



Factors Associated with the Use of HIV Screening in the PMTCT Program by Pregnant Women

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ABSTRACT

Introduction: The Government continues to expand the number of VCT services (KTHIV) in order to increase HIV testing coverage, as mandated by Ministry of Health Decree No. 74 of 2014 on the implementation of HIV counseling and testing guidelines. The purpose of this study is to ascertain the factors that influence the use of HIV testing in health centers participating in the PMTCT program in the City of Medan in 2015. **Method:** The study used an observational design in conjunction with explanatory research and a purposive sampling technique. This research sampled as many as 91 pregnant women's. The results of this study will be analyzed multivariate using the multiple logistic regression test. **Result :** The findings indicate that employment of pregnant women ($p = 0.031$), knowledge ($p = 0.001$), attitude ($p = 0.001$), and family support ($p = 0.003$) are all associated with pregnant women's actions during HIV examinations. Pregnant women's employment ($p = 0.027$), knowledge ($p = 0.039$), attitude ($p = 0.004$), and support from health care providers ($p = 0.023$) all influence the steps pregnant mothers take to obtain an HIV test. The primary factor preventing pregnant women from conducting HIV tests at the Padang Bulan public health office is their negative attitude toward HIV testing ($Exp = 7.167$). **Conclusion:** The research findings indicate that Padang Bulan public health office prenatal care and HIV testing services should be enhanced. Padang Bulan public health office makes people feel at ease and cared for, which is why those who have previously used the prenatal care and HIV testing services will return to perform the examination. As a responsible program, the Medan City Health Department's Prevention of HIV Transmission from Mother to Child should establish collaborations with non-governmental organizations (NGOs) that work on HIV / AIDS.

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1. INTRODUCTION

HIV/AIDS is an infectious disease caused by infection with the Human Immunodeficiency Syndrome Virus, which attacks the immune system. Due to the fact that the infection results in a decrease in the patient's body resistance, it is extremely easy for the patient to contract additional diseases. Prior to entering the AIDS phase, the patient was diagnosed with HIV. HIV/AIDS is a public health problem that is inextricably linked to a variety of sociocultural issues. (Kementrian Kesehatan Republik Indonesia, 2018). The government continues to expand HIV Counseling and Testing (KTHIV) services in order to increase HIV testing coverage under the Minister of Health of the Republic of Indonesia's Regulation No. With the HIV Counseling and Testing (KTHIV) service, it is hoped that more people will become aware of their HIV status and will be able to access necessary additional services immediately (Kementrian Kesehatan Republik Indonesia, 2018; Nyoko, 2016)

Currently, North Sumatra Province is ranked seventh for the highest number of HIV cases, namely 1,603 cases, while in 2013, there were 1,337 HIV cases in North Sumatra Province (Kementrian Kesehatan Republik Indonesia, 2018). When viewed from the characteristics of patients, it is known that the most sufferers are men, around 75% and women, namely 25%. The most common transmission source is through heterosexual intercourse as much as 65% and needle users as much as 26%. The transmission percentage from mother to baby (parenteral) increased from 0.6% in 2007 to 1.6% in 2012. There are already two PMTCT services in Medan, at the Haji Hospital and the Adam Malik Hospital, and 11 PMTCT services at 11 health centres. This indicates that the PMTCT program has begun implementation. According to a 2014 report by the Medan City Health Office, only 1,673 pregnant women (4 percent) of the 35,570 pregnant women who had prenatal check-ups in 11 health centres in Medan City received PMTCT services, and 1 The absence of pregnant women participating in the PMTCT program increases the risk of perinatal HIV/AIDS cases (Kementrian Kesehatan Republik Indonesia, 2018).

HIV testing on the initiation of health workers and counseling (TIPK) is an integrated HIV testing and counseling service in health facilities or testing and counseling initiated by health workers when patients come seeking health services (Farkhanani, 2016). Preventing unplanned pregnancy in HIV women can be done using "double protection" contraceptive

methods and condoms. HIV patients who use double protection contraception is still low. Most sufferers only use condoms as a preventive measure (Aini, 2017).

Giving ARV to HIV positive pregnant women can optimize the mother's health condition by reducing HIV levels as low as possible. The risk of transmission increases after PMTCT ART stops at six months of gestation, supporting the WHO recommendation that ART is lifelong (Bispo, 2017). Pregnant women with HIV aged 23-30 years who gave birth to babies with low birth weight were taller (Jao, 2017). Xiao (2015) research results show that HIV-infected pregnant women have a higher risk of having low birth weight babies or babies with preterm delivery than women who are not infected with HIV.

The results of research from Sisayahid (2017) found that the low adherence to taking ARVs was due to the low public understanding of the benefits of ARVs. It is the same with low VCT because pregnant women do not well understand the benefits of VCT. The results of Tumangke (2017) research show that pregnant women who prefer to see a practising doctor will prevent VCT screening from the government because doctors do not require VCT. The implementation of PMTCT is solely to break the chain of HIV transmission from pregnant women to their children to be born free from HIV disease.

Based on a preliminary survey conducted by the author by conducting interviews with 10 pregnant women at the public health center that have the PMTCT program in Medan, it is known that as many as 6 people did a pregnancy check but did not participate in the PMTCT program at the public health center on the grounds that pregnant women could not be exposed to HIV/AIDS because they 2 people are loyal to have sexual relations with only one partner and pregnant women who want to take part in the PMTCT program but their husbands don't allow 2 people, fearing the cost is too expensive for 1 person and the midwife does not offer to screen 1 pregnant woman Pregnant women who did prenatal check-ups and participated in the PMTCT program stated that the reason for participating in the PMTCT program was to only follow the advice of family and health workers as many as 2 people, to prevent HIV transmission from pregnant women to their babies and ensure that 1 person was not exposed to HIV and only followed friends and because the cost is not expensive as much as 1 person.

2. METHOD

This type of research is analytic by using a cross-sectional design approach. The research was conducted at the Padang Bulan Health Center because the Padang Bulan Health Center is a health centre that has an STD clinic and provides PMTCT services. The study was conducted from November 2015 to February 2016.

The sample of this study was partly pregnant women who did a pregnancy check at the Padang Bulan Health Center because Padang Bulan Health Center has an STI clinic and has a PMTCT program for HIV testing in pregnant women. After the calculations as above, the sample size was obtained as many as 91 third trimester pregnant women at the Padang Bulan Health Center. The sampling method for this study was purposive non-random sampling at Padang Bulan Health Center, while the sample criteria in this study were; Third-trimester pregnant women, have you had a previous pregnancy test at a health service facility; willing to be interviewed.

Bivariate analysis was carried out to determine the relationship of each independent variable which included maternal age, maternal parity, maternal knowledge about PMTCT, attitudes about PMTCT, distance to health centres, perceptions of health workers, reference groups, perception of illness and the actions of pregnant women in the use of the PMTCT program. At the health centre in Medan City. The analytical technique used is the chi-square test with a 95% confidence level. Calculations are carried out with relative risk figures to see the possibility of the emergence or development of behaviour associated with risk factors. Calculation of relative risk for a cross-sectional study design is reflected by the prevalence ratio (PR).

3. RESULT

The chi-square test will be used to see the relationship between the independent and dependent variables.

Table 1 Relationship Between Employment and Actions of Pregnant Women in Conducting HIV Tests

Variable	P	PR	PR 95% CI
Working	0,031	1,611	(1,040-2,493)
Knowledge	<0,001	2,418	(1,431-4,086)
Attitude	<0,001	3,555	(1,562-8,084)
Family Support	0,003	0,442	(0,235-0,834)

This study indicates that work, knowledge, attitudes, and family support are related to the actions of pregnant women in carrying out HIV testing at the Padang Bulan public health center.

Table 2 Most Dominant Factors Related to the Actions of Pregnant Women in Conducting HIV Tests

Variabel	P	Exp (β)
Age	0.490	1.486
Working	0.027	2.809
Family Income	0.962	1.027
Knowledge	0.039	2.491
Attitude	0.004	7.167
Family Support	0.174	0.428
Support Health Worker	0.023	0.259
<i>Constant</i>	0.229	0.102

The results of the logistic regression test above show that the attitude variable (p-value = 0.004), the work of pregnant women (p-value = 0.027), knowledge (p-value = 0.039) and the support of health workers (0.023) affect the actions of pregnant women in carrying out HIV testing. at the Padang Bulan Health Center. The results of this study show that the mother's age variable has an exp () value of 1.486, work has an exp (β) value of 2.809, income has an exp (β) value of 1.027, knowledge variable has an exp (β) value of 2, 491. This study also indicates that the most dominant variable on the actions of pregnant

women in carrying out HIV testing is the attitude variable because it has the largest exp (β) value, which is 7.167.

4. DISCUSS

Relationship between Knowledge and Actions of Pregnant Women in Conducting HIV Tests at Padang Bulan Health Center

According to Fauk (2017), HIV transmission and prevention among MSM have also been identified as factors that contribute to MSM involvement in Unprotected Anal Sex (UAS) and Injecting Drug Use (IDUs), thereby increasing HIV transmission. According to Kou (2016), stigma and discrimination make plague sufferers double. Stigma also hinders efforts to prevent and cure a particular epidemic, in this case, HIV. The statement reaffirms that one of the main challenges in achieving universal access to HIV prevention, care and treatment services.

The chi-square statistical test resulted in a p-value of 0.001, indicating that there is a relationship between pregnant women's knowledge and their actions when it comes to HIV testing at the Padang Bulan Health Center. Additionally, this study demonstrates that pregnant women with adequate knowledge have a 2,418-fold greater chance of taking HIV tests than pregnant women with insufficient knowledge. The exp value (β) for the knowledge variable was 2.491, indicating that mothers with adequate knowledge are estimated to be 2.491 times more likely to conduct HIV testing than pregnant women with inadequate knowledge.

Rokhmah (2015), knowledge is the domain of behaviour; the higher a person's knowledge level, the more lasting the behaviour. Mulyani (2016) said pregnant women should know and understand the benefits and purposes of prenatal care and HIV testing, so pregnant women will behave according to what they know. According to Herlani (2016), pencegahan HIV akan semakin baik jika subjek memiliki pengetahuan yang baik. Umam (2015) research results show that in the Voluntary Counseling and Testing (VCT) service program, patients who have the highest risk of HIV/AIDS based on data from their visits to VCT clinics are people who have higher education and good knowledge.

According to Devkota (2017), counselling has a positive impact on pregnant women's knowledge, attitudes, and practices towards treatment, and counselling can encourage safe treatment during pregnancy. Even those who are HIV negative can still

contribute to preventing the transmission of HIV from mother to baby. With counselling, women will understand more about maintaining their behaviour so that they remain HIV negative. The results of Myer (2017) study suggest that typically, pregnant women who start antiretroviral therapy (ART) late in labour with a high viral load appear to be less likely to achieve viral suppression. According to Rosala-Hallas (2017), the intervention of pregnant women and infants should be targeted to increase children's growth. HIV-exposed, uninfected children (HEU) had lower initial growth than HIV-unexposed, uninfected children (HUU).

The results of the Saputra (2016) and Fatmala (2016) research show that the implementation of counselling about the dangers and ways of preventing AIDS for the community has gone quite well. Because it can provide understanding to people who are at high risk of contracting HIV and AIDS and get a positive response from transgender groups and sex workers who have attended counselling to find out how to prevent HIV and AIDS

According to Sakinah (2015), counselling and proactive activities from health facilities cadres also play a very important role in increasing the success of program coverage. Cadres should do more frequent counselling and education about the dangers of HIV, the benefits of VCT, and the benefits of ARVs for pregnant women. Based on the research, it was found that the active role of cadres and counselling significantly increased the knowledge and attitudes of pregnant women and increased the coverage of Ante Natal Care. According to Sofiyanti (2016), health service agencies must improve integrated antenatal care services, especially related to counselling and offering HIV tests. Providing counselling and offering HIV testing at routine pregnancy check-ups will reduce the stigma against HIV.

Pregnant women who have poor knowledge tend not to do an HIV test. Pregnant women who lack knowledge tend to be pregnant women who are <20 years old and have elementary and junior high school education. This lack of knowledge can also occur because some pregnant women state that they do not participate in various counselling activities about HIV and HIV testing. Patients who came to the Padang Bulan Health Center to do an HIV test not only came from the Padang Bulan Health Center, but ten patients wanted to take an HIV test from other health centres; this was because they were ordered by their public health centre officers (Polonia Health Center and Tuntungan Health

Center).) to do an HIV test at the Padang Bulan Health Center after their previous pregnancy checks at the public health centre they visited.

The Relationship between Attitudes and Actions of Pregnant Women in Conducting HIV Tests at Padang Bulan Health Center

Implementation of PMTCT in maternal and child health services can reduce maternal mortality with HIV. The Independent Practice Midwife Service is one of the maternal and child health service facilities in Indonesia (Ariningtyas, 2017). According to Wahyuni (2017), prevention efforts at this stage increase knowledge and attitudes of HIV among women. People with poor knowledge and attitudes about HIV will increase stigma and discrimination against PLWHA.

The chi-square statistical test resulted in a p-value of 0.001, indicating a relationship between pregnant women's attitudes and behaviors regarding HIV testing at Padang Bulan Health Center. Additionally, this study demonstrates that pregnant women who have a supportive attitude have 3,555 times the likelihood of taking an HIV test as pregnant women who do not have a supportive attitude. The exp value (β) for the attitude variable was 7.167, indicating that pregnant women who support HIV testing in pregnant women are estimated to be 7.167 times more likely to take the HIV test. HIV testing is more prevalent among pregnant women who oppose HIV testing than it is among pregnant women who do not oppose HIV testing.

According to Sofiyanti (2016), the gap between pregnant women's knowledge and attitudes toward HIV testing must be bridged through supportive policies. Pregnant women's knowledge of the PMTCT program cannot yet be used to benchmark pregnant women's attitudes toward HIV testing. This is demonstrated by the insufficient coverage of HIV testing for pregnant women.

This negative attitude is based on the fear of a positive HIV test result caused by feelings of shame about HIV status, especially if it turns out to be positive, fearing the societal stigma associated with HIV testing and HIV positive test results. Many respondents think that their husbands and families do not have to know about HIV and PMTCT due to the respondent's perception that ANC visits are an activity carried out by

women, so they are afraid that taking an HIV test will make their families and husbands angry.

Relationship between Family Support and Actions of Pregnant Women in Conducting HIV Tests at Padang Bulan Health Center

Midwives mostly carry out the PMTCT program as a mother-to-child HIV prevention program. Midwives can provide counselling and support to women who are not infected with HIV and are already infected with HIV (Ningsih, 2018).

The results of the cross-tabulation between family support and the actions of pregnant women in carrying out HIV tests at the Padang Bulan Health Center showed that from 31 respondents who had supportive families, it turned out that eight respondents (25.8%) were pregnant women who took HIV testing. In comparison, from 60 respondents, 35 pregnant women (58.3%) had unsupportive families who took an HIV test.

The results of the chi-square statistical test obtained $p\text{-value} = 0.003$, meaning that there is a relationship between family support and the actions of pregnant women in carrying out HIV tests at the Padang Bulan Health Center. This study also indicates that pregnant women who have supportive families have 0.442 times the possibility of taking an HIV test compared to pregnant women who have families who do not support HIV testing.

Halim (2016) research results show that the husband's involvement is influenced by a very important component for ANC services, especially to improve strategies for preventing mother-to-child transmission of HIV. The results of Purwanthi (2015) research show that families who provide support to pregnant women when the HIV test is positive make pregnant women take the next HIV test. According to Isni (2016), there is a fear that if the family finds out the results of the HIV test and suffers from being HIV positive, they will be ostracized in the family; there are still many people who do not know about HIV, so they have a bad stigma against people living with HIV.

The implementation of HIV AIDS prevention services from mother to child in the three cities studied has not been able to run properly, which is because there is no written policy from the local government. Funding is insufficient because the APBD funds allocated are not specifically for PMTCT activities but are also shared with other HIV-

AIDS activities. Likewise, monitoring and evaluation carried out by the health office to the public health centre and other service units are still accompanied by non-specific PMTCT activities (Sugiharti, 2016).

According to Ningsih (2018), further psychological, social, and health care support HIV-infected mothers and infants and their families. Some BPM midwives have not provided support to HIV-infected mothers or babies. Treatment of mothers living with HIV is carried out in hospitals, midwives do not handle it directly. The midwife can only provide support to the mother if the mother discloses her status to the midwife. In addition, care for people with HIV is centred in large hospitals.

Numerous pregnant women undergo HIV testing despite their families' opposition; this is because some pregnant women have received socialization and education about the importance of HIV testing from health workers at the Padang Bulan Health Center. Health promotion and HIV control officers at Padang Bulan Health Center in the last four months have been very intense in conducting counselling and socialization about HIV test examinations in the Padang Bulan Health Center work area. This is reinforced by several pregnant women who have also received information and counselling about HIV testing during pregnancy tests. Although pregnant women do not get full support from their families in carrying out HIV tests, they still do HIV tests because they have received information and know the importance of HIV testing for the benefit of mothers and their babies in the future.

5. CONCLUSION

1. Factors related to the actions of pregnant women in HIV testing at the Padang Bulan Health Center, namely the work of pregnant women, knowledge, attitudes, family support related
2. Factors that are not related to the actions of pregnant women in HIV testing at Padang Bulan Health Center, namely maternal age, maternal parity, family income, education, availability of health services, perception of illness, symptoms of illness.
3. Pregnant women's work, knowledge, attitudes, and support from health workers all influence their actions during HIV testing at the Padang Bulan Health Center.
4. The most important factor influencing pregnant women's actions when it comes to HIV testing at the Padang Bulan Health Center is their attitude toward HIV testing (exp value () of 7.167).

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