JURNAL SURYA
Jurnal Media Komunikasi Ilmu Kesehatan
Faculty of Health Sciences Universitas Muhammadiyah Lamongan
Volume 17 Special Issue December 2025
e-ISSN: 2715-064X p-ISSN: 1979-9128

The Effect of Benson Relaxation Combination Therapy and Guided Imagery on Anxiety Levels in High-Risk Pregnant Women

Cindiana Putri Yeni Agustin*, Diah Eko Martini and Heny Ekawati
Nursing Department, Faculty of Health Sciences, Universitas Muhammadiyah Lamongan, Lamongan, East Java, Indonesia

ARTICLE INFORMATION

Article process
Submission: December 27, 2025
Revision : December 31, 2025
Accepted : December 31, 2025

Co-Author
Cindiana Putri Yeni Agustin
yeniagustinnnnnn@gmail.com
Nursing Department, Faculty of Health Sciences, Universitas Muhammadiyah Lamongan, Lamongan, East Java, Indonesia

Cite this as:
Agustin, C. P. Y., Martini, D. E., & Ekawati, H. (2025). The Effect of Benson Relaxation Combination Therapy and Guided Imagery on Anxiety Levels in High-Risk Pregnant Women. SURYA: J. Media Komunikasi Ilmu Kesehatan, 17 (1Sp), 195-202. https://doi.org/10.38040/js.v17i1Sp.1417

ABSTRACT

Introduction: High-risk pregnancy is associated with potential dangers and medical complications that may pose serious risks to the mother or fetus, such as hypertension, gestational diabetes, or a history of problematic deliveries. This study aimed to analyze the effect of a combined intervention using Benson Relaxation and Guided Imagery techniques on reducing anxiety levels among high-risk pregnant women.

Methods: A pre-experimental design with a one-group pre-test and post-test approach was employed. The study population included pregnant registered at Kedungpring Public Health Center, selected through purposive sampling, yielding a total of 36 participants. The combined therapy was administered twice weekly for one week, with each session lasting 15 minutes. The instruments used in this study were SOP (Benson and guided imagery) and the Depression Anxiety Stress Scales (DASS) anxiety questionnaire. Data were analyzed using the Wilcoxon test.

Results: Before the intervention, 83% of participants experienced moderate anxiety. After the intervention, 53% reported mild anxiety. The Wilcoxon test results showed a significant difference in anxiety levels before and after the intervention (p: 0.00).

Conclusion: The findings suggest that the combination of Benson Relaxation and Guided Imagery effectively reduces anxiety in high-risk pregnant women and may be considered as supplemental material during antenatal care visits.

Keywords: Anxiety, Benson relaxation, Guided imagery, High-risk pregnant

INTRODUCTION

High-risk pregnancies are pregnancies that have the potential to cause harm and complications for both mother and fetus. This condition is characterized by hypertension, gestational diabetes, or a history of problematic childbirth. Pregnant women with this condition generally feel

worried about the condition of their fetus. They tend to think that these high-risk pregnancies could lead to abnormalities in the fetus or even death, which ultimately further increases the anxiety they experience (Rangkuti, 2020).

Based on data WHO (2020) Around 287 thousand mothers experienced high-risk pregnancies due to complications such as bleeding (28%), preeclampsia/eclampsia (24%), infections (11%), and indirect causes such as obstetric trauma (5%). Most of these cases occur in developing countries, mainly due to the lack of participation of pregnant women in pregnancy classes, so their understanding of pregnancy risks is still low. In Indonesia, the incidence of anxiety in pregnant women reaches 373 million. A total of 107 million cases or 28.7% occurred in pregnant women before childbirth (Rafidah et al., 2021). The results of the research conducted by (Putric et al., 2023), in East Java Province, it was recorded that 31.4% of pregnant women experienced very severe levels of anxiety, while another 12.9% experienced severe anxiety. In 2021, there were 107 thousand pregnant women in East Java who experienced pregnancy-related anxiety, with 28.7% of the total of 679,765 pregnant women. In addition, as many as 355,873 pregnant women or around 52.3% reported experiencing anxiety ahead of the delivery process (Dinkes Jatim, 2021).

Based on the results of a survey on June 26, 2024 at the Kedungpring Lamongan Health Center, it is known that the number of pregnant women in 2024 will be 430 people, with 58 people (13.48%) of whom are classified as pregnancy risk categories. In the initial survey, 10 high-risk pregnant women were identified. Of these, 1 person (10%) experienced severe anxiety, 3 people (30%) experienced moderate anxiety, 4 people (40%) had mild anxiety and 2 people (20%) had no symptoms of anxiety. The data above shows that the prevalence of anxiety in high-risk pregnant women is quite high and is experiencing a significant increase.

The high level of anxiety in high-risk pregnant women is influenced by various factors, broadly speaking, there are 2 types of factors, namely internal factors and external factors. Internal factors include age, education level, occupation and economy. Meanwhile, external factors include the environment, knowledge, access to information, husband support and family support. Among these factors, husband support is an important point for pregnant women's anxiety. Husband's support has an important role in helping the mother stabilize emotions during the pregnancy process, which ultimately has a positive impact on the health of the mother and the fetus. The involvement of the husband during pregnancy has also been proven to increase the mother's readiness to face the childbirth process. All forms of husband support before childbirth contribute strongly in shaping mental readiness, reducing anxiety, and creating a sense of security and comfort for pregnant women (Wicaksana et al., 2024).

Anxiety experienced in mothers during pregnancy can have an impact on reducing the contraction strength of the uterine muscles, this is due to increased secretion of catecholamine and adrenaline hormones, which inhibit the release of oxytocin hormones. The weakening of these muscle contractions has the potential to cause a long labor process, so that the

mother is at risk of infection and fatigue (Apriliani et al., 2023).

Anxiety is one of the factors that affect the progress of childbirth, so interventions to reduce anxiety in pregnant women are an important aspect that must be implemented to help the smooth delivery process (Suriyati, 2019). Anxiety experienced by pregnant women is included in mental health disorders and can be a trigger for depression. Anxiety and depression during pregnancy can increase the risk of abortion (miscarriage), even to the point of suicide. Anxiety itself can be interpreted as a feeling of anxiety or worry about things that have not yet happened, (Zulaekah & Kusumawati, 2021).

Efforts to provide non-pharmacological therapy with relaxation therapy are currently popular because there are no side effects, ease of implementation, short time, and low cost. One of the relaxation therapies that can be used is Benson's relaxation therapy. Benson's relaxation therapy combines deep breathing techniques with religious or religious elements and has been shown to be effective in lowering anxiety with symptoms such as stress or depression. This technique contributes to creating a feeling of calm, comfort, and relaxation, as well as lowering anxiety (Wicaksana et al., 2024). This therapy is supported by Benson & Klipper (2015) That Benson's relaxation technique has been shown to be effective in lowering anxiety and stress levels in various groups of patients, including patients who are experiencing mental well-being problems due to medical conditions.

In addition to relaxation therapy Benson, therapy Guided Imagery It can also be used as an intervention in reducing anxiety in high-risk hamik mothers. Guided imagery is a method by providing a stimulation of thoughts about things that can create feelings of happiness and relaxation, this stimulation is in the form of an object or an event that makes the heart happy. The Relaxation method involves guided imaging techniques, to help the patient achieve an optimal state of relaxation (Suhermi, 2024). This statement is supported by Afshar et al., (2018) The results of his research show that Guided imagery It can lower anxiety and stress levels in pregnant women with a risk of pregnancy complications.

Based on the above background description, guided imagery therapy has been proven to be an alternative nonpharmacological therapy option other than benzone relaxation in reducing anxiety in high-risk pregnant women. This research will combine these two therapies by providing targeted and systematic positive thinking stimulation to create a sense of happiness and relaxation as an approach that is easy to implement and has minimal risk.This study aims to quantify interventions with benzon therapy and guided imagery as an effort to reduce anxiety levels in high-risk pregnant women.

METHOD

This research will be carried out in March 2025 at the Kedungpring Lamongan Pusekesmas. This study uses a pre-experimental design with a one-group pre-post test design approach. The independent variable of this study is a combination of benzon therapy and guided imagery. The dependent variable is the level of anxiety.

The number of samples in this study was 36 respondents who were selected using purposive sampling techniques based on inclusion and exclusion criteria. The inclusion criteria include high-risk pregnant women based on KSPR, in the 1-3rd trimester, able to read and write and fill out informed consent. The exclusion criteria include high-risk pregnant women based on the KSPR but when the study experienced an emergency condition and did not fill out the questionnaire completely. The instruments used in this study were SOP (benson and guided imagery) and the Depression Anxiety Stress Scales (DASS) anxiety questionnaire. The intervention was given 15 minutes with a frequency of 2x in 1 week. Anxiety measurements were taken before the first intervention and after the second intervention. The data that had been collected was then analyzed with the Wilcoxon test ($p<0.05$). This research has received ethical approval from the Ethics Commission of the University of Muhammadiyah Lamongan Number: 218/EC/KEPK/S1/05/2025

RESULTS

Based on table 1. The characteristics of high-risk pregnant women in the age category show that most 50% of the age of high-risk pregnant women are 18-25 years old and a small percentage of 17% of high-risk pregnant women are 34-41 years old. In the Education category, with the results that were obtained, almost 67% of high-risk pregnant women pursued high school education and a small percentage of 14% of high-risk pregnant women pursued junior high school education. Meanwhile, in the job category, almost 86% of high-risk pregnant women at the Kedungpring Lamongan Health Center do not work.

Table 1. Frequency Characteristic Distribution of Respondents (n:36)

Characteristics	n	(%)
Age		
18-25 Years	18	50%
26-33 Years	12	33%
34-41 Years	6	17%
Total	**36**	**100%**
Education		
Junior High School	5	14%
High School	24	67%
DIII/SI	7	19%
Total	**36**	**100%**
Jobs		
Work	5	14%
Not Working	31	86%
Total	**36**	**100%**

Table 2. Frequency Distribution of Anxiety Levels Before and After Intervention (n:36)

Anxiety Level	Before		After	
	n	(%)	n	(%)
Normal	0	0%	13	36%
Lightweight	2	6%	19	53%
Medium	30	83%	4	11%
Severe	4	11%	0	0%
Total	**36**	**100%**	**36**	**100%**
***Wilcoxon Test Result p value* = 0.000**				

Table 2. showed that before being given a combination of Benson relaxation therapy and Guided Imagery, most 83% of high-risk pregnant women experienced moderate anxiety and a small percentage of high-risk pregnant women experienced 0% normal anxiety. Meanwhile, after being given a combination of Benson and Guided Imagery relaxation therapy, 53% of high-risk pregnant women experienced

a decrease in anxiety in the mild category and a small percentage of 0% of high-risk pregnant women experienced anxiety in the severe category.

The results of the analysis of the Wilcoxon test obtained a p value of 0.000 ($p<0.05$) which means that there is an effect of the combination of Benson Relaxation therapy and Guided Imagery on the reduction of anxiety in high-risk pregnant women at the Kedungpring Health Center.

DISCUSSION

The results showed that before being given a combination therapy intervention of benson relaxation and guided imagery, the level of anxiety in pregnant women with a high risk was in the moderate category. This indicates that pregnant women are experiencing emotional stress. If this condition is not treated immediately, it will increase the risk of complications during the delivery process.

Education is a factor that also affects pregnant women's anxiety. Higher levels of education also have better access to health services and are able to manage anxiety well. Research results Mumtaz & Akram (2020) adding that highly educated pregnant women have lower anxiety scores and help mental and emotional readiness and provide better access to information services.

According to Alder et al., (2017) Anxiety during pregnancy often has negative effects on the mother, including an increased risk of premature birth and even miscarriage. Excessive anxiety can make the fetus restless, so it can inhibit its growth and trigger the onset of uterine muscle contractions so that it risks endangering the condition of the fetus.

High anxiety during pregnancy can cause neurodevelopmental disorders in the fetus which will later be at risk of cognitive, emotional, and behavioral development. In addition, babies born to mothers with high levels of anxiety have a high risk of being born with congenital abnormalities, babies with low birth weight (BBLR), premature birth, and other emergency medical conditions. Research Dunkel et al., (2022) suggests that relaxation interventions can reduce the risk of babies being born prematurely and other complications by lowering maternal anxiety levels.

Previous researchers have also revealed that relaxation therapy Benson has a significant effect in lowering anxiety levels in pregnant women. Therefore, this intervention can be an alternative approach to reduce anxiety in high-risk pregnant women (Umam, 2019).

Many pharmacological efforts have been made to reduce anxiety in pregnant women. But it needs to be reviewed regarding the impact of using pharmacological therapy for the mother and the fetus. One of the supportive therapies to overcome anxiety is with relaxation therapy. This method is believed to have many benefits, low cost, low side effects and can even be done as desired. One of the relaxation therapies is Benson relaxation therapy and guided imagery.\ The application of the combination of Benson relaxation therapy and guided imagery is expected to be the right choice to help pregnant women with high risk in managing anxiety naturally, directed, and systematically.

Table 2. It showed that after a combination of Benson Relaxation and Guided Imagery therapy interventions, the

anxiety levels of high-risk pregnant women were in the mild category. The P value was recorded at 0.000 which means that the combination therapy of Benson Relaxation and Guided Imagery therapy can reduce anxiety in pregnant women at high risk.

This has been proven to reduce anxiety levels in pregnant women twice a week with a combination of Benson and Guided Imagery therapy, administered for 15 minutes twice a week. This finding is supported by previous research by Veftisia and Afriyani (2021), which found that pregnant women who participated in Benson and Guided Imagery relaxation sessions twice a week during the second and third trimesters experienced a greater reduction in anxiety scores than those who did not participate in these sessions.

Research Rabipoor & Abedi (2020) also found that the Relaxation technique Guided Imagery positive value for the mother's mental health, and improving the health of the baby during pregnancy and at birth.

Relaxation therapy Benson able to relax the muscles of the body and suppress the sympathetic nervous system, thereby reducing the body's oxygen needs and increasing feelings of calm and comfort, by applying relaxation methods Benson This can reduce anxiety (Sridianti et al., 2022). While in therapy Guided Imagery It can stimulate the production of chemicals in the peripheral nervous system that act as beta inhibitors, thereby inhibiting the activity of sympathetic nerve nodes, lowering blood pressure and tension. This process is able to reduce anxiety levels (Budiyarti, 2021).

Based on the results of the study, after being given a combination of Benson relaxation therapy and Guided Imagery in high-risk pregnant women at the Kedungpring Lamongan Health Center, the results showed a significant decrease in anxiety levels. Before the intervention was performed, most high-risk pregnant women were in the category of moderate anxiety. However, after one week of therapy, with a frequency of twice per week and a duration of 15 minutes per session, there was a decrease, with the majority of high-risk pregnant women moving to mild anxiety levels.

These results concluded that the combination of the two therapies was effective, not only statistically but also clinically, in improving the emotional well-being of pregnant women. Benson's relaxation therapy works by lowering the body's stress response through deep breathing techniques and the recitation of calming positive words, while Guided Imagery plays a role in calming the calm and comfortable mind.

CONCLUSION

This study shows that the administration of benzone combination therapy and guided imagery for 15 minutes has been proven to be effective in reducing anxiety levels in high-risk pregnant women. With the results of the p value analysis of 0.000.

For health practitioners, especially in the field of maternity nursing, it is hoped that this therapy can be an additional non-pharmacological therapy option that can be applied in pregnancy classes to reduce anxiety in pregnant women.

REFERENCES

Afshar, M. Et Al. (2018) ‘The Effects Of Guided Imagery On State And Trait Anxiety And Sleep Quality Among

Patients Receiving Hemodialysis: A Randomized Controlled Trial', Complementary Therapies In Medicine. Elsevier, 40, Pp. 37–41. Https://Doi.Org/10.1016/J.Ctim.2018.07.006

Alder, J. Et Al. (2017) 'Depression And Anxiety During Pregnancy: A Risk Factor For Obstetric, Fetal And Neonatal Outcome? A Critical Review Of The Literature', The Journal Of Maternal-Fetal & Neonatal Medicine. Taylor & Francis, 20(3), Pp. 189–209. Https://Doi.Org/10.1080/14767050701209560

Apriliani, D., Audityarini, E. And Marinem (2023) 'Faktor-Faktor Yang Berhubungan Dengan Tingkat Kecemasan Ibu Hamil Trimester Iii Dalam Menghadapi Persalinan Di Rsu Budi Kemuliaan Tahun 2022', Jurnal Kebidanan Dan Kesehatan Reproduksi, Pp. 16–27. Doi: 10.61633/Jkkr.V1i2.10.

Benson, H. And Klipper, M. Z. (2015) The Relaxation Response. Morrow New York. Https://Doi.Org/10.1080/00332747.1974.11023785

Budiyarti, Y. (2021) 'T Thought Stoping And Guided Imagery Therapy Effects On Anxiety Level Of Third Trimester Primigravida Pregnant Women', Journal Of Nursing Invention, 2(2), Pp. 80–93. Https://Doi.Org/10.33859/Jni.V2i2.123

Dinkes Jatim (2021) 'Daftar Isi', Profil Kesehatan Provinsi Jawa Timur 2021. Dinas Kesehatan Provinsi Jawa Timur, 3(1). Doi: 10.21831/Dinamika.V3i1.19144.

Dunkel Schetter, C. Et Al. (2022) 'Anxiety In Pregnancy And Length Of Gestation: Findings From The Healthy Babies Before Birth Study.', Health Psychology. American Psychological Association, 41(12), P. 894. Https://Psycnet.Apa.Org/Doi/10.1037/Hea0001210

Mumtaz, S. And Akram, B. (2020) 'Management Of Anxiety Among Pregnant Women With Serious Medical Conditions: A Multicentre Study', Department Of Psychology, University Of Gujrat, Pakistan, 7(11). Https://Doi.Org/10.5455/Jpma.47636

Rabipoor, S. And Abedi, M. (2020) 'Perceived Stress And Prenatal Distress During Pregnancy And Its Related Factors', Journal Of Research Development In Nursing And Midwifery. Journal Of Research Development In Nursing And Midwifery, 17(1), Pp. 67–80. Doi: 10.29252/Jgbfnm.17.1.67

Rafidah, R. And Safitri, A. (2021) 'Karakteristik Ibu Dan Dukungan Keluarga Dengan Kecemasan Menghadapi Persalinan Di Wilayah Kerja Puskesmas Martapura Barat Kabupaten Banjar Tahun 2020', Jurnal Skala Kesehatan, 12(2), Pp. 126–133. Doi: 10.31964/Jsk.V12i2.321.

Sridianti, N. I. I., Suhartati, S. And Haryono, I. A. (2022) 'Efektivitas Giving Relaxation Benson Pada Ibu Hamil Terhadap Tingkat Kecemasan Dan Stres: Literature Review: The Effectiveness Of Benson Giving Relaxation To Pregnant Women On Anxiety And Stress Levels: Literature Review', In Proceeding Of Sari Mulia University Midwifery National Seminars, Pp. 30–39. Http://Ocs.Unism.Ac.Id/Index.Php/Prob id/Article/View/905

Suhermi, S. (2024) ‘Efektivitas Penerapan Terapi Guide Imagery Terhadap Penurunan Kecemasan Pasien Pre Operasi Sectio Caesarea’, Jurnal Ilmiah Permas: Jurnal Ilmiah Stikes Kendal, 14(3), Pp. 75–82.

Umam, E. R. (2019) ‘Pengaruh Kombinasi Relaksasi Autogenik Dan Benson Terhadap Kecemasan, Kualitas Tidur, Dan Tekanan Darah Pada Ibu Hamil Dengan Hipertensi Dalam Kehamilan’. Universitas Airlangga. Https://Repository.Unair.Ac.Id/93039/

Veftisia, V. And Ld, A. (2021) ‘Tingkat Kecemasan, Stress Dan Depresi Pada Ibu Hamil Trimester Ii Dan Iii Di Pmb Ibu Alam Kota Salatiga’, Indonesian Journal Of Midwifery (Ijm), 4(1), P. 62. Http://Jurnal.Unw.Ac.Id/Index.Php/Ijm

Wicaksana, I. P. A. Et Al. (2024) ‘Hubungan Dukungan Suami, Status Gravida, Dan Kepatuhan Ibu Melakukan Antenatal Care (Anc) Terhadap Tingkat Kecemasan Ibu Hamil Trimester Iii’, Jurnal Global Ilmiah, 1(6), Pp. 376–388. Doi: 10.55324/Jgi.V1i6.62.

World Health Organization (2020) World Health Sworld Health Organization - World Health Statistics 2020. Isbn 9789240094703. Tatistics 2020.

Zulaekah, S. And Kusumawati, Y. (2021) ‘Kecemasan Sebagai Penyebab Gangguan Kesehatan Mental Pada Kehamilan Di Layanan Kesehatan Primer Kota Surakarta’, Jurnal Kebidanan Dan Keperawatan Aisyiyah, 17(1), Pp. 59–73. Doi: 10.31101/Jkk.2064.