The Relationship Between Pregnancy Exercise Skills and The Smoothness of The Normal Delivery Process for Pregnancy

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Abstract

Pregnancy exercise is a motion exercise therapy given to pregnant women to prepare themselves both physically and mentally to face and prepare for a fast, safe and spontaneous delivery. Knowledge of psychological pregnancy exercise can also help smooth delivery of pregnant women. This study aims to determine the relationship between understanding of pregnancy exercise skills and the smoothness of the normal delivery process. This study uses a quantitative approach to the type of correlational research. The population and sample in this study were mothers who had faced labor between January and June 2022 at the Syamlatira Public Health Center. The technique of dqata analysis uses Bivariate Analysis which aims to see the relationship between the Independent variable (pregnancy exercise) and the dependent variable (delivery process) by looking at the p value < 0.005. The results of the analysis using the chi-square test can be seen in table 4. Based on the results of the chi-square test analysis, the value of value = 0.000 (<0.05) means that there is a relationship between pregnancy exercise and the smoothness of the normal delivery process in pregnant women.

How to Cite

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INTRODUCTION

Pregnancy exercise is a motion exercise therapy given to pregnant women to prepare themselves, both physically and mentally to face and prepare for fast, safe and spontaneous labor. Pregnancy exercise, which is applied, is not exercise oriented only to physical fitness. Rather it strengthens muscles, flexes joints, and mainly trains concentration so that it can divert the mind so that it can forget the pain of childbirth, and strengthens the breath. This method has proven to be quite successful in helping to ease the labor process. Besides, pain during labor can also be minimized, so that stress during childbirth can be reduced automatically. Then the delivery process can run more smoothly and briefly, (Qian et al., 2021).

Pregnancy exercise will have an impact on better delivery, pregnant women who do pregnancy exercise during pregnancy are reported to be able to reduce stress before birth, reduce pain during childbirth, babies born have normal weight, and can reduce risk. the occurrence of preeclampsia, compared to pregnant women who did not do pregnancy exercise during pregnancy, (Macdonald et al., 2021).

Pregnancy exercise is a fitness program designed for pregnant women. During pregnancy, the body experiences weight gain, so regular exercise can help maintain health and fitness, (Peralta et al., 2021). In general, women who are pregnant are afraid to face the birth process because of the pain, causing fear and anxiety. This can cause mental and physical tension which will result in unnatural stiffening of the muscles and joints. Psychological disorders in pregnant women can also adversely affect fetal development. Pregnant women who experience prolonged stress can cause developmental barriers to the fetus, including emotional disturbances after birth, if the stress on the mother is not handled properly even with good nutrition, (Goodwin et al., 2021).

Correct pregnancy exercise is useful for strengthening the muscles, for the pelvic bones, abdomen, lower back, helping to train breathing, blood circulation and good body movements. In addition, pregnancy exercise is also useful to relieve discomfort in pregnancy, help prepare the body during childbirth and increase emotional freshness, (Sniezek et al., 2021). There are still many pregnant women who do not understand and realize that pregnancy exercise is useful for pregnant women for better delivery outcomes than pregnant women who do not do pregnancy exercise.

With increasing gestational age, the mother will experience several changes, including: physically and emotionally. Discomfort arises due to several changes in pregnant women. Discomfort will increase in the third trimester, in the third trimester is the period when the fetus develops more and more. Physical changes that occur in pregnant women are the body's adaptation to pregnancy. The percentage of discomfort that appears in pregnant women according to 20% leg swelling, 10% leg cramps, 60% shortness of breath, 20% headache, and 70% back pain. Maternal psychological changes will change in each trimester. Changes in the psychological condition of the mother occur due to the increase in the hormone progesterone during pregnancy. The pregnancy anxiety study conducted by Heron stated that 21% of pregnant women had clinical symptoms of anxiety and 64% would continue in the puerperium.

Research conducted by Thomson et al., (2021) on 60 pregnant women by comparing pregnant women who follow gymnastics and do not participate in pregnancy exercise, the results of this study prove that pregnant women who do not participate in pregnancy exercise have 4 times the risk of experiencing back pain. A similar study was also conducted by Fitriani in a study involving 30 pregnant women with the results that 22 or 74% of pregnant women who participated in pregnancy exercise had good sleep quality and did not experience anxiety to face childbirth.

Pregnancy exercise is recommended to be done when the fetus in the womb is more than 3 months old, because before the 3 month gestational age, the attachment of the fetus in the uterus is not too strong. This is intended to avoid the risk of abortion.

Pregnancy exercise in the first trimester is recommended for light exercise starting from the first week to the fourteenth week of pregnancy. During that time, you will be limited to walking for 30 minutes per day, and keep your heart rate at no more than 140. Light exercise should also be no more than 30 minutes. In the Second Trimester, you can increase pregnancy exercises to be a little harder. However, it is still important to keep the heart rate below 140 and to avoid overheating. Avoid exercises that involve abdominal crunches. and remember to always drink much water, (Hentges & Pilot, 2021).

During the third trimester, pregnant women will experience an enlarged uterus, excess weight and swollen ankles. But, as long as it's comfortable, pregnancy exercises can still be done. Because every woman and every pregnancy is different, you should talk to your doctor about the exercise routine that is best for you. Proper and regular exercise can help relieve back pain and make your body fitter and stronger carrying

your baby, (Ghebrial et al., 2021).

METHODS

This research is an analytical observational design with a Cross Sectional approach, which is a type of research that emphasizes the measurement or observation of data once at a time which is carried out on the dependent variable and the independent variable, (Lewis et al., 2021).

This approach is used to see the relationship between one variable and another. The population in this study were all pregnant women who had a gestational age of 28-42 weeks at the Syamtalita Health Center as many as 135 people. The sampling technique used was the Accidental Sampling technique, namely sampling based on chance, anyone who coincidentally met the researcher at the research site so that it could be used as a sample, namely 39 people..

The inclusion criteria were: gestational age 28 weeks, perform Antenatal Care (ANC), regularly, pregnant women who are willing to be respondents, and cooperative in the study. Exclusion criteria were: pregnancies with high risk, such as heart defects, shortness of breath, and high blood pressure, heavy smokers and alcohol consumption, and respondents were not at the study site. This research was carried out at the Syamtalira District Health Center.

The data analysis used in this research is univariate and bivariate analysis. Univariate analysis is to analyze the existing variables descriptively by calculating the distribution of frequencies and proportions to determine the characteristics and research subjects, (Lee et al., 2021). Bivariate analysis is an analysis carried out to determine the relationship between the independent variable (pregnancy exercise) and the dependent variable (the smooth delivery process) by using the chi-square statistical test by connecting all the variables studied and using the SPSS (Statistical Package and Social Sciences) version of the Software. 20 with a significant level (sig) of 0.05.

RESULTS AND DISCUSSION

Characteristics of respondents (age of pregnant women, parity, gestational age, education and occupation) and research variables (evaluation of pregnancy exercise and the process of smooth delivery). Univariate Analysis. Characteristics of Respondents. The frequency distribution of respondents based on the characteristics can be seen in **Table 1.**

Table 1. Distribution of Respondents based on Evaluation of Pregnant Gymnastics

Evaluation of pregnancy exercise	n	%
To do	32	82
Do not do	7	17,9
Total	39	100

Table 2. Distribution of Respondents Based on the Smooth Delivery Process

Smooth Labor Process	n	%
Fluent	24	61,5
Not smooth	15	38,5
Total	39	100

Bivariate analysis aims to see the relationship of the Independent variable (pregnancy exercise) with the dependent variable (delivery process) by looking at the p value < 0.005. The results of the analysis using the chi-square test and based on the results of the chi-square test analysis obtained the value of value = 0.000 (<0.05), which means that there is a relationship between pregnancy exercise and smooth delivery.

The results obtained were 32 people (82.1%) pregnant women who did pregnancy exercise and 7 people who did not do pregnancy exercise (17.9%). The results of this study indicate that there are still mothers who do not do pregnancy exercise because pregnant women do not understand the benefits of pregnancy exercise. Therefore, health workers as service providers must be more aggressive in informing or socializing the benefits of pregnancy exercise. In addition, maternity mothers who have done pregnancy exercises are also expected to help disseminate information about the benefits of pregnancy exercise to other pregnant women in the hope that pregnant women can be encouraged or motivated to do pregnancy exercises with the aim of facilitating the delivery process, (Lindsay et al., 2021).

The results of the bivariate analysis of the relationship between pregnancy exercise and the smooth process of childbirth in women giving birth with statistical tests using the chi-square test showed that there was a significant relationship with p value = 0.000 meaning p < 0.005, in this case the hypothesis was accepted, which This means that there is a relationship between pregnancy exercise and the smooth running of the normal delivery process.

Pregnancy exercise can provide fitness for maternity women during the delivery process so that maternity women who do pregnancy exercise can control their energy or power when straining.

By stretching and strengthening the muscles, the birth canal or passage becomes flexible and will make it easier for the baby or passanger to get out, (Lomauro & Aliverti, 2021). Relaxation exercises and breathing techniques taught also prevent mothers from feeling tired, oxygen intake is adequate, mothers are more relaxed in facing childbirth. Relaxation techniques also overcome the urge to push before it's time to push.

The results of this study, supported by Novita's research in the work area of the Padangmatinggi Public Health Center, Padangsidimpuan City, North Sumatra Province, in 2018 there was a significant relationship with the p-value = 0.001 meaning p <0.05. A number of literatures state that pregnant women who do pregnancy exercise will experience the risk of giving birth with a smaller action than those who do not do pregnancy exercise. In addition, the delivery process will be faster in mothers who do pregnancy exercise during pregnancy than those who do not do pregnancy exercise.

CONCLUSION

The conclusions in this study were statistically the majority of pregnant women who did pregnancy exercise smoothly during the normal delivery process took place at the Wara Health Center. This is evidenced by the results of the chi-square test analysis obtained by the value of value = 0.000 (<0.05.

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