The Effect of Pregnancy Class on Mothers' Knowledge Regarding Pregnancy

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Abstract:
A mother's lack of knowledge about pregnancy will affect the mother's health status. So promotional efforts, one of which is holding classes for pregnant women, are really needed. The aim of this research was to determine the effect of pregnant pregnancy class on mothers' knowledge about pregnancy. The design of this study is quasy experimental. The population is all pregnant women who visited Mekarsari Health Centre during the study period. 15 pregnant women were recruited as the sample purposively with a gestational age between 20-32 weeks. The results found that pregnant women's knowledge is significantly higher than before the implementation of the pregnancy class. The conclusion of the research results is that there is a difference in the level of knowledge of pregnant women about pregnancy before and after carrying out classes for pregnant women at the Mekarsari Health Center, Tambun Selatan District, so it is recommended that the development and monitoring of the implementation of maternal classes be better across programs and across sectors and it is hoped that midwives can carry out the classes.

INTRODUCTION

Maternal mortality rates are still quite high in most developing countries and occur at a higher rate among poor mothers and among those who reside in rural areas [World Health Organization, 2018]. Indonesia's Maternal Mortality Rate (MMR) is 359/100,000 live births. The high maternal and infant mortality rate is partly due to the fact that many pregnant women do not have their pregnancies checked regularly so that abnormalities that appear during pregnancy cannot be detected as early as possible (Supiyati et al., 2023).

Pregnancy is the condition of a woman who carries a fetus for approximately nine months or 40 weeks due to the conception of spermatozoa and ovum resulting in nidation of the uterus. Pregnancy is divided into three trimesters: the first trimester from the 1st to the 12th week, the 2nd trimester from the 13th to the 28th week, and the 3rd trimester from the 29th to the 40th week (Kurniyawan et al., 2023). Pregnant women already know information about risky pregnancies. Every pregnant woman hopes for a healthy and comfortable pregnancy without complications because every pregnant woman has a risk of death. Pregnancy will cause hormonal changes in women due to increases in estrogen, progesterone and chorionic gonadotropin (HCG) (Aini et al., 2023). During the nine months of pregnancy, the baby must grow and develop in the womb. Pregnant women may complain of experiencing discomfort that will interfere with the pregnancy process, such as nausea and vomiting (Ariyani et al., 2023).

In an effort to reduce MMR in Indonesia, the Indonesian Ministry of Health emphasizes providing quality maternal health services in the community. One of these efforts is by providing antenatal care (ANC) services. Antenatal care has a real positive impact in reducing maternal and infant mortality rates. With antenatal care, pregnant women can find out about the growth of the fetus and its health, pregnant women can also convey complaints they are experiencing so that health workers can provide information and appropriate action (Novelia et al., 2021).

The 2016 Indonesian Health Profile reports the coverage of the four-contact ANC as much as 85.35% (Ferguson, Davis & Browne, 2013). Despite the declining figure, this coverage has met the target of the Ministry of Health's Strategic Plan (74%). Apart from the individual ANC service, pregnant women in Indonesia can also take advantage of the group prenatal classes at the primary health care centers. The prenatal class is designed as the group learning for pregnant women to improve their knowledge and skills around pregnancy, prenatal exercise, labor, postpartum period, postpartum contraception program, complication prevention, and newborn care (Narchi, 2011). Prior studies have shown the many benefits of the prenatal group class for pregnant women (Ickovics et al., 2003, Grady & Bloom, 2004; Rising, 1998). Some of the benefits are to lower the apprehension about childbirth, to improve the positive labor experience, to prevent preterm labor, to decrease the risk of having a low-birth-weight baby, to prevent prenatal anemia, and to improve husband's support and engagement.

METHOD

The design of this study is a quasy experimental study without control group. The population is all pregnant women who visited the Mekarsari Health Centre during the study period which was April-June 2017 and join to the pregnancy class. 15 pregnant women were recruited as the sample purposively. This study has gained permission from the Mekar Sari Health Centre and Universitas Nasional. The questionnaire regarding pregnancy has been developed by researcher. It was used to assess the pregnant women's knowledge. The questionnaire has been tested for validity and reliability. The data have been analyzed univariately and bivariately.

RESULT

Univariate Analysis

Table 1. Respondents' Characteristics

Characteristics	Frequency	Percentage
Age		
≤ 25 tahun	9	60
≥26 tahun	6	40
Formal Education		
Elementary school	1	6.7
Junior High school	4	26.7
Senior high school	9	60
University	1	6.7
Information resources		
Media	5	33.3
Health care provider	10	66.7
Total	15	100.00

Table 1 shows that majority of the respondents were ≤ 25 tahun, had the senior high school education background. Furthermore, 66.7% of the respondents received information regarding pregnancy from health care provider.

Table 2. Knowledge Regarding Pregnancy

Knowledge	Frequency	Percentage
Pretest		
High	4	26.7
Low	11	73.3
Post test		
High	10	66.7
Low	5	33.3

Table 2 shows that majority of the respondents had the low knowledge regarding pregnancy (73.3%) and 26.7% had high level of knowledge regarding pregnancy before pregnancy class. Then, after pregnancy class, majority of respondents has high level of knowledge (66.7%) and 33.3% had low level of knowledge regarding pregnancy.

The Bivariate Analysis

Table 3. The Differences of Knowledge Before and After Pregnancy Class

Variabel	N	Mean	SD	SE	p
Pretest	15	6.33	2.610	0.674	0.001
Posttest	15	10.87	4.673	1.207	

Based on table 3 above, the average level of knowledge of pregnant women before the Pregnant Women's class activities is 6.33 with a standard deviation of 2.610, while the knowledge of pregnant women after attending the Pregnant Women's class is 10.87 with a standard deviation is 4.673. The mean value of the measurement difference between knowledge before attending the class for pregnant women and after attending the class for pregnant women was -4.533 with a standard deviation of 4.103. The statistical test results obtained a p value of 0.001, so it can be concluded that there is a significant difference between the mother's knowledge before attending the pregnancy class and after attending the pregnancy class.

DISCUSSION

This research shows that there is a significant difference in pregnant women's knowledge about pregnancy between before and after the implementation of the pregnancy class. The statistical test results of the Paired Samples T-Test show p = 0.001. It can be seen that the average change in pregnant women before and after the mother's class activity is 6.33 with a standard deviation of 2.610, while the change in knowledge of pregnant women after attending the class for pregnant women is 10.87 with a standard deviation of 4.673. It can be seen that the mean value of the difference in measurement between knowledge before attending the class. pregnant women and after attending classes pregnant women are -4.533 with a standard deviation of 4.103.

This study is accordance to previous study which found the significant impact of the pregnant women's class on knowledge enhancement (Nurmala, 2021). Typically, pregnant women in Indonesia undergo comprehensive antenatal care (ANC), involving a minimum of four ANC sessions throughout pregnancy. The standard ANC includes various assessments such as weight and height measurements, blood pressure tests, nutritional status evaluations using Mid-Upper Arm Circumference, checks for fundal height, fetal presentation, and fetal heart rate, screening and provision of tetanus vaccination, oral iron supplementation, routine and specific laboratory tests, case management, and counseling. Routine antenatal care is administered by physicians, midwives, and trained nurses on an individual basis for pregnant women (Stellata et al., 2023).

In this study, the majority of respondents had scores above the average, this may have happened because some respondents had received information from health workers about pregnancy. For respondents who get scores below the average, this may be due to lack of information and errors in interpreting the information they obtained while attending pregnancy counseling classes. Apart from that, there may also be other influencing factors, such as low level of education, poor memory, cognitive limitations which cause weak comprehension, lack of interest in learning and lack of familiarity with the sources of information provided by officers. Previous study found that the accounts of women engaged in the prenatal group class underscore the significance of the prenatal health promotion efforts led by women, that pregnant women may require a more extensive form of antenatal education beyond the conventional information provided through standard care (Harahap & Afiyanti, 2019).

There is information from health workers that respondents have received before receiving class counseling for pregnant women, although the material may be different, pregnant women have already been given health education, meaning that pregnant women already have experience in receiving health information. Knowledge can also be obtained from a person's education, the higher a person's education, the easier it is for them to receive and digest information both from health workers and from people around them, and knowledge can also be obtained from beliefs that have become a culture passed down from generation to generation in the environment around the respondent.

The increase in knowledge in this research is one indicator of the success of class counseling for pregnant women, in which there are teaching and learning activities from a cognitive perspective for respondents. It is hoped that this increase in knowledge can change the attitudes and skills of respondents in caring for their pregnancy, and can change the negative culture that exists. can be detrimental to the respondents themselves.

Pregnancy classes have been proven to increase mothers' knowledge, this is because maternal classes have advantages compared to regular counseling at posyandu or case-by-case counseling. The knowledge gained from case-by-case counseling is only limited to the health problems experienced during the consultation. The counseling given in case-by-case counseling or in regular counseling is not coordinated, so that the knowledge given to mothers is only the knowledge possessed by the officers, apart from that there is also no work plan like in mother-class counseling so there is no monitoring and implementation as well. unscheduled and unsustainable. In contrast to mother classes, the implementation of counseling is scheduled, continuous and has a clear structure every day, making the material easier for mothers to accept and sharing experiences with fellow participants, brain storming and direct practice makes the counseling more interesting.

The pregnancy class not only aims to enhance mothers' understanding of pregnancy, childbirth, and child health but also promotes their autonomy in decision-making, particularly in choosing to give birth with the assistance of health workers. Additionally, participating mothers may

offer fresh perspectives to their husbands and families, facilitating a more straightforward acceptance of utilizing Maternal and Neonatal Health (MNH) services by all family members. Moreover, the strong support from family members can boost mothers' confidence in the safety, ease, and comfort of labor in health facilities. A study has revealed that mothers engaged in the KIH program experience lower levels of postpartum depression compared to those not involved in the initiative (Husna et al., 2020).

CONCLUSION

Pregnancy class is effective to increase pregnant women's knowledge regarding pregnancy. It is suggested to health care provider to improve the pregnancy class. Pregnant women are suggested to join pregnancy class during pregnancy in order to improve their knowledge and prepare delivery.

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CONFLICT OF INTEREST

There is no conflict of interest in conducting this study.

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