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The Influence of Music Therapy on Reducing Anxiety in Pregnant Women in the Third Trimester

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ABSTRACT

Introduction: Pregnancy is a physiological and normal condition, but it is also a reproductive process that can be stressful and increase anxiety. When a pregnant woman is in a situation that causes anxiety, her sympathetic nervous system is stimulated, leading to an increase in catecholamines that can negatively affect both the woman and the fetus, resulting in elevated blood pressure, decreased blood flow from the woman to the fetus, or irregular and painful contractions. One of the non-pharmacological efforts is using music as a therapeutic modality with distraction techniques. Music is known to have therapeutic effects on the body and mind, as it neutralizes negative emotions, increases stress thresholds, aligns internal processes, and helps patients reach advanced levels of relaxation and reduce stress; **Method:** The literature review is based on 10 research articles published between 2019 and 2024, sourced from Google Scholar, Sciedirect, and Scipace; **Results:** Based on the results of 10 journal articles that were studied and analyzed by the author, it was found that there is an effect of music therapy on reducing anxiety in pregnant women in their third trimester; **Conclusion:** Based on the analysis of 10 research articles, it can be concluded that anxiety in pregnant women during the third trimester can decrease through music therapy, as it provides a sense of calm and relaxation, is enjoyable, and is non-invasive, creating an atmosphere that enhances the well-being of both the mother and the fetus. In addition, music can also reach the limbic system, which can directly influence emotional reactions and physical responses in humans, such as heart rate, blood pressure, and body temperature.

Keywords: -

Introduction

Pregnancy is a physiological and normal condition and the most crucial period in a woman's life (Jyoti et al., 2022) . During pregnancy, women undergo intense transformations including changes in their bodies and hormonal upheavals. Pregnancy induces a level of anxiety that tends to increase as the time for delivery approaches.

The use of non-pharmacological relaxation methods can

help reduce negative emotions and assist women in having a positive childbirth experience (Estrella-Juarez et al., 2023) . Pregnancy is a reproductive process that is stressful and increases anxiety. One alternative therapy used to reduce anxiety is music therapy (Prastika et al., 2023).

According to the World Health Organization (WHO), in 2019, the prevalence of



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women who died during pregnancy and childbirth was around 529,000. This is due to the emotional condition of the mother during pregnancy and while facing childbirth. Pregnancy is a period of crisis where mothers often feel anxious or fearful about the pain and physical dangers that arise during childbirth. This can lead to bleeding in pregnant women during labor. It is estimated that 4% of the current global population experiences anxiety disorders. In 2019, 301 million people worldwide suffered from anxiety disorders, making anxiety disorders the most common mental health issue.

When a pregnant woman is in a situation that causes anxiety, her sympathetic nervous system is stimulated, leading to an increase in catecholamines that can negatively affect both the woman and the fetus, resulting in elevated blood pressure, decreased blood flow from the woman to the fetus, or irregular and painful contractions. Music is a very important part of life and accompanies every stage of life; it is the art of expressing certain emotions and thoughts through harmonious sounds according to specific rules (Coşar & Bekar, 2024).

To reduce anxiety and stress and to enhance relaxation, various interventions such as non-pharmacological therapy, patient education, massage, aromatherapy, and reflexology have been utilized. However, pharmacology must be used with caution for both the mother and the fetus. One of the non-pharmacological efforts is using music as a therapeutic modality with distraction techniques (Ibrahim et al., 2024). Distraction techniques involve shifting a person's focus away from pain to another stimulus, which can reduce awareness of discomfort. One effective distraction technique is listening to music, as it can help divert a person's attention from excessive anxiety. In medicine, music therapy is also referred to as complementary therapy (Complementary Medicine) (Murtiyarini et al., 2023).

Music is known to have therapeutic effects on the body and mind by neutralizing negative emotions, increasing stress thresholds, harmonizing internal processes, and helping patients reach advanced levels of relaxation and reduce stress. Music can serve as a remedy for stress for mothers who engage in activities that could jeopardize the development of the fetus's brain. (Tanjung et al., 2024). In addition, a study on Mozart's classical music therapy reported a significant decrease in anxiety levels, with the average dropping from 22.03% to 17.63% post-intervention (Murtiyarini et al., 2023).

Research Method

The preparation of this literature review uses the P (patient, population, problem), I (intervention, prognostic factor, exposure), C (comparison, control), and O (outcome) framework, commonly known as PICO. The method used in this literature review begins with topic selection, followed by formulating keywords, and then writing the keywords according to MESH (Medical Subject Headings), namely "Anxiety," "Pregnant," "Music therapy," and "women" "third trimester pregnancy." The articles used are both national and international and are freely accessible. The search for research articles was conducted using the internet, specifically through Google Scholar, ScienceDirect, and SciSpace. This journal search is limited to the publication years, specifically from 2019 to 2024. The total number of articles that appeared was 218 findings, which were then narrowed down by applying inclusion criteria, namely full-text articles and Randomized Controlled Trials, resulting in 12 articles, from which 10 articles that met the criteria were selected.

Data analysis is the process of digging into and collecting systematically organized data to enhance the understanding of the research being studied and to evaluate it in order to produce useful conclusions. This literature review aims to analyze it using the



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literature method, which involves sorting and categorizing the data obtained from the results according to inclusion criteria, and then elaborating on each one and providing conclusions for each source related to what is written within it. The research article will address the research objectives and then include theories related to the research article, as well as the assumptions of the researcher.

Results and Discussions

Based on the literature search results using the search systems available on Google Scholar, Scencedirect, and Scispace with the keywords anxiety, pregnancy, music therapy, women, and third trimester pregnancy, approximately 218 research articles were obtained and then filtered based on inclusion criteria, namely a journal publication range of the last 5 years (2019-2024), original journal types in full text. Journals in both Indonesian and English, as well as journals themed on music therapy to reduce anxiety levels in pregnant women in the third trimester. From the filtering results, the research articles found from Google Scholar amounted to 4, from Scencedirect 3, and from Scispace 3 articles, resulting in a total of 10 articles obtained through the filtering process.

The psychological condition of anxiety and depression in pregnant women will affect the onset of diseases and complications during pregnancy and childbirth, both for the mother and the baby. The issue of anxiety often arises in first-time mothers, so this anxiety problem must be addressed promptly (Tanjung et al., 2024).

Basically, anxiety can be managed using pharmacological therapy; however, concerns about the effects of medication on the developing fetus make it beneficial to add music therapy to treatment and general care as a safe, non-pharmacological method to reduce anxiety and restlessness that occur during pregnancy. It has been observed that it is necessary to

support the effectiveness of music therapy in alleviating and addressing stress, and that music therapy is important in terms of implementation because it is low-cost and non-invasive (Coşar & Bekar, 2024). Listening to music might used more systematically in therapeutic settings, so that to enhance its clinical relevance.

In a state of anxiety, a person's ability to perceive stimuli from individuals can narrow, and even lead to distortions at a panic level. As a result of severe anxiety and panic, actions taken before surgery may be perceived negatively and can even cause deviations, which can hinder the labor process or the recovery process after childbirth. Listening to music has been proven beneficial for pregnant women and their fetuses (Maslahhulislaiah & Ningsih, 2023).

Listening to calming music during pregnancy has been shown to reduce symptoms of anxiety and depression, lower cortisol levels, and increase oxytocin levels, improve sleep quality in women with sleep disorders, enhance bonding between mother and fetus, and decrease anxiety in women who are waiting for or approaching the labor process (Cheung et al., 2023).

Music listening therapy can produce endorphins (morphine-like substances released by the body that can reduce pain) that can inhibit the transmission of pain impulses in the central nervous system, thus reducing the sensation of menstrual pain. Music also acts on the limbic system, which is transmitted to the nervous system that regulates muscle contractions, thereby reducing muscle contractions (Letchmi Panduragan et al., 2023).

From the 10 research articles that have been reviewed, there is an influence of music therapy on reducing anxiety levels in pregnant women in their third trimester. According to recent findings, pregnant women who actively listen to music for at least thirty minutes a day experience better sleep quality. This can be



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linked to the impact of music therapy, which is a fun and non-invasive treatment method that can create an atmosphere that enhances well-being, significantly reduces the severity of stress and anxiety, improves sleep quality, and can help pregnant women relax (Ibrahim et al., 2024).

Conclusion

Based on the analysis of 10 research articles, it can be concluded that anxiety in pregnant women during the third trimester can decrease through music therapy, as it provides a sense of calm and relaxation, is enjoyable and non-invasive, and can create an atmosphere that enhances physiological responses and well-being for both the mother and the fetus. In addition, music can also reach the limbic system, which can directly influence emotional reactions and physical responses in humans, such as heart rate, blood pressure, and body temperature.

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Conflic of Interest

The authors state that they have no conflicts of interest.

Reference

- Cheung, P. S., McCaffrey, T., Tighe, S. M., & Mohamad, M. M. (2023). Music as a health resource in pregnancy: A cross-sectional survey study of women and partners in Ireland. *Midwifery*, 126. <https://doi.org/10.1016/j.midw.2023.103811>
- Coşar, H., & Bekar, M. (2024). The Effect of Music to Pregnant Women on Birth Anxiety and Mental Well-Being: A randomized controlled study. *Cumhuriyet Üniversitesi Sağlık Bilimleri Enstitüsü Dergisi*, 9(1), 48–55. <https://doi.org/10.51754/cusbed.1412239>
- Estrella-Juarez, F., Requena-Mullor, M., Garcia-Gonzalez, J., Lopez-Villen, A., & Alarcon-Rodriguez, R. (2023). Effect of Virtual Reality and Music Therapy on the Physiologic Parameters of Pregnant Women and Fetuses and on Anxiety Levels: A Randomized Controlled Trial. *Journal of Midwifery and Women's Health*, 68(1), 35–43. <https://doi.org/10.1111/jmwh.13413>
- Ibrahim, H., Waheed Elzohairy, N., Mohamed Sami Mostafa, H., & Nicola Ghattas, V. (2024). The Effect of Music Therapy on Psychological Status and Sleep Quality Among Pregnant Women: A randomized Control Trail. In *Original Article Egyptian Journal of Health Care* (Vol. 15, Issue 1).
- Jyoti, Babu, M., Shokanda, S., & Pareek, S. (2022). Effectiveness of music therapy on anxiety among antenatal mothers with pregnancy-induced hypertension. *Indian Journal of Health Sciences and Biomedical Research (KLEU)*, 15(2), 126. https://doi.org/10.4103/kleuhsj.kleuhsj_178_21
- Letchmi Panduragan, S., Studi Ilmu Keperawatan IKesT Muhammadiyah Palembang, P., & Studi Ilmu Keperawatan STIK Bina Husada Palembang, P. (2023). Health Innovation to Improve Quality of Live in Industry 5.0 Era. In *Issue Edisi Khusus* (Vol. 1).
- Maslahhulislaiah, I., & Ningsih, S. S. (2023). Efektifitas Instrumen Musik Terhadap Penurunan Tingkat Kecemasan pada Ibu Bersalin di PMB Bidan Intan Haryadie. *MAHESA: Malahayati Health Student Journal*, 3(12), 3823–3829. <https://doi.org/10.33024/mahesa.v3i12.11173>
- Murtiyarini, I., Herinawati, H., Ruwayda, R., & Hartati, N. (2023). Efektifitas Guided



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| Imagery dan Terapi Musik Klasik Mozart terhadap Tingkat Kecemasan Ibu Hamil Trimester III di Puskesmas Penyengat Olak Muaro Jambi. <i>Jurnal Akademika Baiturrahim Jambi</i> , 12(2), 438. https://doi.org/10.36565/jab.v12i2.729 | 23(2), 1124. https://doi.org/10.33087/jiubj.v23i2.3281 |
| Prastika, A. B., Maharani, F., Rifahmi, N. M., & Anis, W. (2023). Pemanfaatan Terapi Musik terhadap Kecemasan Ibu Hamil di Indonesia (Literature Review). <i>Jurnal Ilmiah Universitas Batanghari Jambi</i> , | Tanjung, W. W., Apripan, R., Arjuna, D., Tinggi, D. S., Kesehatan, I., & Padangsidimpuan, S. (2024). <i>Pengaruh Terapi Musik Terhadap Kecemasan Ibu Hamil Di Desa Sigulang Kecamatan Padangsidimpuan Tenggara</i> (Vol. 9, Issue 1). |