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# RELAXATION TO REDUCE ANXIETY IN PREGNANT MOTHERS

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***Abstract***

*This study aims to examine the effect of relaxation in reducing anxiety in pregnant mothers. The subjects in this study were five pregnant mothers aged 21-28 years. The research method used was an experimental study with a one-group pretest-posttest research design using a purposive sampling technique. The research instrument uses the Hamilton Anxiety Rating Scale (HARS) which has been adapted into Indonesian by Setyaningsih [17]. The interventions given were breath, muscle relaxation, and visual relaxation. Based on the results of the nonparametric analysis test with Wilcoxon analysis techniques to see the difference between pretest and posttest. The results of the analysis obtained are 0, 043 the score <0, 05. These results indicate that there is a decrease in anxiety in pregnant mothers. It was concluded that the application of relaxation can reduce anxiety levels in pregnant women.*

***Keywords:*** *anxiety, pregnant, relaxation*

## INTRODUCTION

Pregnancy and giving birth is a remarkable event for every woman [14]. Pregnancy can also be a very stressful experience for most women because a mother should adapt to a new situation. Pregnancy is an increasingly vulnerable time related to mood [13]. A pregnancy period is an event that is vulnerable to complications on pre- and post-birth. Several factors affecting are the lack of nutrition, virus infection, stressful social condition, and biological and psychological health [15].

According to Na'im [9], pregnancy in labor is a maturity crisis that caused anxiety and stress and valuable events because women should prepare themselves to nurture and have bigger responsibilities. The predecessor study explained anxiety prevalence among pregnant mothers of 10 % dan 20 % [12]. Schetter & Tanner [16] suggested that anxiety during pregnancy period is an emotional reaction in the form of concerns shown by pregnant mothers related to self and babies' well-being, the labor process, the post-birth phase, and an additional role of being a mother. These changes need mastery of particular duties, acceptance of the pregnancy, understanding a mother's role, organizing relationships with partners, building relationships with the unborn child, and preparing oneself to face the labor [9].

Anxiety on pregnant mothers impacts the mother and the baby's condition. Unhandled anxiety by pregnant mothers will impact body tension, inhibit body relaxation, prone to exhaustion, and affect the baby's condition in the womb. The same thing expressed by Bowen et al. [5]


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that anxiety on pregnant mothers will affect the baby's health. A baby may experience pre-term birth from mothers with anxiety. The unstable emotional condition also plays a role in affecting the labor process, in which a mother will experience more pain if she fails to manage her emotion [2]. The problem of mothers' anxiety is that this study's focus is not to generate continuous symptoms and affect mothers' and babies' health.

Several things cause anxiety on pregnant mothers. Previous studies explained that anxiety caused by physical changes, fear of labor, fear of experiencing labor alone without family support, problems with the baby, and the transition of role changing to be a good parent Varney et al. [2, 17]. Concerns can also arise due to the lack of knowledge of the pregnancy phase and the labor process. A study by Lexshimi et al. [17] also suggested that anxiety may arise due to the lack of information regarding mothers' condition, family factors, and socioeconomic condition. Pregnant mothers are expected to manage their emotions and apply proper treatments to reduce anxiety.

There are several treatments to handle anxiety in psychotherapy and pharmacology ways. One of the treatments to be used is a behavioral treatment with relaxation techniques. According to Bastain et al. [3], relaxation can reduce anxiety on pregnant mothers if accompanied by stress management skills. Relaxation techniques also maintain a mother's condition to stay relaxed, stabilize emotion, reduce tension on body parts, and reduce depressive, anxiety, concerns, and stress [7]. This study used three relaxation techniques, i.e., breathing relaxation, muscle relaxation, and visual relaxation. These three relaxation techniques are coping strategies to be applied by pregnant mothers.

Slow and regular breathing relaxation can reduce muscle tension and other physical reactions to reduce anxiety symptoms [20]. Breathing relaxation tends to be easy to practice in daily life. Another type of relaxation is muscle relaxation, which helps to stretch tense muscles [8]. Pregnant mothers often experience muscle tension in particular parts, and muscle relaxation can reduce such tension. The last type of relaxation is visual relaxation, where in practice, it used the mind to bring back a comfortable situation. Individuals are asked to feel peace, calmness, comfort, and these situations are visualized through sounds, touches, and breezing air [19]. This study aimed to test the relaxation effectiveness on the anxiety level of pregnant mothers.

## METHOD

This study involved 5 participants who live in the Gondokusuman Sub-district, Yogyakarta City, with an age range of 21-28 year-olds. Participants joining this event were pregnant mothers with a moderate anxiety category. The method of this study was experimental quasi with one group pretest-posttest design. There was only one experimental group without a control group. The differences are shown by comparing scores of pre- and post-treatment.


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Table 1.

Study Design

| Group | Pretest | Treatment | Post test |
|---|---|---|---|
| **Experiment** | Y1 | X | Y2 |

Information:

Y1 : Pretest before treatment

Y2 : Posttest after treatment

X : Treatment

The variable in this study was anxiety on pregnant mothers. The data collection method used was anxiety measurement using the Hamilton Anxiety Rating Scale (HARS) adopted from the previous study of Setyaningsih [17]. The measurement instrument validity coefficient obtained a range of r-value of 0, 39 – 0, 79, with a meaningful value of less than α (0,05). The reliability coefficient obtained a result of Alpha Cronbach's calculated 0, 948, which is bigger than r (0.6), and was declared reliable. The measurement instrument consisted of aspects to measure anxiety with 42 items. The Linkert scale score with a range of 1-4, with the following details: 1 = Never, 2 = Rare, 3 = Often, 4 = Always. Anxiety score categorizing on pregnant mothers was based on scores obtained by participants with a minimum score of < 84 (low), 84-126 (moderate), and > 126 (high).

Treatments given to participants were breathing, muscle, and visual relaxations. These relaxations aimed to reduce the anxiety level of pregnant mothers. Interventions were conducted in three meetings with each duration of 1-2 hours, located in the hall of Gondokusuman Public Health Center I Yogyakarta. The relaxation instructions were directly given by the researcher, who is capable of providing relaxation intervention. The module was modified by the researcher based on theories of Videback [20] regarding breathing relaxation, Jacobson [10] regarding muscle relaxation, and Tusek, Cwynar, & Cosgnore [19] regarding visual relaxation.

## RESULT AND DISCUS

Participants joining the relaxation training consisted of five pregnant mothers with these profiles:

Table 2.

Participant profile

| No | Initial | Age | Gestation Age | Number of Pregnancy |
|---|---|---|---|---|
| **1** | S | 28 | 5 months | 2 |
| **2** | PDP | 25 | 5 months | 2 |
| **3** | RSA | 24 | 2 months | 1 |
| **4** | SH | 21 | 2 months | 1 |
| **5** | CMS | 27 | 4 months | 1 |

The result of data analysis using the Wilcoxon test shows a reliability coefficient of 0.043 with p = 0.043 (p < 0.05). This result shows a significant difference between participants' pretest and posttest scores after subjected to relaxation. Therefore, the relaxation implemented can reduce the anxiety level of pregnant mothers.



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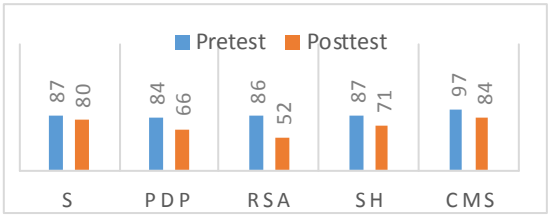


**Figure 1.**
Results of study participants' pretest and posttest

The graphs show a significant difference in each participant after relaxation. Green graphs show results before relaxation, and blue graphs show results after relaxation. Participants' pretest score movement is 84-97, in which these scores are included in the moderate anxiety level. The posttest scores after relaxation are 52-84, in which these scores are included in the low level, and one participant (CMS) is included at a moderate level.

A significant score decrease obtained by PDP, RSA, and SH participants showed that participants followed the process well, actively played in each session, and acquired support from the closest people. CMS was also actively playing, and the obtained score decreased, but it is still included in the moderate category. It caused by stressor factors that CMS should go through.

The results showed that relaxation was effective in reducing anxiety in pregnant women with p = 0, 043 <0.05. The results of the analysis indicate that there is a significant difference after relaxation, the relaxation that has been done can reduce anxiety symptoms in pregnant mothers. Physical reactions that appear tend to be relaxed and emotions tend to be calm when doing relaxation. Relaxation is repeated at home so that pregnant women can practice it in their daily lives. Based on previous research, relaxation can regulate emotions so that it has a positive impact on the emotions of pregnant mothers and is one of the techniques recommended for pregnant mothers in an easy and simple way [7, 18].

Pregnant mothers who feel anxious cause physical reactions including tense body parts, such as the neck, legs, and back feeling relaxed gradually after muscle relaxation. According to Aalami, Jafarnejad, & Gharavi [1] in a previous study showed that muscle relaxation also affects blood pressure to be more stable. In recent studies, it has been shown that muscle relaxation is useful during pregnancy because it can reduce stress, anxiety, and reduce the occurrence of complications after childbirth [14]. Muscle relaxation should be accompanied by breath relaxation to prevent muscle injury.

Complementing other relaxation techniques visual relaxation/ guided imagery helps pregnant mothers to be calmer and more concentrated when invited to imagine beautiful places such as natural scenery. This relaxation also helps regulate feelings that are negative to positive. Previous research has shown that visual relaxation helps pregnant mothers feel happier during pregnancy and reduces the fear of giving birth [4]. This relaxation technique is also accompanied by a relaxing breath. This relaxation technique is accompanied by music so that pregnant women are more concentrated and calm when doing relaxation. According to Labbe et al. [11]


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music helps to provide a calming effect and helps reduce negative emotions.

The success of this study was supported by pregnant mothers who were cooperative and willing to participate in regular training. Pregnant mothers are also willing to open up to each other and find it helpful to meet other participants. Participants feel not alone and get another point of view when they have problems. Group opinion can provide therapeutic benefits, gain support among participants, self-disclosure, catharsis, learn wisdom from other group members, how to build relationships with others and how to understand oneself [6].

This research is generally said to be successful, but it still has limitations, namely the method used is not a pure experiment so that the researcher cannot compare it with the control group. Researcher's inability to limit the side effects that arise in participants, namely the emotions that arise when visual relaxation is performed. This study did not include support from the closest people to the participants, namely family or partners who are one of the factors supporting the success of an intervention.

## CONCLUSION

Interventions in the form of relaxation do pregnant mothers with anxiety are effective. Participants are actively playing in each meeting, which can be seen from the score after intervention, where participants experience a decrease of anxiety score with an analysis result of 0.043. This score is < 0.05, meaning there is a significant difference between pre- and post-intervention. Participants suggested that they receive benefits after practicing relaxation techniques and understand the suitable coping strategy to overcome anxiety.

Psychologists in Public Health Center are expected to work together with other medical fields such as midwives and nutritionists to handle pregnant mothers' anxiety. It is necessary to do regular monitoring in each pregnancy term, conduct psychologically and medically useful activities for pregnant mothers, and create a group of pregnant mothers with special-care problems. The next researcher is suggested to add study participants, using the same method for their study, and add the control group as a comparison. This comparison is meant to discover more-in-depth regarding effects of relaxation techniques on pregnant mothers.

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