

# THE CORRELATION OF PRENATAL YOGA WITH THE LEVEL OF ANXIETY OF THIRD-TRIMESTER PREGNANT MOTHER IN FACING LABOR IN THE INDEPENDENT PRACTICE OF MIDWIFE S.TR.KEB IN 2024

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## ABSTRACT

Third-trimester pregnant women often experience high anxiety because they are worried about the labor process. Factors that cause maternal anxiety can be the absence of labor experience, maternal age, and education level. Pregnancy anxiety is proven to be reduced through physical exercise as self-help to support the process of pregnancy and birth. The population in this study were third-trimester pregnant women both with anxiety and not as many as 30 third-trimester pregnant women. This research is descriptive. Data were collected secondarily from the registered data of pregnant exercises at PMB S in 2024 and questionnaires distributed through WhatsApp groups in the form of Google Forms. By tracing the data by the variables in the status of third-trimester pregnant women. The results showed that pregnant women with age, parity, and low education experienced severe anxiety, namely 33.3% (10 respondents / pregnant women). Of the 30 respondents, there was a relationship between Prenatal Yoga and anxiety levels at PMB S S.Tr.Keb. The Chi-Square test got p-values of 0.000 (<0.05) which shows that there is a significant relationship between the anxiety level of third-trimester pregnant women with prenatal yoga. So it can be concluded that Prenatal yoga can reduce the level of anxiety of third-trimester pregnant women facing abnormalities.

Keywords: Correlation; Prenatal Yoga; Anxiety; Third Semester Pregnant Women; Pregnant Mother

## INTRODUCTION

Third-trimester pregnant women experience high anxiety because they are worried about the labor process and the condition of the fetus during labor. Several factors cause anxiety in pregnant women, which can be in the form of previous bad labor experiences. In addition, other factors can be the mother's age, gravida, and education level (Oktavia, et al 2023).

The World Health Organization (WHO) estimates that 358,000 maternal deaths occur worldwide as a result of complications of pregnancy and or childbirth, a decrease of 34% from the death rate in 1990. Despite the decline, developing countries still account for 99% of these deaths.

Anxiety and depression during pregnancy is a problem that is realistically quite high, which is around (12.5-42%) and its severity is estimated to make this disorder the second largest cause of illness in 2020 (Putri, 2019).

The number of anxious pregnant women in Indonesia reaches 373 million. As many as 107 million or 28.7% of pregnant women experience anxiety before giving birth. In a study of primiparous mothers, 22.5% experienced mild anxiety, 30% experienced moderate anxiety, 27.5% experienced severe, and 20% experienced very severe anxiety. In West Java in 2021, the presentation of pregnant women who were afraid of facing labor experienced anxiety of 36.2% (Rennie and Asunuriyati, 2020).

Anxiety is a feeling of worry or fear without a clear cause. Based on ADAA (Anxiety and Depression Association of America) data, 52% of pregnant women report increased anxiety or depression during pregnancy (ADAA America A and DA of Prevention and Medication, 2016). Fear in pregnant women affects the development of diseases and complications during pregnancy and labor, both in the mother and child. Psychological factors influence the occurrence of disorders in the birth process. The incidence of prolonged labor is approximately 65% and is caused by inefficient uterine contractions, inappropriate uterine contractions in response to anxiety, and thus inhibition of uterine activity. Since these reactions are part of psychological factors, it can be said that psychological factors have a great influence on the safety of mothers before labor (Rusmita, 2011).

Anxiety relates to an anxious state of fear, anxiety, and incapacity, but also to a vague emotional state about a particular object. This fear is often felt during the first time of pregnancy, especially before labor. Psychological stress during pregnancy is more common in the third trimester. Anxiety experienced during pregnancy varies. Anxiety is higher in the second trimester than in the first trimester (Maharani & Hayati, 2020). Especially for primigravida. The process of giving birth is new to them so they are faced with pregnancy for the first time (Yuniarti & Eliana, 2020).

Anxiety during pregnancy is reduced through exercise (Putri, 2019). One form of exercise that provides self-help solutions is pregnancy exercises that support the process of pregnancy, childbirth, and even parenting. This can be done in antenatal classes. One of the exercises during pregnancy is yoga (Yuniarti & Eliana, 2020). Prenatal Gentle Yoga is a conscious processing skill in the form of comprehensive techniques for personality development both physically, psychologically, and spiritually (Bingan, 2019).

Physical exercises such as meditation and yoga are effective ways to reduce pain-related problems due to high maternal anxiety. Doing prenatal yoga exercises is the right solution to help pregnant women themselves. This can be obtained by attending antenatal classes. Yoga exercises in the prenatal period for pregnant women help pregnant women focus on regulating breathing rhythms, thus emphasizing the feelings of comfort, safety, and calmness that pregnant women feel during the exercise.

Pregnancy yoga is one of the physical, mental, and spiritual exercises that is very beneficial for pregnant women, especially in the second and third trimesters, to soften the joints and calm the mind. Prenatal yoga movements are done at a slow pace and accommodate the range of motion of pregnant women. Prenatal yoga helps pregnant women accept, understand and embrace the changes that occur in the mother's body so that pregnant women can enjoy their pregnancy more comfortably and beautifully (Suananda Y. Prenatal Postnatal Yoga. 1st ed. Jakarta: Rafikatama; 2017).

Beddoe, et al. (2019) state that research shows that prenatal yoga can reduce anxiety in pregnant women. Prenatal yoga is effective in reducing anxiety and pregnancy-related disorders and improving women's mental health index (Mirfaizi M.2012; Susilowati D; 2018).

According to Fadhillah, Anisa Nur (2022), Maternity Gentle Yoga better known as prenatal gentle yoga provides changes to the anxiety level of third-trimester pregnant women, the average anxiety level of the intervention group before the test was 21.40, and after the test was 17.80. The average anxiety level of the control group was 21.80 before the test and 23.25 after the test.

In PMB S S.Tr. Keb in 2024 the number of antenatal care mothers was 30 people. While antenatal care mothers who attended prenatal yoga classes were 15 people. This shows the

number of antenatal care mothers who take prenatal yoga classes is still small, which is around 50% compared to mothers who do not take prenatal yoga around 50%. Whereas if you look at previous research, prenatal yoga has proven to show many benefits that are given to the labor process. Therefore, the authors feel interested in conducting research with the title "Relationship between Prenatal Yoga and the Level of Anxiety of Trimester III Pregnant Women in Facing Childbirth at PMB S S.Tr. Keb Bogor City in 2024 "

The hypothesis in this study is that there is a positive and significant influence between Prenatal Yoga on the Anxiety Level of third-trimester pregnant women in facing labor with age, parity, education level, and work at PMB S S.Tr.Keb Bogor Regency in 2024.

## METHODS

This study was conducted in late February at PMB S, which is one of the PMBs located on Jl. Raya Cileueur, RT.01/RW.04, Sukaresmi, Kec. Tamansari, Bogor Regency, West Java. This clinic has been established since 2013. Under the auspices and ownership of Midwife S, S.Tr. Keb. Some of the services available at PMB S S.Tr.Keb are ANC, INC, PNC, Immunization, Family Planning and Baby Newborn Photography, and others.

The type of research used in this research is the survey method. Where researchers distributed questionnaires for data collection. The approach used in this research is quantitative. According to Sugiyono (2019; 16-17), quantitative research methods are research methods based on the philosophy of positivism and are used to study certain populations or samples, using research tools to collect data.

The variables tested against the relationship of anxiety in third-trimester pregnant women are prenatal yoga, age, parity, education, and work.

This research design uses a checklist questionnaire in the form of a Google Form distributed to pregnant women in the form of a Google Form link via WhatsApp group chat to measure the anxiety level of third-trimester pregnant women and medical record instruments for data on pregnant women who follow prenatal yoga obtained from PMB S.Tr.Keb Year 2024.

In the study to measure the anxiety level scale, the Zung Self-Rating Anxiety Scale (ZSAS) instrument was used. Zung Self-Rating Anxiety Scale is an anxiety questionnaire designed by Willam WK Zung, developed based on anxiety symptoms in the Diagnostic and Statistical Manual of Mental Disorder (DSM-II0 (Nursalam 2013). Zung Self-Rating Anxiety has 20 questions with question types. Unfavorable 17 and Favourable 3 questions.

This questionnaire was tested for validity and reliability using the IMB SPSS V22 application by getting the results of 20 validity questions with a calculated r value greater than the r table. The reliability test using Cronbach Alpha is said to be reliable with a Cronbach Alpha value of 0.6 or more.

Data analysis in this study used Univariate and Bivariate Analysis. Data were collected, processed, coded, and tabulated, then organized and processed using a computer. This survey data is presented in narrative and tabular formats. Data analysis is the process of systematically retrieving and compiling data from interviews, field notes, and other materials so that the results are easily understood and communicated to others (Ismail, 2019). Univariate Analysis, In other words, the analysis aims to describe or explain the characteristics of each research variable. The format of univariate analysis depends on the type of data. Mean, median, and standard deviation are used for numerical data. Generally, this analysis only provides a

frequency distribution and representation of each variable. Bivariate analysis aims to identify the relationship between dependent variables. Bivariate data analysis is performed by correlating the independent and dependent variables used in the study. The appropriate statistical test for conducting bivariate analysis in this study is the chi-square test. The bivariate analysis step was carried out using the IMB SPSS V22 application.

## RESULTS AND DISCUSSION

1. Correlation between anxiety levels and antenatal care mothers who do prenatal yoga at PMB S S.Tr.Keb Bogor Regency 2024.

Based on the research results in Table 1 regarding the correlation between prenatal yoga and anxiety levels at PMB S S.Tr.Keb using SPSS V22 with Chi-Square data test got a p-value of  $0.000 < 0.05$  which shows that there is a significant relationship between the implementation of prenatal yoga with anxiety levels. It can be concluded from this study that pregnant women who do prenatal yoga can affect the mother's anxiety level because one of the benefits of prenatal yoga is to reduce anxiety in the mother and prepare the mother mentally during labor, so that the mother is much calmer and relaxed in facing labor and muscles in the body, especially abdominal muscles, genitalia muscles become relaxed, the relaxation of these muscles makes the decline of the fetal head much faster.

2. Correlation between anxiety level and age of antenatal care mothers at PMB S S.Tr.Keb Kab. Bogor Year 2024

Based on the results of research in Table 2 regarding the correlation between anxiety levels and age at PMB S S.Tr.Keb using SPSS V22 with Chi-Square data test got a p = value of  $0.001 (< 0.05)$  which shows that there is a meaningful relationship between the anxiety level of pregnant women in trimester 3. It can be concluded that prenatal yoga can reduce anxiety in the face of labor because the benefits of yoga itself are exercises to strengthen and also maintain muscle elasticity in a relaxed state. When straining later the mother's breathing and muscles have been trained so that they are not stiff and facilitate the labor process.

3. Correlation between anxiety level and parity of antenatal care mothers at PMB SS.Tr.Keb Kab. Bogor Year 2024

Most pregnant women at PMB S S.Tr.Keb has primiparous parity. This is related to the experience of childbirth, the age of more pregnant women  $< 20$  years makes readiness in the face of labor very less optimal and anxiety will be higher or increase. There is a clear significant relationship between the number of children born or parity with the level of anxiety of antenatal mothers. Primiparous mothers are more often and very vulnerable to experiencing anxiety because they have not had experience in undergoing the process of pregnancy and childbirth before or it can be said that this is their first experience. From this, it is concluded that there is a relationship between parity and the anxiety level of third-trimester pregnant women in dealing with anxiety. So it is an effective way for pregnant mothers to overcome anxiety that can interfere with the labor process, one of which is with Prenatal Yoga, with prenatal yoga as a medium for self-help by preparing the mother's physical and psychological during pregnancy, using breathing techniques in yoga can be useful for reducing worry and self-doubt during pregnancy, to increase inner peace, self-acceptance and surrender when going through all the difficulties in the process of pregnancy and childbirth later (Aprilia, 2020).

4. Correlation between Anxiety Level and Education Level of antenatal care mothers at

## PMB S S.Tr.Keb Kab. Bogor Year 2024

Based on the results of the study in Table 4 regarding the relationship between the level of education with the level of anxiety at PMB S S.Tr.Keb using SPSS V22 with the Chi-Square data test, the p-value is 0.003 ( $<0.05$ ) which shows that there is a significant relationship between the implementation of prenatal yoga with anxiety levels. According to Annisa Khoriah and Nelly Mariyam (2020) in Callin (2017) Knowledge about childbirth can affect the anxiety level of pregnant women before childbirth because mothers who have less knowledge will see childbirth as a frightening event.

Pregnant women with more knowledge have a higher success rate than pregnant women with less knowledge. This is because knowledgeable mothers already know information from pregnancy to childbirth, making it easier for them to prepare for pregnancy and childbirth. Fulfill your needs during pregnancy. During pregnancy and preparation for childbirth, the mother's anxiety is reduced so that maternal and child mortality rates are reduced (Annisa Khoriah and Nelly Mariyam, Vol. 5, No. 1, June 2020; p.13).

It can be concluded that the study shows that there is a significant relationship between education and the level of anxiety of pregnant women in the third trimester. This means that the education of antenatal care mothers is not good with a basic education level (elementary- junior high school) and the highest education is only up to high school, which has a significant effect on the anxiety level of antenatal care mothers.

5. Correlation between anxiety level and work of antenatal care mothers at PMB S.Tr.Keb Kab. Bogor Year 2024

Research results in Table 5 regarding the relationship between anxiety levels and work. The results of the value through the chi-square test of 0.003 ( $<0.5$ ) indicate that there is a relationship between the level of anxiety and work in antenatal care mothers at PMB S S.Tr.Keb in 2024. The results of this study indicate that there is a significant relationship between maternal employment and anxiety in undergoing antenatal care. This means that this initiative will increase social interaction for maternity mothers and reduce their anxiety levels during pregnancy checks, and vice versa.

A study by Garry et al. In 2020;30, it was found that pregnant women who had jobs as housewives were more likely to experience anxiety. Working mothers have more opportunities to meet other people so that mothers can obtain information and experiences about pregnancy from others. In addition, working mothers influence the determination of stressors, so that mothers can better control their fears. As stated in the study, work affects stress factors for people who are active outside the home, so it is important to be influenced by friends and receive various information and experiences from others. This can affect your perspective on the situation. Change with fear.

**Table****Table 1** The relation of Anxiety Level with antenatal care mothers who do Prenatal Yoga at PMB S S.Tr.Keb Kab. Bogor Year 2024

| Level Of Anxiety | Yoga      |               | Total     | P = Value    |
|------------------|-----------|---------------|-----------|--------------|
|                  | Exercised | Not Exercised |           |              |
| Not Anxiety      | 10        | 0             | 10        | <b>0,000</b> |
| Mild Anxiety     | 5         | 0             | 5         |              |
| Moderate Anxiety | 0         | 8             | 8         |              |
| Major Anxiety    | 0         | 7             | 7         |              |
| <b>Total</b>     | <b>15</b> | <b>15</b>     | <b>30</b> |              |

**Table 2** The relation between Anxiety Levels and usia at PMB S.Tr.Keb Kab. Bogor Year 2024

| Level Of Anxiety | Age       |              | Total     | P = Value    |
|------------------|-----------|--------------|-----------|--------------|
|                  | <20 Year  | 20 – 30 Year |           |              |
| Not Anxiety      | 1         | 9            | 10        | <b>0,001</b> |
| Mild Anxiety     | 4         | 1            | 5         |              |
| Moderate Anxiety | 7         | 1            | 8         |              |
| Major Anxiety    | 6         | 1            | 7         |              |
| <b>Total</b>     | <b>18</b> | <b>12</b>    | <b>30</b> |              |

**Table 3** The relation Relationship between anxiety level and parity at PMB S.Tr.Keb Kab. Bogor Year 2024

| Level Of Anxiety | Parity    |           | Total     | P = Value    |
|------------------|-----------|-----------|-----------|--------------|
|                  | Primipara | Multipara |           |              |
| Not Anxiety      | 3         | 7         | 10        | <b>0,000</b> |
| Mild Anxiety     | 4         | 0         | 5         |              |
| Major Anxiety    | 7         | 0         | 7         |              |
| <b>Total</b>     | <b>23</b> | <b>17</b> | <b>30</b> |              |

**Table 4** The relation between anxiety level and education at PMB S.Tr.Keb Kab. Bogor Year 2024

| Level Of Anxiety | Formal Education                |                    | Total     | P = Value    |
|------------------|---------------------------------|--------------------|-----------|--------------|
|                  | Elementary – Junior High School | Senior High School |           |              |
| Not Anxiety      | 2                               | 8                  | 10        | <b>0,003</b> |
| Mild Anxiety     | 3                               | 2                  | 5         |              |
| Moderate Anxiety | 8                               | 0                  | 8         |              |
| Major Anxiety    | 6                               | 1                  | 7         |              |
| <b>Total</b>     | <b>19</b>                       | <b>11</b>          | <b>30</b> |              |

**Table 5** The relation between anxiety level and employment at PMB S S.Tr.Keb Bogor Regency 2024

| Level Of Anxiety | Occupation |          | Total     | P = Value    |
|------------------|------------|----------|-----------|--------------|
|                  | Unemployed | Employe  |           |              |
| Not Anxiety      | 5          | 5        | 10        |              |
| Mild Anxiety     | 1          | 4        | 5         |              |
| Moderate Anxiety | 8          | 0        | 8         | <b>0,003</b> |
| Major Anxiety    | 7          | 0        | 7         |              |
| <b>Total</b>     | <b>21</b>  | <b>9</b> | <b>30</b> |              |

## CONCLUSION

From the results of the study of 30 respondents, there is a correlation between prenatal yoga and anxiety levels at PMB S S.Tr.Keb. The Chi-Square test got p-Values of 0.000 (<0.05) which shows that there is a significant correlation between the anxiety level of third-trimester pregnant mothers with prenatal yoga. So it can be concluded that Prenatal yoga can reduce the anxiety level of a third- trimester pregnant mother facing labor. One of the benefits of yoga is to give pregnant mothers a feeling of relaxation with exercises - breathing techniques and movements - movements that are useful later to prepare for childbirth so that mothers feel comfortable during pregnancy and feel ready to face childbirth.

It is hoped that the research site can improve and develop the promotion and education of complementary care, namely prenatal yoga at PMB S S.Tr.Keb Bogor City. For educational institutions, it is hoped that they can provide facilities and infrastructure, especially references to complementary midwifery care books and the latest research methods so that students who want to do research get the latest sources. especially not spared for further research to develop or conduct research on anxiety levels in pregnant mothers, especially third-trimester pregnant women with prenatal yoga complementary therapy with multivariate variables.

## LIMITATIONS AND FUTURE DIRECTION

Limitations are situations and conditions that limit research so that they can affect the conclusions of the research results. These limitations can provide opportunities for future research. Describe the future direction of this research.

## DECLARATIONS

The authors declare no conflict of interest.

## REFERENCES

- Apriliansi 2020 Dalam Situmorang RB, Rossita T, Rahmawati DT. Hubungan Senam Prenatal Yoga dengan Tingkat Kecemasan Ibu Hamil Primigravida Trimester III. Jurnal Ilmu Kesehatan Masyarakat. 2020 Sep 3;9(03):178-83
- Asnuriyati W, Fajri L. Gambaran tingkat kecemasan ibu hamil trimester III dalam menghadapi persalinan di puskesmas cempaka tahun 2020. Journal Nursing Army. 2020 Apr 30;1(2):1-8.

- Bingan EC. Pengaruh Prenatal Gentle Yoga dalam Menurunkan Tingkat Kecemasan pada Ibu Hamil Trimester III. *Jurnal Kesehatan*. 2019 Nov 30;10(3):466-72.
- Beddoe AE, Paul Yang C-P, Kennedy HP, Weiss SJ, Lee KA. The Effects of Mindfulness-Based Yoga During Pregnancy on Maternal Psychological and Physical Distress. *J Obstet Gynecol Neonatal Nurs* [Internet]. 2009 May 1 [cited 2019 Jan 24];38(3):310–9
- Fadhilla AN. PENGARUH PRENATAL GENTLE YOGA TERHADAP TINGKAT KECEMASAN IBU HAMIL TRIMESTER III DI PMB M KABUPATEN BOGOR TAHUN 2022 (Doctoral dissertation, Universitas Nasional).
- Khoiriah A, Mariyam N. Faktor-Faktor Yang Mempengaruhi Tingkat Kecemasan Ibu Hamil Menghadapi Kelahiran. *Jurnal Kebidanan Besurek*. 2020 Jun 26;5(1):6-17.
- Octavia YT, Siahaan JM, Barus E. EFEKTIFITAS YOGA DENGAN KECEMASAN IBU HAMIL DI KLINIK PRATAMA MATAHARI DELI SERDANG. *Jurnal Keperawatan Widya Gantari Indonesia*. 2023 Mar 29;7(1).
- Putri M. Pengaruh Yoga Terhadap Kecemasan Ibu Hamil Primigravida Trimester Iii Di Puskesmas Rawang Pasar IV Kecamatan Rawang Panca Arga Kabupaten Asahan Tahun 2019. *Excellent Midwifery Journal*. 2019 Oct 12;2(2):1-3.
- Rusmita T Eli. Pengaruh Senam Hamil Yoga Selama Kehamilan terhadap Kesiapan Fisik dan Psikologis dalam Menghadapi Persalinan pada Ibu Hamil Trimester III di RSIA Limijati Bandung. Universitas Indonesia; 2011.
- Suananda Y. Prenatal Postnatal Yoga. 1st ed. Jakarta: Rafikatama; 2017. 1–170 p.
- WHO. (2019). Global health observatory data repository: Maternal mortality. WorldHealthOrganization. [Http://www.who.int/who/maternal\\_health/mortality/maternal/en/](http://www.who.int/who/maternal_health/mortality/maternal/en/)
- Yuniarti Y, Eliana E. Pengaruh Senam Prenatal Yoga Terhadap Kesiapan Ibu Primigravida Dalam Menghadapi Persalinan Di Bpm Kota Bengkulu. *Jurnal Media Kesehatan*. 2020;13(1):9-17