The Relationship Level Of Knowledge And Attitude Of Mothers During Pregnancy To Mother's Behavior At The Time Of HIV Pretest In The HIV TKIP Program At Puskesmas Kotabaru 2023

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ABSTRACT. Backgrounds: Based on the guidelines for Integrated Ante Natal Care pregnancy checks issued by the Minister of Health at every level of MCH services, health workers in health care facilities are required to test all pregnant women for HIV, syphilis and hepatitis B at least once as part of routine laboratory examinations during pregnancy. antenatal checks at visit 1 (K1) until just before delivery. Research objectives: To determine the relationship between the level of knowledge and attitudes of pregnant women with their behavior towards the HIV pretest at the Kota Baru Health Center. Type of research: Research conducted in June. The sample in this study was 60 samples in the Kota Baru Health Center area. This study uses a questionnaire and checklist with a quantitative approach method with a cross-sectional research design. Total sampling technique. The results of the study: The distribution is known from 60 respondents, the majority of respondents have good knowledge about preventing mother to child transmission as many as 47 people 78.3%, the less good there are 13 people 21.7% distribution of attitudes from 60 respondents, the negative value is less than 20 regarding prevention of mother to child transmission, namely as many as 12 or 20.0% of respondents, while positive values of more than 20 were 48 students or 80.0% of distribution of the behavior from 60 respondents, who participated in preventing mother to child transmission, namely as many as 41 68.3% of respondents, who did not participate in preventing mother to child transmission, namely 19 or 31.7% of respondents. Based on the results of the chi-square statistical test, it is obtained that the p value = 0.002 is smaller than the value α = 0.005. Research conclusion: There is a significant relationship between knowledge and the use of HIV testing at the Kota Baru Health Center, while the results of the chi-square statistical test obtained p=0.006, meaning that there is an attitude relationship between knowledge and the use of HIV testing at the Baru City Health Center.

Keywords: Knowledge, Attitude, HIV Test, Pregnant Women

INTRODUCTION

Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) are the main problems in achieving the Sustainable Development Goals (SDGs) in the third goal indicator. This is because HIV has a devastating impact, not only on public health, but also the world and every country (WHO, 2020).

According to UNAIDS (United Nations Program HIV/AIDS) data released in 2018, the total number of people living with HIV worldwide is 36.9 million, consisting of 35.1 million adults and 1.8 million children. Where 18.2 million were women aged over 15 years and there were 1.1 million pregnant women with HIV in 2017, if not intervened early, it is likely that more pregnant women infected with HIV will give birth to babies with HIV (UNAIDS, 2018).
Meanwhile in Indonesia, based on the results of reports on the development of HIV/AIDS and STIs (Sexually Transmitted Infections) at the General Directorate of Disease Prevention and Control, the Ministry of Health of the Republic of Indonesia in 2018 the cumulative number of HIV sufferers up to 2017 was 280,623 and AIDS cases were 102,667. If based on status or occupation, housewives are in second place with a total of 14,721 people (Ministry of Health, 2018) and as many as 1,502 pregnant women who take part in HIV transmission prevention services from mother to child (Kementrian Kesehatan RI, 2018).

Data from the Jawa Barat Health Office for 2021 recorded an additional 5,444 HIV positive people. As many as 4,165 people are now routinely undergoing treatment. Meanwhile, in the first semester of 2022 (January-June), an additional 3,744 cases were recorded. A total of 2,850 people have undergone routine treatment. 2021. Data for the top 5 regions in West Java recorded additional positive HIV cases, namely Bandung City (869), Bogor Regency (429), Bekasi (390), Bogor City (388) and Indramayu Regency (353). While during January-June 2022, the top five are Bandung City (410), Bogor Regency (365), Bekasi City (365), Indramayu Regency (252) and Bekasi Regency (217).

Based on incorrect data, Karawang Regency has 1 Hospital that provides Support and Treatment Care (PDP) for patients living with HIV AIDS and there are 50 health centers and 1 prison as a place for HIV testing services. While the number of targets who are at risk and who have to take an HIV test this year is 51,488 people with the highest target being pregnant women, namely 45,032 people. However, the achievement of screening or testing for HIV in the target population had only reached 35.5% until October 2020.

The process of receiving knowledge about HIV by pregnant women certainly requires time and the right method. Based on the above, there are many influencing factors that play a very important role in the acceptance of HIV testing, which has an impact on changing behavior including delivery choices, infant nutrition and immunization (Arniti, Wulandari, & Wirawan, 2018). This is also supported by several studies on changes in the behavior of sex workers by increasing knowledge about HIV transmission to increasing HIV prevalence (Omori & Raddad, 2016) as well as research on attitudes, knowledge and behavior of mothers related to the prevention of HIV transmission from mother to child after childbirth in mothers with HIV revealed that low knowledge resulted in failures in disclosing the HIV status of pregnant women and resulted in higher vertical transmission of HIV from mother to child (Dlamini & MokobotoZwane, 2019).
HIV testing for pregnant women at the Kota Baru Health Center is a mandatory examination that is carried out on the first visit where during this visit pregnant women are first given an explanation about HIV testing then followed by signing an informed consent.

**RESEARCH METODHS**

This research is an analytical quantitative observational study with a cross sectional approach. This research was conducted at the Kota Baru Health Center, Kotabaru District, Karawang City. The population in this study were all TM 1 and 3 pregnant women who would carry out HIV testing in integrated ANC at the Kotabaru Health Center as many as 60 people. The sampling technique is Nonprobability sampling with consecutive sampling. The instrument used in this study was a questionnaire using closed statements and checklists. For primary data obtained directly from the questionnaire. Univariate analysis using the dependent variable and independent variables. Bivariate data analysis in this study used Chi square with the help of SPSS.

**RESEARCH RESULT**

1. **Univariate analysis**

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Frequency</th>
<th>percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not enough</td>
<td>12</td>
<td>21.0</td>
</tr>
<tr>
<td>Good</td>
<td>47</td>
<td>75.8</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>96.8</td>
</tr>
</tbody>
</table>

The table above shows that the distribution is known from 60 respondents, the majority of respondents have good knowledge about preventing mother to child transmission as many as 47 people (78.3%) while the knowledge of respondents who are not good is 13 people (21.7%).

Distribution based on the characteristics of pregnant women's attitudes towards HIV testing can be seen in the table below:

**Distribution Pretest attitudes of pregnant women towards HIV testing**

<table>
<thead>
<tr>
<th>Attitude</th>
<th>frequency</th>
<th>percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negatives &lt;20</td>
<td>12</td>
<td>19.4</td>
</tr>
<tr>
<td>Positive &gt;20</td>
<td>48</td>
<td>77.4</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>96.8</td>
</tr>
</tbody>
</table>
The table above shows that the distribution of 60 respondents, those with a negative value of less than 20 regarding the prevention of mother-to-child transmission are as many as 12 or 20.0% of respondents, while those with positive values of more than 20 are 48 respondents or 80.0%

**Distribution of pregnant women's pretest behavior towards HIV testing**

At the Kota Baru Health Center in Karawang 2023

<table>
<thead>
<tr>
<th>Behavior</th>
<th>frequency</th>
<th>percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not do</td>
<td>19</td>
<td>30.6</td>
</tr>
<tr>
<td>Do</td>
<td>41</td>
<td>66</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>60</strong></td>
<td><strong>96.8</strong></td>
</tr>
</tbody>
</table>

The table above shows that the distribution of 60 respondents who participated in preventing mother-to-child transmission was 41 or 68.3% of respondents, while those who did not participate in preventing mother-to-child transmission were 19 or 31.7% of respondents.

**Bivariate Analysis**

Bivariate analysis of the relationship between knowledge and behavior of mothers to check for HIV

**Relationship Between Knowledge of Pregnant Women about PPIA and Utilization of HIV Tests at the Kota Baru Health Center in Karawang 2023**

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Scope of knowledge &amp; behavior</th>
<th>Total</th>
<th>Or</th>
<th>p.s</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>Not enough</td>
<td>13</td>
<td>21.0</td>
<td>19</td>
<td>30.6</td>
</tr>
<tr>
<td>Good</td>
<td>47</td>
<td>75.8</td>
<td>41</td>
<td>66.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>60</strong></td>
<td><strong>96.8</strong></td>
<td><strong>60</strong></td>
<td><strong>96.7</strong></td>
</tr>
</tbody>
</table>

The results of the analysis of the relationship between knowledge of pregnant women about preventing mother-to-child transmission by utilizing HIV testing at the Kota Baru Karawang Health Center in 2023 showed that out of 60 respondents, there were 47 respondents (75.8%) with good knowledge. Based on the results of the chi-square statistical test, p value = 0.002 is less than the value α = 0.005 so it can be concluded that there is a significant relationship between knowledge and the use of HIV testing at the Kota Baru Health Center
Relationship Between Attitudes of Pregnant Women about PPIA and Utilization of HIV Tests at the Kota Baru Karawang Community Health Center 2023

The next variable measured in this study is the relationship between the attitudes of pregnant women about preventing mother-to-child transmission and the use of HIV testing in the PPIA program at the Kota Baru Health Center in Karawang 2023. The results can be seen in the table below.

### Relationship Between Behavioral Attitudes of Pregnant Women and Utilization of HIV Tests at the Kota Baru Health Center in Karawang 2023

<table>
<thead>
<tr>
<th>Attitude</th>
<th>Coverage of attitudes and behavior</th>
<th>Total</th>
<th>Or</th>
<th>p.s</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>negative&lt;2</td>
<td>12</td>
<td>19.4</td>
<td>19</td>
<td>30.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>positive &gt;2</td>
<td>48</td>
<td>77.4</td>
<td>41</td>
<td>66.1</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>96.8</td>
<td>60</td>
<td>96.7</td>
</tr>
</tbody>
</table>

The results of the cross-tabulation between the attitudes of pregnant women preventing mother to child transmission and the actions of pregnant women carrying out HIV tests at the Kota Baru Health Center obtained data that out of 60 respondents who had an attitude of agreement 48 respondents (80.0%) took the HIV test while from 12 respondents (20.0%) who had an attitude of disapproval agreed to take an HIV test with a total of 96.8%. The results of the chi-square statistical test obtained p = 0.006, meaning that there is an attitude relationship between knowledge and the use of HIV testing at the Kota Baru Health Center.

**DISCUSSION**

**Univariate analysis**

**Knowledge About Prevention of Mother To Child Transmission**

From the results of univariate analysis of pregnant women's knowledge about preventing HIV transmission from mother to child (PPIA) it can be seen that out of 60 respondents there were respondents (78.3%) in the category of good knowledge about the prevention of mother-to-child transmission. Another research that is in line with this research is Legiati’s research et.al (2012) who examined the behavior of pregnant women for HIV testing in the Bandarharjo and Tanjung Mas sub-districts of Semarang City which stated that
The majority of pregnant women had good knowledge about prevention of HIV transmission from mother to child (PPIA) of (64.4%) compared to pregnant women who had poor knowledge of (35.6%). Pregnant women who lack knowledge about prevention of HIV transmission from mother to child (PPIA) are pregnant women who have basic education. This means that the education of pregnant women determines the level of knowledge of pregnant women about PMTCT. According to Notoamodjo (2010),

According to the researcher's analysis, having good knowledge about preventing mother-to-child HIV transmission greatly encourages individuals to carry out HIV screening, one of which is by taking an HIV test.

**Attitudes of Pregnant Women About Prevention of Mother-to-Child HIV Transmission**

Attitude is a closed reaction, not an open reaction or open behavior. Attitude is a readiness to react to objects in a certain environment as an appreciation of objects (Notoadmojo, 2010). From the results of univariate analysis of attitudes about preventing HIV transmission from mother to child (PPIA) it can be seen that out of 60 respondents there were 48 respondents(80.0%) on preventing mother-to-child transmission. The difference in the results of this study with previous studies was caused by the different characteristics of the respondents and because pregnant women in the working area of the new city health center lacked awareness of the importance of preventing mother-to-child HIV transmission. Pregnant women feel less at risk of contracting HIV. In this study, the majority of respondents' agreed attitude towards preventing HIV transmission in pregnant women could be influenced by the fact that the knowledge of the respondents was relatively high so that they were able to lead to good behavior in efforts to prevent HIV transmission in pregnant women.

According to the researcher's analysis, having good knowledge about preventing mother-to-child HIV transmission greatly encourages individuals to carry out HIV screening, one of which is by taking an HIV test.

**Participation in HIV Examination by Pregnant Women**

From the results of univariate analysis of the variable utilization of HIV testing by pregnant women, it can be seen that out of 60 respondents, 41 respondents (68.3%) took advantage of HIV testing and 19 respondents (31.7%) did not. The results of the study are in line with Halim's research (2016) which states that there are still pregnant women who do not
carry out HIV testing in the working area of the Halmahera Public Health Center, Semarang City, by (38.9%).

For this reason, the Kota Baru Health Center often conducts counseling about HIV and the importance of doing this to pregnant women, in order to achieve the health of mothers and babies. Counseling can be a pretty good tool to increase respondents’ knowledge about the importance of preventing mother to child HIV transmission. Thus causing a change in attitude that supports the use of HIV testing.

**Bivariate Analysis**

**Relationship Between Knowledge of Pregnant Women and Utilization of HIV Tests at the Kota Baru Health Center**

The results of the analysis of the relationship between the knowledge of pregnant women about preventing mother-to-child transmission with the use of HIV testing in Kota Baru, Karawang Regency 2023 showed that out of 60 respondents, there were 47 respondents (78.3%) with good knowledge and who participated in the use of HIV tests 41 respondents (68.3%), this percentage was higher compared to respondents who had poor knowledge about preventing mother-to-child transmission, totaling 13 respondents (21.7) only 19 respondents (31.7%) took part in taking HIV tests. Based on the results of the chi-square statistical test, it was obtained that p value = 0.002 was smaller than the value α = 0.005 so that it could be concluded that there was a significant relationship between knowledge and the use of HIV testing. The large number of mothers who have good knowledge about preventing mother to child HIV transmission (PPIA) in pregnant women and carrying out HIV tests at the Kota Baru health center cannot be separated from the efforts of health workers at the Kota Baru health center who continue to conduct counseling and outreach about HIV disease, HIV prevention and HIV testing for both men, women who are not pregnant and pregnant women. According to the author's assumption, pregnant women who have poor knowledge tend not to do an HIV test, pregnant women who have less knowledge tend to be pregnant women who are old. This lack of knowledge can also occur because some of the pregnant women stated that they did not participate in various counseling activities about HIV and HIV testing carried out by the Kota Baru Health Center staff in the community such as posyandu.
The relationship between the attitude of pregnant women and the use of HIV testing at the Kota Baru Health Center

The results of the cross-tabulation between the attitudes of pregnant women preventing mother to child transmission and the actions of pregnant women carrying out an HIV test at the Kota Baru Karawang 2023 health center obtained data that of the 60 respondents who disagreed only 12 respondents (20.0%) took the HIV test action while of the 48 respondents (80.0%) who had an attitude of agreement. The results of the chi-square statistical test obtained \( p = 0.006 \), meaning that there is a relationship between attitudes and actions of pregnant women in carrying out HIV tests in Kota Baru. The results of this study are different from the results of research (Akbar P, 2014) where it was found that there was no significant relationship between attitudes and behavior of pregnant women towards HIV testing. The large number of pregnant women who chose to agree to an HIV test was because many pregnant women also received information about HIV testing when health workers in Kota Baru conducted counseling, midwives and health workers where they carried out pregnancy checks suggested taking an HIV test in Kota Baru, families accompanying and supporting pregnant women in carrying out HIV testing. The frequency of Kota Baru health workers in providing counseling about HIV and AIDS to various groups has made more and more pregnant women more familiar with HIV and AIDS information so that it creates a positive attitude in supporting the use of antenatal care services and HIV testing even though their families may not necessarily support their actions. This positive attitude can be seen from the emotions or feelings of pregnant women regarding antenatal care services and HIV testing in Kota Baru. These emotions or feelings include pregnant women's assessment of Antenatal Care services and HIV tests at the Kota Baru Health Center which are considered good and acceptable which can be seen from their pleasure in carrying out pregnancy checks and HIV Tests.

**CONCLUSION**

1. The proportion of utilization of HIV testing by pregnant women at the 2023 Kota Baru Health Center in Karawang is 68.3%.
2. For the knowledge of pregnant women about preventing HIV transmission from mother to baby (PPIA), the majority of respondents were in the good category, 78.3%.
3. For the attitude of pregnant women about preventing HIV transmission from mother to baby (PPIA), the majority of respondents were in the agree category, there were 41 respondents or 80.0%
4. There is a relationship between the knowledge of pregnant women about preventing HIV transmission from mother to baby (PPIA) and the use of HIV testing at the Kota Baru Karawang health center in 2023 with a p-value of 0.002.

There is a relationship between pregnant women's attitudes about preventing HIV transmission from mother to baby (PPIA) and the use of HIV testing at the Kota Baru Karawang health center in 2023 with a p-value of 0.006.

SUGGESTION

1. Scientific
   
   For the Stikes Abdi Nusantara Education Agency, Jakarta
   
   It is hoped that this research can be an additional insight for readers, especially prospective midwives so that later they can apply it when carrying out midwifery care services for breastfeeding mothers.

2. Practical
   
   a. For Mothers/Society
      
      It is hoped that the public, especially pregnant women, will check the laboratory so they know new information about supporting the utilization of antenatal care services and HIV testing.

   b. For Health Workers at the Health Center
      
      Increase education to the public, especially pregnant women, regarding the importance of HIV testing to prevent early mother-to-child transmission.

   c. For Scientific
      
      For the Stikes Abdi Nusantara Education Agency, Jakarta
      
      Provides new information about examinations that pregnant women need during pregnancy to complete pregnancy care materials

   d. For further researchers
      
      Further research is needed regarding the factors that influence pregnant women's behavior towards HIV testing using the deep interview method or with focus groups
REFERENCES


Program Pengendalian HIV AIDS Dan PIMS. Petunjuk Teknis Program Pengendalian HIV AIDS
