https://doi.org/10.31101/ijhst.v5i2.3304

Original Research Paper

The Effect of Health Education on Pregnancy Danger Signs on Increasing **Knowledge of Third Trimester Pregnant Women**

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Submitted: 15 September 2023 Revised: 30 Oktober 2023 Accepted: 18 November 2023

Abstrak

The success of maternal health programs can be measured using the main indicator of Maternal Mortality Rate (MMR). One of the factors causing high MMR is the lack of knowledge of III trimester pregnant women about the danger signs of pregnancy. Providing health education to pregnant women is one way to increase knowledge so that third trimester pregnant women can make decisions quickly when facing dangerous signs of pregnancy. One that affects knowledge is education. The educational process is expected to bring changes in knowledge, attitudes and skills. The purpose of this study was to determine the effect of health education about the danger signs of pregnancy on increasing the knowledge of III trimester pregnant women. This research method uses preexperimental design with one-group pre-test post-test design. Data collection method with primary data using questionnaires. The population of this study amounted to 42 III trimester pregnant women, the sample in this study was 38 III trimester pregnant women using purposive sampling and Wilcoxon test. The results of this study show an increase in knowledge of III trimester pregnant women as evidenced by the results obtained a p-value of 0.000 where the p-value is <0.05. This means that health education about the danger signs of pregnancy is effective in increasing the knowledge of third trimester pregnant women at PMB Ummi Latifah Bantul.

Keywords: Health education, Knowledge, Pregnant women

1. Introduction

According to the data World Health Organization (WHO) 2020, the maternal mortality rate (MMR) is still very high, with about 810 women dying every day worldwide from complications related to pregnancy or childbirth, and about 295,000 women dying during and after pregnancy and childbirth. The maternal mortality rate in developing countries is 462/100,000 live births. At the same time in developed countries, about 11/100,000 live births (WHO 2020). Based on the Indonesian Health Profile (2021), maternal deaths compiled from the records of the Ministry of Health's Family Health Program in 2021 showed 7,389 deaths in Indonesia. This figure shows an increase compared to 2020 of 4,628 deaths (Indonesia Health Profile, 2021).

The number of maternal deaths in DIY in 2020 again increased to 40 cases. The most cases occurred in Bantul Regency with 20 cases and the lowest in Yogyakarta City with 2 cases (Yogyakarta DIY Health Office, 2020). The maternal mortality rate (MMR) in Bantul Regency in 2020 was higher than in 2019. Maternal mortality in 2019 was 99.45/100,000 live births or with 13 cases, while in 2020 it was 157.6/100.00 with 20 cases (Bantul District Health Office, 2022).

The problem of high MMR is caused by problems in maternal health status and readiness to get pregnant, antenatal examinations (gestational period), childbirth assistance and care immediately after delivery, as well as socio-cultural factors (Sali, 2019). The factors of high maternal mortality in Indonesia are caused by covid-19, bleeding, hypertension in pregnancy, circulatory system disorders, and others. The above conditions are also influenced by the lack of knowledge of pregnant women about complications or complications during pregnancy. This is a problem that cannot be ignored and can lead to complications during pregnancy and even death, so if a pregnant woman knows the danger signs of pregnancy, then she must be aware of the dangers of pregnancy (Febrina, 2021).

Pregnancy danger signs are signs that indicate dangers that can occur during pregnancy or before birth and if not recognized can cause maternal death (Retnaningtyas et al., 2022). One of the efforts to increase the knowledge of pregnant women is through health education to pregnant women which aims to make mothers recognize these danger signs early on and can immediately seek help from midwives, doctors or directly to the hospital to save the lives of mothers and babies in case of pregnancy complications (Devi &; Winni, 2022). Danger signs of pregnancy in III trimester mothers include: Vaginal bleeding, severe headache, blurred vision, swelling in the face and fingers, vaginal discharge fetal movements are not felt, severe abdominal pain (Kartikasari et al., 2021).

The results of research conducted by Mutmainnah and Kumpa (2022) stated that pregnant women's knowledge about the dangers of pregnancy is still low and will affect the level of maternal and perinatal health (Mutmainah &; Kumpa, 2022). Pregnant women in the Banjarmasin area are aware of the dangers of pregnancy through the taboos they practice during pregnancy. (Inayah, 2020). The Healthy Living Community Movement (GERMAS) program was re-launched by the government in 2020 as an effort to reduce the high maternal mortality rate (MMR) by recognizing early the danger signs of pregnancy (Febrina, 2021). The Qur'an affirms that pregnancy has development and change, starting with mild stages followed by weight gain, just like QS. Al a'raf (7) verse 189. This verse explains that the signs of pregnancy are changes in the burden experienced by women due to disorders in the fetus in the womb (Al-Izazy, 2018).

According to research conducted by Devi & Winni (2022), it was found that there are differences in the level of knowledge of mothers about the danger signs of pregnancy using the leaflet method. This is because leaflets are objects so that respondents get stimulus from the media and recording occurs by the five senses then makes respondents know what is conveyed by researchers (Devi &; Winni, 2022). This study aims to determine the effect of health education about the danger signs of pregnancy on increasing knowledge of third trimester pregnant women at PMB Ummi Latifah Bantul.

2. Method

The design of this study was quantitative with pre-experimental design. This type of research was conducted using a one-group pre-test post-test design. The population in this study was 42 III trimester pregnant women who carried out examinations at PMB Ummi Latifah Bantul from October 2022-December 2022. The number of samples needed in this study was 38 III trimester pregnant women. Sampling method using purposive sampling technique. Data collection techniques by distributing questionnaires to respondents. Data management methods are: Editing, Coding: Coding knowledge level (Bad = <56%, Sufficient = 56-75% and Good = 76-100%), Data Tabulation, Cleaning and Data Entry. The media used is in the form of PPT and leaflets. The questionnaire in this study amounted to 19 questions and the questionnaire grid included: Understanding pregnancy danger signs, the benefits of knowing pregnancy danger signs, how to detect early pregnancy danger signs, pregnancy checks and various pregnancy danger signs. The duration of the study was carried out for 60 minutes. In this study, researchers did not test validity because researchers used questionnaires on knowledge of third trimester pregnant women about pregnancy danger signs from questionnaires that have been used by researchers before, namely by Aisyah (2018) with a calculated r value of 0.343-0.732. The instrument is said to be valid where the value of r is calculated > r table which is > 0.3338. This research has received approval from the Ethics Commission of Universitas 'Aisyiyah Yogyakarta with No. 2709 / KEP-UNISA / III / 2023.

3. Result and Discussion

The results of the study are presented in two types, namely univariate analysis and bivariate analysis. Univariate analysis is used to determine the distribution of data from the independent variable (Health education) and the dependent variable (Knowledge level) while bivariate analysis is used to test whether or not there is an influence between the independent variable and the dependent variable. This univariate analysis consists of respondents' characteristics from age, education and occupation.

3.1. Description of Demographic Data

Based on the results of respondents' answers, it can be analyzed in the form of demographic data distribution according to the table presented below:

Table 1. Frequency Distribution of Respondent Characteristics Based on Maternal Age, Education and Work

No	Characteristic	Frequency	Percentage %
1	Mother's Age		
	20-25	26	68,4
	26-30	12	31,5
2	Education		
	Junior High School	8	21,1
	High School / Vocational School	21	55,3
No	Characteristic	Frequency	Percentage %
	College	9	23,6
3	Work		
	Student	1	2,6
	Private Employees	3	7,9
	Honorary	1	2,6
	Laborer	2	5,3

(Source: Primary Data, 2023)

Based on table 1, it shows that the research conducted at PMB Ummi Latifah Bantul, the majority of respondents aged 20-25 years, namely 26 respondents (68.4%), the respondents' jobs were almost entirely IRT as many as 31 pregnant women (81.6%), and most respondents had the last education background of high school / vocational school, which was 21 respondents (55.3%).

Table 2. Frequency distribution based on knowledge of third trimester pregnant women about the danger signs of pregnancy before being given health education

Variable	Category	N	%
	Good	14	36,8
Knowledge	Enough	13	34,2 28,9
	Less	11	28,9
	Sum	38	100

(Source: Primary Data, 2023)

Table 3. Frequency distribution based on knowledge of third trimester pregnant women about the danger signs of pregnancy after being given health education

Variable	Category	N	%
	Good	33	86,8
Knowledge	Enough	5	13,2
	less	0	0
	Sum	38	100

(Source: Primary Data, 2023)

Based on table 2 above, it is known that in the variable knowledge of respondents before being given health education, it shows that from 38 respondents there were 14 respondents (36.8%) with good

categories and respondents there were 11 respondents (28.9%) in the less category, of the 38 respondents, it is known that the average knowledge of third trimester pregnant women before health education about pregnancy danger signs was 73.6, meaning that the average respondent was included in the sufficient category.

Based on table 3 above, it is known that the variable knowledge of respondents after being given health education shows that from 38 respondents there were 33 respondents (86.8%) in the good category and 5 respondents (13.2%) in the sufficient category, of the 38 respondents it is known that the average knowledge of third trimester pregnant women after health education about the danger signs of pregnancy is 93.4, meaning that the average respondent is included in the good category.

Bivariate analysis was used to determine the effect of health education on increasing knowledge of III trimester pregnant women. The data analysis used to test the hypothesis is Wilxocon, from the results of calculations processed using computer programs, the following results are obtained.

Table 3. Wilxocon Statistical Test

Information	Z score	p-value
Pretest and Posttest	-4.524b	.000

(Source: Primary Data, 2023)

Based on table 3.4 above, it is known that "Z" is -4.524b and p-value is 0.000 where the p-value is <0.05 so that it can be stated that H0 rejected Ha is accepted because of the probability value of <0.05 so that there is an influence of health education about pregnancy danger signs on increasing knowledge of third trimester pregnant women at PMB Ummi Latifah Bantul.

3.2. Discussion

Based on the results of the study, it is known that before health education was given, from 38 respondents, it is known that the average knowledge of pregnant women in the third trimester is 73.6, meaning that the average respondents fall into the sufficient category, and most respondents have a high school / vocational education background, which is 21 respondents (55.3%). This educational status is very influential on how pregnant women can process the information that has been obtained, and increase the knowledge of third trimester pregnant women about the danger signs of pregnancy that need to be watched out for during pregnancy. The higher the level of education, the easier it is to get information, and the better the knowledge and wider compared to the low level of education (Darsini et al., 2019).

According to previous research, knowledge is influenced by education where someone who has a high level of education tends to be easier to access or get information. This makes respondents can easily absorb and understand information about healthy pregnancy, the importance of pregnancy checks and healthy foods given. Higher education levels have broad insight, and are more experienced, so it is easier to solve problems and know how to have positive coping mechanisms (Retno &; Nur, 2020).

The work environment can make a person gain experience and knowledge both directly and indirectly. Sometimes the work done by an individual will provide wider opportunities for individuals to gain knowledge or it could be that the work activities owned even make individuals unable to access information (Darsini et al., 2019). This is in line with research that has been conducted that respondents mostly work as housewives 31 respondents (81.6%). According to Moudy and Syakurah (2020), individuals who have non-health educational/occupational backgrounds certainly have lower experience of knowledge about health than individuals with educational/occupational health backgrounds (Moudy &; Syakurah, 2020). Health education is a learning process that aims as a form of behavior change through the process of increasing knowledge, skills but changing attitudes that are intertwined with lifestyles towards aspects that move healthier. Health education obtained by respondents has an impact on increasing respondents' knowledge (Nurul et al., 2022).

After being given health education, the results of the 38 respondents were obtained from the average knowledge of pregnant women in the third trimester was 93.4, meaning that the average respondent was included in the good category. This is in line with the research of Rohani & Wahyuni (2023) with the results of increasing knowledge of the majority of good posttest scores by 22 respondents (79%). The success of health education is supported by several factors including the methods used, media and delivery methods. This study used discussion methods, media used questionnaires, PPT and leaflets. The effectiveness of the discussion method is influenced by the ability of researchers to master the material and be able to deliver in accordance with the target. In addition, it is also supported by the media used (Widyawati, 2020).

Based on the results of Wilcoxon's statistical test with a p-value of 0.000 where the p-value <0.05 so that it can be stated that H0 rejected Ha is accepted because of the probability value of <0.05 so that there is an influence of health education about the danger signs of pregnancy on increasing knowledge of third trimester pregnant women at PMB Ummi Latifah Bantul. In line with Rohani & Wahyuni's (2023) research, a p value of -value = 0.000 was obtained. This study is in line with Devi & Winni's (2022) research, this result has the influence of health education about pregnancy danger signs on knowledge with a significant value of 0.000 (P <0.05).

The results showed that after health education was carried out almost all third trimester pregnant women in the good category and only a small part had sufficient knowledge, there were no respondents in the category of less knowledge, this shows that there was a change in respondents' knowledge, and there was an influence of health education provided by researchers, the success of the health education provided was apart from material giving factors, material provided, methods used and media provided. The use of PPT media and leaflets is considered more effective in helping the concentration of III trimester pregnant women in listening to the material presented. Factor the education level of respondents in this study with the first level (junior high school / junior high school), secondary (high school / vocational school) and college. Respondents with higher education levels have a more structured and open mindset so that in receiving the material it is easier to understand and absorb the health education material provided and have been able to respond to the material presented both similar to questions and responses (I Nengah et al., 2020).

According to the Qur'an before a baby is born, a person goes through various stages in the mother's womb. Here are some stages of pregnancy in its development that each person goes through: The first stage of nutfah, the second stage of 'alaqah, the third stage of mudghah, the fourth and fifth stages (flesh and bones), and the sixth stage of spirit giving (Mukhlis, 2022). During this pregnancy, pregnant women have the obligation to maintain and care for the womb, quite difficult because it takes patience to wait nine months (Al-Izazy, 2018). Obstetric care is quite influential on fetal development, pregnant women certainly have to avoid several things, such as food and the like, drinks and other things that endanger fetal safety. In addition to the need for medical care and physical care, a pregnant woman must also pay attention to things that can affect the mental stability of pregnant women, because pregnant women who experience stress affect the development of the fetus in the womb (Ministry of Health, 2022). The existence of the fetus in the womb also affects the physical condition of the mother, pregnant women experience many changes both physically and mentally. This causes complaints of pregnant women, one of which is a weak state (Kartikasari et al., 2021). Referring to the word of Allah SWT Al-Qur'an surah Lukman Verse 14 namely:

Meaning: And We commanded man (to do good) to his two fathers; his mother conceived him in a state of increasing weakness, and weaned him in two years. Give thanks to Me and to your father's parents, only to Me is your return.

Based on the results of the study, it is known that after health education about the danger signs of pregnancy, there is an increase in knowledge that can increase vigilance and early detection of high-risk pregnancies that can be done by third trimester pregnant women themselves.

4. Conclusion

There is an influence of health education about the danger signs of pregnancy on increasing knowledge of third trimester pregnant women at PMB Ummi Latifah Bantul, this is shown from the results of the Wilcoxon statistical test with a p-value of 0.000.

Acknowledgments

The researcher expressed his deepest gratitude to the Dean of the Faculty of Health Sciences UNISA and the Head of PMB Ummi Latifah Bantul for all the facilities and directions given in this study and do not forget to thank the third trimester pregnant women for their participation in this study.

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