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Knowledge level of high risk of pregnancy with antenatal care visit compliance during pandemic

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ABSTRACT

Non-compliance in the antenatal care can cause various types of high-risk pregnancies to be unknown which can affect the continuity of pregnancy or pregnancy complications so that they cannot be addressed immediately which will result in an increase in the Maternal Mortality Rate (MMR). This study was conducted to determine the relationship between the level of knowledge about the high risk of pregnancy in pregnant women and to compliance antenatal care visits during the pandemic. This research is an analytic observational research, using a cross sectional research design. The research subjects were 55 respondents at the Galur II Public Health Center, Kulon Progo in January 2022 using purposive sampling technique. The data that has been collected is then coded, then the data is processed using the SPSS application, using the chi-square statistical test with a 90% confidence degree (α=0.1). The results showed that 54.5% of respondents were high school/vocational high school graduates, 83.6% of respondents were between the ages of 20-35 years, 54.5% of respondents were pregnant with multiparas, and 74.5% of respondents had jobs as housewives. The results of statistical tests showed that as many as 30 respondents (93.8%) had good knowledge and were obedient in conducting antenatal care visits. Hypothesis testing with chi-square statistical test and obtained p value = 0.001 (<0.05). There is a relationship between the level of knowledge about the high risk of pregnancy in pregnant women and compliance with antenatal care visits during the pandemic.
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INTRODUCTION

Antenatal Care (ANC) as one of the early screening efforts of pregnancy risk factors. According to the World Health Organization (WHO) antenatal care during pregnancy to detect early occurrence of high risks of pregnancy and childbirth can also reduce maternal mortality and monitor the condition of the fetus. Ideally, if every pregnant woman wants to have her pregnancy checked, it is aimed at detecting abnormalities that may exist or will arise in the pregnancy, which can be quickly identified, and can be addressed immediately

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before they have an adverse effect on the pregnancy by conducting antenatal care examinations. The indicators used to assess the coverage are K1 and K4. ANC coverage according to the standard is at least four times (K4). The visit of K4 pregnant women in Kulon Progo Regency from 2014 to 2019 has never reached the national target, which is 95%. K4 coverage in Kulon Progo district in 2019 only reached 84.5%. According to the 2019 Kulon Progo health profile, it was noted that the K4 coverage at the Puskesmas Galur II was 73.2% and made the Puskesmas Galur II in 20th place out of 21 Puskesmas in Kulon Progo.[1]

Utilization of ANC services by a number of pregnant women in Indonesia has not fully complied with the established guidelines. This tends to make it difficult for health workers to carry out regular and comprehensive health care development for pregnant women, including early detection of pregnancy risk factors that are important to be addressed immediately. Whereas antenatal care is very important because the mother will obtain basic information about maternal health and pregnancy, obtain health education needed to maintain the quality of her pregnancy and avoid health problems during her pregnancy. The lack of ANC utilization by pregnant women is related to many factors, one of which is the knowledge of pregnant women.[2]And currently during the COVID-19 pandemic, ANC services are also limited, such as pregnancy consultations, and IEC is carried out online, and pregnant women can meet with health workers by making an appointment in advance or if there is an emergency.

Non-compliance in the ANC examination can cause various types of high- risk pregnancies to be unknown which can affect the continuity of pregnancy or pregnancy complications so that they cannot be addressed immediately which will result in an increase in the Maternal Mortality Rate (MMR).[3]The target for the Maternal Mortality Rate in Yogyakarta City in 2019 is <102 per 100,000 live births, while the achievement is 119.8 per 100,000 live births, indicating that in the last 2 years the Maternal Mortality Rate still tends to increase. This is due to the decrease in the number of pregnant women each year, but cases of maternal mortality tend to remain the same. The causes of maternal death in Yogyakarta are other diseases, bleeding, hypertension in pregnancy, infections, and circulatory system disorders. Health efforts are aimed at maternal and child health services, and can be seen from the proportion of deliveries handled by health workers and examinations during pregnancy.[4]

Based on research conducted by Kurniasih, explaining that pregnant women who have good knowledge will tend to be more obedient in checking their pregnancy because consciously received knowledge can increase compliance where mothers are able to explain known material and interpret it correctly.[5]Another study conducted by Setianti also explained that there was a significant and positive relationship between the level of knowledge of pregnant women about high-risk pregnancies and the frequency of ANC with a correlation coefficient of 0.455 in the medium category.[6]

Meanwhile, research conducted by Anggraeni explained that there was no relationship between the level of knowledge, age, education, occupation, sources of information and support from health workers for third trimester pregnant women regarding high-risk pregnancies and compliance with ANC visits at the Johar Baru District Health Center in 2019.[7]This makes the researchers want to investigate further about the level of knowledge about the high risk of pregnancy in pregnant women on ANC visit compliance.

METHOD

This type of research is analytic observational (non-experimental) with a cross-sectional research design. This research was conducted in the Galur II Public Health Center, Kulon Progo Regency in January 2022. The sample in this study was 55 respondents. Samples that meet the inclusion and exclusion criteria will then be selected

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by purposive sampling method. In this study, pregnant women were given a knowledge level questionnaire about a high risk of pregnancy to fill out. Then the researcher looked at the MCH book notes on compliance with ANC visits. The variables studied included the independent variable, namely the level of knowledge about high risk of pregnancy and the dependent variable, namely adherence to antenatal care visits. The data that has been collected is then coded.=0,1).

RESULTS

Table 1. Frequency distribution of respondents based on characteristic at Puskesmas Galur II, Kulon Progo

Variable	Category	Frequency (f)	Percentage (%)
Level of education	Basic (elementary/junior high)	11	20
	Intermediate (SMA/SMK)	30	54.5
	College (College)	14	25.5
Age	<20 years	2	3.6
	20-35 years old	46	83.7
	>35 years old	7	12.7
parity	Primipara	25	45.5
	Multipara	30	54.5
Work	PNS/TNI/Polri	1	1.8
	Private sector employee	13	23.7
	Housewife	41	74.5
	Amount	55	100

Table 1. shows the results of data analysis showing that the characteristics of respondents which include education at most are high school / vocational graduates as many as 30 respondents (54.5%), 46 respondents (83.6%) are between the ages of 20-35 years, 30 respondents (54.5%) were pregnant with multiparas, and the most occupations were housewives, namely 41 respondents (74.5%).

Table 2. Frequency distribution of respondents based on knowledge levels about High risk of pregnancy at Puskesmas Galur II, Kulon Progo

Knowledge level	Frequency (f)	Percentage (%)
Not enough	8	10.9
Enough	17	30.9
Well	32	58.2
Amount	55	100

Table 2. shows that most of the respondents have knowledge in a good category as many as 32 respondents (58.2%).

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Table 3. Frequency distribution of respondents based on ANC compliance at Puskesmas Galur II, Kulon Progo

ANC Compliance	Frequency (f)	Percentage (%)
Yes	46	83.6
Not	9	16.4
Amount	55	100

Table 3. shows that most respondents (83.6%) adhere to ANC visits at health facilities.

Table 4. Cross table of knowledge levels about high risk of pregnancy in pregnant Women with Compliance with ANC Visits during a pandemic at Puskesmas Galur II, Kulon Progo

Knowledge level	ANC Kunjungan Visit Compliance				Amount		P value
	Yes		Not				
	f	%	f	%	f	%	
Well	30	93.8	2	6.3	32	100	0.001
Enough	14	82.4	3	17.6	17	100	
Not enough	2	33.3	4	66.7	6	100	
Amount	46	83.6	9	16.4	55	100	

Table 4. shows that as many as 30 respondents (93.8%) have good knowledge and are obedient in conducting antenatal care visits. Hypothesis testing with chi-square statistical test and obtained p value = 0.001 (<0.05). This shows that statistically there is a relationship between the level of knowledge about the high risk of pregnancy in pregnant women and adherence to ANC visits.

DISCUSSION

The characteristics of research respondents at the Puskesmas Galur II, Kulon Progo are that most of their education is high school / vocational high school graduates, as many as 30 respondents (54.5%), 46 respondents (83.6%) are between the ages of 20-35 years, 30 respondents (54.5%) were pregnant with multiparas, and the most occupations were housewives, namely 41 respondents (74.5%).

Most of the respondents have knowledge with a good category as many as 32 respondents (58.2%). Respondents' knowledge about high risk pregnancy provides pregnant women with an understanding of the importance of antenatal care visits. The knowledge possessed by respondents includes information that increases respondents' beliefs about the importance of antenatal care visits, and the knowledge they have is able to move them to conduct antenatal care visits. This is as stated by Hoy and Miskel (Sugiyono, 2005) who argue that knowledge (knowledge or knowledge) is an essential part of human accidents.

According to Notoatmodjo, knowledge is the result of human sensing, or the result of someone knowing about objects through their senses (eyes, nose, ears, and so on). By itself, the time from sensing to producing knowledge is greatly influenced by the intensity of attention and perception of the object. Most of a person's knowledge is obtained through

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the sense of hearing, namely the ear and the sense of sight, namely the eye. Good knowledge was obtained by respondents from education, work, socio-cultural and economic, occupation, previous experience of pregnancy, age, environment and family, information from various existing media such as the internet, magazines, health advertisements, and television as well as from health promotion socialization at the Galur Health Center. II, Kulon Progo.[8]

The results of this study also showed that most of the respondents (83.6%) adhered to ANC visits at health facilities. A person's obedience can occur if someone is aware of the benefits based on good knowledge then followed by good health behavior as well. According to Syakira (2008), compliance is the patient's behavior in accordance with the provisions provided by health professionals, while the compliance of pregnant women to visit health workers is assessed from pregnant women continuing to check their pregnancy according to established standards of visits, namely once in the first trimester (gestational age). 0-13 weeks), once in the second trimester (14-27 weeks of gestation), twice in the third trimester (28-36 weeks of gestation) and after 36 weeks of gestation).

The results of this study prove that there is a significant relationship between the level of knowledge about high risk of pregnancy and compliance with ANC visits at the Puskesmas Galur II, Kulon Progo (p = 0.001). This is in line with the research conducted by Wahidamunir, who explained that there was a significant relationship between the level of knowledge and the behavior of pregnant women in the ANC examination.[9]Another study conducted by Hidayah, also explained that there was a significant relationship between Knowledge of Pregnant Women About High-Risk Pregnancy and Compliance with ANC Visits.[10] The Covid-19 pandemic can also affect ANC compliance because some pregnant women are still afraid to go to health workers. Apart from being due to the covid pandemic, some pregnant women do not comply with ANC because there are pregnant women who are embarrassed to come to the puskesmas. Basically, if the level of knowledge is low, they should not comply with ANC, but in this study pregnant women still adhere to ANC because of the need for these pregnant women.

Human knowledge is obtained through perception of the stimulus using the senses, the result of perception in the form of information will be stored in the memory system to be processed and given meaning, then the information is used (retrieval) when needed. Thus, the higher the respondent's level of knowledge about the high risk of pregnancy, the higher the respondent's awareness and willingness to conduct antenatal care visits.

CONCLUSION

The data collected from pregnant women at Puskesmas Galur II, Kulon Progo, reveals several key demographics and behaviors among this population. Most women in this group possess a high school or vocational education, fall within the age range of 20 to 35 years, have multiple childbirth experiences, and are primarily engaged in homemaking as their occupation. Additionally, it's notable that these women exhibit a commendable level of awareness regarding the high-risk factors associated with pregnancy. Furthermore, a significant portion of these expectant mothers consistently attend Antenatal Care (ANC) visits, indicating a strong adherence to prenatal healthcare, which is crucial for monitoring maternal and fetal health.

However, while these findings shed light on the prevailing characteristics and behaviors among pregnant women in Puskesmas Galur II, Kulon Progo, there are limitations to consider. The study might benefit from a deeper exploration into the specific details of knowledge levels concerning high-risk pregnancy factors. A more nuanced analysis could help discern whether the depth or accuracy of this knowledge influences

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the ANC visit adherence. Additionally, while the correlation between knowledge about high-risk pregnancy and ANC visit compliance is highlighted, causation cannot be conclusively established solely based on this relationship. Other variables or external factors might contribute to ANC adherence, warranting further investigation for a more comprehensive understanding of the factors influencing prenatal care attendance among these women.

SUGGESTION

According to the results of this study, the incidence of LBW is a risk factor for the development of toddlers. Suggestions that can be given by the author in connection with this research for midwives at the Kokap II Public Health Center, Kulon Progo are that they are expected to be able to carry out inspections with the scheduled KPSP sheet. Furthermore, suggestions for mothers of toddlers and their families are to be able to do stimulation and monitoring with MCH books at home. Further researchers can add variables or examine other factors not included in this study, such as food intake.

The guidance provided to midwives at Puskesmas Galur II, Kulon Progo to consistently engage in health promotion activities aimed at emphasizing the significance of adhering to ANC schedules among pregnant women is a crucial step in ensuring maternal and fetal well-being. However, a limitation in this context might lie in the depth and variety of the health promotion strategies employed. Further research could explore the effectiveness of different approaches to health promotion—assessing whether certain methods or communication styles resonate more strongly with pregnant women and encourage better adherence to ANC schedules. Additionally, while emphasizing the importance of ANC visits during normal and pandemic conditions is essential, the study's scope may have overlooked potential barriers or facilitators to ANC attendance unique to pandemic situations. Understanding these specific challenges and adaptations required during crises can be pivotal in ensuring continuous access to vital prenatal care.

Moreover, the recommendation to introduce additional variables, such as examining the role of husband's support, holds significant promise for enriching future research endeavors. The influence of spousal support on pregnant women's healthcare decisions, including ANC visit compliance, is a critical aspect that could contribute immensely to this field of study. Exploring the dynamics of familial support systems and their impact on prenatal care-seeking behavior could provide invaluable insights into how to further enhance the support networks available to expectant mothers. However, it's important to acknowledge that while including more variables can yield a broader understanding, the study design should ensure clarity in assessing each variable's individual impact to draw precise conclusions regarding their influence on ANC visit adherence in this specific context.

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