

The relationship between knowledge and attitudes of pregnant women about pregnancy exercises with the smooth process of normal labor

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ABSTRACT

During pregnancy a mother will experience various changes - both anatomical and physiological changes. Pregnant gymnastics is one of the activities in services during pregnancy or prenatal care which aims to prepare and train the muscles so that they can be optimally utilized in normal childbirth. The purpose of this study was to identify the relationship between knowledge and attitudes of pregnant women with the implementation of pregnancy exercises. This type of research is quantitative analytic using cross sectional design. Sampling technique with purposive sampling through non probability sampling as many as 55 people. The results showed that most pregnant women had good knowledge about pregnant gymnastics, as many as 40 respondents (72.7%), had a positive attitude towards pregnant gymnastics, as many as 36 respondents (65.5%), and 32 respondents (58.2%) did not do pregnant gymnastics. Based on bivariate data analysis, obtained p value = 0.037, which means there is a relationship between knowledge and the implementation of pregnant gymnastics ($p < 0.05$). Significant results were also obtained p value = 0.001, which means there is a relationship between attitude with the implementation of pregnant gymnastics ($p < 0.05$). Based on the results of this study, the authors suggest increasing health promotion about pregnant gymnastics, and holding a pregnant gymnastics program for pregnant women.

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INTRODUCTION

Pregnancy exercises are done during pregnancy with the aim of preparing pregnant women physically and mentally, with the hope that the birth process will run smoothly and safely (Airo et al., 2018; Campbell & Nolan, 2019; Söderström, 2012). With the existence of pregnant exercises, the health of pregnant women both physically and mentally can be maintained and moreover, pregnant exercises help pregnant women to prepare for a smooth delivery. A pregnant woman can adapt to the changes that occur both physically and mentally, it is necessary to do pregnant exercises that aim

to prepare for physiological and smooth labor with the aim of the mother and child to be born in a healthy state (Davis & Narayan, 2020; Dawe et al., 2020; Kołomańska-Bogucka & Mazur-Biały, 2019). According to the World Health Organization (WHO) estimates that about 15% of all pregnant women will experience conditions that develop into complications related to their pregnancy and threaten their lives. Mothers who do gymnastics regularly during their pregnancy, the discomfort felt during pregnancy will be reduced and the postpartum healing process will be faster than mothers who do not follow pregnant gymnastics (Herdiani & Simatupang, 2019; Siregar, 2022).

Maternal mortality can be prevented by up to 22% through regular antenatal care (ANC), early detection of complications in pregnancy, healthy living with balanced nutrition, early initiation of labor and regular implementation of pregnant exercises (Ana et al., 2021; Juan & Yang, 2020; Sparks et al., 2022).

Pregnancy exercises that are done regularly both at the training center and at home in their spare time can lead pregnant women towards physiological labor as long as there are no pathological conditions accompanying pregnancy (Atkinson & Teychenne, 2022; Nsugbe et al., 2021; Todorovic et al., 2020). Pregnant women who do pregnancy exercises regularly during their pregnancy are reported to be able to provide benefits at the time of delivery, namely in the active period (kala II) to be shorter, prevent the occurrence of breech location and reduce the occurrence of section caesaria incidents. Pregnancy exercises can also reduce the risk of stress and pain during labor. In addition, the essence of pregnant gymnastics itself is to train breathing before labor. So that at the time of the birth of the baby, the mother can relax and master the situation (Ferguson et al., 2022; Jidong et al., 2021; Widström et al., 2019).

The movements and exercises from pregnancy exercises not only benefit the mother, but also greatly affect the health of the baby she is carrying. When the baby begins to breathe on its own, oxygen will flow to it through the placenta, namely from the mother's bloodstream into the bloodstream of the unborn baby. Pregnancy exercises will increase the amount of oxygen in the blood throughout the mother's body and therefore the flow of oxygen to the baby through the placenta will also be smooth (Hidajaturokhmah & Rohmah, 2019; Rokibullah & Sofinia, 2022; Swanson & Liu, 2022).

Pregnancy exercise is not a strange thing, but it does not mean that everyone understands and realizes that pregnancy exercise is useful for pregnant women (Davenport et al., 2022; Madden et al., 2021; Tabib et al., 2021). Pregnancy exercises cannot be said to be perfect if the presentation is not arranged regularly, namely at least once a week starting at 24 weeks of pregnancy. By following pregnant exercises regularly and intensively, the woman will maintain the health of her body and the fetus she is carrying optimally. According to Hatch's research, it reveals that pregnant women who do pregnant exercises for about 3-5 hours every week have a smaller chance of giving birth early (premature) than those who do not do pregnant exercises (Hatch-McChesney & Lieberman, 2022; Roche et al., 2023; Zubcevic et al., 2022).

From the above background, the authors are interested in conducting research on the relationship between knowledge and attitudes of pregnant women about pregnancy exercises with the smooth process of normal labor at Eka Sri Wahyuni Clinic, Medan Denai District, Medan City, 2022.

RESEARCH METHOD

This research method is an analytic form of implementation with a Cross Sectional Survey. In this case, the population is all pregnant women who take Pregnant Gymnastics at Eka Sri Wahyuni Clinic as many as 20 people, the sample method by using total sampling.

RESULTS AND DISCUSSIONS

Univariate Analysis

Respondent Characteristics Data

Data on the distribution of respondent characteristics were taken from 20 pregnant women who were patients at Eka Sri Wahyuni Clinic in 2022 including age, education, and parity. The complete results can be seen in table 1 below:

Table 1. Data on the distribution of respondent characteristics

No	Respondent Characteristics	Quantity	
		Frequency	Percentage (%)
1	Age (year)		
	- <25 years old	4	20,0
	- 26-35 years old	14	70,0
	- >35 years old	2	10,0
	Totally	20	100,0
2	Education		
	- Elementary	0	0,0
	- Junior High School	8	40,0
	- High School	9	45,0
	- Higher Education	3	15,0
	Totally	20	100,0
3	Occupation		
	Homemaker	11	55,0
	Self-Employed	8	40,0
	Public Servant	1	5,0
	Totally	20	100,0
3	Parity		
	- Primiparous	7	35,0
	- Multiparous	13	65,0
	Totally	20	100,0

Based on table 1 above, it is known that the characteristics of respondents based on the age of the majority of respondents aged between 25-35 years as many as 14 respondents (70.0%), with the education level of the majority of respondents graduating from high school (SMA) as many as 9 respondents (45.0%), based on the work of the majority of mothers as Homemaker (IRT) as many as 11 respondents (55.0%) and seen from parity most have ≥ 2 children (multipara) as many as 13 respondents (65.0%).

Pregnant women's knowledge about pregnancy exercises

Data on the distribution of knowledge of pregnant women about pregnancy exercises at Eka Sriwahyuni Clinic in 2022 can be seen in table 2 below:

Table 2. Frequency distribution of pregnant women's knowledge about pregnant gymnastics

No	Knowledge	Quantity	Percentage (%)
1	Good	6	30,0
2	Fair	9	45,0
3	Less	5	25,0
	Totally	20	100,0

Based on table 4.2 above, it is known that the knowledge of pregnant women about pregnant gymnastics at Eka Sriwahyuni Clinic in 2022 is mostly sufficient as many as 9 respondents (45.0%) and the minority of mothers have less knowledge as many as 5 respondents (25.0%).

Pregnant Women's Attitudes About Pregnancy Gymnastics

Data on the distribution of pregnant women's attitudes about pregnancy exercises at Eka Sriwahyuni Clinic in 2022 can be seen in table 3 below:

Table 3. Frequency distribution of pregnant women's attitudes about pregnant gymnastics

No	Attitudes of Pregnant Women	Quantity	Percentage (%)
1	Positif	11	55,0
2	Negatif	9	45,0
	Totally	20	100,0

Based on table 3 above, it is known that the attitude of pregnant women about pregnancy exercises at Eka Sriwahyuni Clinic in 2022 was mostly positive as many as 11 respondents (55.0%) and the minority had a negative attitude as many as 9 respondents (45.0%).

Smoothness of the Normal Labor Process at Eka Sriwahyuni Clinic

Data on the distribution of the smooth process of normal labor at Eka Sriwahyuni Clinic in 2022 can be seen in table 4 below:

Table 4. Frequency distribution of the smooth process of normal

No	Smooth Normal Labor Process	Quantity	Percentage (%)
1	Smooth	12	60,0
2	Not Smooth	8	40,0
	Totally	20	100,0

Based on table 4 above, it is known that the smooth process of normal labor at Eka Sriwahyuni Clinic in 2022, the majority was smooth as many as 12 respondents (60.0%) and the minority had not smooth as many as 8 respondents (40.0%).

Bivariate Analysis

Relationship between Pregnant Women's Knowledge about Pregnant Gymnastics with the Smooth Process of Normal Labor at Eka Sriwahyuni Clinic in 2022

Table 5. Cross tabulation of the relationship between pregnant women's knowledge of pregnant gymnastics with the smooth process of normal labor

No	Knowledge	Smooth Normal Labor Process				Totally	<i>p-value</i>	
		Smooth		Not Smooth				
		f	%	f	%			
1	Good	6	30,0	0	0,0	6	30,0	0,025
2	Fair	5	25,0	4	20,0	9	45,0	
3	Less	1	5,0	4	20,0	5	25,0	
	Totally	12	60,0	8	40,0	20	100,0	

Based on table 5, it can be seen that pregnant women who have good knowledge all experience smoothness in the normal labor process as many as 6 people (30.0%). The majority of pregnant women who have sufficient knowledge experience a smooth normal labor process as many as 5 people (25.0%), and pregnant women who experience a labor process that is not smooth as many as 4 people (20.0%). While pregnant women who have less knowledge the majority experience a normal labor process that is not smooth as many as 4 people (20.0%), and pregnant women who experience a smooth labor process as many as 1 person (5.0%).

The results of the chi square statistical test obtained a p value = 0.025 ($p < 0.05$) so that the Alternative Hypothesis (H_a) is accepted, which means that there is a significant relationship between the knowledge of pregnant women about pregnancy exercises and the smooth process of normal labor at Eka Sriwahyuni Clinic in 2022.

The Relationship between Pregnant Women's Attitudes About Pregnant Gymnastics with the Smooth Process of Normal Labor at Eka Sriwahyuni Clinic in 2022

The results of the cross tabulation analysis of the relationship between the attitude of pregnant women about pregnancy exercises with the smooth process of normal labor at Eka Sriwahyuni Clinic in 2022 can be seen in table 4.6 below:

Table 6. Cross tabulation of the relationship between pregnant women's attitudes about pregnant gymnastics with the smooth process of normal labor

No	Attitude	Smooth Normal Labor Process				Totally		<i>p-value</i>
		Smooth		Not Smooth		f	%	
1	Positif	9	45,0	2	10,0	11	55,0	0,028
2	Negatif	3	15,0	6	30,0	9	45,0	
	Totally	12	60,0	8	40,0	20	100,0	

Based on table 6, it can be seen that the majority of pregnant women who have a positive attitude experience smoothness in the normal labor process as many as 9 people (45.0%), and pregnant women who experience the labor process is not smooth as many as 2 people (10.0%). While pregnant women who have a negative attitude the majority experience a normal labor process that is not smooth as many as 6 people (30.0%), and pregnant women who experience a smooth labor process as many as 3 people (15.0%).

The results of the chi square statistical test obtained a *p* value = 0.028 (*p* < 0.05) so that the Alternative Hypothesis (*H_a*) is accepted, which means that there is a significant relationship between the attitude of pregnant women about pregnant gymnastics and the smooth process of normal labor at Eka Sriwahyuni Clinic in 2022.

Discussion

The Relationship between Pregnant Women's Knowledge of Pregnant Gymnastics with the Smoothness of the Normal Labor Process at Eka Sriwahyuni Clinic in 2022

The results of the chi square statistical test obtained a *p* value = 0.025 (*p* < 0.05) so that the Alternative Hypothesis (*H_a*) is accepted, which means that there is a significant relationship between the knowledge of pregnant women about pregnancy exercises and the smooth process of normal labor at Eka Sriwahyuni Clinic in 2022.

This illustrates that in general, respondents have quite good knowledge with a positive attitude towards pregnancy exercises. The results of this study are in line with the theory put forward by Muhimah (2010), that pregnant women who have high knowledge about pregnancy exercises tend to often do pregnancy exercises. Conversely, pregnant women who have less knowledge tend not to want to do pregnant exercises. The implementation of pregnant exercises can be influenced by laziness, lack of desire to do pregnant exercises, and lack of motivation to do pregnant exercises from health services.

The Relationship between Pregnant Women's Attitudes About Pregnant Gymnastics with the Smooth Process of Normal Labor at Eka Sri Wahyuni Clinic in 2022

The results of the chi square statistical test obtained a *p* value = 0.028 (*p* < 0.05) so that the Alternative Hypothesis (*H_a*) is accepted, which means that there is a significant relationship between the attitude of pregnant women about pregnant gymnastics and the smooth process of normal labor at Eka Sriwahyuni Clinic in 2022.

Based on the results of this study, it shows that mothers whose labor process is not smooth are due to the fact that the mother does not participate in pregnancy exercises and the mother does not know the benefits of the importance of pregnancy exercises. When the mother is in labor, there

are factors that affect labor, namely the power that the mother can get from pregnant exercises, so that the mother will not be exhausted when facing the labor process so that the normal labor process can run smoothly. Therefore, during pregnancy, health workers should recommend and provide information about the importance of pregnant exercises.

CONCLUSION

Based on the results of data analysis and discussion that has been attached, the following conclusions can be drawn: (a). The knowledge of pregnant women about pregnancy exercises at Eka Sri Wahyuni Clinic in 2022 is mostly sufficient as many as 9 respondents (45.0%), (b). The attitude of pregnant women about pregnancy exercises at Eka Sri Wahyuni Clinic in 2022 is mostly positive as many as 11 respondents (55.0%), (c). The smooth process of normal labor at Eka Sri Wahyuni Clinic in 2022 is mostly smooth as many as 12 respondents (60.0%), (d). There is a significant relationship between the knowledge of pregnant women about pregnancy exercises and the smooth process of normal labor at Eka Sri Wahyuni Clinic in 2022, with a p value of 0.05. There is a significant relationship between the knowledge of pregnant women about pregnancy exercises with the smooth process of normal labor at Eka Sri Wahyuni Clinic in 2022, with a p value = 0.025 ($p < 0.05$), (e). There is a significant relationship between the attitude of pregnant women about pregnancy exercises with the smooth process of normal labor at Eka Sri Wahyuni Clinic in 2022, with a p value = 0.028 ($p < 0.05$). Suggestions for future research development involve a larger number of respondents, research conducted over a longer period of time, such as longitudinal research, conducting research in various clinics or other hospitals, considering other factors that may affect the smoothness of normal labor, such as social support, physical fitness level, and other environmental factors, developing interventions or educational programs to improve the knowledge and attitudes of pregnant women about pregnancy exercises, involving medical personnel and related experts such as obstetricians and physiotherapists can provide a more in-depth perspective in evaluating the knowledge and attitudes of pregnant women about pregnancy exercises and their impact on the smoothness of normal labor.

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