

REDUCE ANXIETY IN PREGNANT WOMEN IN THE FACE OF CHILDBIRTH BY USING COMPLEMENTARY METHODS

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Abstract

Introduction: Childbirth is one of the most important events in a woman's life, but not infrequently childbirth can cause anxiety or stress in pregnant women in the face of childbirth, becoming one of the potential diagnoses if anxiety in labor is not handled properly. Therefore, it is necessary to conduct a literature review on the effectiveness of complementary methods to reduce labor anxiety. **Methodology:** This research method is a literature study with systematic computerized databased search (PubMed, EBSCO, Elsevier, Google Scholar). **Research findings:** The results of the study revealed that there are several complementary therapies to reduce labor anxiety, namely: Qur'an Murottal Therapy, classical music therapy, Application of Prenatal Gentle Yoga, the effectiveness of auriculotherapy, the effectiveness of aroma therapy in labor management and the influence of hypnotherapy in labor. **Conclusions:** Complementary therapies are effective and easy to perform to reduce anxiety in labor.

Keywords: anxious, mother, maternity, method, complementary

1. Introduction

Pregnancy is a period of female reproduction that requires physical and psychological adaptation. Psychological reactions in pregnancy that occur are anxious reactions, this disorder is characterized by anxiety and excessive needs. Anxiety in pregnant women in the face of childbirth is a feeling of fear or anxiety that arises as a general reaction to the inability to overcome a problem or the absence of a sense of security arising from changes that occur in a pregnant woman in facing childbirth

both physically and psychologically (Afrilia, Winda, Istiyaroh, 2021).

Childbirth is a natural process in which cervical dilatation occurs, the birth of the baby and the placenta from the mother's womb. At the time of delivery the mother feels very affected by the environment, helpers who perform intervention care, unknown health workers, reduced comfort and other conditions that result in adverse experiences, these conditions have an influence on the progress of labor and feelings of

ability and confidence in the mother. The process of childbirth causes various kinds of emotions in a woman, one of which is anxiety. About 5-20% of pregnant women feel fear of the labor process and anxiety is one of the factors that contribute to the progress of labor. The increased prevalence of anxiety is associated by various factors including the mother's age that is too young, having previous psychological problems, and lack of social support (Suriyati, 2019).

In the third trimester anxiety will reappear when approaching the labor process. Psychosocial changes in pregnancy occur in response to physiological disturbances that occur and to increased responsibilities associated with the presence of new individuals who are able to be independent. The third trimester is the climax of emotional excitement awaiting the birth of the baby. A mother may begin to fear the pain and physical dangers that will arise during childbirth. In addition, the mother begins to feel sad because she will be separated from her baby and loses the special attention received during pregnancy. (Ayu, Tutik, Yusrah, 2021)

Anxiety that occurs is influenced by the characteristics of each

individual. Anxiety of pregnant women can be prevented or lowered through supportive group therapy, such as Al-Qur'an Murottal therapy, classical music therapy, Non-pharmacology Methods, application of Prenatal Gentle Yoga, the effect of yoga gymnastics, the effectiveness of auriculotherapy, the use of music during epidural catheter placement in maternity mothers, the effectiveness of aroma therapy in labor management, the influence of music intervention, and the influence of hypnotherapy in reducing anxiety during labor

2. Method

This study is a literature review that describes reducing anxiety in pregnant women in the face of childbirth with complementary methods. Sources for conducting this review include systematic computerized databased search studies (PubMed, NCBI, EBSCO, Elcivier, Google scholar).

3. RESULTS AND DISCUSSION

3.1 Murottal al – qur'an therapy

The Qur'an is one of the treatment methods that has all kinds of programs and data needed to treat various kinds of disorders in the body's cells. Murottal (listening to Qur'an recitation is one of the healing methods using

the Qur'an. Listening to the Qur'an can affect emotional intelligence, (EQ) intellectual intelligence (IQ), and spiritual intelligence (SQ) a person. Listening to murottal will cause a calm and relaxed effect on a person, so it will contribute to lowering blood pressure. Feeling relaxed from listening to murottal can also affect anxiety, as reported by one of the results of the study that, there is a difference in the average anxiety score before and after listening to murottal (Rahmadhani, Ayu., Tutik Agustini and Yusrah Taqiyah, 2021).

Murottal Al-Qur'an is a sound recording of the Qur'an sung by a Qori'. Sound can lower stress hormones, activate natural endorphins, increase feelings of relaxation, and distract from fear, anxiety, and tension, improve the body's chemical system thereby lowering blood pressure, slowing breathing, heart rate, pulse rate, and brainwave activity. Surah Ar-Rahman has medium timbre, pitch 44 Hz, harmony regular and consistent, rhythm andante (daydreaming), volume 60 decibels, intensity medium amplitude. At a low pitch with a slow rhythm and low volume will cause a calm effect in the range of 40-60 Hz. The volume that can cause a

therapeutic effect is 40-60 dB. While the time needed in *auditory therapy* (hearing therapy) in order to provide a therapeutic effect is at least 10 minutes.

Surah Ar-Rahman consists of 78 verses. All verses have the character of short verses so that they are comfortable to listen to and can have a relaxing effect on even lay listeners. The stylistic form is that there are 31 verses that are repeated. The repetition of this verse to emphasize a very strong belief.³ According to Mustamir (2009), the positive perception obtained from the Qur'anic murottal will further stimulate the hypothalamus to release endorphins, which are hormones that make a person feel happy.

Parasympathetic nerves function to innervate the heart and slow the heart rate. Controlled autonomic nerve stimulation will cause epinephrine and norepinephrine secretion will inhibit the formation of angiotensin which can further lower blood pressure. Non-pharmacological therapy is therapy without the use of drugs that can be used to reduce anxiety levels.

Based on the results of the research obtained, researchers assume that anxiety experienced by third trimester pregnant women can be

handled by nonpharmacological means such as Qur'anic murottal therapy which can be used as a pain healer. It has been proven and done by people who read the Qur'an or listen to it will give changes in electrical current in the muscles, changes in blood circulation, changes in heart rate and changes in blood levels in the skin. The provision of Quran murrotal therapy is proven to have an effect on reducing anxiety scores because the effect of Quran murrotal therapy is to have calm and relax so that anyone who listens to it can give a positive response and the pain felt can be slightly reduced.

The conclusion of this study is that there is an influence of Qur'anic murottal therapy on the level of anxiety of third trimester pregnant women in facing the labor process. Therefore, it is hoped that in overcoming anxiety before childbirth can apply relaxation techniques with Qur'anic murottal therapy without directly consuming pharmacological drugs, then this research can also be additional information, especially related to maternity nursing.

3.2 Classical music therapy

A study shows that calm rhythmic music can reduce labor anxiety and pain. Researchers have shown that

emotional tension affects the duration of labor by increasing catecholamines and cortisol, and high plasma epinephrine levels can be seen in pregnant women who have the highest levels of anxiety; women with high levels of anxiety will experience decreased uterine motility at the time of delivery in primiparous compared to the group not receiving music and prolonged labor. Music therapy during labor led to a reduction in pain and a decrease in heart rate and hypertension in primiparous maternity women compared to groups not in music therapy.

As a long-standing relaxation technique, proper music is having a tremendous positive impact on the mind. The research findings reveal some interesting facts that music therapy is effective in reducing anxiety levels, pain perception and length of labor in primiparous mothers during one delivery. This has been supported by several other studies that the group of mothers who received music therapy significantly reduced sensations of pain and anxiety, and music was an important addition in pain and stress management during labor and birth. (Suriyati. 2019).

Anxiety is commonly experienced during labor and has been shown to

have adverse effects on the health outcomes of both mother and baby. Music interventions tend to reduce the effects of anxiety in diverse, low-cost, accessible, and highly acceptability populations. The purpose of this review and meta- analysis was to assess the effectiveness of music interventions in reducing anxiety levels among women during labor. Music interventions can lower anxiety scores and physiological indices related to anxiety (HR, SBP, and DBP). Music interventions may be good nonpharmacological approaches to lowering anxiety levels during labor. (Lin, Hsin-Hui et al, 2019)

3.3 Prenatal application of gentle yoga

Prenatal gentle yoga is a form of exercise that can be done by pregnant women, prenatal gentle yoga therapy can also help facilitate labor. Prenatal gentle yoga can improve stamina, body condition and can also train breathing which is very helpful to relax tension during labor where the hypothalamus and pituitary and sympathetic nerves are stimulated to secrete corticosteroid and catecholamine hormones (epineprin and norepinephrine) which can reduce stress, decreased heart rate, breathing rhythm, blood pressure, muscle tension, metabolic rate, and

production of anxiety-causing hormones. The benefits of prenatal gentle yoga are relaxation and stress management, maintaining stamina and health, improving blood circulation, helping to cope with pain, preparing physically and mentally for labor, speeding up the healing process after childbirth, and helping mothers reduce anxiety.

Based on the results of literature review, prenatal gentle yoga therapy can effectively reduce the anxiety level of III trimester pregnant women. With the statistical results of the three articles, $P\text{value} = 0.000 < \alpha (0.05)$ which means that there is an effect of prenatal gentle yoga therapy on reducing anxiety in pregnant women. This is in line with research conducted by Situmorang, Rossita, Rahmawati in 2020 in Mukomuko Regency, then the second study from Amalia, Rusmini, Yuliani in 2018 conducted on pregnant women in the Puskesmas I Kembar Area, and the third research from Aswitami in 2018 conducted on pregnant women at the Bumi Foundation which showed that prenatal gentle yoga exercises can reduce anxiety in third trimester pregnant women. (Sriwahyuni, Eka and Guspita Sari., 2018)

In addition, research related to the Effect of Yoga Gymnastics on the Anxiety of Pregnant Women Facing Childbirth at the Alfitrah Maternity Home, Paya Perupuk Village, Tanjung Pura District, Langkat Regency in 2019. It can be concluded There is an influence of yoga on the anxiety of pregnant women facing childbirth at the Alfitrah Maternity Home, Paya Perupuk Village, Tanjung Pura District, Langkat Regency In 2018 with the Wilcoxon test, $p = 0.002 < 0.005$ were obtained. There are differences in anxiety of pregnant women before and after doing Yoga exercises. Of the 20 respondents, the anxiety of pregnant women facing childbirth decreased with the average value (Means) on the pretest which was 2.90 and on the posttest which was 2.10. (Husanah, Een and Nurul Aprilia., 2021)

3.4 The effectiveness of auriculotherapy

Auriculotherapy is a form of alternative medicine based on the idea that the ear is a microsystem, reflecting the whole body, represented on the auricle, the outer part of the ear. Auriculotherapy or auricular acupuncture is a TCM modality that uses reflex points in the ear to the center of the nervous system to treat

various bodily disorders through stimulation with needles, pressure with seeds or microspheres.

The stimulation of auriculotherapy points to treat anxiety has been evaluated by several studies. the use of this therapy with a significant decrease in anxiety, fatigue and traumatic stress, and observed a significant increase in professional courage and patience. (Mafetoni, Reginaldo Roque et al., 2018)

3.5 The effectiveness of aroma therapy in childbirth management

Aromatherapy as an alternative and complementary medicine is a well-known method to reduce symptoms from various physiological processes such as childbirth, experience. The purpose of this study was to systematically review the currently available evidence evaluating the use of aromatherapy for the management of labor pain and anxiety.

The essential oils used in the included studies were geranium, frankincense, lavender, rose, chamomile, bitter orange, jasmine, sweet orange, mandarin, peppermint, and cloves. Most studies provide aromatherapy through inhalation and then massage. No significant aromatherapy-related side effects

were reported in the included studies. Aromatherapy can be a complementary therapy in reducing pain and anxiety in labor.

Evidence from this study suggests that aromatherapy, as a complementary and alternative modality, can be helpful in reducing maternal anxiety and pain during labor. (Tabatabaeichehr, Mahbubeh and Hamed Mortazavi., 2020)

3.6 The effect of hypnotherapy in reducing anxiety during labor

Most women experience some level of anxiety during pregnancy. In this respect, anxiety, and fear of labor pain is one of the most common causes for elective cesarean section as the type of delivery preferred by pregnant women. However, delivery by cesarean section as a surgical technique can be accompanied by side effects and adverse outcomes for mother-infant health. Thus, the use of non-pharmaceutical approaches moderating anxiety and pain during labor can be beneficial in improving the degree of health of the mother and baby. Thus, the aim of this study was to investigate the effects of hypnotherapy in reducing anxiety and pain during childbirth among pregnant women. It was concluded that hypnotherapy is effective in reducing

anxiety and pain during labor and can be used as a non-pharmaceutical approach during pregnancy and caring childbirth. (Sahour, Anahita., M. Kazem Fahri and Mahdi P., 2017)

4. Conclusions

Management to reduce anxiety in labor is very important to do because anxiety in the face of childbirth not only has an impact on psychological but also on physical. Proper handling of anxiety in labor can prevent labor complications in both mother and fetus. Aromatherapy can be used to reduce anxiety in pregnant women in the face of easy, cheap and effective childbirth and has no side effects.

Murottal Therapy Al-Qur'an, classical music therapy, Application of Prenatal Gentle Yoga, the effectiveness of auriculotherapy, the effectiveness of aroma therapy in labor management and the influence of hypnotherapy in labor can reduce anxiety in pregnant women in the face of labor.

Acknowledgments

The researcher expressed his gratitude to the Faculty of Health Sciences, University of Muhammadiyah Tangerang for the funding provided for this article. We also express our gratitude to various parties who have helped research to

writing articles

Reference

- [1] Rahmadhani, Ayu., Tutik Agustini., and Yusrah Taqiyah., (2021). *The effect of Qur'anic murottal therapy on the level of anxiety of third trimester pregnant women in facing the labor process*. Makassar: Indonesian Muslim University.
- [2] Suriyati. (2019). *Non-Pharmacological Methods in Overcoming Anxiety in Childbirth*. Bengkulu: Universitas Bengkulu Indonesia.
- [3] Afrilia, Eka., Isyti'aroh., and Windha Widyatusti., (2021), *Application of Prenatal Gentle Yoga to Reduce Anxiety of Pregnant Women in Facing Childbirth*, Pekalongan: University of Muhammadiyah Pekajangan Pekalongan.
- [4] Sriwahyuni, Eka and Guspita Sari., (2018), *the influence of yoga on the anxiety of pregnant women facing childbirth at the Alfitrah maternity home, Paya Perupuk village, Tanjung Pura district, Langkat Regency in 2018*, North Sumatra: Deli Husada Deli Tua Health Institute.
- [5] Husanah, Een and Nurul Aprilia., (2021), *Classical Music Therapy in Third Trimester Pregnant Women in Reducing Anxiety About Childbirth*. Pekanbaru: Hang Tuah College of Health Sciences Pekanbaru.
- [6] Mafetoni, Reginaldo Roque dkk., (2018), *Effectiveness of auriculotherapy on anxiety during labor*, Brazil: Revista Latino-Americana de Enfermagem.
- [7] Drzymalski, Dan M dkk., (2017), *A Randomized Controlled Trial of Music Use During Epidural Catheter Placement on Laboring Parturient Anxiety, Pain, and Satisfaction*. Massachusetts: International Anesthesia Research Society.
- [8] Tabatabaeichehr, Mahbubeh dan Hamed Mortazavi., (2020), *The Effectiveness of Aromatherapy in the Management of Labor Pain and Anxiety*, <http://dx.doi.org/10.4314/ejhs.v30i3.16>.
- [9] Lin, Hsin-Hui dkk, (2019), *Effect of music interventions on anxiety during labor*, Taiwan: PeerJ.
- [10] Sahour, Anahita., M. Kazem Fahri dan Mahdi P., (2017), *Investigating the Effect of Hypnotherapy on Reducing Anxiety and Pain during Labor*, Iran: Islamic Azad University.