
APPLICATION OF PREGNANT EXERCISE AND HYPNOSIS TECHNIQUES AS EFFORT TO IMPROVE HEALTH IN PREGNANT MOTHERS TRIMESTER III

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ABSTRACT

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Pregnancy exercise is one of the sports that can be done by pregnant women in the third trimester . Pregnancy can cause worry and anxiety in pregnant women, making them vulnerable to mental and psychological disorders . Severe anxiety during pregnancy can cause changes in blood flow to the baby, so that the flow of oxygen and other important nutrients to the baby's organs is disrupted . The purpose of this study was to analyze efforts to improve health in pregnant women. This study used a field method with pre-test and post-test techniques to determine the increase in participants ' knowledge about pregnancy exercise and hypnosis techniques. The results of this study indicate that community service activities What is done can be well received by pregnant women in the third trimester as a target. Pregnant women seemed very enthusiastic about participating in this activity and based on the results of the posttest given there was an increase in the mother's understanding and knowledge about pregnancy exercise and hypnosis techniques. This is also an effort to improve maternal health during pregnancy, especially in the third trimester of pregnancy to prepare for a safe and easy delivery.

INTRODUCTION

Pregnancy is a very important period for the mother and the fetus. The fetus requires the intake of nutrients and oxygen through the utero-placental vasculature from the mother to be able to develop while in the womb (Basak & Duttaroy, 2022). The third trimester of pregnancy lasts from 28-40 weeks of gestation, which in this trimester pregnant women experience many physical and psychological changes. This gestational age is a time to prepare for birth and the role of parents. Mothers must maintain healthy food intake to meet the nutritional needs of the mother and fetus. In addition, pregnant women are recommended to exercise regularly to maintain and improve the health of pregnant women. One of the sports that can be done by pregnant women in the third trimester is pregnancy exercise . Pregnancy exercise aims to increase flexibility, stamina, relieve back pain, maintain the circulatory system and prepare mentally and physically for pregnant women. (Beetham et al., 2019). Pregnancy exercise significantly reduces the risk of cesarean delivery. Regular pregnancy exercise can prevent pregnant women from gaining excessive weight or gestational diabetes mellitus and hypertension disorders. Some women are prone to diabetes and preeclampsia, especially if they are more than 35 years old. S six can improve the overall health of the mother. (Di Mascio D, 2016).

Mothers during pregnancy, childbirth and post partum are a group that is vulnerable to psychological disorders, including anxiety disorders (Green, Furtado, Inness, Frey, & McCabe, 2022). Feelings of anxiety in pregnancy relatively occur in 10-15% of all pregnant women. Anxiety or anxiety is a feeling of worry, a fear that is not clear why. Anxiety and fear during pregnancy will affect the health of the baby. according to several studies that babies born to mothers who have high levels of anxiety and fear during pregnancy will have a weak immune system, while babies born to mothers without fear will have a strong immune system. (Kiruthiga, 2017).

Pregnancy can cause worry and anxiety in pregnant women, making them vulnerable to mental and psychological disorders. (M. Mirghafourvand, 2021)_research by Khoury, et al said that 57% ($t=17.21$, $p<0.001$) pregnant women experienced an increase in clinical depression, 30% ($t=17.21$, $p<0.0001$) experienced an increase in depression. 19% increase in anxiety and insomnia, which is higher compared to non-pregnant women. (Khoury, Atkinson, Bennett, Jack, & Gonzalez, 2021).

Anxiety of pregnant women can affect the brain growth of the fetus. Any emotion felt by a mother will be felt by the fetus. Based on the results of the study, a high level of maternal anxiety has a significant relationship with mental disorders, emotional problems, lack of concentration and hyperactivity and impaired cognitive development of children. In addition, severe anxiety during pregnancy can cause changes in blood flow to the baby, so that the flow of oxygen and other important nutrients to the baby's organs is disrupted, this has a significant impact on the biological indicators of newborns such as height, weight, and head circumference. (Shahhosseini, Pourasghar, Khalilian, & Salehi, 2015).

During pregnancy, mothers also need to manage stress properly, one of which is by using hypnosis techniques. If done correctly and regularly, hypnosis can even prevent and relieve symptoms of mental disorders, such as depression and anxiety disorders in pregnant women. By doing pregnancy exercises and hypnosis techniques during the third trimester of pregnancy, it is expected to maintain the health of pregnant women both physically and psychologically.

The results of the initial survey on the problem partners found were the lack of knowledge of pregnant women about pregnancy exercises and hypnosis techniques during pregnancy so that they were not applied during pregnancy. The target of this activity is to increase the experience, knowledge and skills of pregnant women in doing pregnancy exercises and hypnosis techniques to improve the health of the mother and fetus which is indirectly expected to reduce morbidity and maternal mortality.

Based on the description above, the Tarutung Midwifery Study Program lecturer team through community service activities by providing assistance in the form of education and demonstrations on the implementation of pregnancy exercises and hypnosis techniques for third trimester pregnant women at Poskesdes Siborong-borong I, Siborong-borong District, North Tapanuli Regency.

This activity began with mapping the number of third trimester pregnant women in the working area of the Siborong-borong 1 Poskesdes in collaboration with the local village midwife. The activity is carried out in several stages, namely: 1st stage: providing education about pregnancy exercise and hypnosis techniques to improve the health of pregnant women,

using leaflet media. The second stage is to carry out a physical examination of pregnant women. The third stage is a demonstration of pregnant exercise and hypnosis techniques. Before and after the activity, participants were given a pre-test and post-test to assess the increase in participants' knowledge about pregnancy exercise and hypnosis techniques to improve the health of pregnant women. This activity was attended by 12 third trimester pregnant women in the Siborong-borong 1 Poskesdes area.

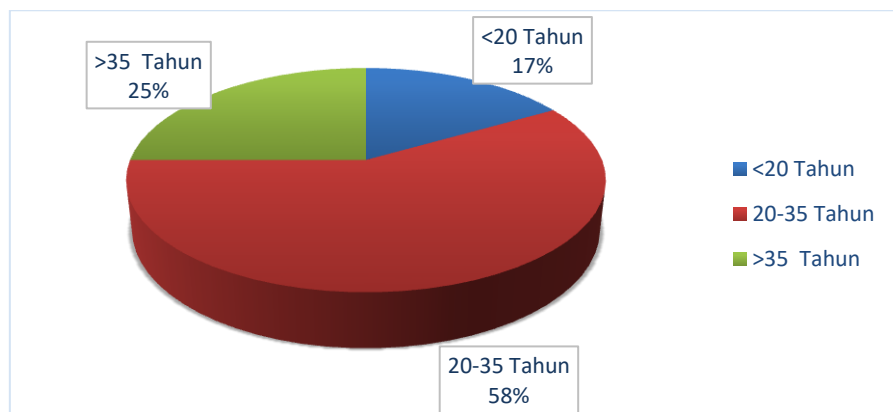
RESULTS AND DISCUSSION

The process of the ongoing activities can be seen in the following table which includes techniques for implementing community service activities that refer to the results and discussions (Zapata & Tokarz, 2022).

1. Characteristics of pregnant women

During the activity, as many as 12 third trimester pregnant women came to check their pregnancy. The following is the age distribution of respondents who took part in community service for pregnant gymnastics and hypnosis techniques:

Table 1. Age Distribution of Respondents Who Participate in Community Service Pregnancy Gymnastics and Hypnosis Techniques



Source: Community Service Data for 2022

The diagram above shows that the third trimester pregnant women who have their pregnancy checked are mostly in the 20-35 year age category (58%). This age is a healthy reproductive age, where mothers at the age of 21 are considered mature in terms of physical, emotional, personality and social aspects. Meanwhile, age <20 years and >35 years are risk factors in pregnancy. In women younger than 20 years of age, the uterus and pelvis have not developed properly, so there may be a risk of complications in childbirth. On the other hand, age > 35 years is considered vulnerable to complications in pregnancy because the condition of the female reproductive organs has decreased the ability to reproduce so that there is a greater chance that pregnant women will have children with disabilities, obstructed labor and bleeding. (Rochayati P, 2011).

Based on research by Cavazos, et al., found that pregnancy complications were highest at the age of 11-18 years compared to 25-29 years, while those aged >35 years were at risk for preterm labor, chorioamnionitis, endometritis, and mild preeclampsia. In addition, pregnant women aged 15-19 years have a greater chance of severe preeclampsia, eclampsia,

postpartum hemorrhage, poor fetal growth and fetal distress. Pregnant women aged 35 years have a greater chance of giving birth prematurely, hypertension, preeclampsia, preeclampsia, and a reduced risk of chorioamnionitis. Older pregnant women (≥ 40 years) have an increased risk of mild preeclampsia, fetal distress, and poor fetal growth. (Cavazos-Rehg et al., 2015).

Given the many conditions that can be associated with high-risk pregnancies, every pregnant woman needs to be aware that pregnancy at the age of < 20 years and > 35 years is a risk factor for pregnancy that can lead to complications. In addition, it is necessary to receive antenatal care to prepare for pregnancy properly so that conditions that have the potential to pose risks or complications of pregnancy complications can be identified and treated as soon as possible. (Simbolon & Pakpahan, 2020).

2. Distribution of Participants' Knowledge Based on Pretest and Posttest Results

To assess the increase in participants' knowledge, a survey was carried out through filling out questionnaires that had been prepared and filled out by community service participants. The results of processing the pretest and posttest questionnaires are presented in the following diagram:

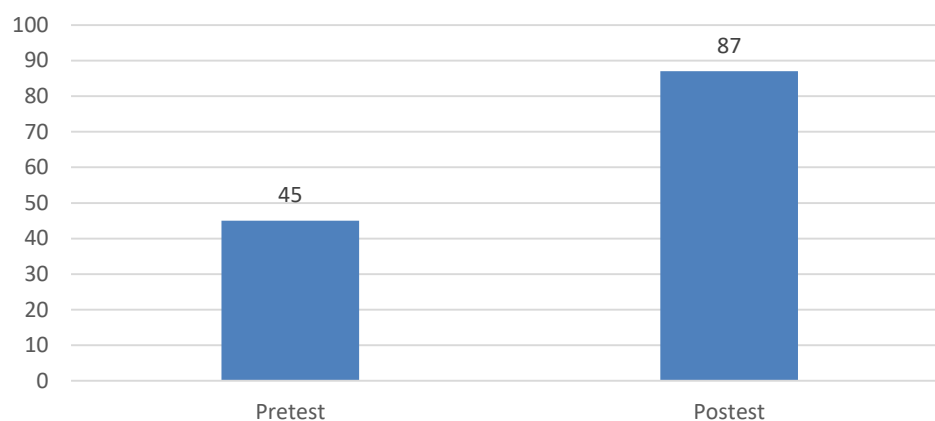


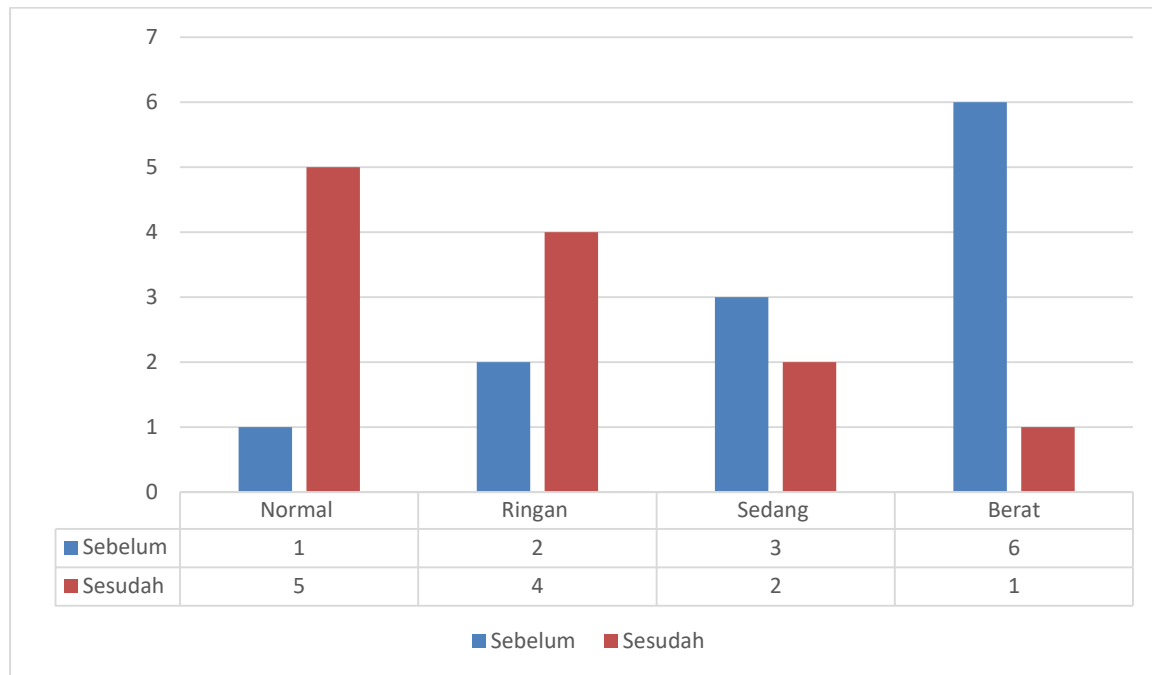
Figure 1. Posttest and *Pretest Analysis Diagrams*

The diagram above shows the *posttest results* reached an average of 45 and *posttest* reached 87. With an average increase of 43%. These results illustrate that there is an increase in understanding after counseling. Knowledge is the final achievement of observation and what has been experienced and seen by individuals directly on a thing, while perception is the sensing of an object derived from direct exposure to the five human senses, namely the senses of hearing, sight, smell, taste and touch. (Notoadmojo, 2018) Information becomes very important to increase human knowledge.

Based on the results of the *posttest* conducted by filling out the questionnaire sheet, it was found that the knowledge of pregnant women increased by 43 times from the initial score obtained by the mother when filling out the pretest questionnaire after health education activities were carried out (Barnes & Adamson-Macedo, 2022). Health education is expected to be able to make people aware of the importance of maintaining health and educating how to prevent all activities that can damage health. In this community service activity, information is provided in the form of health counseling related to pregnancy exercise and hypnosis techniques to increase mother's knowledge so that they can change attitudes to

create healthy behavior. With the increase in knowledge of pregnant women about pregnancy exercise and hypnosis techniques, it is hoped that changes in behavior will occur, namely pregnant women can apply pregnancy exercises and hypnosis techniques during pregnancy.

3. Distribution of Psychological Disorders With Anxiety Before and After Following Pregnancy Exercises and Hypnosis Techniques



The picture above shows the changes in anxiety experienced by mothers before and after doing pregnancy exercises and hypnosis techniques (Carus, Albayrak, Bildirici, & Ozmen, 2022). Previously there were 6 people who experienced severe anxiety, after receiving education and demonstration there was a change in the level of anxiety, namely the severe category to 1 person, moderate anxiety 2 people, mild anxiety 4 people, and the remaining 5 people were in the normal category. Anxiety in pregnancy is caused by changes in hormone levels in the body, which affect the levels of chemicals in the brain that play a role in regulating feelings. Anxiety conditions for third trimester pregnant women can occur due to concerns about childbirth, predictions of miscarriage, babies, disabilities, premature babies, twins, and the health conditions of pregnant women (Mirzaee, Hasanpoor-Azghady, & Amiri-Farahani, 2022). Anxiety in pregnant women can trigger stimulation of uterine contractions so that it can lead to preeclampsia and miscarriage, the birth of babies with low birth weight and premature babies. Therefore, pregnant women need to recognize the causes and symptoms of anxiety in pregnancy so that they can anticipate and overcome them as early as possible. In addition to consuming healthy food, pregnant women need to carry out regular exercise such as pregnancy exercise and hypnosis which can reduce anxiety and improve health in pregnant women.

4. Photos and figures

The following is a documentation of the application of pregnancy exercise and hypnotherapy for third trimester pregnant women at Poskesdes Siborong-borong I

- Examination of pregnant women in the third trimester



(a)

(b)

Figure 1. (a) The appearance of Poskesdes Siborong-borong 1. (b) Pemeriksaan ibu hamil trimester III.

- Counseling about pregnancy exercise and hypnosis techniques



Figure 1. Penyuluhan senam hamil dan teknik hipnosis

- Demonstration of pregnancy exercise and hypnosis techniques



Figure 2. Penerapan Senam Hamil pada ibu hamil trimester III. (a) *Butterfly pose (baddha konasana)*. (b) *Goddess pose (utkata konasana)*

CONCLUSION

In general, community service activities carried out can be well received by pregnant women in the third trimester as targets. Pregnant women seemed very enthusiastic about participating in this activity. Based on the results of the posttest given, there was an increase in the mother's understanding and knowledge about pregnancy exercise and hypnosis techniques. It is expected that pregnant women will apply it in daily life during pregnancy. This is also an effort to improve maternal health during pregnancy, especially in the third trimester of pregnancy to prepare for a safe and easy delivery.

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