

The Effect of Health Education about Labor Pain Management on the Knowledge Level of Pregnant Women at Sewon II Health Center, Bantul Yogyakarta

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Abstract

Labor is the expulsion of the conception product which is marked by the release of the fetus, placenta, and amniotic membranes. Labor pain is a condition whereby almost all pregnant women experience physiological discomfort, especially in the last trimester. Therefore, reducing labor pain can be done by, one of the ways, increasing the knowledge of pregnant women about non-pharmacological labor pain management. The study aimed at determining whether there is any effect of health education about labor pain management on the level of knowledge of pregnant women at Puskesmas (Community Health Center) Sewon II Bantul, Yogyakarta. The design of the study was the Quasy-Experimental Design method with the pretest and posttest one-group design. The sampling technique used was purposive sampling with a total sample of 37 respondents. Data were analyzed using the Wilcoxon Signed Rank Test. The results of the study showed that the knowledge level of pregnant women before being given health education about non-pharmacological labor pain management was in the sufficient category with 20 respondents (54.1%) and the knowledge level of pregnant women after being given health education about non-pharmacological labor pain management was in the good category with 36 respondents (97.3%). There is an effect on the difference in the knowledge level of pregnant women before and after being given health education about non-pharmacological labor pain management.

Keywords

Health education; labor pain; knowledge level



I. Introduction

Labor or birth is a normal physiological process in life where the opening or thinning of the cervix occurs. The opening and thinning of the cervix is caused by uterine contractions which cause labor pain. Pain in labor is not a new thing but one of the causes of excessive worry and anxiety in laboring mothers. (Khoirunnisa' et al., 2017). Labor pain is a condition where there is a feeling of physiological discomfort in general experienced by almost all pregnant or birthing women, especially in the final trimester. Labor pain is undoubtedly the most severe and worst type of pain that most women have experienced in their lives. Therefore, reducing labor pain is one of the main concerns for both laboring mothers and their family members (Deepak et al., 2022).

Pain management can be controlled by two methods, namely pharmacological and non-pharmacological therapies. Pharmacological therapy methods in handling pain are methods using chemicals or drugs, while non-pharmacological therapy is a method of handling pain naturally, including relaxation, warm and cold compresses, deep breath relaxation techniques, movement and position changes, massage, hydrotherapy, hot or

cold therapy, music therapy, guided imagery therapy, acupuncture, and aromatherapy (Triwidiyantari & Ramadhini S, 2018).

Knowledge is the result of a process in a person that occurs due to exposure to information with the help of the senses possessed by that person. A person's knowledge can increase if they consistently and continuously want to learn new things. In research (Dewi, et al., 2019). A person's knowledge can be influenced by several aspects, namely education, work, family, environment and interest. High knowledge of pregnant women can affect the mother's knowledge and insight to be broader. Based on data from the DIY Health Office in 2021, there were 40,000 births and 16,000 of them were first births (DIY Health Office, 2021). First birth can affect the knowledge of pregnant women in managing labor pain because they have not had previous childbirth experience. The insight possessed by the mother about childbirth can affect how the mother's behavior and mindset in managing labor pain. Perception of pain varies depending on each individual how to perceive the feeling of pain. Pain during childbirth can affect the psychological condition of the mother in the process of childbirth, the mother feels afraid of facing labor and makes an excuse to perform labor by surgery or sc surgery even without medical indications (Etty et al., 2022).

The mother's lack of knowledge results in the wrong mother determining the type of delivery. Therefore, to increase information and insight, pregnant women can increase the knowledge gained by participating in health education. This health education plays an important role in adding information to pregnant women about the process of pregnancy and effective labor. Appropriate health education about labor pain management must be informed during pregnancy with the aim of increasing maternal confidence in the labor process (Widiawati & Legiati, 2017).

Health promotion or health education is a means of showing and carrying information messages to pregnant women in increasing their knowledge efforts are expected to change behavior and also increase their knowledge about their health positively (Aeni & Yuhandani, 2018). In research conducted by Clark & Mayer (2016), the most frequently used and effective media in conducting health education is using audiovisual or video because the delivery of material using this method is felt to make respondents understand more quickly because it is equipped with pictures or photos that seem real (Sudarmi, 2021).

Animated video media is one of the learning media that displays interesting pictures and writings that are easy to understand and imitate in the process of increasing one's knowledge. Animated video media includes a type of audio visual media because the media contains sound and images. The development of animated video media developed with technology can increase a person's level of knowledge through the delivery of material used as a means of conveying the material. So that through animated video display media regarding material on labor pain management can provide increased maternal motivation, and not boring (I. Pratiwi & Ridwan, 2021).

II. Research Method

The type and research in this study used the Quasy Experimental Design method with the Pretest and Posttest One Group design. The method of data collection in this study was before being given a pretest (O1) followed by giving treatment in the form of health counseling (x) and after being given treatment given a posttest (O2). The population in this study were pregnant women at the Sewon II Bantul Health Center. The sampling technique used in this study was purposive sampling with a total of 58 pregnant women. Data

collection was carried out after obtaining an ethical permit with the number Skep/79/KEPK/IV/2023. The data collection process was carried out in May-June 2023 starting from pretest, providing interventions by providing health education on non-pharmacological labor pain management using animated video media. After the intervention was given, a posttest was conducted. Univariate analysis in this study used frequency distribution while bivariate analysis in this study used the Wilcoxon test.

III. Result and Discussion

The characteristics of respondents in this study include the age of pregnant women, gestational age, occupation, education, parity status, and information about non-pharmacological labor pain management. The frequency distribution for the characteristics of respondents can be seen in table 1.

Table 1. Frequency Distribution of Respondents' Characteristics (n= 37)

Characteristics	Frequency	Percentage (%)
Age		
18-25 years old	11	29,7
26-32 years old	20	54,1
33-42 years old	6	16,2
Pregnancy Age		
Trimester I	2	5,4
Trimester II	12	32,4
Trimester III	23	62,2
Occupation		
Housewife	20	54,1
Private	10	27,0
Self-employed	2	5,4
And others	5	13,5
Education		
Junior high school	1	2,7
Senior high school	15	40,5
College	21	56,8
Parity		
Primiparous	21	56,8
Multiparous	16	43,2
Information		
Know	4	10,8
Don't know	33	89,2
Amount	37	100,0

Table 1 shows that the age of the majority of pregnant women is in the range of 26-32 years as many as 20 respondents (54.1%). Then based on the gestational age of the majority of pregnant women in the third trimester as many as 23 respondents (62.2%). Then based on the work of pregnant women, the majority are housewives as many as 20 respondents (54.1%). Then the last level of education of pregnant women is mostly college as many as 21 respondents (56.8%). Then the parity status of pregnant women is mostly primipara or first pregnancy as many as 21 respondents (56.8%). And then regarding

health information about non-pharmacological labor pain management, the majority of pregnant women do not know as many as 33 respondents (89.2%).

3.1 Pregnant Women's Knowledge about Non-Pharmacological Labor Pain Management before and After Being Given Health Education

Table 2 Frequency Distribution of Pregnant Women's Knowledge before and After Health Education (n = 37)

Knowledge Level	Frequency Before	Frequency After
Less	5	0
Enough	20	1
Good	12	36

Table 2 shows that the level of knowledge of pregnant women before being given health education about non-pharmacological labor pain management was mostly knowledgeable as many as 20 respondents (54.1%). Then the level of knowledge of pregnant women after being given health education about non-pharmacological labor pain management was mostly good knowledge as many as 36 respondents (97.3%).

3.2 The Effect of Health Education on the Knowledge Level of Pregnant Women about Non-Pharmacological Labor Pain Management

Table 3. Mean difference in knowledge of pregnant women before and after health education (n = 37).

	Mean Rank	Sig	Z Wilcoxon
<i>Pretest</i>	0,00	0,000	-5,315
<i>Posttest</i>	19,00		

Based on Table 3, it can be seen that there is a difference in the average level of knowledge of pregnant women before and after being given health education about non-pharmacological labor pain management with a mean rank value of pretest 0.00 and posttest 19.00, Z Wilcoxon -5.315, and a p-value of 0.000 (p-value <0.05), so it can be seen that there is a difference in the level of knowledge of pregnant women after giving health education about non-pharmacological labor pain management using animated video media at the Sewon II Health Center, Bantul Yogyakarta in 2023.

3.3 Result and Discussion

a. Pregnant Women's Knowledge about Non-Pharmacological Labor Pain Management before Health Education

Based on the results of the study, it was found that the level of knowledge of pregnant women before health education about non-pharmacological labor pain management was mostly 20 respondents (54.1%) in the category of sufficient knowledge level. From these results it can be stated that the majority of respondents have sufficient knowledge about non-pharmacological labor pain management before health education is conducted.

Then there were 5 respondents (13.5%) who were less knowledgeable about non-pharmacological labor pain management. The level of knowledge of pregnant women in this study may be influenced by educational factors, parity and information regarding non-pharmacological labor pain management. The level of education also affects a person's perception to be more receptive to new ideas and technology. Education is also one of the

factors that influence a person's perception. Because it can make someone easier to make decisions and act (Palifiana and Khasanah, 2019). In line with research conducted by Sari et al., (2021) as many as 15 respondents (50.0%) had sufficient knowledge about reducing labor pain.

b. Pregnant Women's Knowledge about Non-Pharmacological Labor Pain Management after Health Education

Based on the results of the study, it was found that after giving health education about non-pharmacological labor pain management, most of the knowledge levels of pregnant women as many as 36 respondents (97.3%) had good knowledge. Then there was 1 respondent (2.7%) who was moderately knowledgeable and all pregnant women experienced an increase in knowledge from the pretest treatment about non-pharmacological labor pain management. The level of knowledge of pregnant women in this study may be influenced by age and occupational factors. In this study, most of the pregnant women were 26-32 years old (54.1%). According to research by Dharmawati and Wirata (2016) states that the older a person is, the level of maturity and strength of a person will be better for thinking. So that pregnant women aged 26-32 years are more receptive to the information provided.

c. The Effect of Health Education on the Knowledge Level of Pregnant Women About Non-Pharmacological Labor Pain Management

Based on the results of the analysis test, it shows that there is a difference in the level of knowledge of pregnant women before and after being given health education about non-pharmacological labor pain management with a p-value of 0.000 (p-value <0.05), it can be concluded that there is a difference in the level of knowledge of pregnant women after giving health education about non-pharmacological labor pain management using animated video media. This study is in line with previous research which states that there are differences before and after being given health education through pregnant women's classes with pre-test results in the sufficient category as much as (62.8%) and post-test in the good category as much as (77.1%) which means there is an effect of health education on the level of knowledge of pregnant women. Another study conducted by Andriani (2017) which showed the results of research on childbirth preparation with the results of the level of knowledge of pregnant women before being given health education of 73.52% and after health education of 83.60% which concluded that there was an effect of providing health education about pregnancy on the level of knowledge of primigravida pregnant women in facing childbirth using video or audiovisual media assistance that was able to increase the knowledge of pregnant women.

Health counseling activities involve listening, speaking and viewing activities that make this method effective. In line with research conducted by Saban (2017) on health education using video media that the media is effective in increasing health knowledge compared to using leaflets or other media. Research subjects who are given health education using videos will more easily understand information because it activates many senses. Information with this video can increase the mother's understanding so that the mother's knowledge can be better. In accordance with the theory that says that video media has many advantages including that it can be played repeatedly if necessary to add clarity, the message or material conveyed is fast and easy to remember, videos can encourage and increase motivation to keep watching. Providing health education in pregnant women's classes using video media makes respondents will have an interested attitude towards the material presented and can be played repeatedly at any time by respondents at home (Sari, 2019).

In addition, messages from video or audiovisual media are more effective because audiovisual presentation makes the audience more concentrated. Daryanto (2011) revealed that the absorption capacity of humans who only rely on the sense of sight is only around 82%. In leaflet media, pregnant women only get material by relying on the sense of sight. The presentation of material that is less interesting makes the absorption obtained less than the delivery of material with video media that relies on the senses of sight and hearing. Human absorption using video media with the sense of sight and the sense of hearing amounted to 93%.

IV. Conclusion

Knowledge of pregnant women about non-pharmacological labor pain management before and after giving health education about non-pharmacological labor pain management there is a significant effect. Health education on non-pharmacological labor pain management using animated video media is effective for increasing the knowledge of pregnant women in managing labor pain.

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