Increasing Antenatal Care (ANC) Visits through Education for Pregnant Women at the Gurah Community Health Center, Kediri Regency

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ABSTRACT
Quality antenatal care is a key factor in ensuring pregnant women are prepared for a safe delivery and in preventing complications that require special medical attention. Low attendance at antenatal visits is partly due to a lack of awareness about the importance of timely ANC check-ups. To improve the quality of antenatal visits among pregnant women at Gurah Public Health Center, Kediri Regency. This community service activity was conducted for pregnant women in the Gurah Public Health Center area from September 30 to October 30, 2024, with 10 pregnant women in the first trimester. The activity consisted of three stages: preparation, implementation, and evaluation. The findings showed that after receiving education, there was an increase in pregnant women's knowledge regarding antenatal visits. Education can enhance the participation of pregnant women, which is expected to improve the coverage of ANC services in accordance with the set targets.

Keywords: antenatal visits, education, knowledge, pregnant women

INTRODUCTION

Pregnancy and childbirth are significant moments in a woman's life and require thorough preparation to ensure a safe experience (Slamet & Aprilina, 2019). Quality antenatal care (ANC) is essential in preparing pregnant women for safe delivery and preventing complications or emergencies that require special medical attention (Gitanurani, 2017). In Indonesia, maternal mortality in 2019 reached 4.221 cases, with the leading causes being hemorrhage (1.280 cases), pregnancy-induced hypertension (1.066 cases), and infections (207 cases) (Ministry of Health of Indonesia, 2020).
Comprehensive ANC services for pregnant women are crucial, as they include observation, education, and medical treatment provided by healthcare professionals, all of which play a significant role in reducing maternal and infant mortality (Adam et al., 2015 in Hamidiyah & Hidayati, 2018). Additionally, external factors such as the distance to healthcare facilities,

family income, and support from husbands, family members, and healthcare providers also play a crucial role in determining how regularly a woman attends antenatal check-ups (Choirunissa & Syaputri, 2018).

According to the Performance Assessment Report of Gurah Public Health Center for the first semester of 2024, the coverage of the first antenatal visit (K1) among pregnant women was only 39.9% of the target of 50%, while the coverage of standard ANC services stood at 25.9% of the 50% target. This indicates a significant gap of 24.1% from the target set by the Ministry of Health. Age, parity, household income, and distance from health facilities are significant factors associated with ANC visits.(Andriani et al., 2022) Husband's support is also one of the factors that influence ANC visits. Research states that husbands who live in urban areas have a 1.2 times greater chance of being involved in ANC visits than those who live in rural areas. Likewise, the better the husband's education, the more they are involved in ANC. (Laksono et al., 2022) Education level plays an important role in fulfilling antenatal visits. Pregnant women with higher education are 2.65 times more likely to complete antenatal visits than those with basic education. (Idris & Sari, 2023).

Efforts undertaken by the health center to meet performance targets include providing ANC services according to standard procedures and implementing an online registration system to reduce waiting times. However, these measures have not been fully effective in increasing ANC visits. Therefore, in this residency program, the team aims to provide education to pregnant women on the importance of ANC visits. This is based on the results of the initial survey obtained during the residency, namely the lack of ANC visits at the Gurah Health Center.

METHODS

Location and Time of Activity
The activity was conducted in the Gurah Public Health Center area from September 30 to October 30, 2024.

Participants
The target participants of this activity were 10 pregnant women in the first trimester in the Gurah Public Health Center area.

Instruments
The instrument used to assess the level of knowledge among pregnant women was a questionnaire consisting of 12 questions.

Implementation Method

The activity was carried out in three stages:

1. Preparation Stage
   This stage involved obtaining permission for the community service activity from Division of Research and Community Service of STRADA Indonesia and the Gurah Public Health Center.
2. Implementation Stage
   Participants were given a pre-test using a questionnaire to assess their initial knowledge regarding antenatal care visits at the Gurah Public Health Center.
3. Evaluation Stage
   Knowledge levels were evaluated by comparing the pre-test and post-test scores.

RESULTS

The study assesses pregnant women's knowledge of prenatal care using a questionnaire consisting of 12 questions. The questionnaire evaluates their understanding of the importance of regular check-ups, health monitoring, and preventive measures during pregnancy. The

aspects covered include doctor consultations, blood pressure measurement, weight and height monitoring, and upper arm circumference assessment. Additionally, specific examinations such as fundal height measurement, fetal position, fetal heartbeat, and tetanus toxoid (TT) immunization are addressed. The questionnaire also highlights the importance of iron supplement intake and laboratory tests, including hemoglobin levels, blood type, urine protein, and HIV screening, as well as referral procedures in cases of potential risks. This study aims to assess the extent of pregnant women's knowledge in maintaining their own health and that of their fetus, serving as a basis for improving maternal and child healthcare services. Data is analyzed using SPSS 25, with the test results presented in Table 1 below.

Table 1. Results of the Paired Samples Statistics Test

Mean	N	Std. Deviation	Mean	Std. Error
Pre test	3.40	15	.737	.190
Post test	12.00	15	.000	.000

The statistical results indicate a significant increase in the average scores between the pre-test and post-test among 15 respondents**.** In the pre-test, the average score was 3.40 with a standard deviation of 0.737, reflecting variations in scores among respondents. The standard error of 0.190 indicates the accuracy of this mean estimate. After the intervention, the average post-test score increased dramatically to 12.00, with both the standard deviation and standard error being zero. This implies that all respondents achieved the same score on the post-test, with no variation, making the mean highly accurate.

Table 2. Results of the Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pre test – post test	-8.600	0.737	0.190	-9.008	-8.192	-45.207	14	0.000

Based on the paired t-test results, the mean difference between the pre-test and post-test scores was -8.600, with a standard deviation of 0.737 and a standard error of the mean of 0.190. The 95% confidence interval ranged from -9.008 to -8.192. The calculated t-value was -45.207, with 14 degrees of freedom (df) and a significance level (Sig. 2-tailed) of 0.000, which is less than 0.05. This indicates a significant difference between the pre-test and post-test scores. These results suggest that the intervention had a meaningful impact on the measured variable, as there was a significant difference before and after the treatment. The data were collected using paired samples from the same subjects, where each variable was measured under different conditions while ensuring that the normality assumption was met.

DISCUSSION

Based on the research findings obtained through the distribution of questionnaires to pregnant women, it was identified that their knowledge of various essential aspects of pregnancy care significantly changed before and after the intervention, consistent with previous studies (Maisura & Darmawati, 2016). This study utilized a questionnaire consisting of 12 questions covering routine pregnancy check-ups, health monitoring, and essential preventive measures during pregnancy. The aspects assessed included medical examinations, blood pressure monitoring, weight measurement, and specialized assessments such as fundal height measurement, fetal heartbeat monitoring, and tetanus toxoid (TT) immunization.

Additionally, the questionnaire addressed the importance of iron supplement intake and other laboratory tests.

Data analysis was conducted using SPSS 25, with the statistical test results presented in Table 4.1. In the pre-test stage, the respondents' average score was 3.40, with a standard deviation of 0.737, indicating significant variations in pregnant women's knowledge. After the intervention, the post-test results showed a substantial improvement, with an average score of 12.00 and a standard deviation of 0.000, meaning there was no variation in scores among respondents. This suggests that all participants successfully comprehended the material after the intervention, consistent with previous research (Arsyati, 2019).

The paired t-test results showed that the mean difference between pre-test and post-test scores was -8.600, with a standard deviation of 0.737 and a significance value (Sig. 2-tailed) of 0.000 (less than 0.05). With a t-value of -45.207 and a 95% confidence level, these findings indicate a highly significant difference before and after the intervention. Therefore, it can be concluded that the intervention, in the form of education and the dissemination of information on pregnancy care, successfully improved pregnant women's knowledge significantly. This is crucial in efforts to enhance maternal and child healthcare services. These findings align with previous studies by Dyna et al. (2022) and Rahmawati & Rahadewi (2024), which demonstrated that educational programs provided to pregnant women have a significant positive impact. The results of the paired t-test showed that the difference in the mean pre-test and post-test scores was -8.600 with a standard deviation of 0.737 and a significance value (Sig. 2-tailed) of 0.000 (less than 0.05). With a t value of -45.207 and a confidence level of 95%, this finding shows a very significant difference before and after the intervention. Thus, it can be concluded that the intervention in the form of education and dissemination of information about pregnancy care has succeeded in significantly increasing the knowledge of pregnant women. This is important in efforts to improve maternal and child health services.

This finding is in line with previous studies conducted by Dyna et al. (2022) and Rahmawati & Rahadewi (2024) which showed that educational programs provided to pregnant women have a significant positive impact. According to Idris and Sari (2022), the level of education is very important in shaping the knowledge and attitudes of mothers towards the use of antenatal care services in health facilities. To increase the utilization of these services, the Indonesian government needs to make more intensive socialization efforts to increase public awareness and knowledge about the importance of regular pregnancy check-ups. Health workers, especially nurses and midwives, also need to provide more intensive health education to pregnant women to help them access services. In counseling to increase ANC visits, counseling techniques with a humanistic approach can be used. This technique prioritizes attitudes that emphasize understanding of humans, focusing on the nature of the human condition, including the ability to be self-aware, free to choose to determine destiny, freedom, and responsibility, anxiety as an important element, and the search for unique meaning in a meaningless world, loneliness and contact with others, limitations, and death, and the tendency to actualize one self.(Yulianingsih et al, 2024) Non-compliance with ANC can result in the inability to detect various complications affecting pregnancy. This lack of detection may prevent early identification of pregnancy-related complications, significantly impacting the accuracy and timeliness of necessary referrals (Astutik & Rusdianawati, 2018).

CONCLUSION

The conclusion from this residency program is that the Antenatal Care (ANC) service coverage for pregnant women at Gurah Public Health Center in the first semester of 2024 has not yet met the expected target. Several factors contributing to this issue include a lack of

knowledge among pregnant women regarding the importance of ANC, limited distribution of leaflets for Communication, Information, and Education (CIE), and inadequate follow-up on pre-marital health data. The intervention, in the form of education and the dissemination of pregnancy care information, was proven effective in significantly increasing pregnant women's knowledge, which is an essential step in improving maternal and child healthcare services.

The evaluation also indicated an increase in pregnant women's participation in adhering to their ANC check-up schedules. Based on these findings, it is expected that ANC service coverage for pregnant women will improve to meet the target. The evaluation process involved pregnant women, academic supervisors, and healthcare professionals at Gurah Public Health Center.

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