

Relationship between Knowledge of Pregnant Women and Compliance with Pregnancy Visits (Antenatal Care) K1 to K4 Sijambi Village, Datuk Bandar District, Uptd Work Area of Datuk Bandar Health Center 2022

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ABSTRACT

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The maternal mortality rate is an indicator to assess the success of achievements in maternal health efforts. One of the efforts to reduce maternal mortality is antenatal care, which is an examination of pregnancy that aims to improve the health of pregnant women, both physically and mentally optimally, and restore the health of reproductive organs. This study aims to see whether there is a relationship between knowledge of pregnant women and compliance Pregnancy Visit (Antenatal Care). This research is a non-experimental research with a descriptive correlation. The population in this study were all pregnant women third trimester who visited the Datuk Bandar Health Center UPTD, a total of 47 pregnant women. The sampling technique was carried out using the Accidental Sampling technique so that the total sample was 32 people. Data analysis used the Chi-Square test. The results of this study indicate that from the results of the knowledge questionnaire the majority of respondents had high knowledge (64.5%), while from the results of the pregnancy visit the majority were obedient (58.1%). The results of data analysis showed a value of $P = 0.014$, where $0.014 < 0.05$. This shows that there is a relationship between knowledge of pregnant women and compliance with antenatal care K1 to K4.

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INTRODUCTION

Pregnancy is a matter of physiological, biological and psychological changes that can change a woman's life. The natural and physiological processes that occur in women are characterized by fertilization, namely the process of forming a zygote and eventually becoming a fetus that will develop in the uterus until delivery occurs. During pregnancy, pregnant women will experience physiological and psychological changes so that pregnant women need information from health workers about the mother and the fetus they contain. Therefore, supervision is needed by health

workers to pregnant women (Wahyuningsih, 2020).

According to the World Health Organization (WHO) maternal death is the death of a woman while pregnant or within 42 days after termination of pregnancy, irrespective of the duration and location of the pregnancy from any cause related to the interruption of the pregnancy or its management. Globally, WHO data for 2018 showed that 47% of maternal deaths due to problems during childbirth or pregnancy occurred in developing countries (WHO, 2018).

In 2018 the maternal mortality rate (MMR) in the Association of Southeast Asian Nations (ASEAN) was 16,000/100,000 live births. According to the Indonesian Ministry of Health in 2018, there was a decline in MMR in Indonesia from 1991 to 2015 from AKI 390 to 305 per live birth. Although there has been a decline in MMR, it has not yet reached the MDG target of 102 per 100,000 live births (WHO, 2018).

Maternal mortality rate (MMR) is one of the indicators to assess the success of achievement in maternal health efforts. One of the efforts to reduce maternal mortality is antenatal care (ANC). Antenatal care is an examination in pregnancy that aims to improve the health of pregnant women, both physically and mentally optimally, preparation for childbirth and the postpartum period, preparation for exclusive breastfeeding, and restoring the health of reproductive organs (Ministry of Health of the Republic of Indonesia, 2018).

The antenatal care program (ANC) was introduced by WHO in 2002, which was originally known as Focused Antenatal Care (FANC) or basic ANC. The FANC model is a recommendation from WHO as a standard for prenatal care with a minimum frequency of four visits during pregnancy with the first visit being carried out in the first trimester (Nurlaili, 2019).

Health services for pregnant women must meet a minimum frequency of every trimester, namely at least once in the first trimester (0-12 weeks of gestation), at least once in the second trimester (12-24 weeks of gestation), and at least twice in the third trimester. (24 weeks of gestation until delivery). This time standard is recommended to ensure protection for pregnant women and fetuses in the form of early detection of risk factors, prevention, and early treatment of pregnancy complications (Ministry of Health of the Republic of Indonesia, 2019).

The target of ANC visits has not been achieved due to the lack of compliance of pregnant women to conduct ANC visits, so that there are still pregnant women who still do not know the importance of having an examination during pregnancy. The high MMR can be influenced by the attitude of pregnant women and supported by the mother's knowledge of her pregnancy (Prataumi S, 2019).

According to Notoatmodjo (2012), knowledge is one of the factors that can influence behavior change. Someone who has good knowledge will have self-motivation to apply it in his life. Knowledge about pregnancy can be obtained through counseling about pregnancy, fetal growth and development, self-care during pregnancy, as well as danger signs to watch out for during pregnancy.

The results of research conducted by Mujahida (2020) concerning the factors that influence the regularity of antenatal care checks at the Biru-biru Health Center in Bone Regency found that 62.5% of mothers who adhered to ANC while those who did not comply were 37.5%. Based on the bivariate analysis, the variables tested with the chi-square test obtained a p value for the knowledge variable, namely $p = 0.000$ and for the attitude variable, namely $p = 0.000$, which means that there is a relationship between knowledge and attitudes and ANC behavior.

Based on research by Betzia, et al (2022) concerning the Relationship between Knowledge Levels and Attitudes of Pregnant Women and Compliance with Antenatal Care Visits at the Rijali Health Center in 2021, it reveals a p value = 0.007. Based on data analysis, it is known that there is a significant relationship between knowledge and adherence to ANC visits at the Rijali Health Center.

The initial survey of researchers in the UPTD Work Area of the Langsa Barat Health Center in July 2021 through direct interviews of 7 TM III pregnant women, 2 of whom routinely checked their pregnancies every trimester 1 to trimester 3 to health services. Meanwhile 5 other pregnant women said that she does not carry out regular prenatal checks according to the schedule

determined by the health worker because there are no complaints, she feels healthy because in the past pregnancy she did not have a prenatal visit but did not experience any complications either during pregnancy, childbirth or the puerperium, they will do a pregnancy visit if there are complaints and do not know the standard of antenatal care service visits.

RESEARCH METHODS

Types of research

This type of research is Correlational Descriptive, which is research directed at explaining the relationship between two independent variables and the dependent variable (Notoatmodjo, 2016). Variables are the object of research or the point of attention of a study. This study uses two variables, namely one independent variable (independent variable) or variable X and one dependent variable (dependent variable) or variable Y. The independent variable in this study is Knowledge of Pregnant Women, while the dependent variable is Compliance with Pregnancy Visits (Antenatal Care). K1 to K4.

Research design

In this study using a research design *Cross-sectional* namely research that emphasizes the time of measurement or observation of independent and dependent variable data is only carried out once at the same time (Nursalam, 2016). Where the researchers wanted to know the relationship between knowledge of pregnant women and compliance with pregnancy visits (Antenatal Care) K1 to K4 Seuriget Village Work Area UPTD Datuk Bandar Health Center in 2022.

Research sites

The location of this research was carried out at the UPTD Datuk Bandar Health Center, with several considerations, namely the large number of pregnant women who did not routinely check their pregnancies, no research had been conducted on the relationship between knowledge of pregnant women and adherence to pregnancy visits, population size and sample suitable to be used as research subjects, and location. The UPTD Datuk Bandar Health Center is a place that is easily accessible to researchers, making it easier for researchers in the research process as an effort to find out the relationship between knowledge of pregnant women and compliance with antenatal care K1 to K4.

Research time

This research was conducted from July to October 2022.

Population and Sample

The population is an area consisting of: objects/subjects that have certain qualities and characteristics determined by researchers to be studied and then conclusions drawn (Sugiyono, 2017). The population in this study were all pregnant women third trimester who visited the UPTD of the Datuk Bandar Health Center, totaling 47 pregnant women.

The sample is part of the number and characteristics possessed by the population (Sugiyono, 2017). The sampling technique was carried out using the accidental sampling technique, namely taking respondents as samples based on chance, that is, anyone who coincidentally met the researcher could be used as a sample if the person who happened to be met was suitable as a data source. The sample in this study was the third trimester pregnant women whom the researchers met in UPTD Puskesmas Datuk Bandar in a period of 2 weeks as many as 31 respondents.

Data collection technique

Data collection, a tool used to collect research data. Data was collected by means of a questionnaire compiled and modified by the researcher with reference to the conceptual framework and literature review covering knowledge and attitudes.

The steps of the researcher in collecting the data are:

- 1) Administrative Engineering

The research will be carried out after the researcher receives a research permit from an educational institution, namely the Bachelor of Applied Midwifery Study Program at

Haji University, North Sumatra, then brings the letter to the HeadUPTD Puskesmas Datuk Bandar, to request the conduct of the research.

2) Implementation Techniques

Respondents who were willing to take part in the study were asked to sign the consent form provided. After that, the researchers distributed questionnaire sheets to the respondents. Then explain about the purpose, benefits, and process of filling out the questionnaire. Then the collected data will be analyzed.

Research Instruments

Research instruments are tools or facilities used by researchers in collecting data (Arikunto, 2017). This study used a research instrument in the form of a questionnaire about knowledge of pregnant women and adherence to pregnancy visits K1 to K4. The compliance questionnaire for pregnant women was adopted from Fidratul Khasanah's research (2017), while the K1 to K4 pregnancy visit compliance questionnaire was adopted from Aviati Faradhika's research (2018).

RESULTS AND DISCUSSION

Research result

This research was carried out in October 2022, with a total of 31 respondents. Data collection was carried out using questionnaires and observation sheets, where each respondent had met the requirements and was willing to become a respondent.

Demographic Data

Demographic data in this study include Age, Education, and Occupation of Respondents. The demographic characteristics of the research respondents were as follows:

Table 1. Frequency Distribution Based on Respondent Characteristics at UPTD Puskesmas Datuk Bandar in 2022

No	Characteristics of Respondents	Amount N	Percentage (%)
1	Age		
	17-25	6	19,4
	26-35	21	67,7
	36-45	4	12,9
	Amount	31	100
2	Education		
	JUNIOR HIGH SCHOOL	8	25,8
	SENIOR HIGH SCHOOL	15	48,4
	SI	8	25,8
	Amount	31	100
3	Work		
	IRT	18	58,1
	Trader	3	9,7
	Self-employed	8	25,8
	civil servant	2	6,5
	Total	31	100

Based on table 4.1 above it is known the majority of respondents are aged 26-35 years as many as 21 people (67.7%), the majority of respondents' education is high school education as many as 15 people (48.4%) and the majority of respondents work as housewives as many as 18 people (58.1%) .

Univariate analysis

Table 2. Frequency Distribution of Respondents' Knowledge at UPTD Puskesmas Datuk Bandar in 2022

Knowledge	Frequency	Percentage
Low	11	35.5
Tall	20	64.5

Total	31	100
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Based on table 2 above, it is known that the knowledge of respondents in the UPTD of Datuk Bandar Health Center in 2022 was the majority of high knowledge as many as 20 people (64.5 %).

Table 3. Distribution of the Frequency of Pregnancy Visits Compliance (Antenatal Care) on respondents at the UPTD of Datuk Bandar Health Center in 2022

Obedience	Frequency	Percentage
Not obey	13	41.9
obey	18	58,1
Total	31	100

Based on table 4.3 above, it is known that the majority of respondents at the Datuk Bandar Health Center 2022 adherence to pregnancy visits are 18 people (58.1%).

Bivariate Analysis

Table 4. Results of analysis of the relationship between knowledge of pregnant women and compliance with antenatal care K1 to K4 at UPTD Datuk Bandar Health Center in 2022

Knowledge	Obedience		Total	P value
	Not obey	obey		
Low	8	3		
Tall	5	15		0.014
Total	13	18	31	

Based on table 4 above, it can be seen that of the 13 respondents who did not comply with the visit, 8 respondents had low knowledge and 5 high knowledge, and of the 18 obedient respondents, 3 respondents had low education and 15 respondents had high education. Statistical test results show that the P Value is 0.014 (< 0.05), meaning that there is Relationship between Knowledge of Pregnant Women and Compliance with Pregnancy Visits (Antenatal Care) K1 to K4 at UPTD Puskesmas Datuk Bandar in 2022.

Discussion

Knowledge of Pregnant Women at UPTD Puskesmas Datuk Bandar in 2022

From the results of the study, the majority of respondents at the Datuk Bandar UPTD Health Center in 2022 had high knowledge. So, it can be concluded that knowledge is a factor for a mother to visit ANC. The higher the knowledge of pregnant women about ANC services, the higher the utilization rate of ANC services, as research conducted by Rauf (2018).

The high knowledge possessed by respondents is influenced by various supporting factors such as education because the level of education greatly influences a person's level of knowledge. In addition, it is influenced by work where the majority of pregnant women do not work or as housewives, so that it provides opportunities for mothers to seek information from their environment. Information about pregnancy can also be obtained by respondents via electronic media. Good knowledge will affect the mother's good attitude to pay attention to her pregnancy so that the mother feels the need for antenatal care visits.

Knowledge is the result of knowing and this is after people have sensed certain objects. Sensing occurs through the five human senses, namely the senses of sight, hearing, smell, taste and touch. Most of human knowledge is obtained through the eyes and ears (Notoatmodjo, 2018). In accordance with Notoadmojo's opinion that knowledge is a factor that can make it easier for someone to do what they do. Mothers who will have their pregnancy checked will be facilitated if the mother knows what the benefits of having a pregnancy check are, who and where for a pregnancy check.

According to the Indonesian Ministry of Health (2017) the factors that influence the achievement of K1 and K4 visits for pregnant women include internal (age) and external factors (knowledge, attitudes, economy, socio-culture, geography, and support). The existence of elements of experience that were originally inconsistent with what is known by the individual will be rearranged, rearranged or changed in such a way as to achieve a consistency. The higher the level of knowledge, the better the mother is.

This research is in line with the results of Citrawati's study (2018), namely the level of knowledge of mothers about antenatal care at the Tampaksiring II Health Center, it was found that 25 (83.3% of respondents had good knowledge of antenatal care while 5 (16.7%) had poor knowledge of antenatal care. The better the knowledge pregnant women, the mother will have a high awareness of caring for her pregnancy, namely the effort made is to routinely carry out antenatal checks.

According to the researcher's assumption, knowledge about antenatal visits needs to be obtained by every pregnant woman starting from the first trimester in order to make it easier for the mother to understand and overcome various confusing situations so that the mother can behave and make the right decisions according to her condition.

Compliance with Pregnancy Visits (Antenatal Care) K1 to K4 at UPTD Datuk Bandar Health Center in 2022

From the results of the study, the majority of respondents at the UPTD of Datuk Bandar Health Center in 2022 had the obedient category in pregnancy visits. Antenatal K4 visits are said to be achieved if the mother performs a pregnancy examination in the first trimester at least once, in the second trimester at least 1 time, and in the third trimester at least 2 times. More than half of pregnant women made K4 antenatal visits where based on the characteristics of pregnant women in this study the majority had upper secondary education.

K4 is pregnant women with 4 or more times of contact with competent health workers to get integrated and comprehensive services according to standards (1 - 1 - 2). Contacts were made 4 times as follows: at least once in the first trimester (0-12 weeks), at least once in the 2nd trimester ($\geq 12-24$ weeks) and at least 2 times in the 3rd trimester (≥ 24 weeks up to 24 weeks). birth). Antenatal visits can be more than 4 times as needed/indications and if there are complaints of illness or pregnancy disorders (Ministry of Health, 2019).

Mothers who comply in carrying out ANC visits will obtain information about the importance of maintaining pregnancy and the development and growth of the fetus, while mothers who are non-compliant are expected to be active and raise awareness in carrying out ANC visits, so that the nutritional needs of the mother and fetus can be met, then the mother can immediately receive handling and health services if there are problems in the pregnancy process, so that mothers are encouraged to carry out regular pregnancy visits

This study is in line with the results of Citrawati's (2018) research, namely Antenatal care visits at the Tampaksiring II Health Center, it was found that 27 (90.0%) respondents made regular antenatal care visits while 3 (10.0%) respondents made irregular antenatal care visits.

According to the researchers' assumptions, pregnant women who obtain information and utilize health services tend to be obedient in conducting antenatal care visits. This happens because all the information and health services received by the mother creates a good understanding of the mother so that positive behavior is created.

Relationship between Knowledge of Pregnant Women and Compliance with Pregnancy Visits (Antenatal Care) K1 to K4 at UPTD Puskesmas Datuk Bandar in 2022

Based on statistical tests using chi square analysis, it was found that the p value of 0.014 ($p < 0.05$) statistically there was a significant relationship between knowledge of pregnant women and adherence to antenatal care (Antenatal Care) K1 to K4 at UPTD Puskesmas Datuk Bandar in 2022.

This is supported by research conducted by Citrawati (2018) which examines the relationship between knowledge of pregnant women about ANC and ANC visits at the Tampaksiring II Health Center. The results of this study indicate that the results of data analysis between the level of knowledge and antenatal care visits found that the p value was 0,00 which

means that p value < 0.01 , then statistically there is a significant relationship between the level of knowledge of pregnant women about antenatal care and antenatal care visits at the Puskesmas Tampaksiring II. From the results of the study, it was found that from 30 respondents, 25 (83.3%) respondents had good knowledge by conducting regular antenatal care visits, while 5 (16.7%) respondents had less knowledge by conducting irregular antenatal care visits.

This research is in line with Notoadmojo's (2018) theory which says that mothers who will check their pregnancy will be facilitated if the mother knows what the benefits of having a pregnancy check are, who and where the pregnancy check is done. Lack of understanding and knowledge of mothers and families about the importance of prenatal care has an impact on pregnant women.

Researchers assume that in this study the mother's knowledge has a close relationship with the implementation of antenatal visits K1 to K4, this is because the higher the level of knowledge of the mother about her pregnancy, the higher her desire to know the health condition of herself and the fetus being conceived so that the mother is motivated to make antenatal visits K4.

CONCLUSIONS

From the results of research and discussion on the relationship between knowledge of pregnant women and compliance with antenatal care from K1 to K4 at UPTD Puskesmas Datuk Bandar in 2022, the following conclusions can be drawn: Distribution of knowledge to pregnant women at UPTD Puskesmas Datuk Bandar in 2022 the majority of respondents have high knowledge. Distribution of observance of pregnancy visits at UPTD Puskesmas Datuk Bandar in 2022 the majority of respondents have adherence in pregnancy visits. There is a Relationship between Knowledge of Pregnant Women and Compliance with Pregnancy Visits (Antenatal Care) K1 to K4 at UPTD Puskesmas Datuk Bandar Year.

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