



## Qur'an Recitation Intensity and Anxiety Among Third-Trimester Pregnant Women: A Cross-Sectional Study

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### ABSTRACT

*Anxiety among third-trimester pregnant women is an important concern because it may affect their readiness for childbirth as well as maternal and fetal health. One non-pharmacological approach that may provide a relaxation effect is spiritual activity, including Qur'an recitation. This study aimed to analyze the relationship between the intensity of Qur'an recitation and anxiety levels among third-trimester pregnant women at Wihdatul Ummah Medical Center Clinic, Makassar. This study employed a quantitative analytic observational method with a cross-sectional design. The study was conducted from September to October 2025. The study population consisted of 55 third-trimester pregnant women, with a sample of 36 respondents selected using simple random sampling based on the Slovin formula with a 10% margin of error. Data were collected using a 25-item Likert-scale questionnaire measuring the intensity of Qur'an recitation and the 14-item Hamilton Anxiety Rating Scale (HARS) questionnaire. Data were analyzed using univariate and bivariate analyses with the Chi-Square test. The results showed that the majority of third-trimester pregnant women were categorized as having no anxiety, comprising 25 respondents (69.4%), while 11 respondents (30.6%) experienced anxiety ranging from mild to very severe. The intensity of Qur'an recitation was predominantly categorized as moderate, comprising 24 respondents (66.7%), while 12 respondents (33.3%) had a high intensity, and no respondents were categorized as having low intensity. The Chi-Square test showed no significant relationship between the intensity of Qur'an recitation and anxiety levels among third-trimester pregnant women ( $p = 0.950$ ). Although descriptively there was a tendency toward lower anxiety levels among pregnant women with higher Qur'an recitation intensity, the relationship was not statistically significant. Therefore, the intensity of Qur'an recitation was not significantly associated with anxiety levels among third-trimester pregnant women at Wihdatul Ummah Medical Center Clinic, Makassar. These findings indicate that anxiety during pregnancy may be influenced by various other factors; therefore, further research should consider psychological, social, obstetric, and environmental factors that may contribute to anxiety levels during pregnancy.*

## 1. INTRODUCTION

Pregnancy is a physiological process accompanied by substantial physical, psychological, and social changes. Among the psychological problems that may occur during pregnancy, anxiety is an important concern because its intensity may increase as childbirth approaches, particularly during the third trimester. The World Health Organization (WHO) reports that mental health problems during the perinatal period are common and may adversely affect the health and well-being of mothers, infants, and families. In developing countries, the burden of maternal mental health problems is even greater, highlighting the importance of early identification and appropriate management during antenatal care (Organization, 2022). In Indonesia, (Heryanti et al., 2023) reported that 28.7% of pregnant women experienced anxiety approaching childbirth. At the local level, a study conducted at Ananda Maternity Hospital, Makassar, found that 61.3% of third-trimester pregnant women experienced high levels of anxiety before childbirth (Safitri,

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2021). These findings indicate that anxiety during the third trimester remains an important maternal health issue requiring attention.

Anxiety during pregnancy is not merely a psychological condition but may also have implications for maternal and fetal outcomes. Excessive and persistent anxiety may be associated with physiological stress responses, sleep disturbances, reduced quality of life, and difficulties in coping with the physical and emotional demands of pregnancy and childbirth. Maternal psychological distress has also been associated with adverse obstetric and neonatal outcomes, including preterm birth and low birth weight. Evidence from perinatal mental health research indicates that maternal anxiety and depression are associated with poorer pregnancy outcomes, while untreated maternal mental health problems may also contribute to maternal morbidity and postpartum psychological problems (Simonovich et al., 2022). Therefore, anxiety in the third trimester should be addressed as part of comprehensive antenatal care rather than being considered merely a normal emotional response to approaching childbirth. Early identification and appropriate management are important to support maternal psychological well-being and promote positive maternal and neonatal outcomes (Organization, 2022).

The emergence of anxiety during the third trimester is multifactorial. Pregnant women may experience concerns regarding the safety and health of the fetus, the process and pain of childbirth, possible pregnancy or delivery complications, their ability to become mothers, and the possibility of adverse outcomes for themselves or their babies. These concerns may be influenced by individual and social factors, including age, parity, educational level, economic status, social and spousal support, previous childbirth experience, pregnancy complications, and previous negative obstetric experiences. Consequently, anxiety cannot be attributed to a single factor. Within this multifactorial context, spiritual factors may represent one of the personal resources that pregnant women use to cope with stress and uncertainty during pregnancy. For Muslim women, religious practices may provide a culturally and spiritually meaningful source of psychological support.

One potential non-pharmacological approach is Qur'an recitation. Spiritual activities such as reading the Qur'an may be relevant to Muslim pregnant women because they are consistent with their religious beliefs and can be incorporated into daily life without requiring specialized equipment or complicated procedures. From the perspective of coping theory, religious practices can function as a form of religious coping by helping individuals interpret stressful experiences, regulate emotional responses, strengthen hope, and develop a sense of meaning and trust in God. The use of religious coping may therefore help pregnant women manage worries related to pregnancy and childbirth. In addition, the relaxation response theory proposed by Benson suggests that repetitive and focused activities accompanied by a sense of faith can elicit a physiological state opposite to the stress response. Qur'an recitation involves focused attention, rhythmic vocalization, controlled breathing, and spiritual meaning, which may contribute to psychological relaxation and reduce perceived anxiety (Irmawati et al., 2020).

Previous research provides empirical support for the potential psychological benefits of Qur'an-based practices. (Irmawati et al., 2020) reported that Qur'an recitation had a calming effect and could be used as a complementary approach to reduce anxiety. Their findings are consistent with the concept of the relaxation response, in which spiritual concentration and repetitive activity may promote calmness and reduce psychological tension. The process of reciting the Qur'an involves auditory, cognitive, emotional, and spiritual components that may contribute to a subjective sense of peace and security. Thus, Qur'an recitation may serve not only as a religious practice but also as a potential coping mechanism for women experiencing anxiety during pregnancy and childbirth.

Evidence from broader research on Islamic faith practices also supports this relationship. (Simonovich et al., 2022), through a mixed-methods scoping review, identified nine studies examining Islamic faith practices and perinatal mental health. The review found that faith-based practices, including Qur'an recitation, prayer, and listening to Qur'an recitations, were associated with reductions in anxiety, depression, stress, pain, and fear among Muslim women during the perinatal period. Several intervention studies included in the review reported significant reductions in anxiety following Qur'an-based or other Islamic spiritual interventions. However,

most of these studies evaluated structured interventions, such as listening to recorded Qur'an recitations for a specified duration and frequency, rather than examining the intensity of Qur'an recitation as a naturally occurring daily religious practice (Simonovich et al., 2022). This distinction is important because the psychological effect of a spiritual practice may differ between a researcher-administered intervention and an individual's habitual religious practice.

In the present study, the intensity of Qur'an recitation refers to the level of regularity and intensity with which pregnant women engage in Qur'an reading, as assessed using a 25-item Likert-scale questionnaire. The total score reflects the respondents' overall intensity of Qur'an recitation and is categorized as low, moderate, or high. Thus, the variable does not merely describe whether a woman reads the Qur'an or not, but represents the degree of consistency and intensity of the practice based on the respondent's overall questionnaire score. This operationalization allows the study to examine Qur'an recitation as a habitual spiritual behavior rather than as a short-term therapeutic intervention administered by researchers.

Although previous studies have demonstrated beneficial effects of Qur'an recitation or other Islamic faith practices on anxiety, important gaps remain. Much of the existing evidence has focused on experimental or quasi-experimental interventions involving listening to Qur'an recitations, structured religious education, or specific spiritual therapy sessions. For example, studies summarized by (Simonovich et al., 2022), predominantly used intervention designs with predetermined duration and frequency, whereas relatively limited evidence has examined the relationship between the habitual intensity of Qur'an reading and anxiety among pregnant women in routine antenatal settings. Furthermore, differences in study populations, measurement instruments, intervention procedures, and pregnancy stages make it difficult to generalize the findings of previous intervention studies to pregnant women who independently practice Qur'an recitation in their daily lives. Therefore, examining the relationship between habitual Qur'an-reading intensity and anxiety may provide a different perspective on the role of spirituality in maternal mental health.

The third trimester is a particularly relevant period for examining this relationship because psychological concerns may become more prominent as childbirth approaches. Pregnant women must prepare physically and psychologically for childbirth while simultaneously coping with uncertainty regarding labor pain, delivery procedures, possible complications, and the health of the baby. In this context, culturally appropriate and easily accessible non-pharmacological approaches may complement conventional antenatal care. For Muslim pregnant women, Qur'an recitation may represent a personally meaningful spiritual activity that can potentially support emotional regulation. However, because anxiety is multifactorial, Qur'an recitation should not be viewed as the sole determinant of maternal anxiety. Rather, its potential association should be examined alongside the recognition that psychological, social, obstetric, and environmental factors may contribute simultaneously to anxiety levels.

The importance of this issue is particularly relevant in antenatal services because maternal mental health is an integral component of comprehensive maternal care. WHO emphasizes that antenatal and perinatal health services provide an important opportunity to identify mental health problems, provide appropriate support, and integrate mental health promotion into maternal and child health services (Organization, 2022). In a Muslim-majority setting such as Indonesia, the integration of culturally and spiritually relevant approaches into health education may provide an additional avenue for promoting maternal psychological well-being. Nevertheless, such approaches should be based on empirical evidence rather than assumptions regarding their effectiveness.

Based on the existing evidence, there remains a need to examine whether the intensity of Qur'an recitation in everyday life is associated with anxiety among third-trimester pregnant women. This study therefore focuses specifically on the relationship between the intensity of Qur'an recitation and anxiety levels among third-trimester pregnant women at Wihdatul Ummah Medical Center Clinic, Makassar. The findings are expected to contribute to the evidence regarding spiritual approaches to maternal mental health and provide a basis for developing culturally and religiously appropriate health education as part of promotive and preventive antenatal care. Accordingly, this study aimed to analyze the relationship between the intensity of Qur'an

recitation and anxiety levels among third-trimester pregnant women at Wihdatul Ummah Medical Center Clinic, Makassar.

## 2. METHOD

This study used a quantitative analytic observational method with a cross-sectional design to analyze the relationship between the intensity of Qur'an recitation and anxiety levels among third-trimester pregnant women. The study was conducted at Wihdatul Ummah Medical Center Clinic, Makassar, Indonesia, from September to October 2025. The study population consisted of 55 third-trimester pregnant women, and 36 respondents were selected using simple random sampling based on the Slovin formula with a 10% margin of error. Eligible respondents were third-trimester pregnant women who attended the clinic, were willing to participate, were able to read the Qur'an, and had no history of diagnosed anxiety or psychiatric disorders. Respondents with severe pregnancy complications, incomplete questionnaires, or other therapies that could affect anxiety levels were excluded.

Data were collected using a 25-item Likert-scale questionnaire measuring the intensity of Qur'an recitation and the 14-item Hamilton Anxiety Rating Scale (HARS) for assessing anxiety levels. The Qur'an recitation intensity questionnaire had previously been tested for validity and reliability in 30 respondents, with validity coefficients ranging from 0.342 to 0.813 and Cronbach's alpha of 0.932. The total score was categorized as low (25–49), moderate (50–74), and high (75–100). Anxiety was categorized based on HARS scores as no anxiety (<14), mild anxiety (14–20), moderate anxiety (21–27), severe anxiety (28–41), and very severe anxiety/panic (>41). Primary data were obtained directly from respondents through questionnaire completion, followed by checking and processing the collected data.

Data analysis included univariate and bivariate analyses. Univariate analysis was used to describe the frequency and percentage distribution of the study variables, while bivariate analysis was performed to determine the relationship between the intensity of Qur'an recitation and anxiety levels using the Chi-Square test. Statistical significance was determined at  $\alpha = 0.05$ . Data were processed using Microsoft Excel and SPSS.

## 3. RESULT AND DISCUSSION

### Result

This study was conducted on pregnant women in their third trimester who had their pregnancies checked at the Wihdatul Ummah Clinic in Makassar. Sampling was carried out from September to October 2025, with 36 pregnant women in their third trimester participating. All samples taken were samples that met the inclusion criteria. This study used primary data collected through questionnaires on the intensity of reading the Qur'an and anxiety levels.

Table 1. Distribution of Third Trimester Pregnant Women Respondents Based on Age

| Characteristics |       | Frequency | Percentage |
|-----------------|-------|-----------|------------|
| Age Range       | 20    | 35        | 97.2       |
|                 | >35   | 1         | 2.8        |
|                 | Total | 36        | 100        |

Table 1 shows the distribution of third trimester pregnant women respondents based on age characteristics at the Wihdatul Ummah Clinic in Makassar. Based on age groups, most respondents were in the 20–35 age range, totaling 35 people (97.2%), while 1 person (2.8%) was over 35 years old.

Table 2. Distribution of Respondents in Their Third Trimester of Pregnancy Based on Parity

| Characteristics |              | Frequency | Percentage |
|-----------------|--------------|-----------|------------|
| Parity          | Primigravida | 18        | 50         |
|                 | Multigravida | 18        | 50         |
|                 | Total        | 36        | 100        |

Based on parity characteristics, the respondents had an equal number of primigravida and multigravida mothers, namely 18 people (50%) each.

Table 3. Distribution of Respondents in Their Third Trimester of Pregnancy Based on Educational Status Characteristics

| Characteristics    |                                                   | Frequency | Percentage (%) |
|--------------------|---------------------------------------------------|-----------|----------------|
| Educational Status | Diploma/Bachelor's Degree                         | 28        | 77.80          |
|                    | Elementary School/Islamic Elementary School       | 1         | 2.80           |
|                    | Junior High School/MTS                            | 0         | 0              |
|                    | High School/Vocational School/Islamic High School | 7         | 19.40          |
|                    | Total                                             | 36        | 100            |

Based on educational status characteristics, most respondents were in the Diploma/Bachelor's degree category, totaling 28 people (77.8%), while 7 people (19.4%) had a high school/vocational school/Islamic high school education, none had a junior high school/Islamic junior high school education (0%), and 1 person (2.8%) had an elementary school/Islamic elementary school education.

Table 4. Distribution of Respondents in Their Third Trimester of Pregnancy Based on Employment Characteristics

| Characteristics |               | Frequency | Percentage |
|-----------------|---------------|-----------|------------|
| Occupation      | Housewife     | 16        | 44.4       |
|                 | Student       | 1         | 2.8        |
|                 | Civil Servant | 13        | 36.1       |
|                 | Self-employed | 6         | 16.7       |
|                 | Total         | 36        | 100        |

Based on job characteristics, most respondents were housewives (16 people, 44.4%), followed by students (1 person, 2.8%), civil servants (13 people, 36.1%), and entrepreneurs (6 people, 16.7%).

Table 5. Categories of Anxiety Levels in Pregnant Women in the Third Trimester

| Category          | Number | Frequency | Percentage |
|-------------------|--------|-----------|------------|
| Very severe/Panic | >41    | 2         | 5.60       |
| Severe            | 28-41  | 4         | 11.10%     |
| Moderate          | 21-27  | 3         | 8.30%      |
| Mild              | 14-20  | 2         | 5.60%      |
| Not anxious       | <14    | 25        | 69.40%     |
| Total             |        | 36        | 100        |

Based on the results of the study of 36 respondents, the category of severe anxiety/panic was experienced by 2 respondents (5.6%). The category of severe anxiety was experienced by 4 respondents (11.1%). Furthermore, the moderate anxiety category was experienced by 3 respondents (8.3%), and the mild anxiety category was experienced by 2 respondents (5.6%). Meanwhile, the non-anxious category was the most common, with 25 respondents (69.4%). These findings indicate that although most respondents did not experience anxiety, there were still pregnant women who experienced moderate to very severe anxiety, thus requiring more attention in terms of prevention and intervention.

Table 6. Categories of Al-Qur'an Reading Intensity Scores

| Category | Number | Frequency | Percentage |
|----------|--------|-----------|------------|
| High     | 75-100 | 12        | 33.30      |
| Medium   | 50-74  | 24        | 66.70%     |

|       |       |    |     |
|-------|-------|----|-----|
| Low   | 25-49 | 0  | 0   |
| Total |       | 36 | 100 |

Based on the results of the study of 36 respondents, 12 respondents (33.3%) experienced a high intensity of reading the Qur'an. Furthermore, the medium intensity category was the most common, with 24 respondents (66.7%). Meanwhile, there were no respondents in the low intensity category (0%).

Table 7. Descriptive Analysis Results

| Variable                       | N  | Minimum Score | Maximum Score | Mean  | Standard Deviation |
|--------------------------------|----|---------------|---------------|-------|--------------------|
| Anxiety (Y)                    | 36 | 0             | 56            | 14.41 | 14.11              |
| Intensity of Quran Reading (X) | 36 | 40            | 82            | 68.44 | 9.0                |

Based on the results of descriptive analysis, an initial picture of the two variables studied was obtained. The anxiety variable (Y) measured in 36 respondents showed a score range of 0 to 56, with an average value of 14.42 and a standard deviation of 14.11. These findings illustrate that there is a fairly wide variation in anxiety levels among pregnant women. Meanwhile, the variable of reading the Qur'an (X) was also measured in 36 respondents and showed a minimum score of 40 and a maximum score of 82. The average value was 68.44 with a standard deviation of 9.04. These results illustrate that most respondents had a relatively high intensity of reading the Qur'an, with not too much variation between respondents. The bivariate analysis in this study aimed to determine the relationship between the variable of intensity of reading the Qur'an and the anxiety level of pregnant women in the third trimester using the chi-square test.

Table 8. Chi-Square Test

| Intensity of Reading the Quran |   | Anxiety Level |      |          |        |                   | Total | P Value |
|--------------------------------|---|---------------|------|----------|--------|-------------------|-------|---------|
|                                |   | Not Anxious   | Mild | Moderate | Severe | Very Severe/Panic |       |         |
| Moderate                       | n | 13            | 2    | 3        | 4      | 2                 | 24    | 0.95    |
|                                | % | 54.2          | 8.3  | 12.5     | 16.7   | 8.3               | 100   |         |
| Height                         | n | 12            | 0    | 0        | 0      | 0                 | 12    |         |
|                                | % | 100.0         | 0    | 0        | 0      | 0                 | 100   |         |
| Total                          | n | 25            | 2    | 3        | 4      | 2                 | 36    |         |
|                                | % | 69.4          | 5.6  | 8.3      | 11.1   | 5.6               | 100   |         |

Table 8 shows that among respondents with moderate intensity of reading the Qur'an, most were in the non-anxious category, namely 13 people (54.2%). However, there were still respondents who experienced mild anxiety (8.3%), moderate anxiety (12.5%), severe anxiety (16.7%), and very severe anxiety/panic (8.3%). Meanwhile, among respondents with a high intensity of reading the Qur'an, all respondents, namely 12 people (100%), were in the non-anxious category, and no respondents were found to experience anxiety in other categories. Proportionally, it can be seen that respondents with a high intensity of reading the Qur'an have lower anxiety levels than respondents with moderate intensity. The statistical analysis results showed a p-value of 0.95, which means that the p-value > 0.05. Thus, it can be concluded that there is no significant relationship between the intensity of reading the Qur'an and the level of anxiety. This shows that the difference in the distribution of anxiety levels in the two groups of Qur'an reading intensity is not statistically significant.

## Discussion

### *Anxiety Levels in Third-Trimester Pregnant Women*

The results showed that most third-trimester pregnant women were in the non-anxious category, with 25 respondents (69.4%), while 11 respondents (30.6%) experienced anxiety ranging from mild to severe. This finding indicates that although most respondents demonstrated

relatively good psychological adaptation toward childbirth, anxiety remained present in a substantial proportion of pregnant women. Anxiety during the third trimester is a complex condition that may arise from concerns regarding labor pain, maternal and fetal safety, delivery complications, and the transition to the parental role. Therefore, the absence of anxiety in most respondents should not be interpreted as being caused by a single characteristic of the respondents.

The finding differs from the study by (Luong et al., 2021) in which moderate anxiety was the most common category, affecting 48 respondents (82.8%). The difference may be related to variations in population characteristics, cultural context, educational background, social support, environmental conditions, and the circumstances surrounding pregnancy and childbirth (Irawati et al., 2020). Conversely, the present finding is consistent with (Eki & Utami, 2023), who reported that most respondents had no anxiety symptoms (54.2%), followed by mild, moderate, and severe anxiety. The similarity between the studies may reflect comparable patterns of psychological adaptation among pregnant women. However, factors such as age, education, employment, social support, previous pregnancy experience, and access to childbirth information were not statistically analyzed in the present study. Therefore, these characteristics should be considered as possible explanations rather than established determinants of the absence of anxiety.

The predominance of respondents without anxiety may also reflect the multifactorial nature of anxiety during pregnancy. Anxiety is influenced by biological, psychological, and social factors that interact with one another. Age, parity, previous childbirth experience, pregnancy complications, family and husband support, socioeconomic conditions, pregnancy planning, and access to health information may contribute to the psychological condition of pregnant women. Thus, the relatively low proportion of anxiety observed in this study may reflect the combined influence of several factors rather than the effect of a particular intervention or behavior. Further research is needed to examine these factors simultaneously.

#### *Intensity of Qur'an Recitation among Third-Trimester Pregnant Women*

The results showed that the intensity of Qur'an recitation was predominantly moderate, involving 24 respondents (66.7%), while 12 respondents (33.3%) were categorized as having high intensity. No respondents were categorized as having low intensity. These findings indicate that all respondents maintained some level of engagement with Qur'an recitation during pregnancy, although the frequency and consistency varied between individuals. The predominance of moderate intensity is consistent with the study by (Arifudin, 2022), which also found that Qur'an recitation intensity was predominantly in the moderate category.

The predominance of moderate intensity may be related to physical changes and discomfort experienced during the third trimester. (Ridawati et al., 2024) reported that physical complaints, particularly back pain, are common among third-trimester pregnant women and may interfere with prolonged activities or maintaining certain positions. Such physical limitations may affect the frequency or duration of Qur'an recitation (Ridawati et al., 2024). At the same time, the absence of respondents in the low-intensity category may indicate that Qur'an recitation remains an important spiritual activity among the respondents. Spiritual activities may provide a source of emotional support and help individuals cope with stressful situations during pregnancy (Astuti & Ediyono, 2023). However, intensity of recitation should not be equated directly with the quality or effectiveness of spiritual practice. The instrument used in this study primarily assessed the intensity of Qur'an recitation, whereas aspects such as understanding of Qur'anic meaning (tadabbur), concentration, sincerity, emotional involvement, and positive religious coping were not specifically measured. Consequently, two respondents with similar reading frequencies may experience different psychological effects because the quality and meaning attached to the practice may differ. This distinction is important when interpreting the relationship between Qur'an recitation and anxiety.

#### *Relationship between Qur'an Recitation Intensity and Anxiety Levels*

The main finding of this study was that there was no statistically significant relationship between the intensity of Qur'an recitation and anxiety levels among third-trimester pregnant

women, with a Chi-Square test result of  $p = 0.950$ . This result indicates that the observed differences in anxiety distribution between respondents with moderate and high Qur'an recitation intensity were not statistically significant. Although descriptive differences were observed, the findings do not provide sufficient statistical evidence to conclude that higher Qur'an recitation intensity is associated with lower anxiety levels in this population.

The absence of a significant association may partly be related to the relatively small sample size of 36 respondents and the uneven distribution of the independent variable. In particular, no respondents were categorized as having low Qur'an recitation intensity, leaving only the moderate and high categories for comparison. Such a distribution reduces variability between groups and may limit the ability of the statistical test to detect an association. Therefore, the non-significant result should be interpreted with consideration of the statistical power of the study. A larger sample with more balanced representation across intensity categories would provide greater ability to detect a potentially small or moderate association. Nevertheless, the  $p$ -value of 0.950 indicates that the present data do not demonstrate a statistically significant relationship.

Another possible explanation is the multifactorial nature of anxiety during pregnancy. Anxiety in the third trimester is not determined by spiritual practices alone but may result from interactions between biological, psychological, and social factors. Age, parity, previous childbirth experience, pregnancy complications, husband and family support, socioeconomic status, pregnancy planning, and concerns about the health of the fetus may contribute to anxiety. (Kusumah et al., 2025) similarly emphasized that anxiety during the third trimester involves complex interactions among biological, psychological, and social factors. Because these potential confounding factors were not analyzed in the present study, their influence cannot be separated from the relationship between Qur'an recitation intensity and anxiety.

The present findings are consistent with the study by (Asiah et al., 2022), which reported that Qur'an recitation intensity, assessed through frequency, duration, and understanding, was not significantly associated with emotional stability or stress tendencies. The similarity suggests that the frequency of religious practice alone may not necessarily translate into measurable psychological benefits. Differences in age, environmental stressors, individual characteristics, and the psychological context of participants may influence the outcomes of spiritual practices (Asiah et al., 2022).

The findings also support the perspective of religious coping theory proposed by Kenneth Pargament, which emphasizes that the psychological effects of religious practice depend not only on the frequency of religious activities but also on how individuals interpret and use religion as a coping resource. In the present study, respondents' intensity of Qur'an recitation was measured quantitatively, but the depth of understanding (*tadabbur*), emotional engagement, and positive or negative religious coping were not specifically assessed. Therefore, frequent Qur'an recitation may not necessarily produce the same psychological response among all respondents. A high frequency of recitation performed primarily as a routine may have a different effect from recitation accompanied by understanding, reflection, and a sense of spiritual security. Conversely, religious practices accompanied by feelings of guilt, pressure, or negative religious coping may not reduce anxiety (Ramadika et al., 2025).

The present findings differ from those of (Muslimah et al., 2025), who reported a significant relationship between Qur'an recitation intensity and anxiety among post-stroke patients, with a  $p$ -value of 0.002. The difference may be explained by differences in the population and sources of stress. Post-stroke patients may experience prolonged and chronic psychological stress associated with physical disability and long-term illness, whereas third-trimester pregnant women generally experience situational concerns related to childbirth, maternal and fetal safety, and anticipated labor pain (Muslimah et al., 2025). Differences in study design, participant characteristics, clinical conditions, and measurement of spiritual practice may therefore contribute to different findings.

The present result also differs from the theoretical explanation proposed by (Tiara & Ulfah, 2022), which suggests that Qur'an recitation or listening to Qur'anic recitation may reduce anxiety through relaxation and neurophysiological mechanisms, including reduction of stress

responses and promotion of a calming state. However, evidence of a potential relaxation effect does not necessarily mean that the frequency of Qur'an recitation will show a statistically significant association with anxiety in every population. The psychological response to pregnancy and childbirth is influenced by multiple factors, and the cross-sectional design of this study cannot determine whether differences in Qur'an recitation intensity preceded or contributed to differences in anxiety levels.

Importantly, the descriptive finding that most respondents were within a healthy reproductive age range or had relatively high educational attainment should be interpreted cautiously. These characteristics may contribute to better access to information, emotional adaptation, and preparation for childbirth, but they were not tested as independent predictors of anxiety in this study. Therefore, they cannot be considered statistically proven explanations for the low anxiety level observed. Future studies should include these variables in multivariable analyses to determine their independent contribution to anxiety among third-trimester pregnant women.

From a clinical perspective, the absence of a statistically significant relationship does not mean that Qur'an recitation has no value for pregnant women. Rather, the findings suggest that Qur'an recitation should be positioned as a supportive spiritual practice, rather than as a standalone intervention for managing anxiety. In antenatal care, spiritual approaches may be combined with childbirth education, psychological counseling, relaxation techniques, family and husband support, and appropriate screening for anxiety. Such an integrated approach is more consistent with the multifactorial nature of maternal psychological health.

This study has several limitations. First, the cross-sectional design limits the ability to establish temporal or causal relationships between Qur'an recitation intensity and anxiety. Second, the sample size was relatively small, consisting of only 36 respondents, and the absence of respondents in the low-intensity category resulted in an unbalanced distribution that may have limited statistical power. Third, both Qur'an recitation intensity and anxiety-related information were obtained through questionnaires, making the findings potentially subject to self-report bias. Fourth, the study was conducted at only one clinic, which may limit the generalizability of the findings to pregnant women in other settings. Finally, several potentially important factors, including parity, previous childbirth experience, husband and family support, pregnancy complications, socioeconomic status, pregnancy planning, and quality of religious coping, were not analyzed. These limitations should be considered when interpreting the non-significant association observed in this study.

Overall, this study found that most third-trimester pregnant women were not anxious and that Qur'an recitation intensity was predominantly moderate. However, the statistical analysis showed no significant relationship between Qur'an recitation intensity and anxiety levels ( $p = 0.950$ ). The findings suggest that the frequency or intensity of Qur'an recitation alone may not be sufficient to explain variations in maternal anxiety, particularly in a small and relatively homogeneous sample. Nevertheless, Qur'an recitation may remain a culturally and spiritually relevant supportive coping practice. These findings contribute to the evidence concerning spiritual approaches in antenatal care by emphasizing that spiritual practices should be integrated with psychological, educational, and family-based support rather than considered as an independent determinant of anxiety. Future research involving larger and more diverse samples, longitudinal or intervention designs, and measurements of religious coping, tadabbur, social support, obstetric factors, and other potential confounders is needed to clarify the role of Qur'an recitation in maternal psychological well-being.

#### 4. CONCLUSION

Based on the findings of this study, most third-trimester pregnant women at Wihdatul Ummah Clinic in Makassar were categorized as non-anxious, while a proportion of respondents experienced anxiety ranging from mild to very severe. The intensity of Qur'an reading was predominantly categorized as moderate, with the remaining respondents categorized as having high intensity. The analysis showed no statistically significant association between the intensity

of Qur'an reading and anxiety levels among third-trimester pregnant women ( $p = 0.95$ ;  $p > 0.05$ ). This finding indicates that the intensity of Qur'an reading alone was not significantly associated with anxiety levels in the study population.

The absence of a statistically significant association suggests that anxiety during the third trimester may be influenced by multiple biological, psychological, and social factors that were not examined in this study. Therefore, Qur'an reading may be considered a complementary spiritual activity that can support psychological comfort, but it should not be regarded as the sole approach to managing anxiety during pregnancy. Spiritual activities may be integrated with routine antenatal education, family support, psychological counseling, and appropriate medical monitoring.

Further studies are recommended to use longitudinal or experimental designs, larger sample sizes, and broader study settings. Future research should also consider potential confounding factors, including family support, religiosity, spiritual coping, previous pregnancy or childbirth experiences, and pregnancy complications, to provide a more comprehensive understanding of factors associated with anxiety among pregnant women..

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