serving a population of more than 60000 people, not entirely people or patients stay near the clinic.

Unemployment and Financial Challenges

All the 10 participants admitted that the unavailability of cash or income contributed to failure by some participants to report at the clinic monthly in a bid to collect their tablets. The collection of tablets at the clinic is done every month meaning patients have to go monthly to the clinic in order to collect their course of ART. This was regardless of where one would be coming from, which put a stroll on distant patients as they needed to endure long journeys in pursuit of long life anticipated by taking ART. This was true for patients who needed to travel for long distances in order to reach the clinic as indicated by participant 3;

"*….. I and my husband are not employed, and we then relocated to the farm which is about 140 kilometres away from this clinic. We no longer have financial resources to cater for bus fare and our basic needs. I therefore find it difficult to frequently come to this place to collect medication. Things are not well on our side, we do not know what to do because at times, we only have one or two meals a day"*

The narration provided by participant 3 exhibited that her husband was not employed and that was the reason of her relocated to their farm which was 140 kilometres from the clinic. She also bemoaned that her family had limited financial resources to cater for the

transport and basic needs. The information provided also showed that the participant was also considering looking after her children other than spending money going to the clinic to collect medication. Despite the fact that some other participants did not relocate to areas that were a bit far from the clinic, they also complained about financial resources, which they believed was also a contributing factor.

The majority of participants indicated that they were not employed together with their husbands. Their living conditions was subsidised by selling tomatoes and airtime, which was not enough for them to get money for transport and food. Though health is fundamental, but the majority of participants were frustrated and disturbed by the economic hardship that is prevailing in the country as indicated by participant 4;

"*… surely if my husband was employed and if we had enough financial resources, I was not going to default taking medication because I still want to live longer in this earth. The fact that we do not have enough financial resources, I see it wise to taking care of my family with the little that we get. Life is difficult and there is no where I can go and beg money because everyone is crying".*

The narration provided by participant 4 was sympathetic. The economic hardship was negatively affected the generosity of the people in the country. The participant wished if her husband was employed. She also indicated that if she had enough financial resources, she was not going to default taking medication, but due to financial constraints, she found it difficult to travel to the clinic. She believed that it was rather better to take care of her family. The majority of participants made the same statements.

Shortage of key staff

Kuwadzana clinic does not have even a pharmacist to dispense drugs to the patients. There are only 2 doctors who are responsible for the entire clinic and they come only twice a week yet patients come every day. The pharmacy is run by a pharmacy assistant who was assisted by a nurse aid in the pharmacy specialized counsellor for all its ART programmes. For counselling services at the clinic, they are done by state registered nurses so they alternate to teach patients of what ought to be done and what ought not to be done. Since counselling needs a lot of patients especially to those who are slow learners, the shortage of patient personnel at the clinic can result in inadequate counselling services. One of the health workers admitted that;

"*… it is true that we have critical shortage of key staff here at the clinic, for example counsellors, we just use nurses to counsel patients, and some of these nurses have no experience and idea on how to deal with patients when it comes to counselling issues. The clinic is burdened and we have no idea as to when the government or the council will provide us with other key staff". (P10).*

The information provided by participant 10 was so compassionate. The health staff at the clinic admitted that there was critical shortage on the key staff. The indication was that, the current staff had no ideas as to when other key staff could be deployed at the clinic. Participant 10 also indicated that nurses lacked the experience and clear attributes for being counsellors.

Subsequently, the majority of participants also admitted that lack of counsellors, nurses, doctors was hampering a lot of efforts to improve on ART intake. The mothers who were interviewed admitted that they thought that they had not fully received the correct information from the clinic as evidenced by their many unanswered questions they had posed to the medical staff. This contributed to the gaps in information that existed amongst patients and thus possibly leading to high defaulting on the part of the PMTCT mothers and the other patients in general. It is prudent that those who deliver counselling services to the masses be in adequate numbers to serve all those that require counselling especially in ART as counselling helps fight stigma, counselling helps in enforcing compliance thus giving long life as cases of drug resistance will be reduced massively.

Delays at the Clinic

The antenatal and postnatal wings of the clinic are run by only 10 nurses who offer maternity services yet the clinic serves more than 60000 residents surrounding it. The counsellors are extracted again from the nurses as they rotate to offer counselling services. This leaves the clinical side with less than 2 nurses on duty at any given time, making it very unpleasant and boring especially in the eyes of the patients who have endured long waiting hours trying to access medical services. Participant 9 admitted that;

"…. It is true that clinic delays are due to shortage of competent medical staff and that the clinic is understaffed, operating at 40% capacity which is detrimental to the health of the people and the community to be served at large".

Clinic delays, according to participant 9, contributed to defaulting on ART by many as patients felt so much bored by waiting for long hours. Equally, participant 8 and 10 also concurred with the narration provided by participant 9. On other particular days, patients could go for 4 hours being served because the queues would be long and winding as indicated by participant 3;

"*…. at one time I had to abandon the whole process of collecting my ART after having been forced to wait for 5 hours with nothing concrete coming out of the efforts. I then spent the whole month without medication only to appear the following trying to collect again".*

The narration provided by participant 3 was also given by the majority of participants. Based on the information provided, it showed that haphazard was being experienced in taking of ART which was obnoxious and detrimental to the health of the patients. Women usually could get easily annoyed by delays at the clinic because they would be waiting to do household chores at home so any delays or anticipation of delays would result in absconding from the clinic activities.

V. Discussion

The study investigated fsctors contributing to high default rate to Option B+ of Postnatal PMTCT Mothers. Lack of adequate counselling services at the clinic hampered a lot of progress as lots of people did not understand what constituted Option B+. Majority of participants had no idea on the difference between Option A and Option B thus causing confusion. Nicoll (1994) indicates that HIV and AIDS counselling assist people to make

informed decisions, cope better with their condition, lead more positive lives, and prevent HIV transmission. Counselling before and after being tested for HIV is a great opportunity to share important health information that can save lives. Feguson (2012) claims that many mothers and health workers, are reluctant to discuss HIV.

Lack of knowledge contributed to high default rate as majority did not appreciate that the treatment was supposed to be life-long. Stopping ART without medical reasons is detrimental to health in the long run as there would be greater chances of resistance to medication later in life, which catalyse morbidity and mortality. As reported by (John, 2013), a good level of understanding about HIV participants, a belief that ART is effective and prolongs life and recognition that poor adherence may result in viral resistance and treatment failure, could impact favourably upon their ability to adhere. Knowledge of HIV, ART and PMTCT is however, be influenced by interplay of socio-economic and other cultural factors including clients' educational level and on the other hand Stephen (2016) argues that level of education impacts positively on patient's ability to adhere to ART.

The findings exhibited that some churches implying that HIV would have disappeared after prayers so there would be no need to continue on ART while traditional healers argued that all prevalent diseases were a result of bad spirits, witches and wizards so traditional cleansing ceremonies ought to be done to exorcise the evil spirits. Some churches told their congregants that they were now healed of their problems hence patients ended up defaulting. Such abhorrent actions lead to catastrophic consequences hence thoughtful action ought to be taken in order to curtail such behaviours. Individual members have roles which are expected of them depending upon the position held. These expectations can be compelling or obligatory to the point of controlling an individual's behaviour. The folkways are conventional practices while the mores are obligatory as they are necessary for the maintenance of the social order and these can be deeply significant to the members. Culture is a system of shared accumulated facts by members of a given society, which are conceptions, regulations and meanings articulated in much the same way by the members (WHO, 2016).

The study also established that behavioural issues also played a role for example alcoholism where some mothers that consume alcohol ended up forgetting to take their tablets at first until they realized that nothing wrong by not taking treatment at all. Despite the fact that some of the mothers would be breastfeeding, they ignored the breastfeeding and went on to drink alcohol thus further compromising their health. Beliefs about the medications themselves also play a role in adherence. Patients who report low confidence in the efficacy of the medications and perceive minimal benefits resulting from ART are less likely to be adherent (Feguson, 2012). Lack of faith in the medications, combined with a poor outlook for the future, often leaves little motivation for adherence to prescribed pharmacotherapy. Adherence to ART medications also is predicted by perceived competence for taking medications as prescribed (Painter, 2012), as well as acceptance of one's sero-positive status (Mehta). Many patients report difficulty meeting the demands of family and/or work while maintaining their ART regime. As is the case with many individuals who take regular prescription medications, those with greater social support typically report greater adherence to HIV medications.

It was also established that participants who could not afford to travel to the clinic every month to collect their supplies risked complete shunning of the health facility. Although it began with episodic withdrawal, it later culminated in total withdrawal after some initial episodes hence default in the following months. Some mothers highlighted that they had since relocated to out of Harare and that their husbands were not working making it impossible for them to secure decent bus fares to travel to the clinic every month.

The study also exhibited that those with higher social standing in the society who were very popular like local celebrities had bigger chances of defaulting as they did not tolerate the long waiting hours at the clinic while being watched by those who knew them. The conclusion for them was to stop coming to the clinic completely or face humiliation as everyone would know that they were coming for PMTCT programs at the clinic. For those who would afford to buy the tablets in private, they just abandoned their clinic files and went to their private doctors.

Summer (2000) notes that people living with HIV and other key affected populations are shunned by family, peers and the wider community, while others face poor treatment in educational and work settings, erosion of their rights, and psychological damage. These entirely limit access to HIV testing, treatment and other HIV services. Brown and Bussell (2011) says that the fear surrounding the emerging HIV epidemic in the 1980s largely persists today. At that time, very little was known about how HIV is transmitted, which made people scared of those infected due to fear of contagion (Painter, 2012). This fear, coupled with many other reasons, means that lots of people falsely believe: HIV and AIDS are always associated with death, HIV is associated with behaviours that some people disapprove of (such as homosexuality, drug use, sex work or infidelity), HIV is only transmitted through sex, which is a taboo subject in some cultures and HIV infection is the result of personal irresponsibility or moral fault (such as infidelity) that deserves to be punished. John (2013) believes that inaccurate information about how HIV is transmitted creates irrational behaviour and misperceptions of personal risk hence the need to get relevant information. Stephen (2016) cites fear of stigma and discrimination as the main reason why people are reluctant to get tested, disclose their HIV status and take antiretroviral drugs (ARVs).

VI. Conclusion

Lack of counselling sessions, socio-cultural, and economic factors partly attributed to high default rate to Option B+ of Postnatal PMTCT Mothers. There is need to recruit and select counsellors who work in the ART clinic, increase supply of ARVs and span of drug collection from 1 month to 3 months, sensitize the community because health and development are symbiotic hybrids of each other and increase working staff at health institutions because it is good to have adequate staff members' duties are performed as expediently as possible.

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