

DIFFERENCES IN ANXIETY LEVELS OF PRIMIGRAVIDA, MULTIGRAVIDA AND GRANDE MULTIGRAVIDA IN THE THIRD TRIMESTER OF PREGNANCY AT KAMAL HEALTH CENTER – BANGKALAN

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ABSTRACT

Background: Anxiety is a mixture of several feelings dominated by fear. Pregnancy is one of the elements that contribute to women's anxiety. Anxiety during pregnancy affects physical and psychological changes. This research aims to compare the anxiety levels of primigravidas, multigravidas, and grande multigravidas during the third trimester of pregnancy at the Kamal Health Center - Bangkalan. **Method:** This study is a quantitative observational study with a cross-sectional approach. The sample of the study consisted of 46 pregnant women in third trimester or at least 28 weeks of gestational age, who were selected using a non-random sampling group with accidental sampling technique. Data was collected between May and August 2022 in the kamal health center area using the Pregnancy Related Anxiety Questionnaire-Revision (PRAQ-R2). Data were analyzed using descriptive statistics (frequency, percentage, mean), Kruskal-Wallis test and Dunn test. **Results:** The findings revealed that 17 primigravidas, 27 multigravidas, and 2 grande multigravidas reported 34,8% mild anxiety, 63% moderate anxiety, and 2.2% severe anxiety. The Kruskal-Wallis test revealed p value = 0.034 ($< \alpha 0.05$). The mean value of the Dunn test results is 17.06 for primigravida, 20.75 for grande multigravida, and 27.76 for multigravida. **Conclusion:** The amount of anxiety differs between primigravida, multigravida, and grande multigravida in the third trimester of pregnancy at the Kamal Health Center - Bangkalan. From the highest to lowest level of anxiety among pregnant women in their third trimester at the Kamal Health Center, Bangkalan is primigravida, grande multigravida and multigravida.

Keywords: Anxiety, Primigravida, Multigravida, Grande Multigravida

1. BACKGROUND

One of the things that make women anxious is being pregnant. Pregnancy anxiety influences both psychological and physical changes. Pregnancy-related changes bring mixed emotions, mood swings, and emotional instability (Bjelica et al., 2018). Handayani (2015) claims that among the anxiety that pregnant women frequently experience are worries about giving delivery, the health of the unborn child, and the state of the family once the child is delivered. Both internal and external factors might contribute to antenatal

anxiety. External aspects include information offered by healthcare professionals and support networks, while internal factors include the conception of childbirth and feelings before delivery (Shodiqoh & Syahrul, 2014). According to several additional types of research, factors that affect antenatal anxiety include age, parity, education level, income, lifestyle or health-related behaviours, history of abortion or childbirth, complications, and difficulties. (Rubertsson et al., 2014; Silva et al., 2017).

Early in 2020, Indonesia had to deal with the COVID-19 pandemic. As a pandemic state, the world health organization designated *Coronavirus Disease* as a *Public Health Emergency Of International Scale* (PHEIC) (WHO, 2020). Because pregnant women are more likely to contract the virus, the pandemic condition raises their chance of developing anxiety (Townsend et al., 2021). The risk of maternal death in Indonesia is dramatically increased by COVID-19, both directly and indirectly. (Akbar et al., 2022). Stress impacts pregnancy by interfering with endocrine, neurological, and immunological responses, claims Marques in Amalia et al. (2021). Prenatal stress can have a direct impact on the fetus' growth or an indirect impact on the mother's health, which in turn has an impact on the baby's welfare.

According to earlier studies, the effects of antenatal anxiety include premature birth, low birth weight, baby death, suffocation, difficulties in pregnancy, and slowing or accelerating the delivery process (Isnaini et al., 2020; Schetter & Tanner, 2012). Antenatal anxiety also has a detrimental effect on the postpartum mental health of mothers and the health of their infants. It may impact children's welfare and development if it is not handled. (Kingston, Tough and Whitfield, 2012; Norhayati et al., 2015; Rwakarema et al., 2015).

There is no prenatal psychological testing in Indonesia. Pregnant women are still mostly examined physically in current government programs. In light of this, I am interested in conducting an antenatal anxiety study at a first-class medical centre. Because most pregnant women in the Puskesmas are classed as physiological, the Puskesmas is a good location for a study on the level of anxiety in pregnant women without comorbidities. This research will be carried out on the island of Madura, in the city of Bangkalan, at the Kamal Health Center, one of the medical centres. Madura is well known for its frequent births and early marriages. According to an analysis of demographic information published on the government of East Java's official website, 38.58% of married women were under the legal age of marriage (less than 17 years old) (Badan Pusat Statistik JATIM, 2016). The number of babies born in 2018 in the Kamal sub-district was 343 out of a total of 6215 births in the city of Bangkalan (DISPENDUKAPIL Bangkalan Regency, 2019). The researchers can be utilized to inform the development of antenatal care in the form of a psychological checkup.

2. METHOD

This study is a quantitative cross-sectional observational design. The population for this study consisted of pregnant women in the Kamal Health Center region who were at least 28 weeks along in their

pregnancies. The sample comprises 46 pregnant women selected using the *Accidental Sampling* approach and the *Non-Random Sampling* group. *Accidental Sampling* is a sampling method conducted by chance or is available for a predetermined time frame, from May to August 2022.

The tool used for research was a questionnaire with two parts: the respondent's identity and the *Pregnancy-Related Anxiety Questionnaire-Revised* (PRAQ-R2). With a Cronbach alpha of 0.954, PRAQ-R2 in Indonesian has been examined for validity and reliability in research identical to this (Kusumawati, 2021). This questionnaire may be administered to nulliparas and multiparas during the third trimester (Huizink et al., 2016). The PRAQ-R2 questionnaire consists of 10 question items that are divided into three categories: 1) fear of childbirth (question items 1, 2, and 5); 2) fear of fetal deformities (question items 4, 8, and 9); and 3) worries about bodily changes (question items 3, 6 and 7).

The results of the data obtained will be analyzed with descriptive statistics, the Kruskal-Wallis test and the Dunn test through the SPSS application. At the Kamal Health Center - Bangkalan, there is a difference in anxiety levels between primigravidas, multigravidas, and grande multigravidas during the third trimester of pregnancy if the significant value of the Kruskal-Wallis test is less than 0.05. In addition, Dunn's experiment compared the highest anxiety levels against the lowest ones.

3. RESEARCH RESULT

From research data on differences in primigravida, multigravida, and grande multigravida anxiety levels in the third trimester of pregnancy in the Kamal Health Center region of Bangkalan Regency for 46 respondents were retrieved, with the following results :

Table 1 Distribution of the characteristics of respondents at the Kamal Health Center

Characteristics	Amount (N)	Percentage (%)
Age (year)		
<20	1	2
20-35	40	87
>35	5	11
Education		
Primary school	9	19,6
Middle school	9	19,6
High school	19	41,3
College	9	19,6
Job		
Working	7	15,2
Not working	39	84,8
Abortion		
Ever	4	8,7
Never	42	91,3
Total	46	100

Table 1 shows that 87% of respondents' characteristics fall within the age range of 20 to 35. Therefore, most responses fall within the age group that is not at risk. Meanwhile, the greatest degree of education was held by 19 people at high school, accounting for 41.3% of the total. Based on the work, 39 people did not work, accounting for 84.8%. According to the history of abortion, 4 respondents in the multigravida group, or 8.7% of the total respondents, had undergone an abortion. This indicates that homemakers comprised most of the study's respondents. According to the study's findings, neither the primigravida nor the grande multigravida groups had a history of abortion.

Table 2. The distribution of respondents' research variables at the Kamal Health Center

Variable	Amount (N)	Percentage (%)
Gravida Status		
Primigravida	17	37
Multigravida	27	58,7
Grande Multigravida	2	4,3
Anxiety level		
Mild	16	34,8
Moderate	29	63
Severe	1	2,2
Total	46	100

Based on Table 2, it can be seen that the largest group was found in multigravida pregnant women, accounting for 58.7%. As many as 29 pregnant women experienced moderate anxiety (63%), while 1 pregnant woman experienced severe anxiety (2.2%).

The Kruskal-Wallis statistical test was performed using the above data, and the results showed a p-value of 0.034. The choice between rejecting H0 and accepting H1 depends on whether the p-value exceeds the study's critical limit. The p-value of 0.034 in this research is less than 0.05, which suggests that H1 can be accepted.

Table 3 Dunn test results

Factor	Amount (N)	Rating Average of PRAQ-R2 score	Difference (p<0,05) of factor
Primigravida	17	17,06	2
Multigravida	27	27,76	1
Grande Multigravida	2	20,75	

The Dunn test was conducted as a follow-up to the Kruskal-Wallis test. If the Kruskal-Wallis test findings revealed a difference, Dunn's follow-up test was conducted. In the examination of Dunn's test results, the ratings are read reverse, with the highest anxiety level corresponding to the lowest average value. Based on the table 3, the outcomes of Dunn's follow-up test reveal that the average rating value of the primigravida group is more than that of the grande multigravida group, and the average rating value of the grande multigravida group is greater than that of the multigravida group.

4. DISCUSSION

In this research, four characteristics of the respondents were identified as risk factors for the amount of anxiety during pregnancy: the mother's age, level of education, occupation, and abortion history. The findings of this study suggest that 87% of respondents are between the ages of 20 and 35. That is, the majority of responders are not at risk due to their age. According to the Ministry of Health in Qurniyawati (2015), the safest age for women to become pregnant is between the ages of 20 and 35, as the cervix and other body components are ready to accept the pregnancy, and women typically feel ready to become mothers at this point in their lives. The risk of pregnancy and childbirth is small for women aged 20 to 35. A woman's maturity allows her to face pregnancy, labour, and childbirth with equanimity from a psychological standpoint (Yanti et al., 2020b). According to Wang et al. (2021), depression and anxiety are less prevalent at older ages.

Knowledge and experience are correlated, and as one gains knowledge and experience, one's perceptions and behavioural patterns change. Only 19.6% of the respondents in this survey completed university education, and only 41.3% completed high school; the remaining respondents had only completed elementary or junior high school, indicating that the respondents' level of education was quite low. According to Kahyaoglu's research from 2021, pregnant women who are educated report less anxiety or depression. The findings of other studies suggest that women with junior high school to higher education levels may have a slight chance of developing prenatal depression symptoms. (Wu et al., 2021).

According to respondents' employment characteristics, 84.8% were homemakers or did not have a job. Working pregnant women are tied to both their activities and material possessions. To deflect feelings of concern or to overthink, a person who works will engage with pregnant women, exchange knowledge, and occupy their time. However, a moderately demanding workload might also impact stress (Suyani, 2020). Working mothers will receive financial benefits. This is linked to the mother receiving adequate nutrition throughout pregnancy and attending prenatal appointments (Matsushima & Horiguchi, 2022).

Four multigravida pregnant women had a history of abortions or 8.7% of the total. Pregnant women with a history of abortion tend to have a history of unsuccessful pregnancies, which can emotionally impact future pregnancies. By Hangparast et al. (2016), women who have had spontaneous abortions tend to have significantly higher average levels of depression, anxiety, somatization, obsessive-compulsiveness, interpersonal sensitivity, psychosis, hostility, paranoia, *Global Severity Index*, and concerns about labour and childbirth.

The PRAQ-R2 questionnaire was used in this research to measure the level of anxiety in each sample group, focusing on the dread of birthing, fear of fetal abnormalities, and fear of bodily changes. The Kruskal-Wallis test showed differences in the anxiety levels of primigravidas, multigravidas and grande multigravidas in the third trimester of pregnancy with a *p*-value of 0.034.

Rozikhan and Sapartinah (2021) conducted a similar study during the Covid-19 pandemic and found the same outcomes: substantial disparities between primigravida and multigravida patients in the third trimester. No prior research has been discovered investigating the anxiety associated with grande multigravida. Anxiety is a vague feeling, such as experiencing discomfort or fear without recognizing the source. Anxiety is also viewed as a warning of a potential threat or risk to motivate individuals to improve. Anxiety during pregnancy affects both the fetus and the mother. Anxiety during pregnancy increases the risk of low birth weight, early birth, asphyxia, and emotional issues in children. It impacts the nervous system development and growth of the fetus. (Isnaini et al., 2020). The intrauterine environment and fetal development will impact moms suffering from anxiety. Excessive stress hormones in the mother might affect the fetus's blood supply, making it hyperactive (Puspitasari & Wahyuntari, 2020).

This research reveals that the primigravida group had the highest levels of anxiety among pregnant women based on the Dunn test findings. According to various earlier studies, primigravidas experience more anxiety than multigravidas. This is a result of her first pregnancy, which requires her to adapt to physical changes, the fact that she has no idea how giving birth will go, her lack of confidence that she will be able to care for her unborn child, and the numerous accounts of other people's experiences that can increase her anxiety. (Ge et al., 2021; Hamzehgardeshi et al., 2021; Lebel et al., 2020). In contrast, anxiety during pregnancy in multigravida and grande multigravida is brought on by negative pregnancy experiences, such as a history of abortion, traumatizing births, unplanned pregnancies, or contraception failure (Siallagan and Lestari, 2018).

5. CONCLUSION

Following is a conclusion that may be drawn from the study's findings:

1. The amount of anxiety differs between primigravida, multigravida, and grande multigravida in the third trimester of pregnancy at the Kamal Health Center - Bangkalan.
2. From the highest to lowest level of anxiety among pregnant women in their third trimester at the Kamal Health Center – Bangkalan is primigravida, grande multigravida and multigravida.

6. SUGGESTION

1. Pregnant women

Pregnant women are urged to perform regular pregnancy checks to reduce worry, refrain from overanalyzing the labour and delivery process, and consult with an obstetrician or midwife if they have any concerns.

2. Public health centre

Pregnant women can expect to get holistic midwifery care from midwives. The birthing process, which according to the study's findings, is the biggest cause of worry, can be explained by midwives or other medical professionals. Additionally, the Kamal health centre can offer medical facilities in the form of a psychologist to be used as a referral source if expectant women experience worry.

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