

Pregnant Mothers Perception and Adherence in the Prevention of Mother-To-Child Hiv Transmission in Cilacap Regional Hospital 2020

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ABSTRACT

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HIV/AIDS has emerged as a worldwide health crisis since 1981 and has spread extensively. According to the Joint United Nations Programme on HIV/AIDS (UNAIDS), the global HIV infection count reached 6.7 million at the end of 2016, with 2.1 million of those affected being under the age of 15. Approximately 1.8 million individuals acquire HIV annually, and over 1.4 million women with HIV infection get pregnant each year. According to data provided by the director of VCT at Cilacap Regional Hospital during the last decade, there have been a total of 983 instances of HIV/AIDS in Cilacap Regency, ranking it as the third highest in Central Java Province. Of the whole population, 75% of individuals diagnosed with HIV/AIDS fall between the age range of 25 to 49, which is the reproductive age group. While HIV infection is becoming less common in Asia, in many of these nations it remains one of the most common pregnancy problems. The fact that only 20% of pregnant women have access to anti-retroviral (ARV) services is one reason why HIV is still the primary cause of death for women of childbearing age in cases of vertical transmission [1]. According to preliminary survey results from January 10, 2020, the VCT clinic presently has four pregnant HIV+ women. This research intends to ascertain the perspective and adherence of pregnant mothers in preventing the transfer of HIV from mother to child (PMTCT). This study is a descriptive qualitative study with an explanatory research approach. The sampling method is Purposive Sampling followed by Snowball Sampling while the data were collected using triangulation technique. The results showed that all participants had good perceptions and adherence about the implementation of PMTCT programs. Further research is required on the significance of family support to the pregnant mothers adherence.

1. INTRODUCTION

HIV, short for Human Immunodeficiency Virus, is a sexually transmitted illness caused by an RNA virus that particularly targets the human immune system. system and causes AIDS. HIV positive is a person who has been infected with the HIV virus and the body has formed antibodies to the virus. They are a potential source of infection for others. AIDS is a collection of clinical symptoms due to a decrease in the immune system arising from HIV infection ([2] (MOH RI, 2008; Sarwono, 2008).

HIV/AIDS emerged as a worldwide health issue in 1981 and subsequently escalated into a pandemic. Thus far, no drugs or vaccines have been discovered to address this issue, leading to detrimental consequences in several sectors including health, society, economy, politics, culture, and demography. It is sometimes difficult to differentiate individuals with HIV from those who are in good health. The HIV virus has an incubation period of 10 years [1].

HIV infects CD4 (Cluster Differentiation 4) T-lymphocytes, which are vital for the immune system, become inefficient in combating infections and start a progressive decline in immunological function. HIV/AIDS usually

starts with the treatment of sexually transmitted infections (STIs) caused by deviant sexual behavior (Kumalasari & Andhyantoro, 2012). The body becomes susceptible to various infections, including common ones that the immune system can usually defeat (known as opportunistic infections) (Jason, 2011).

Women are more likely to be infected with HIV. The possibility of HIV transmission from men to women is 2-4 times greater than HIV transmission from women to men. This is because women have more external mucous membranes that are easily irritated [3]. In addition, women are the ones who hold the semen, while the HIV content contained in semen is more in number than HIV in vaginal fluid [4]. The biggest way of HIV transmission in Indonesia is through unsafe sexual intercourse and changing partners. In sohimah's previous research, it revealed that 19% of adolescent attitudes support sexual deviant behavior making the potential for HIV transmission becomes greater [5]. This disease exacerbates the risk of HIV transmission, leading to an increased prevalence of HIV-positive pregnant women. Consequently, there is a heightened chance of giving birth to infants who are HIV positive [6].

HIV/AIDS is now not only spreading in big cities in Indonesia. Rather, the spread has reached all provinces in Indonesia, one of which is Central Java Province. Central Java ranks 5th for HIV cases with 13,547 sufferers. The province of DKI Jakarta holds the top position with a total of 40,500 individuals affected by HIV. Then in second place by the province of East Java with 26,052 HIV cases, third place Papua with 21,474 cases and fourth place West Java with 18,727 cases[7].

In Indonesia, efforts to prevent and examine HIV/AIDS cases need to be increased to accelerate the decline in the death rate due to HIV/AIDS [8]. Small steps that must be taken include increasing HIV testing services, namely VCT (Voluntary Counselling Testing) or HIV Test and Counseling [9]. The existence of Cilacap District Regional Regulation No. 2 of 2015 on HIV and AIDS Response in Cilacap District is a concrete step by the government in an effort to prevent the increase in HIV/AIDS cases, including PMTCT programs[10].

The risk of mother-to-child HIV transmission in pregnancy is 5-10 percent, labor 10-15 percent, and postpartum 5-20 percent (De Cock et al., 2000). According to 2017 Pusdatin data, the prevalence of HIV, syphilis and hepatitis B infection in pregnant women was 0.3 percent, 1.7 percent and 2.5 percent, respectively. The risk of mother-to-child transmission for syphilis is 69-80 percent and for hepatitis B is more than 90 percent [3].

In Germany, HIV testing among women and non-LSL, elderly, heterosexual and migrant people with HIV tends to be diagnosed late. However, the rate of late diagnosis in men who have sex with men (MSM) is decreasing. This leads to worsened immunity and increased risk of morbidity and mortality [11].

The 2013 WHO recommendations advocate the use of combination anti-retroviral medication for preventing the transfer of HIV from mother to child [12]. According to Miller's 2017 research, women were more inclined to start ART within 6 months of pregnancy when given the B+ period choice (68% vs. 7%, $p < 0.0001$). Additionally, they saw considerably higher increases in CD4 counts one year after pregnancy compared to those who did not get the B+ option (+172 vs. -5 cells, $p < 0.001$). All pregnant women are eligible for antiretroviral therapy (ART), regardless of their CD4 level, under Option B/B+ [13].

Guidelines for PMTCT is a reference for health workers, program managers, professional groups, and stakeholders related to Prevention of Mother-to-Child Transmission of HIV (Article 1). Maternal transmission HIV may be transmitted by vertical transmission, which includes the processes of pregnancy, delivery, and nursing. The intervention consists of four activities: a) preventing HIV transmission in women of childbearing age, b) preventing unplanned pregnancies in HIV-positive mothers, c) preventing HIV transmission from HIV-positive pregnant women to their babies, and d) providing psychological, social, and care support to HIV-positive mothers, their children, and families [14].

Data on the development of HIV / AIDS and sexually transmitted infections (STDs) quarter 1 in Central Java province is ranked 4th most HIV in Indonesia. The prevalence of the incidence of pregnant women with HIV is as much as 1,590 people. According to a study done in Brazil by Valdilea GV et al and published in October 2015, the prevalence of HIV in women was 6.5% (N=1,439) in Porto Alegre and 1.3% in Porto Alegre. The population of Rio de Janeiro is 3,778. The majority of women in Porto Alegre had testing during childbirth (88.7%), but in Rio de Janeiro, the majority were tested in the postpartum period (67.5%). A total of 144 infants were delivered by 143 mothers who

were infected with HIV. Every infant in each city, save for one, got prophylaxis with oral AZT (Meirelles, Quiteria, Maia Batista:Lopes; Bezerra, Ana Karla:Lima:Costa, 2016).

Further technical elaboration of the MOH Regulation with the issuance of Circular Letter GK/Menkes No. 01/I/2013 appealed to all heads of District/City Health Offices and Directors of all Indonesian Hospitals to make efforts for early detection and prevention of mother-to-child transmission of HIV and AIDS in a comprehensive and continuous manner. [9].

Early detection efforts and HIV and AIDS Transmission Prevention Services as mentioned in the Circular Letter can be done by VCT examination [16]. The Minister of Health stipulates that IHCP services are integrated with MCH, Family Planning and Adolescent Counseling services at every level of health services with gradual expansion and involving the role of the private sector, Non-Governmental Organizations (NGOs) and the community. PMTCT in Maternal Child Health (MCH) is part of the National HIV and AIDS and STI Control Program. Every woman who comes to MCH and adolescent counseling services should get information about IYCF. [17]

The study conducted by Tanya M et al, 2015 on Health system constraints to optimal prevention coverage of mother-to-child HIV transmission programs in Southern Africa reveals that the program's effectiveness is hindered by low rates of acceptance for HIV testing, inadequate provision of maternal nevirapine, and the inability to monitor postnatal mother-baby pairs for HIV testing in infants at 12 months of age. The program's operational efficacy will be significantly diminished by the inadequate execution of these critical components [18].

A study was conducted in Zambia to assess the effectiveness of a quality improvement intervention aimed at preventing mother-to-child transmission of HIV (PMTCT) in defense force facilities. The study included 137 women who were observed during their first antenatal care (ANC) visit. Out of these women, 52% sought ANC within the first 20 weeks of pregnancy, while 19% delayed until the 28th week or later. The overall scores for provider PMTCT abilities in the intervention sites rose from 58% at the beginning to 73% at the conclusion of the study ($p=0.003$). However, in the comparison sites, the scores remained consistent at 52%. Significant improvements were seen at the intervention sites in the areas of family planning counseling (34% to 75%, $p=0.026$), HIV testing during follow-up visits (13% to 48%, $p=0.034$), and HIV/AIDS management during visits that did not include HIV testing (1% to 34%, $p=0.004$). The ANC skills scores of providers in the intervention locations showed an improvement from 67% to 74%, whereas in the control sites, they declined from 65% to 59%. [19].

According to the chief of VCT at Cilacap Hospital, there have been a total of 983 HIV/AIDS cases in Cilacap Regency over the last decade, ranking Cilacap as the third highest in Central Java Province. Case findings in 2019 until the third quarter were 155 cases, this figure was lower than in 2018 which reached 277 cases [10].

A preliminary survey conducted on January 10, 2020 obtained data that currently there are 4 pregnant women with HIV (+) at the VCT clinic and of the 4 pregnant women, 2 of them are not included in the risk group. Based on the description above, it is important to conduct research on perceptions and adherence of pregnant women in the implementation of HIV / AIDS transmission prevention programs at Cilacap Hospital in 2020.

2. METHOD

The objective of this research is to ascertain the perspective and compliance of mothers in the execution of programs aimed at preventing the spread of HIV. This study is a descriptive qualitative investigation using an explanatory research methodology. [20].

The location of this study was at Cilacap Regional Hospital during period 2016 - 2018. The sampling method was purposive sampling followed by snowball sampling [21]. When all aspects of the phenomenon have been successfully explored, the researcher aims to describe the phenomenon as a whole and thorough narrative [22].

Prior to doing the study, the researcher obtained the informant's agreement to participate by having them complete and sign an informed consent form.. Then the data collection techniques were completed through triangulation while the data were analyzed qualitatively which emphasized on meaning rather than generalization [23].

3. RESULTS AND DISCUSSION

This study was conducted starting in February 2020. Participants who participated in this study were 3 pregnant women with HIV positive. The age of participants ranged from 30 - 35 years old. One of the participants is a junior high school graduate while the other two have a high school education background. They are full time housewife, one of whom also opened a snack stall at her house. The three participants have been married twice so the current marriage is their second ones. All participants have been taking ARVs regularly for more than 2 years, so taking ARVs is no longer new to the participants. The researcher analyzed the description of how the mother's experience while taking ARVs from before pregnancy and until when undergoing pregnancy with HIV/AIDS. Researchers identified the description of interviews with the three participants in this study there were 5 themes, namely the mother's response to HIV, support from health workers, implementation of HIV transmission prevention programs during pregnancy, delivery plans and breastfeeding plans.

Mother's Response to Pregnancy

From the results of the interview, it shows that when the mother is HIV (+) positive, the mother feels happy with her pregnancy but is afraid that her baby will be infected.

"When I found out that I was pregnant even though I was like this, I mean I had AIDS, I was happy because I was given a child, but I was also sad. I felt sorry for my child, worried that he would get infected, but what else did the officer at the hospital say, the important thing was not to breastfeed, so it became calmer..." (P1)

"I am happy. Yes, in my heart I immediately prayed that I would be able to take care of my child, because I could be taken away at any time, I wanted to see adult children, because I couldn't bear it, so I took medicine and kept doing what I wanted to do to be healthy..." (P2)

"Yes, I'm happy, but I know that if I get pregnant with HIV, my child will be infected, and I want my child to be healthy, not like me, so I think I have to take medicine and then not breastfeed tomorrow so I don't get infected..." (P3)

All participants said that when they found out they were pregnant they were glad. The participant as an informant also said that even though she was HIV positive, she did not want her child to be as sick as she was. When a woman found out that she is pregnant, the changes that pregnant women will experience for the first time are psychological changes. The mother's response to pregnancy is different. Mother who expects her pregnancy with a mother who does not expect her pregnancy has a different response. Specifically, mothers with primigravida (first pregnancy) are different from multigravida mothers (second pregnancy and so on) and environmental factors, family, and nutritional status of the mother also affect the psychology of pregnant women. The response is also dissimilar if the pregnancy occurs in a healthy mother and a sick mother, especially if the illness has the potential for transmission to the baby. Pregnant women with HIV/AIDS experience physical and psychological changes and have various pregnancy complications both in the mother and the fetus. Pregnant women with HIV have various pregnancy complications including; rupture during labor, birth defects, low birth weight (LBW), premature birth and fetal HIV infection. This results in psychological changes in pregnant women with HIV/AIDS such as ambivalence, feelings of uncertainty about their pregnancy, depression, excessive concern for the fetus, and even post partum blues (Reeder, S. J., Martin, Griffin, K., 2013). Physical symptoms that appear during pregnancy in mothers with HIV / AIDS are perinatal discomfort, including severe fatigue, anorexia, and weight loss (Bobak, Lowdermilk & Jensen, 2005).

Pregnant women have a high risk of contracting [24] In their research, Alison et al. assessed the HIV risk in pregnant and non-pregnant women by analyzing data from five accessible studies. Among women in the African cohort, the risk of mother-to-child transmission (MTCT) was notably greater in those with newly acquired HIV infection compared to those with long-standing infection during the time after giving birth (odds ratio [OR] 2.9, 95% confidence interval [CI] 2.2-3.9) or over the combined period of pregnancy and postpartum (OR 2.3, 95% CI 1.2-4.4). The research determined that pregnancy and the postpartum period are characterized by enduring vulnerability to HIV, with levels comparable to those seen in "high-risk" populations. The risk of MTCT shows an increase in women who are infected. Prioritizing the detection and prevention of HIV transmission during pregnancy and postpartum is crucial for minimizing mother-to-child transmission (MTCT) of the virus. It is crucial to provide the most effective methods of prevention at this time. [25].

Health Workers Support

When the participants were asked about the response of health workers once they know their status as pregnant mothers with HIV, they recalled that the health workers in the hospital provide information very clearly, even health workers monitor these three participants more strictly during pregnancy.

"Yes, I really do, even I feel bad myself. Because in addition to being told how to do it, the officers also often texted me to take medicine and when the medicine runs out, they will definitely call to tell you to take it so that you don't end up not taking it..." (P1)

"Yes, I have been told, reminded constantly by the health worker, for example when it is scheduled to take medicine, the officer texted me informing that the medicine has been ready. He also made it sure that I take the medicine. The point is that if you haven't taken it, they keep contacting me" (P2)

"Yes, the officer told me that because I am with HIV, so when my child was born, I could not breastfeed, so I obeyed, I was told to take whatever medicine was important for my child to be healthy, so I just obeyed." (P3)

Participants received good support from health workers, in terms of information related to the condition of pregnancy with HIV experienced, especially in terms of choosing the correct method of delivery and also social support from health workers [26]. Participants also said that health workers always reminded the schedule of taking medication and the importance of taking drugs (ARVs) as an effort so that the baby is not infected and healthy. This makes participants feel optimistic that they will be able to give birth to a healthy baby even though they are pregnant with HIV. Poor treatment adherence can be attributed to several factors, including a discordant rapport between HIV patients and healthcare providers, the complexity of medication regimens, forgetfulness, depression, educational attainment, limited patient comprehension regarding the drugs' administration and potential toxicity, and patients' physical incapacitation preventing them from swallowing medications.

Health workers play an important role in providing support in the form of encouraging and facilitating families to support each other. In this section, Shelton explains that another support that can be provided to families is inter-family support. This element was originally applied to the care of children with special needs such as Down syndrome or autism. Other professionals facilitate families to get support from other families who also have similar problems regarding their child. The purpose of this familial support is to provide reciprocal assistance and foster amicable connections, facilitate the sharing of information on the child's state and well-being, and effectively use and enhance the available service systems for the child's care requirements [27].

Healthcare professionals' endorsement of Prevention of Mother-to-Child Transmission (PMTCT) is crucial. Research by Doudou et al, in 2015 in South Africa conducted a study on why women did not return to check CD4 count results at Embhuleni Hospital, Mpumalanga, South Africa, and the results revealed that participants were not informed about the PMTCT process; poor service delivery from health practitioners; unprofessional health service practitioner behavior; drug shortages at health facilities; fear of social stigma, and poor socioeconomic conditions of patients [28].

Implementation of HIV/AIDS Prevention Program

In your opinion, how to protect your baby from being infected?

"Yes, I have to take the medicine regularly and HIV can be transmitted through pregnant women to their babies, so yes, I can't give birth normally and I can't breastfeed. ..." (P1)

"Yes, I have to be more diligent in taking medicine, yes I get nauseous after taking it, but what else can I do, because I want my child to be like me." (P2)

"Yes, in my opinion, what is really important is to prevent it, especially if you are pregnant, HIV can be transmitted while breastfeeding, so it's okay if I don't breastfeed my child later. The important thing is that my child is healthy" (P3)

In the HIV/AIDS transmission prevention program, all participants said that in order for the baby not to be infected, the mother must take medicine regularly during pregnancy, then give birth in the hospital by cesarean section and not breastfeed the baby when it is born [29].

In pregnant women, HIV poses a significant risk to both the mother and the fetus, since transmission may pass from the mother to the fetus. Vertical transmission, namely from mother to newborn, accounts for almost 90 percent of HIV transmission in children. The majority of cases are seen in youngsters aged 5 and below.

The risk of HIV transmission from mother to baby occurs in pregnancy 5-10 percent, labor 10-15 percent, and postpartum 5-20 percent (De Cock et al., 2000). According to 2017 Pusdatin data, the prevalence of HIV, syphilis and hepatitis B infection in pregnant women was 0.3 percent, 1.7 percent and 2.5 percent, respectively. The risk of transmission from mother to child, for syphilis is 69-80 percent and for hepatitis B is more than 90 percent [30]. A study conducted by Olumuyiwa et al (2018) in Sub-Saharan Africa investigated the adherence of pregnant women to antiretroviral therapy, specifically focusing on the factors that enable or hinder treatment adherence among HIV-positive pregnant women. The findings of the study revealed that stigma, transportation expenses, food scarcity, and the decision to disclose or not disclose their HIV status to partners, families, and communities can significantly impact the extent to which these women adhere to the prescribed antiretroviral drugs during pregnancy. Moreover, the research demonstrated a substantial correlation between awareness of one's HIV status, whether obtained before to or during pregnancy, and adherence to treatment. The absence of adequate socialization and education on HIV/AIDS by healthcare professionals might have a detrimental impact on the overall well-being [4]. Women who were aware of their HIV status before to becoming pregnant had high levels of adherence. The HIV infection status during pregnancy is linked to a lack of adherence to antiretroviral therapy (AR) [31].

Medication Adherence During Pregnancy

During this pregnancy, did you always take medicine as recommended by health workers?

"Yes, I just followed the advice from the doctor and from the officers, like the mba too..." (P1)

"Yes, yes mba, I want my children not to be like me, I also want to be able to see my children grow up, yes even though I am like this, my children should not be like this, mom.... so yes, I take the medicine regularly, I haven't finished it yet, sometimes my husband has taken it to the hospital..." (P2)

"Yes, since I was told that I was like this, I have started taking medicine regularly. Anyway, until I make a schedule, the time is always the same, at 4 pm." (P3)

Success in providing HIV therapy can be done in clients who are expected to adhere to taking drugs at least 95% according to the dose. Adherence to therapy is a situation where patients comply with their treatment on the basis of their own awareness [18]. Compliance describes the patient's behavior in taking medication correctly about the dose, frequency, and time so that the patient is obedient, the patient is involved in deciding whether to drink or not. Antiretrovirals (ARVs) are often prescribed for maternal health and to minimize the transfer of HIV-1 from mother to child. However, the effectiveness of these medications may be compromised by inadequate adherence [32]. A US research found that pregnant women who adhered perfectly to the prescribed regimen had a reduced viral load. Women who started antiretroviral therapy (ARVs) during pregnancy had a considerably greater probability of perfect adherence ($P < 0.01$). Additionally, those who did not have AIDS ($P = 0.02$), never skipped prenatal vitamins ($P < 0.01$), never used marijuana ($P = 0.05$), or consistently experienced happiness ($P < 0.01$) also showed a higher chance of perfect adherence. The findings of this research indicate that adherence to antiretroviral therapy (ARVs) is much higher throughout the antepartum period. However, overall adherence rates remain low. There is a need for interventions aimed at enhancing adherence throughout pregnancy. [33].

Isaac Boadu et al, A research conducted in 2023 found that it is crucial to maintain high levels of adherence to antiretroviral medication (ART) in order to restrict the fast reproduction of the virus, prevent drug resistance, and minimize viral transmission. Nevertheless, the act of following the prescribed Antiretroviral Therapy (ART) continues to be a significant obstacle in effectively treating patients with HIV/AIDS in Ghana. The research included a collective of 4,436 people. The aggregated estimate of adherence to antiretroviral therapy (ART) was 70% with a confidence interval (CI) of 58-81%. The aggregated estimation of ideal adherence to antiretroviral therapy (ART) among individuals with HIV in Ghana falls below the recommended threshold of 95% necessary to achieve viral suppression. In order to attain the UN Sustainable Development Goals and the UNAIDS "95-95-95" objectives, it is imperative to concentrate on enhancing adherence interventions among those living with HIV/AIDS [34].

Many factors contribute to the adherence of pregnant women in implementing HIV/AIDS treatment programs. One of them is partner involvement. The research done by Tiwonge et al in 2015 examined the impact of partner engagement on the effectiveness of antiretroviral therapy (ART) and adherence to the B+ option program. The research findings indicated that receiving ART reminders from partners was linked to improved retention and adherence to therapy one month after initiation. Retention was operationally defined as the act of moms visiting an

HIV clinic for a follow-up appointment within 24 hours after depleting their pill supply. Adherence was defined as the use of antiretroviral therapy (ART) at a rate of 95% or above, determined by the quantity of tablets consumed [35].

Furthermore, This research identifies many obstacles and facilitating variables influencing adherence among pregnant women receiving antiretroviral therapy (ART) in sub-Saharan Africa. The primary obstacles are apprehension over the disclosure of one's HIV infection status to both partners and family members, as well as the presence of stigma and prejudice. The main factor that drives women's adherence to ART is women's knowledge [31].

Delivery and Breastfeeding Plans

What is your plan to give birth?

"I planned to have cesarean section because the officer said it would make the baby healthy, because I don't want my child to be like me." (P1)

"Oh, when I was giving birth, the doctor told me to just have a cesarean section so that it wouldn't spread to my child, so yes, the birth couldn't be normal and I couldn't breastfeed." (P2)

"At the hospital ma'am, because the doctor also told me to, he said so that my baby would be healthy," (P3)

All participants understood that in an effort to prevent HIV transmission from pregnant women to their babies, the most appropriate delivery method was caesarean section. Mothers diagnosed with HIV most often choose for caesarean section as a birth method because to its proven effectiveness in preventing transmission of HIV to the newborn. This aligns with study findings on the advantages of caesarean section in comparison to vaginal birth for women who are HIV positive. Research has shown that planned caesarean delivery may decrease the likelihood of transmission from mother to infant by as much as 80%. Furthermore, if elective caesarean section is combined with the administration of antiretroviral therapy, the risk can be further lowered. As high as 87% (Boer, England, Godfried, Thorne, 2010). The most important factors influencing the risk of HIV transmission from mother to child are the HIV levels (viral load) in the mother's blood before or during delivery and the HIV levels in breast milk when the mother breastfeeds her baby (Ministry of Health, 2011).

Do you have plans to breastfeed your baby?

"Yes, I really want to, but I can't, it could be contagious, so I don't breastfeed, formula milk is the most possible..." (P1)

"I was told by the officer that I'm not breastfeeding my child, so I just obeyed." (P2)

"HIV can be transmitted while breastfeeding, so it doesn't matter if I don't breastfeed my child tomorrow. The important thing is that my child is healthy..." (P3)

Based on the results of the interviews, it was concluded that all participants had a strong desire to be able to breastfeed their babies, but would not breastfeed their babies because they followed the advice of health workers in an effort to prevent HIV transmission from mother to baby. The most important factors influencing the risk of HIV transmission from mother to child are the HIV levels (viral load) in the mother's blood before or during delivery and the HIV levels in breast milk when the mother breastfeeds her baby (Ministry of Health, 2011). This is in accordance with the results of research by Oladokun, Brown and Osinusi (2010) in Nigeria on 241 HIV positive women regarding feeding choices for babies of HIV positive mothers. The choice of giving formula milk in 223 (93.5%) and 9 (3.7%) mothers chose to breastfeed and give formula milk alternately. The majority of reasons for giving formula milk compared to exclusive breastfeeding is because of the risk of the baby contracting HIV through breastfeeding [36] [37] [25]

Herek et al., (2013) Disclosed findings from their investigation in the United States indicate that between 40 to 50% of individuals hold the belief that HIV may be communicated by sneezing or coughing, sharing drinking glasses, and using public bathrooms. Additionally, 20% of respondents think that HIV can be transmitted through cheek-to-cheek kissing. The way individuals see people living with HIV/AIDS (PLWHA) will significantly impact their attitudes and behaviors towards them. Attitudes towards people living with HIV/AIDS (PLWHA) are influenced by values such as shame, blame, and judgment. [38] [39].

The PMTCT program must be supported by the Health Center as implementing staff in efforts to prevent HIV transmission from mother to child [40] [30]. Based on the results of research on midwives' perceptions and attitudes towards preventing mother-to-child transmission of HIV by interviewing forty respondents, the results of

the research were that seventy percent of midwives had a positive perception of PMTCT HIV services and 85% had a positive attitude towards providing PMTCT HIV services [41].

The study conducted by Thana et al. (2016) examined the relationship between risk perception and use of HIV services among university students in Thailand. The findings demonstrated that implementing an HIV preventive outreach program with HIV testing and counseling (HTC) was both practical and effective in identifying the risk of HIV transmission and infection among students. Nevertheless, there is a need for interventions aimed at enhancing the use of HIV testing and counseling (HTC), as well as improving the perception of HIV risk and the process of connecting individuals to appropriate treatment [42].

4. CONCLUSION

The conclusion in this study is that pregnant women with HIV have good perceptions and adherence regarding the implementation of HIV/AIDS transmission prevention programs. This is supported by good information support from health workers, so that pregnant women carry out programs to prevent HIV transmission from mother to baby. All participants will give birth by cesarean section and will not provide breast milk.

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