Factors That Influence On Compliance With Visits K1 To K4 In Pregnant Women In Parsoburuan Puskesmas, Habinsaran District Toba District In 2021

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**ABSTRACT**
The problem of maternal mortality and morbidity in Indonesia is still a big problem. Utilization of Antenatal Care (ANC) services by a pregnant woman can be seen from the coverage of ANC services (K1 and K4). Based on the results of observations made by the authors of the Parsoburan Health Center, there are still pregnant women who do not check their pregnancies with antenatal care health workers regularly. This type of research is survey explanatory research. The purpose of this research is to analyze the factors that influence compliance with K1 to K4 visits for pregnant women at the Parsoburuan Public Health Center, Habinsaran District, Toba Regency in 2021. The population of this research is all pregnant women in Besitang District, Toba Regency, totaling 65 people and a sample of 60 people were taken by simple random sampling. Primary data was collected through interviews, and data analysis was performed using the chi square test and simple logistic regression test. The results of the chi square test and logistic regression test show that the variables age, knowledge, education, and affordability have a relationship and influence on ANC visits because the p value <0.05. This research is expected to provide input to the Toba District Health Office to improve antenatal care in Habinsaran District, provide information to increase pregnant women's knowledge, improve performance and pay more attention to the welfare of village midwives so they are willing to live and settle in the village.

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1. **Introduction**

ANC (Antenatal Care) is a planned program in the form of observation, education and medical treatment for pregnant women, with the aim of: keeping the mother healthy during pregnancy; delivery, and postnatal as well as trying to baby born healthy; safe and satisfying process of pregnancy and childbirth; monitor possible risks of pregnancy; planning optimal management of high risk pregnancies; and reduce perinatal maternal and fetal morbidity and mortality (Fitrayeni et al, 2015).

Antenatal Care (ANC) is a health service provided by health workers for mothers during pregnancy and carried out according to the service standards set out in the Midwifery Service Standards (Vinny et al, 2016). The use of antenatal care services by a number of pregnant women in Indonesia is not fully in accordance with the guidelines. This tends to make it difficult for health workers to carry out regular and comprehensive health care for pregnant women, including early detection of risk factors for pregnancy that are important to treat immediately. However, complications of pregnancy and childbirth can be prevented with antenatal care. regularly (Risksesdas, 2013).

One of the indicators to assess the quality of antenatal care is that it can be assessed from the level of quality of antenatal care with the compliance of midwives in applying standard antenatal care/pregnancy services. The antenatal program policy stipulates that the frequency of antenatal care visits can be monitored through the service of new visits for pregnant women (K1), as well as
access to standard pregnant women’s health services at least 4 times (K4) with a distribution of once in the first trimester, once in the second trimester, and once in the second trimester. times in the third trimester (Elisabeth, 2013).

K1 coverage is an illustration of the number of pregnant women who make their first visit to a health care facility to get antenatal care. The coverage rate for repeat visits for pregnant women (K4) is pregnant women who receive standardized antenatal care at least 4 times with a distribution of at least 1 time in the first quarter, 1 time in the second quarter, and 2 times in the third quarter of gestation. K4 indicator is an indicator used to assess the quality of health services for pregnant women (ANC, which refers to the trimester period when carrying out pregnancy checks (Ministry of Health, 2013).

Nationally, the target for antenatal visit services is in accordance with the target for antenatal care visits according to the Minimum Service Standards (SPM), namely 95% in 2015. The problem is the lack of achievement of the set targets. The first visit (K1) in Indonesia in 2014, namely the K1 target of 97% but the achievement was 94.99% and the coverage of antenatal services for four visits (K4) with the K4 target of 95%, but the achievement was 86.70%, while the coverage of antenatal visits first in North Sumatra 2019, namely the target of 97% but the achievement was 92.6%, the K4 target in North Sumatra was 95% but the achievement was 86.32%. Based on data from the Medan City Health Office in 2019, K1 coverage in Medan City was 88.55% and K4 coverage was 83.20% K1 coverage in Medan Denai District was 78.99% and K4 coverage was 77.70% (Ministry of Health, 2015).

The continuity of health checks during pregnancy can be seen from the first visit (K1) to the K4 visit with visit times according to the trimester of pregnancy. Nationally ideal K1 coverage is 81.6% and nationally K4 coverage is 70.4%. Based on these data, it was found that there was a difference between the ideal K1 and K4 coverage nationally which showed that 12% of mothers who received ideal K1 did not continue ANC according to the minimum standard (K4). Low K1 indicates that the reach of antenatal services and the program’s ability to mobilize the community still needs to be improved and low K4 indicates low opportunities to capture and deal with high obstetrical risks (Dhita, 2017).

There are many factors that cause this situation, according to Green’s theory in Notoatmodjo (2016) there are predisposing factors (age, education, work, knowledge and attitudes of pregnant women), enabling factors (facilities and infrastructure, transport, family income, distance and health facilities) and reinforcing factors (attitudes and behavior of health workers, religious leaders and community leaders) that can influence a person’s behavior including influencing the behavior of pregnant women in making ANC visits (Notoatmodjo, 2016).

The results of the initial data survey conducted by researchers at the Parsoburan Health Center obtained information from 7 TM III pregnant women, 2 of whom routinely checked their pregnancies every trimester 1 to trimester 3 for health services. Meanwhile, the other 5 pregnant women said that they did not go for regular prenatal checks according to the schedule determined by the health worker because they had no complaints, felt themselves healthy because in the past pregnancy they did not go on prenatal visits but did not experience complications either during pregnancy or childbirth. as well as postpartum, they will carry out pregnancy visits if there are complaints and do not know the standard of antenatal care service visits.

The results of research by Jane M et al, 2014, which was conducted at the Motoling Health Center in South Minahasa district, showed that there was a strong relationship between the use of K1 and K4 services (education, employment) with antenatal care visits and there was no relationship between the age of pregnant women and the use of K1 and K4 services. Dwi Feni's research, 2017, the completeness factor of Antenatal Care (ANC) visits shows that there is a relationship between knowledge, attitudes of pregnant women, socio-economic, distance and husband’s support with ANC visits but there is no parity relationship with ANC visits. But in Linda’s research, 2017, the factors related to K4 visits to pregnant women at the Danurejan I Health Center in Yogyakarta City showed that there was a significant relationship between age and visits.
2. Method

The research design is analytic with a cross-sectional approach, namely the type of research using quantitative methods. which studies the dynamics of the correlation between risk factors and effects, by means of an approach, questionnaires in the form of checklists or data collection at the same time (point time approach) (Notoatmodjo, 2012).

<table>
<thead>
<tr>
<th>No</th>
<th>Variabel</th>
<th>Jumlah (n=60)</th>
<th>Persentase (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>At risk</td>
<td>8</td>
<td>13.3</td>
</tr>
<tr>
<td></td>
<td>No Risk</td>
<td>52</td>
<td>86.7</td>
</tr>
<tr>
<td>2</td>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low education</td>
<td>37</td>
<td>61.7</td>
</tr>
<tr>
<td></td>
<td>higher education</td>
<td>23</td>
<td>38.3</td>
</tr>
<tr>
<td>3</td>
<td>Work</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Doesn't work</td>
<td>28</td>
<td>46.7</td>
</tr>
<tr>
<td></td>
<td>Working</td>
<td>32</td>
<td>53.3</td>
</tr>
<tr>
<td>4</td>
<td>Knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not good</td>
<td>42</td>
<td>70.0</td>
</tr>
<tr>
<td></td>
<td>Well</td>
<td>18</td>
<td>30.0</td>
</tr>
<tr>
<td>5</td>
<td>Attitude</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Negative</td>
<td>42</td>
<td>70.0</td>
</tr>
<tr>
<td></td>
<td>Positive</td>
<td>18</td>
<td>30.0</td>
</tr>
<tr>
<td>6</td>
<td>Antenatal Visits</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Care (ANC)</td>
<td>35</td>
<td>58.3</td>
</tr>
<tr>
<td></td>
<td>Irregular</td>
<td>25</td>
<td>41.7</td>
</tr>
</tbody>
</table>

From the table above, 52 respondents (86.7%) of 60 pregnant women in the age category were not at risk, the majority in the education category had low education, 37 people (61.7%), the majority in the occupation category were 32 people (53.3%), the knowledge category the majority had poor knowledge as many as 42 people (70.0%), in the attitude category the majority with a negative attitude were as many as 42 people (70.0%), and in the category of Antenatal Care Visits (ANC) the majority made irregular visits as many as 35 people (58.3%).

Bivariate Analysis The relationship between age and Antenatal Care (ANC) visits can be seen in the following table.

3. Result and Discussions

The results of the research conducted showed that respondents who were not at risk (20-35 years) totaled 52 people, while respondents who were at risk (<20/> 35 years) totaled 8 people. The RP value was 1.35 (95% CI = 0.84 - 2.15).

Based on the results of statistical tests, the chi-square results obtained were p = 0.52, so it can be interpreted that there is no relationship between age and Antenatal Care (ANC) visits at the Parsoburuan Health Center, Habinsaran District, Toba Regency in 2021. This is quite good because the majority of pregnant women are in the age category that is safe for pregnancy, but there are still many pregnant women at a safe age as many as 29 people (55.8%) who do not make regular antenatal care visits, in the age category that is also at risk. a small percentage, as many as 6 people (75%) did not make irregular antenatal care visits, because age greatly influences pregnancy.

The results of this study are not in accordance with research conducted by Adhesty (2014) that there is a relationship between age and antenatal care visits, p = 0.012. These results are also not supported by Linda’s research (2017) that there is a relationship between age and K4 visits for pregnant women at the Danurejan I Health Center in Yogyakarta City with a value of p = 0.000.

The results of this study are not in accordance with the theory put forward by Juwaher (2011) the coverage of those aged 20-35 years (unreliable) mostly carries out standard pregnancy checks (> 4 times), compared to those aged <20 or > 35 years (rest). The more mature, the maturity level of a person will be more trusted than someone who is not yet mature enough, if the maturity level
of a person is high enough then the mindset will be more mature. And it is further explained that mothers who are of productive age will think more rationally and maturely about the importance of carrying out pregnancy checks and have a higher level of motivation in checking their pregnancies (Walyani, 2017).

According to Prawirohardjo (2014) that maternal deaths that occur in pregnant women and give birth at the age of under 20 years are 2-5 times higher than maternal deaths that occur at the age of 21-35 years. Maternal mortality increases again after the age of 35 years. Pregnancy at a young age or teenager, (under the age of 20 years) will cause fear of pregnancy and childbirth, this is because at that age the mother may not be ready to have children and the reproductive organs of the mother are not ready to get pregnant while old age (over 35 years) will cause anxiety about pregnancy and childbirth as well as the reproductive organs of women who are too old to get pregnant.

Differences in the results of this study may occur because individual characteristics differ from one region to another. In the case of the findings of this study, pregnant women at the Parsoburuan Health Center, Habinsaran District, Toba Regency in 2021 are not aware of the designation and benefits of health services regardless of age. This means that the behavior of not utilizing health services cannot be determined or depends on the age of the pregnant woman. The findings of this study also do not indicate any behavior if it is associated with the definition of age. These results are supported by research from Jane M, et al (2014) showing that there is no relationship between age and utilization of K1 and K4 services with a probability value of 0.840, meaning that the p value is greater than 0.05. The same results were also carried out by Vicky, et al (2014) with a probability value of 0.564.

Behavioral theory according to Lawrence Green (2016) has made age a part of individual characteristics (heredity) that can contribute to individual health behavior. Based on this explanation, the authors argue that the case of ANC visits at the Parsoburuan Health Center, Habinsaran District, Toba Regency in 2021 shows a lack of linkages between the age of the respondent and the behavior of pregnant women in carrying out ANC visits, so it can be said that age does not influence the participation of pregnant women in carrying out antenatal care.

Based on the data analysis carried out, it can be seen that the value of \( p = 0.52 \) (\( p <0.05 \)) then \( H_a \) is rejected and \( H_0 \) is accepted so it can be concluded that there is no age relationship with Antenatal Care (ANC) visits at the Parsoburuan Health Center, Habinsaran District, Toba Regency in 2021.

Relationship between Education and Antenatal Care (ANC) Visits The results of the research conducted showed that 37 respondents with low education and 30 people (81.1%) did not regularly make ANC visits, while 23 respondents with higher education and 18 people (78.3%) made regular ANC visits. The RP value was 3.73 (95% CI = 1.70 - 8.23) indicating that mothers with low education are 3.73 times more likely to have irregular ANC visits than mothers with higher education, this means that the low education of pregnant women can affect antenatal visits. Care becomes incomplete. Based on statistical test results. The results of the chi-square value \( \chi^2 = 0.00 \) so that it can be interpreted that there is a relationship between education and Antenatal Care (ANC) visits at the Parsoburuan Health Center, Habinsaran District, Toba Regency in 2021.

This research is in accordance with research conducted by Adhesty (2014) that there is a relationship between education level and antenatal care visits, obtained \( p = 0.022 \). These results are also supported by the research of Vinny et al (2016) that there is a relationship between education and the regularity of Antenatal Care (ANC) examinations at the Ranotana Weru Health Center, Wanea Kota Manado District, with a value of \( p = 0.000 \).

In theory, the level of education is considered important because from education a person can know and carry out his role in accordance with organizational goals. This theory is in line with the theory put forward by Lawrence Green (2016), education level is a factor for a person to behave so that educational background is a very basic factor in motivating someone towards health behavior and one’s learning references. Mother’s education level greatly influences the frequency of ANC visits. The more the mother understands the importance of ANC, the higher her awareness will be to make ANC visits. Educational status also showed a significant association with respondents with secondary and high school education attending more ANC clinics compared to women with primary and lower education. Pregnant women with low levels of education sometimes do not get enough
information about their health, so they do not know how to carry out good pregnancy care and this also affects their pregnancy visits. Occupational Relations with Antenatal Care (ANC) Visits

The results of the research showed that there were 32 working respondents, and 18 people (56.3%) made regular ANC visits, while 28 respondents did not work, and 21 people (75%) did not make regular antenatal care visits. In the category that is said to be working are those who carry out an activity to earn a living for personal and family life. The RP value obtained was 1.71 (95% CI = 1.10 - 2.69) indicating that mothers who do not work are 1.71 times more likely to make ANC visits irregularly than working mothers, this means that the work of pregnant women who do not work can affect antenatal visits care becomes incomplete. Based on the results of the statistical test, the chi square results obtained with a value of $p = 0.02$ so that it can be interpreted that there is a work relationship with Antenatal Care (ANC) visits to the Parsoburan Health Center, Kec. Habinsaran Kab. Toba. This study is in accordance with research conducted by Jane M et al (2014) that there is a relationship between education level and antenatal care visits, $p = 0.003$. And according to Romauli’s theory (2015) a person’s work will describe the activity and level of economic welfare obtained. The results of the study also show that working mothers have a better level of knowledge than non-working mothers, because working mothers have more opportunities to interact with other people, so they have more opportunities to obtain information about their situation. Health needs to study this to get data on both of these things. By knowing this data, health workers can provide appropriate information and counseling according to the patient’s condition (Romauli, 2015).

Based on this explanation, the authors argue that work is related to their daily activities so that it is likely that the mother is outside the home and allows the mother to have wider interactions in her social environment so that new information and experience can be obtained easily, including those related to health behavior. Based on the data analysis carried out, it can be seen that the value of $p = 0.02$ ($p < 0.05$) then $H_a$ is accepted and $H_0$ is rejected so it can be concluded that there is a work relationship with Antenatal Care (ANC) visits at the Parsoburan Health Center, Habinsaran District, Toba Regency in 2021.

Based on the data analysis carried out, it can be seen that the value of $p = 0.00$ ($p < 0.05$) then $H_a$ is accepted and $H_0$ is rejected so it can be concluded that there is a relationship between education and Antenatal Care (ANC) visits at the Parsoburan Health Center, Habinsaran District, Toba Regency in 2021. Relationship of Knowledge with Antenatal Care (ANC) Visits. The results of the research showed that there were 42 respondents with poor knowledge and 31 people (73.8%) did not regularly make antenatal care visits, while 18 respondents who had good knowledge and 14 people (77.8%) made regular antenatal visits. Obtained an RP value of 3.32 (95% CI = 1.37 - 8.03) indicating that mothers with less good knowledge are 3.32 times more likely to have irregular ANC visits than mothers with good knowledge, this means that with poor knowledge of pregnant women it can affect visits antenatal care becomes incomplete. Based on the results of the statistical test, the chi square results obtained with a value of $p = 0.001$ so that it can be interpreted that there is a relationship between knowledge and Antenatal Care (ANC) visits at the Parsoburan Health Center, Habinsaran District, Toba Regency in 2021.

Relationship between Attitudes and Antenatal Care (ANC) Visits, The results of the research showed that there were 42 respondents who had a negative attitude and 31 people (73.8%) did not regularly make antenatal care visits, while 18 respondents who had a positive attitude and 14 people (77.8%) made regular antenatal visits. An RP value of 3.32 (95% CI = 1.37 - 8.03) was obtained, indicating that mothers who had a negative attitude were 3.32 times more likely to make ANC visits irregularly than mothers who had a positive attitude. This means that negative attitudes of pregnant women can affect antenatal care visits be incomplete. Based on the results of the statistical test, the chi-square results showed a value of $p = 0.001$, which means that there is a relationship between attitude and Antenatal Care (ANC) visits at the Parsoburan Health Center, Habinsaran District, Toba Regency in 2021.

This research is in accordance with research conducted by Dwi Feny (2017) that there is a relationship between attitude and antenatal care visits, $p = 0.003$. This result is also supported by Dwi Asihani’s research (2010) that there is a relationship between knowledge and the completeness of Antenatal Care (ANC) visits at the Permata Bunda Maternity Hospital in Sragen with $p = 0.003$. Based on research by Dewi Zolekhah (2021), said that a person's level of education
affects the reception of information, one of which is about sex education. Someone who is highly educated will be more open to receiving information. Unlike the case with parents who have low education, they tend not to be open to receiving information from outside, they often even think that the issue of sex education is taboo. A father will be able to guide and educate himself and his family to be better with the knowledge he has, especially about sex education. A mother besides having an obligation to care for the family, a mother also has an obligation to seek knowledge, including sex education. This is important because a child will be closer to his mother.

According to Notoatmodjo (2018) the basic concept of education is a learning process which means that in education there is a process of growth, development or change towards a more mature, better and more mature individual or community group. According to the researcher's assumption that parents who have a higher level of education will influence their children's awareness of the importance of sex education for themselves and the environment that can influence or encourage the need for sex education. The high level of parental education will make it easier for respondents to absorb the information provided, compared to those with low education, especially information about sex education.

From the results of Isnaini Maulidya's research, et al (2021) entitled Factors Associated with Adolescent Sexual Behavior. From the results of statistical tests, it can be concluded that there is a relationship between parents' occupation and adolescent sexual behavior (p-value = 0.037). Bad sexual behavior is more common in adolescents whose parents have risky jobs. Risky work is work related to prostitution, such as selling the needs of FSW, hotel employees, karaoke places, and massage parlors, and providing boarding houses for FSW. This risky parental occupation can enable adolescents to also get involved in prostitution activities to help their parents.

The results of research conducted in Takengon, Silih Nara District, Central Aceh District (2022) on 31 adolescents regarding attitudes towards free sex were negative by 21 respondents (67.7%) and positive attitudes by 10 respondents (32.3). The negative attitude here means that there is an authoritarian parental role and association in schools between boys and girls is no distance to make friends. The role of parents in communicating and also the knowledge of respondents is very important. Other people (peers, parents and the environment) around the respondent are one of the social components that influence the attitude of the respondent.

4. Conclusion

The results of the analysis of factors related to antenatal care (ANC) visits were mother’s education level (p=0.00), employment level p=0.02), level of knowledge (p=0.001), attitude (p=0.001) and which is not related to Antenatal Care (ANC) visits, namely the age of pregnant women (p = 0.52), at the Parsoburuan Health Center, Habinsaran District, Toba Regency in 2021.

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