



A correlation between knowledge and attitudes of third trimester of pregnant women with implementation of pregnant gymnastics at Lepo-Lepo health centre, Wundudopi, Baruga, Kendari in 2018[☆]

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Abstract Gymnastics or exercise during pregnancy has a positive effect on the reduction of pain experienced by third trimester pregnant women. Preliminary study conducted at the lep-olepo health center in Wundudopi, Baruga, Kendari, and the number of pregnant women for the period of January to June 2018 was 85 pregnant women, consisting of the first, second and third trimesters. Interviews were also conducted to 11 pregnant women in the third trimester, that often experience in the form of back pain, tingling, aches and fatigue, the pregnant woman also did not take any action to overcome it because according to pregnant women the problems experienced are common in pregnant women especially trimester three. The purpose of this study was to determine the relationship between knowledge and attitudes of third trimester pregnant women with the implementation of pregnancy gymnastics.

This study applied quantitative using a cross sectional approach, with a population of 85 pregnant women and a sample was 46 third trimester pregnant women. Analysis method used Chi Square Test and Phi Test.

The results of the study for knowledge variable showed that there was a correlation between knowledge of third trimester pregnant women with the implementation of pregnant gymnastics with a value of $\chi^2_{\text{count}} = 6.758 > \chi^2_{\text{table}} = 3.841$ so that H_0 was rejected or H_a was accepted. For attitudes variable from the results of the SPSS test analysis, the chi square statistical test results showed that $\chi^2_{\text{count}} = 5.073 > \chi^2_{\text{table}} = 3.841$ so that H_0 was rejected or H_a was accepted which means that there was a correlation between the attitude of the third trimester pregnant women and the implementation of pregnant gymnastics.

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Finally, it is recommended for researchers to continue the research toward other variables related to pregnancy exercise, for relevant agencies to develop services for pregnant women.
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Introduction

Maternal death can be prevented up to 22%, namely through regular antenatal care, early detection of complications in pregnancy, healthy living with balanced nutrition, implementation of early breastfeeding initiation in childbirth, and regular pregnancy exercise.

Pregnant gymnastics is a motion training therapy to prepare pregnant women, physically or mentally, in a fast, safe and spontaneous labor. Pregnant gymnastics is proven to be safe for both mother and fetus if it is done appropriately and there are no other dangerous conditions.

Based on the results of the Indonesian Demographic and Health Survey (IDHS) 2007,¹ it was stated that Indonesian MMR was 228 per 100,000 live births. This figure dropped compared to the AKI in 2002 which reached 307/100,000 Births of Life. According to the Indonesian Demographic and Health Survey (IDHS) (2012)² maternal deaths jumped very significantly to 359 per 100,000 live births or returned to the condition in 1997. This means that maternal health declined for 15 years. In 2007, MMR of Indonesia³ reached 228 per 100,000 live births.

The number of pregnant women at lepolepo health center in January to June 2018 amounted to 85 people. Based on the initial survey Prospective researchers with midwives on duty in maternal and child health polyclinics at LepoLepo health center said that actually pregnant gymnastics is part of the program, but its implementation is not optimal. Interviews held among 11 third trimester pregnant women, 6 pregnant women said they often experienced aches, back pain, tingling and fatigue. After clarifying what actions were taken by pregnant women to overcome them, they said they did not take any action to reduce the pain. There were 5 third trimester pregnant women through interviews also said that feeling tired or tingling naturally occurs in mothers who are pregnant so they do not need to have special treatment, and this will disappear after childbirth. In accordance with research conducted by Febriana (2012)⁴ pain or aches, especially in the back of pregnant women, can be overcome by doing pregnancy exercise. Prospective researchers also asked whether pregnant women got information about pregnancy exercise and how they participated in the pregnancy gymnastics class, 4 pregnant women said that they did not participate in pregnancy exercises because they found it difficult to move and did not know how to do pregnancy exercise, 2 pregnant women said they had never get information about pregnancy exercise either through counseling or other media. 3 people said they had attended counseling but had never participated in pregnancy exercise classes. Thus, prospective researchers are interested in conducting a study of the relationship between knowledge and attitudes of third trimester pregnant women with the implementation of pregnancy exercise at the Lepolepo health center in Wundudopi, Baruga, Kendari.

Methods

This type of study was a quantitative study using a cross sectional approach that aims to determine the correlation between knowledge and attitudes of third trimester pregnant women with the implementation of pregnancy exercise at Lepolepo health center in Wundudopi, Baruga, Kendari.

Results

Characteristic of respondents

Respondents were based on the highest age group, namely age between 28 and 30 years as many as 11 respondents (23.9%) and the lowest was 34 years old as many as 7 respondents (15.2%). The highest education was senior high school, with 25 respondents (54.4%) and the lowest was junior high school with 10 respondents (21.7%).

Result of univariate analysis

Less knowledge of mothers was 25 respondents (54.3%) while good knowledge was 21 respondents (45.7%). The mother's attitude was less as many as 31 respondents (67.4%) while the smallest was the good attitude of Mother, namely 15 respondents (32.6%).

Based on the results of the study, the distribution of knowledge of pregnant women in the third trimester with the implementation of pregnancy exercise can be seen in [Table 1](#).

Result of bivariate analysis

The chi square statistical test results showed that $\chi^2_{\text{count}} = 6.758 > \chi^2_{\text{table}} = 3.841$ so that H_0 was rejected or H_a was accepted which means that there was a correlation between the knowledge of the third trimester of pregnant women with the implementation of pregnancy. Based on the results of the study, the distribution of three trimester pregnancy attitudes with the implementation of pregnancy exercise that can be seen in [Table 2](#).

The chi square statistical test results showed that $\chi^2_{\text{count}} = 5.073 > \chi^2_{\text{table}} = 3.841$ so that H_0 was rejected or H_a was accepted which means that there was a correlation between the attitude of the third trimester pregnant women and the implementation of pregnancy exercise.

Discussion

This study was conducted on 46 respondents, namely third trimester pregnant women who visited to community health

Table 1 Correlation between knowledge and implementation of pregnant gymnastics.

No.	Knowledge of respondent	Pregnant gymnastics				Total		$X^2_{\text{count}}X^2_{\text{table}}$
		Do (+)		Don't (–)				
		<i>N</i>	%	<i>N</i>	%	<i>n</i>	%	
1	Good	12	26.1	9	19.6	21	45.7	6758 3841
2	Poor	5	10.8	20	43.5	25	54.3	
	Total	17	36.9	29	63.1	46	100	

Table 2 Relationship between attitudes with implementation of pregnant gymnastics.

No	Attitude of respondent	Pregnant gymnastics				Total		$X^2_{\text{count}}X^2_{\text{table}}$
		Do (+)		Don't (–)				
		<i>N</i>	%	<i>N</i>	%	<i>n</i>	%	
1	Good	9	19.5	6	13.1	15	32.6	5073 3841
2	Poor	8	17.4	23	50	31	67.4	
	Total	17	36.9	29	63.1	46	100	

center of Lepo-lepo, the results of research on the implementation of pregnant gymnastics showed that mothers who did not exercise pregnancy were 29 respondents (63.0%) while those who did pregnant gymnastics were 17 respondents (37.0%). The results of this study indicated that pregnant women did not really understand about pregnant gymnastics, the purpose and benefits of pregnancy exercise, so the fact that researchers in the field found more pregnant women who did not do pregnancy exercise. According to the Ministry of Health (2009),⁵ pregnancy exercise was an action as well as a motion training therapy to make sense physically and mentally facing the labor process and reduced the pain, aches or tingling felt by pregnant women especially the third trimester.

Pregnant gymnastics is a fitness program that is intended for pregnant women, especially the third trimester, so that it has a principle of special movement that is suitable for the condition of pregnant women. Pregnant gymnastics is specifically designed to nourish and dispense pregnant women, reduce complaints that arise during pregnancy and prepare the physical and psychological mother. Pregnant gymnastics begins during pregnancy into the third trimester, namely the age of 28–30 weeks of pregnancy.

Pregnant gymnastics is needed to increase physical and mental readiness. Implementation of pregnant gymnastics in breathing exercises is very useful to get oxygen, so that the mother is ready physically and psychologically.

In terms of education, the level of knowledge of pregnant women about pregnant gymnastics shows a tendency that the higher the education of pregnant women, the better the knowledge of pregnant women about pregnant gymnastics, and vice versa, the lower the education of pregnant women, the less knowledge of pregnant women about pregnant gymnastics.

There is a correlation between the knowledge of the third trimester of pregnant women with the implementation of

pregnant gymnastics at the Lepolepo Health Center in Wundudopi, Baruga, Kendari.

There is a correlation between the attitude of the third trimester of pregnant women with the implementation of pregnant gymnastics at the Lepolepo Health Center in Wundudopi, Baruga, Kendari.

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Ethical clearance

Obtained from college committee.

Conflict of interest

The authors declare no conflict of interest.

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