


The Relationship Between Pregnancy Exercises And The Labor Process Of Mothers In Labor At The Nur Kholidah Pulungan Clinic

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Article Info	ABSTRACT
Keywords: Pregnancy Exercises, Labor Process	Maternal and perinatal mortality rates in Indonesia are still quite high, one of the causes of high mortality is due to prolonged labor. Pregnancy exercise is an exercise program to prepare the mother's physical condition by maintaining the condition of the muscles and joints that play a role in the labor process, as well as an important method to maintain or improve the physical balance of pregnant women and is an exercise therapy given to pregnant women with the aim of achieving a fast, easy and safe delivery and preventing the occurrence of stage II. This study design is cross-sectional with secondary data collection. The population in this study was 25 and sampling was carried out using the total sampling technique. Data analysis used Chi Square. The results of the study of 25 respondents who participated in pregnancy exercise as many as 21 people (84%) participated in pregnancy exercise and 4 respondents (16%) did not participate in pregnancy exercise. The results of the statistical test with the "Chi Square Test" obtained a p-value of 0.030 <0.05 so that it can be concluded that there is a significant relationship between the relationship of pregnancy exercises and the delivery process at the Nur Kholidah S.Keb Darussalam midwife clinic in 2024. Suggestions for health institutions are expected to increase socialization about pregnancy exercises and apply them to ANC services and in pregnancy classes.
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INTRODUCTION

Pregnancy and childbirth are natural processes and cause pain. However, many women feel the pain is worse than it should be because it is influenced by panic and stress. This is called the fear-tension-pain concept, where fear causes tension or panic that causes muscles to stiffen and ultimately causes pain (Inka and Arif, 2018) The high maternal mortality rate (MMR) places Indonesia in the t Pregnancy is something that is awaited by married couples, of course with pregnancy we also have to prepare everything for the birth of the baby later, preparation that is no less important is the readiness of the mother and the health of the mother, if the mother is healthy she will give birth to a healthy baby too. Therefore, so that the pregnancy and childbirth process goes smoothly, it can be done by doing pregnancy

exercises (Roischa, 2017) Maternal and perinatal mortality rates are indicators of the success of health services, especially obstetric and perinatal services. Until now, the number One of the progress of a country can be seen from developments in the health sector. A health problem that is still a concern in every country is the high maternal mortality rate (Roischa, 2017) in ASEAN. The Ministry of Health of the Republic of Indonesia (2019) stated that the maternal mortality rate in 2018/2019 was at 305 per 1000 live births. The direct causes of maternal death were 28% due to bleeding, eclampsia 24%, puerperium complications 8%, abortion 5%, eclampsia labor 24%, obstetric trauma 3%, others 11%. The World Health Organization (WHO) estimates that around 15% of all pregnant women will develop complications related to their pregnancy and threaten their lives. The Maternal Mortality Rate in Medan was in 2019, AKI was 179 out of 302,555 live births or 59.16 per 100,000 live births. number of neonatal deaths neonatal mortality rate (AKN) was found to be 611 deaths or 2.02 per 1,000 live births, (Ministry of Health of the Republic of Indonesia, 2019; North Sumatra Health Profile, 2019; SDKI, 2017) Women who participate in exercise programs have been shown to experience shorter labor periods and fewer interventions and faster recovery periods. Pregnancy exercise provides benefits for maintaining and improving the physical health of pregnant women, improving blood circulation, reducing complaints of cramps or aches to face the labor process. There are several different modifications to the exercise movement components, but there are some that need to be considered, namely warming up, breathing exercises, muscle and pelvic exercises. (Romauli, 2016). Pregnancy exercise is a form of physical activity that is beneficial because it develops body muscles, increases the elasticity of pelvic muscles and ligaments and reduces the incidence of bleeding during and after childbirth and can reduce the incidence of fetal distress. Exercise is also a form of coping that can prevent physical stress from pregnancy, such as reducing leg and back cramps, and improving the mother's ability to adapt to changes in her body. Therefore, the American College of Obstetricians and Gynecologists (ACOG) recommends exercise as a preventative measure for mothers to ensure a natural pregnancy and labor process and reduce labor-related crises (Clapp, 2018, and Artal, 2019). The three core components of prenatal exercise are breathing exercises, muscle strengthening and stretching exercises, and relaxation exercises. When pregnant women practice breathing exercises, especially deep breathing, they experience more regular, lighter, less hurried, and longer breaths. Breathing exercises open up more usable space in the lungs, increasing total lung capacity and decreasing residual lung volume, while also training the muscles surrounding the lungs to function properly. In addition, muscle strengthening and stretching exercises also have an impact on reducing stress in pregnant women. The results of research conducted by Widyawati and Fariani (2018) on the effect of pregnancy exercises on the delivery process and neonatal health status obtained the results of the group of mothers who did pregnancy exercises, most respondents (90.9%) experienced labor without intervention (normal delivery). While in the group of mothers who did not do pregnancy exercises, there were 34.1% of respondents who experienced labor with intervention. The group of mothers who did pregnancy exercises, most (90.9%) babies were born with normal weight, while in the group of mothers who did not do pregnancy exercises, there were 27.3% LBW. Aulia and Siti (2019) conducted research on the effect of pregnancy exercises on the

delivery process, obtaining the results that mothers who did pregnancy exercises with a normal delivery process were 56.06% while mothers who did not do pregnancy exercises had a normal delivery process of 43.94%. Based on the background of the problem above, the researcher is interested in conducting research with the title of the relationship between pregnancy exercises and the delivery process of mothers giving birth at the Nur Kholidah Pulungan midwife clinic, S. Keb in 2024. Breathing exercises will open more usable space in the lungs so that the total lung capacity will increase and the residual lung volume will decrease, as well as train the muscles around the lungs to work well. In addition, muscle strengthening and stretching exercises also have an impact on reducing tension in pregnant women. The results of research conducted by Widyawati and Fariani (2018) on the effect of pregnancy exercises on the labor process and neonatal health status obtained the results of the group of mothers who did pregnancy exercises, the majority of respondents (90.9%) experienced labor without intervention (normal delivery). Meanwhile, in the group of mothers who did not do pregnancy exercises, there were 34.1% of respondents who experienced labor with intervention. The group of mothers who did pregnancy exercises, the majority (90.9%) of babies were born with normal weight, while in the group of mothers who did not do pregnancy exercises, there were 27.3% of low birth weight babies. Aulia and Siti (2019) conducted research on the effect of pregnancy exercises on the labor process, obtaining the results that mothers who did pregnancy exercises had a normal delivery process of 56.06% while mothers who did not do pregnancy exercises had a normal delivery process of 43.94%. Based on the background of the problem above, the researcher is interested in conducting research with the title of the relationship between pregnancy exercise and the labor process of mothers giving birth at the Nur Kholidah Pulungan, S. Keb midwife clinic in 2024. Breathing exercises will open more usable space in the lungs so that the total lung capacity will increase and the residual lung volume will decrease, as well as train the muscles around the lungs to work well. In addition, muscle strengthening and stretching exercises also have an impact on reducing tension in pregnant women. The results of research conducted by Widyawati and Fariani (2018) on the effect of pregnancy exercises on the labor process and neonatal health status obtained the results of the group of mothers who did pregnancy exercises, the majority of respondents (90.9%) experienced labor without intervention (normal delivery). Meanwhile, in the group of mothers who did not do pregnancy exercises, there were 34.1% of respondents who experienced labor with intervention. The group of mothers who did pregnancy exercises, the majority (90.9%) of babies were born with normal weight, while in the group of mothers who did not do pregnancy exercises, there were 27.3% of low birth weight babies. Aulia and Siti (2019) conducted research on the effect of pregnancy exercises on the labor process, obtaining the results that mothers who did pregnancy exercises had a normal delivery process of 56.06% while mothers who did not do pregnancy exercises had a normal delivery process of 43.94%. Based on the background of the problem above, the researcher is interested in conducting research with the title of the relationship between pregnancy exercise and the labor process of mothers giving birth at the Nur Kholidah Pulungan, S. Keb midwife clinic in 2024.

METHODS

This study is an analytical observational study with a cross-sectional design. This study uses a cross-sectional research design with simultaneous measurements or momentary measurements (one time). (Suparyanto, 2018) The sample in this study were pregnant women who gave birth at the clinic above and were recorded in medical records from August - November 2024. The sampling technique was total sampling where the number of samples was equal to the number of populations. This study used secondary data, data collection was carried out based on pregnancy examination history, pregnancy exercise history, and labor history. By using instruments of pregnancy history and exercise forms, and partograph sheets, data collection used observation sheets or checklists whether the pregnant women did pregnancy exercise or not and how the labor process was.

RESULTS AND DISCUSSION

This study used secondary data, collected based on pregnancy check-up history, prenatal exercise history, and delivery history. The instruments used were pregnancy history and exercise forms and partograph sheets. Data collection included observation sheets or checklists, including whether the pregnant woman performed prenatal exercise or not, and the delivery process.

1. Univariate Analysis

Univariate analysis was conducted to create a picture or description of a research variable presented in frequency distribution and presentation. The purpose of this study was to analyze the relationship between pregnancy exercise and the labor process of mothers giving birth at the clinic mentioned above.

Table 1 Frequency Distribution Based on Age Characteristics of Mothers Giving Birth at Nr

	Age	Frequency (F)	Percentage (%)	Khol-
idah	>25 years	3	12	
	25-35 years	14	56	
	>35 years 1	8	32	
	Amount	25	100	

Pulungan Midwife Clinic, S. Keb in 2024

Based on Table 1 above, it is known that of the 48 respondents, 31 people (64.5%) were aged 25-35 years. 14 people (29.2%) were aged >35 years and 3 people (6.3%) were aged >25 years.

Table 2 Frequency Distribution Based on the Occupational Characteristics of Mothers Giving Birth at the Nur Kholidah Pulungan Midwife Clinic, s. Keb in 2024

Work	Frequency (F)	Percentage (%)
Work	20	80
Doesn't work	5	20
Amount	25	100

Based on table 2 above, it is known that of the 25 respondents, 20 (80%) were working mothers, while 5 (20%) were unworking mothers.

Table 3 Frequency Distribution Based on Pregnancy Exercises at the Nur Kholidah Pulungan, S. Keb Midwife Clinic in 2024

Pregnancy exercise	Frequency (F)	Percentage (%)
Pregnancy exercise	21	84
No pregnancy exercise	4	16
Amount	25	100

Based on table 3 above, it is known that of the 25 pregnant women, 21 (84%) did pregnancy exercises, and 4 (16%) did not do pregnancy exercises.

Table 4 Distribution of the Frequency of Childbirth Processes at the Nur Kholidah Pulungan, S. Keb Midwife Clinic in 2024

The Process of Childbirth	Frequency (F)	Percentage (%)
Normal	25	100
Abnormal	0	0
Amount	25	100

From table 4 above, it is known that of the 25 mothers who gave birth, 25 (100%) gave birth normally.

2. Analysis Bivariate

Bivariate analysis was conducted to determine the relationship between pregnancy exercise and the labor process at the Nur Kholidah Pulungan Midwife Clinic, S. Keb in 2024, which can be seen as follows:

Table. 5 The Relationship Between Pregnancy Exercises and the Delivery Process at the Nur Kholidah Pulungan Midwife Clinic, S. Keb

NO	Knowledge	The process of childbirth				Total %	P-value
		Normal		Abnormal			
		F	%	F	%		
1	Pregnancy exercise	21	84	0	0	21 84	0.030
2	No prenatal exercise	4	16	0	0	4 16	
TOTAL		25	100	0	0	25	100.0

Based on table.5 above, it can be seen that of the 25 respondents who did pregnancy exercises, 21 people (84%) had normal delivery. Of the 25 people who did not do pregnancy exercises, 4 people (16%) had normal delivery. The results of the statistical test using chi-square obtained a p value = 0.030 where $p < \alpha$ (0.05) so that H_0 was rejected. H_a was accepted. It can be interpreted that there is a significant relationship between pregnancy exercises and the delivery process at the Nur Kholidah Pulungan, S. keb midwife clinic in 2024.

CONCLUSION

Based on the results of the study, it can be concluded that: Of the 25 pregnant women, 21 people (84%) did pregnancy exercises, and 4 people (16%) did not do pregnancy exercises. Of the 25 mothers who gave birth, 25 people (100%) gave birth normally. There is a significant relationship between pregnancy exercises and the delivery process at the Nur Kholidah Midwife clinic in 2024. ($p = 0.030$)

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