

## Original Paper

# Beyond Emotional Care: Quantifying the Impact of Social Support on Maternal Psychological Well-being during First Pregnancy

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**Background:** Pregnancy, particularly among primigravida women, represents a critical transitional period often accompanied by emotional and psychological challenges. This study aimed to examine the relationship between perceived social support and psychological well-being among primigravida women and to identify key predictors influencing maternal mental health during pregnancy. **METHODS:** A cross-sectional study was conducted among 150 primigravida women attending antenatal care services. Data was collected using a structured questionnaire that included sociodemographic and obstetric characteristics, a validated social support scale, and a standardized psychological well-being scale. Data analysis was performed using IBM SPSS Statistics. Descriptive statistics summarized participant characteristics, while Pearson correlation assessed the relationship between social support and psychological well-being. Multiple linear regression analysis was conducted to identify independent predictors. Statistical significance was set at  $p < 0.05$ . **RESULTS:** Participants reported high levels of perceived social support (mean =  $33.83 \pm 5.42$ ), primarily from husbands and family members. Psychological well-being scores were moderate (mean =  $28.83 \pm 4.87$ ). A strong positive correlation was observed between social support and psychological well-being ( $r = 0.62$ ,  $p < 0.001$ ). Regression analysis indicated that social support was the strongest predictor of psychological well-being ( $\beta = 0.55$ ,  $p < 0.001$ ), followed by education level ( $\beta = 0.14$ ,  $p = 0.021$ ) and income ( $\beta = 0.13$ ,  $p = 0.024$ ). **CONCLUSION:** Social support significantly enhances psychological well-being among first-time pregnant women. Integrating psychosocial support into routine antenatal care and strengthening family-based support systems are recommended to improve maternal mental health outcomes.

**KEYWORDS** Social support; Psychological well-being; Primigravida; Maternal mental health; Antenatal care

## 1-INTRODUCTION

Pregnancy represents a critical transitional period in a woman's life, characterized by profound physiological, psychological, and social changes<sup>1,2</sup>. For first-time mothers (primigravida women), this transition is often accompanied by uncertainty, emotional fluctuations, and heightened vulnerability to psychological distress<sup>3</sup>. While pregnancy is commonly perceived as a joyful and fulfilling experience, evidence indicates that many women experience anxiety, stress, and reduced psychological well-being during this period, particularly in the absence of adequate support systems<sup>3</sup>. Maternal psychological well-being is increasingly recognized as a key determinant of both maternal and fetal health outcomes, influencing prenatal behaviors, birth outcomes, and long-term child development<sup>4,5</sup>.

Psychological well-being during pregnancy encompasses emotional stability, the ability to cope with stress, positive affect, and overall life satisfaction. Disruptions in these domains may lead to adverse consequences, including antenatal anxiety, depression, and impaired maternal-fetal attachment<sup>6</sup>. First-time mothers are particularly susceptible due to their limited prior experience with pregnancy and childbirth, as well as concerns related to health, delivery outcomes, and the transition to motherhood. In addition, sociocultural expectations, economic pressures, and healthcare accessibility can further influence maternal mental health, especially in low- and middle-income or conflict-affected settings<sup>7</sup>.

Social support has been widely identified as a critical protective factor that can buffer the negative psychological effects associated with pregnancy. It is a multidimensional construct that includes emotional support (empathy, care, reassurance), instrumental support (tangible assistance), informational support (guidance and advice), and appraisal support (affirmation and feedback). Sources of social support typically include partners, family members, friends, and healthcare providers<sup>8</sup>. Among these, partner and family support are often the most

influential during pregnancy, particularly in cultures where family structures play a central role in caregiving and decision-making<sup>9,10</sup>.

Theoretical frameworks, such as the stress-buffering model, suggest that social support mitigates the impact of stressors by enhancing coping mechanisms and promoting resilience. Empirical studies have consistently demonstrated that higher levels of perceived social support are associated with lower levels of anxiety and depression, as well as improved psychological well-being among pregnant women. Conversely, lack of support or perceived social isolation has been linked to increased psychological distress and adverse pregnancy outcomes. Despite this, the relative contribution of different sources of support such as family, friends, and significant others—remains insufficiently explored, particularly in diverse sociocultural contexts.

In regions affected by socioeconomic challenges and instability, such as parts of the Middle East, including Iraq, the importance of social support may be even more pronounced. Women in these settings often face additional stressors, including limited healthcare resources, financial constraints, and societal pressures, which can exacerbate psychological vulnerability during pregnancy. However, extended family networks and strong community ties may serve as important sources of support, potentially offsetting some of these challenges. Understanding how these support systems function and influence maternal well-being is essential for developing culturally appropriate interventions.

Although previous research has highlighted the association between social support and maternal mental health, there remains a need for comprehensive studies that quantify this relationship and identify key predictors of psychological well-being among first-time pregnant women. Moreover, few studies have integrated both psychosocial and demographic variables within a predictive model to assess their combined influence on maternal outcomes. Addressing this gap is particularly important for informing evidence-based prenatal care strategies.

Therefore, this study aims to examine the relationship between perceived social support and psychological well-being among first-time pregnant women and to identify the most significant predictors of maternal mental health. By providing empirical evidence within a specific cultural context, this research seeks to contribute to the growing body of literature and support the integration of psychosocial care into routine antenatal services.

## 2-MATERIALS AND METHODS

### Study Design

A descriptive cross-sectional study design was employed to examine the relationship between perceived social support and psychological well-being among first-time pregnant women. This design was considered appropriate to assess associations between variables at a single point in time and to generate evidence for predictive analysis.

### Study Population

The study population consisted of primigravida women attending antenatal care services. Participants were eligible if they were experiencing their first pregnancy, aged 18 years or older, and able to understand and respond to the questionnaire. Women with a known history of diagnosed psychiatric disorders or high-risk medical complications that could significantly affect psychological status were excluded to reduce potential confounding.

### The Setting of the Study

The study was conducted in selected antenatal care clinics within public healthcare facilities in **Mosul, Nineveh Governorate, Iraq**. These facilities provide routine prenatal services to a diverse population of women from both urban and rural areas, making them suitable for capturing a representative sample of first-time pregnant women within the region.

### Sample Size and Sampling Technique

A total of 150 participants were included in the study. The required sample size was estimated using G\*Power version 3.1 for multiple linear regression analysis. Assuming a medium effect size ( $f^2 = 0.15$ ), a significance level ( $\alpha$ ) of 0.05, a statistical power of 80%, and up to eight predictor variables, the minimum required sample size was calculated to be 109 participants. To enhance the precision of the estimates and to account for potential incomplete or missing responses, a total of 150 primigravida women were recruited using a non-probability convenience sampling technique.

### Data Collection Tools

Data was collected using a structured, self-administered questionnaire consisting of five sections:

1. **Sociodemographic Characteristics:** including age, educational level, occupation, residence, and income level.
2. **Obstetric History:** including gestational age, pregnancy planning status, and weight-related variables.
3. **Social Support Scale:** comprising 10 items measuring perceived emotional, informational, and practical support from family, friends, significant others, and healthcare providers. Responses were rated on a 7-point Likert scale ranging from “strongly disagree” to “strongly agree.”<sup>11</sup>
4. **Psychological Well-being Scale:** consisting of 10 items assessing emotional state, anxiety, coping ability, and overall psychological stability using a 4-point Likert scale<sup>12</sup>.

5. **Experience Scale:** divided into positive and negative domains evaluating emotional experiences related to pregnancy<sup>13</sup>.

Content validity of the instrument was established through review by a panel of experts in maternal health and nursing. Reliability testing indicated acceptable internal consistency, with Cronbach's alpha coefficients exceeding 0.80 for the main scales.

#### **Data Collection Procedure**

Data collection was conducted over a defined period following ethical approval from the relevant institutional review board and administrative permissions from health authorities. Eligible participants were approached during their antenatal clinic visits.

The purpose of the study was explained, and informed consent was obtained prior to participation. Participants completed the questionnaire in a private setting to ensure confidentiality and reduce response bias. Assistance was provided when needed, particularly for participants with limited literacy. Each questionnaire required approximately 15–20 minutes to complete.

#### **Statistical Data Analysis**

Data were entered and analyzed using the Statistical Package for the Social Sciences (SPSS), version 28. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize participant characteristics and study variables.

Inferential statistics were applied to examine relationships between variables. Pearson correlation analysis was used to assess the association between social support and psychological well-being. Multiple linear regression analysis was conducted to identify predictors of psychological well-being while controlling for relevant sociodemographic and obstetric variables.

Prior to multiple linear regression, multicollinearity was assessed using variance inflation factors (VIFs), with all VIF values below 2.0, indicating no evidence of multicollinearity. Residual normality was examined using Q-Q plots and the Shapiro–Wilk test, while homoscedasticity and linearity were evaluated through residual scatterplots. All assumptions were satisfactorily met.

Statistical significance was set at  $p < 0.05$ , and confidence intervals were calculated at the 95% level.

#### **Limitations of the Study**

Several limitations should be acknowledged. First, the cross-sectional design limits the ability to establish causal relationships between social support and psychological well-being. Second, the use of a convenience sampling technique may affect the generalizability of the findings to all pregnant women in the region. Third, data were collected using self-reported measures, which may be subject to recall bias and social desirability bias.

Additionally, the study was conducted in selected healthcare facilities within one geographic area, which may not fully represent variations across different regions or healthcare settings. Future longitudinal and multi-center studies are recommended to validate and extend these findings.

### **3-RESULTS**

#### **1. Sociodemographic Characteristics of Participants**

A total of 150 first-time pregnant women were included in the study. As shown in Table 1, nearly half of the participants (48.0%) were aged between 20–29 years, followed by 30–39 years (30.0%). A smaller proportion were younger than 20 years (12.0%) or aged 40 years and above (10.0%). Regarding educational level, the largest group held a bachelor's degree (22.7%), followed by secondary education (21.3%) and intermediate level (18.7%), while only 6.7% were illiterate. In terms of employment status, the majority of participants were unemployed (61.3%). Most participants resided in urban areas (63.3%), and nearly half reported a medium level of income (47.3%), with 34.7% having low income and 18.0% high income.

#### **2. Obstetric Characteristics**

The obstetric profile of participants is presented in Table 2. The largest proportion of women were in the third trimester of pregnancy (40.0%), followed by the second trimester (38.7%) and the first trimester (21.3%). Most pregnancies were planned (64.0%), while 36.0% were unplanned. Regarding pre-pregnancy weight, the majority of participants (34.7%) had a weight between 60–69 kg, followed by 50–59 kg (26.7%) and 70–79 kg (18.7%). Only a small percentage reported weights above 80 kg or below 50 kg.

#### **3. Social Support Levels**

The distribution of social support scores is summarized in Table 3. Overall, participants reported high levels of perceived social support, with a total mean score of  $33.83 \pm 5.42$ .

The highest mean scores were observed for support from husbands ( $3.60 \pm 0.58$ ) and the presence of a significant person who provides emotional care ( $3.55 \pm 0.60$ ). Family support was also notably high ( $3.52 \pm 0.62$ ).

In contrast, relatively lower mean scores were reported for reliance on friends ( $3.09 \pm 0.85$ ) and communication with friends ( $3.21 \pm 0.78$ ), indicating that family and partner support were more prominent sources of support compared to friends.

**Table 1. Sociodemographic Characteristics of Participants (n = 150)**

| Variable          | Category     | Frequency (n) | Percentage (%) |
|-------------------|--------------|---------------|----------------|
| Age               | <20 years    | 18            | 12.0           |
|                   | 20–29 years  | 72            | 48.0           |
|                   | 30–39 years  | 45            | 30.0           |
|                   | ≥40 years    | 15            | 10.0           |
| Educational Level | Illiterate   | 10            | 6.7            |
|                   | Primary      | 20            | 13.3           |
|                   | Intermediate | 28            | 18.7           |
|                   | Secondary    | 32            | 21.3           |
|                   | Diploma      | 18            | 12.0           |
|                   | Bachelor's   | 34            | 22.7           |
|                   | Master's     | 8             | 5.3            |
| Occupation        | Employed     | 58            | 38.7           |
|                   | Unemployed   | 92            | 61.3           |
| Residence         | Urban        | 95            | 63.3           |
|                   | Rural        | 55            | 36.7           |
| Income Level      | Low          | 52            | 34.7           |
|                   | Medium       | 71            | 47.3           |
|                   | High         | 27            | 18.0           |

**Table 2. Obstetric Characteristics (n = 150)**

| Variable                | Category         | Frequency (n) | Percentage (%) |
|-------------------------|------------------|---------------|----------------|
| Gestational Age         | First trimester  | 32            | 21.3           |
|                         | Second trimester | 58            | 38.7           |
|                         | Third trimester  | 60            | 40.0           |
| Pregnancy Planning      | Planned          | 96            | 64.0           |
|                         | Unplanned        | 54            | 36.0           |
| Weight Before Pregnancy | <50 kg           | 12            | 8.0            |
|                         | 50–59 kg         | 40            | 26.7           |
|                         | 60–69 kg         | 52            | 34.7           |
|                         | 70–79 kg         | 28            | 18.7           |
|                         | 80–89 kg         | 12            | 8.0            |
|                         | ≥90 kg           | 6             | 4.0            |

**Table 3. Social Support Scale Scores (Mean ± SD) (n = 150)**

| Item               | Description                   | Mean ± SD           |
|--------------------|-------------------------------|---------------------|
| 1                  | Special person available      | 3.48 ± 0.65         |
| 2                  | Family support                | 3.52 ± 0.62         |
| 3                  | Emotional support from family | 3.44 ± 0.70         |
| 4                  | Talk with family              | 3.36 ± 0.74         |
| 5                  | Friends support               | 3.18 ± 0.81         |
| 6                  | Rely on friends               | 3.09 ± 0.85         |
| 7                  | Someone cares emotionally     | 3.55 ± 0.60         |
| 8                  | Talk with friends             | 3.21 ± 0.78         |
| 9                  | Husband support               | 3.60 ± 0.58         |
| 10                 | Healthcare support            | 3.40 ± 0.72         |
| <b>Total Score</b> |                               | <b>33.83 ± 5.42</b> |

**Note.** Scores are based on a 7-point Likert scale, with higher scores indicating greater perceived social support.

#### 4. Psychological Well-being Status

As shown in Table 4, the overall psychological well-being score among participants was moderate (mean =  $28.83 \pm 4.87$ ). Participants reported relatively higher scores in positive dimensions such as hopefulness about the future ( $3.20 \pm 0.75$ ), confidence in childbirth ( $3.18 \pm 0.72$ ), and emotional stability ( $3.12 \pm 0.74$ ). However, moderate levels of psychological distress were also observed, particularly in anxiety related to the baby's health ( $2.90 \pm 0.80$ ) and fear of childbirth complications ( $2.85 \pm 0.82$ ). Lower scores were noted in difficulty relaxing ( $2.60 \pm 0.88$ ) and overreacting to situations ( $2.45 \pm 0.91$ ), suggesting variability in emotional responses among participants.

#### 5. Relationship between Social Support and Psychological Well-being

The relationship between perceived social support and psychological well-being is presented in Table 5 and illustrated in Figure 1. Pearson correlation analysis demonstrated a statistically significant positive association between social support and psychological well-being ( $r = 0.62$ ,  $p < 0.001$ ), indicating that higher levels of perceived social support were associated with better psychological well-being among primigravida women. Multiple linear regression analysis (Table 5) further identified social support as the strongest independent predictor of psychological well-being ( $\beta = 0.55$ ,  $B = 0.68$ ,  $SE = 0.09$ ,  $t = 7.56$ ,  $p < 0.001$ ). Education level ( $\beta = 0.14$ ,  $B = 0.35$ ,  $SE = 0.15$ ,  $t = 2.33$ ,  $p = 0.021$ ) and income level ( $\beta = 0.13$ ,  $B = 0.41$ ,  $SE = 0.18$ ,  $t = 2.28$ ,  $p = 0.024$ ) were also significant independent predictors of psychological well-being.

The overall regression model was statistically significant ( $F(3,146) = 28.96$ ,  $p < 0.001$ ), explaining 50% of the variance in psychological well-being ( $R^2 = 0.50$ ; adjusted  $R^2 = 0.48$ ). As illustrated in Figure 1, psychological well-being tended to increase with higher perceived social support, demonstrating a clear positive linear relationship. These findings highlight the substantial contribution of perceived social support, together with selected socioeconomic factors, to maternal psychological well-being during first pregnancy.

**Table 4. Psychological Well-being Scores (Mean  $\pm$  SD) (n = 150)**

| Item               | Description              | Mean $\pm$ SD                      |
|--------------------|--------------------------|------------------------------------|
| 1                  | Difficulty relaxing      | $2.60 \pm 0.88$                    |
| 2                  | Overreaction             | $2.45 \pm 0.91$                    |
| 3                  | Hopefulness              | $3.20 \pm 0.75$                    |
| 4                  | Loss of enthusiasm       | $2.38 \pm 0.93$                    |
| 5                  | Anxiety about baby       | $2.90 \pm 0.80$                    |
| 6                  | Fear of complications    | $2.85 \pm 0.82$                    |
| 7                  | Coping ability           | $3.10 \pm 0.76$                    |
| 8                  | Enjoy activities         | $3.05 \pm 0.79$                    |
| 9                  | Confidence in childbirth | $3.18 \pm 0.72$                    |
| 10                 | Emotional stability      | $3.12 \pm 0.74$                    |
| <b>Total Score</b> |                          | <b><math>28.83 \pm 4.87</math></b> |

**Note.** Scores are based on a 4-point Likert scale, with higher scores indicating better psychological well-being.

#### 4-DISCUSSION

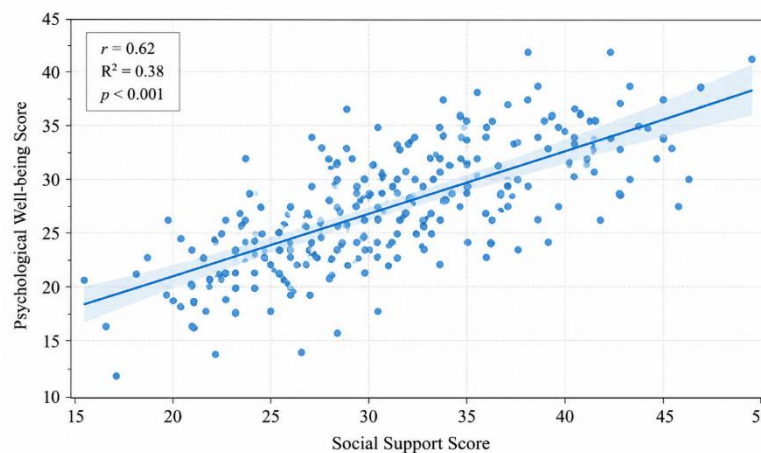
This study examined the relationship between perceived social support and psychological well-being among first-time pregnant women and identified key predictors influencing maternal mental health. The findings demonstrated that participants reported relatively high levels of social support, particularly from husbands and family members, alongside moderate levels of psychological well-being. Importantly, a strong and statistically significant positive relationship was observed between social support and psychological well-being, confirming the central role of interpersonal support systems during pregnancy.

The high levels of perceived social support observed in this study may reflect the strong family-oriented culture characteristic of the study setting, where extended family networks and spousal involvement are integral components of maternal care. Among the different sources of support, partner (husband) and family support emerged as the most prominent, suggesting that close relational ties provide emotional reassurance, practical assistance, and a sense of security during pregnancy. This finding is consistent with recent studies indicating that partner and family support are the most influential determinants of maternal psychological outcomes, particularly in collectivist societies where family cohesion plays a central role<sup>14, 15</sup>. In contrast, support from friends was comparatively lower, which may be influenced by sociocultural norms that prioritize family over peer networks in maternal care contexts. Similar patterns have been reported in Middle Eastern and Asian populations, where informal family caregiving outweighs peer-based support systems<sup>16</sup>.

**Table 5. Correlation and Multiple Linear Regression Analysis of Psychological Well-being (n = 150)**

| Variable                               |       | <i>r</i> |                | <i>p</i> -value |                 |
|----------------------------------------|-------|----------|----------------|-----------------|-----------------|
| A. Pearson Correlation Analysis        |       |          |                |                 |                 |
| Social Support Score                   |       | 0.62     |                | <0.001          |                 |
| B. Multiple Linear Regression Analysis |       |          |                |                 |                 |
| Predictor                              | B     | SE       | Standardized β | <i>t</i>        | <i>p</i> -value |
| Constant                               | 12.45 | 2.11     | —              | 5.90            | <0.001          |
| Social Support                         | 0.68  | 0.09     | 0.55           | 7.56            | <0.001          |
| Education                              | 0.35  | 0.15     | 0.14           | 2.33            | 0.021           |
| Income                                 | 0.41  | 0.18     | 0.13           | 2.28            | 0.024           |
| C. Model Summary                       |       |          |                |                 |                 |
| Statistic                              |       |          |                | Value           |                 |
| R                                      |       |          |                | 0.71            |                 |
| R²                                     |       |          |                | 0.50            |                 |
| Adjusted R²                            |       |          |                | 0.48            |                 |
| F (3,146)                              |       |          |                | 28.96           |                 |
| <i>p</i> -value                        |       |          |                | <0.001          |                 |

**Note.** B = unstandardized regression coefficient;  $\beta$  = standardized regression coefficient; SE = standard error. The overall regression model was statistically significant,  $F(3,146) = 28.96$ ,  $p < 0.001$ , explaining 50% of the variance in psychological well-being ( $R^2 = 0.50$ ; adjusted  $R^2 = 0.48$ ).

**Figure 1.** Scatter plot illustrating the relationship between perceived social support and psychological well-being among primigravida women (n = 150).

The overall psychological well-being of participants was found to be moderate, indicating that while many women experience positive emotions such as hopefulness and confidence, they simultaneously encounter anxiety related to fetal health and childbirth outcomes. This dual emotional experience is consistent with the transitional nature of pregnancy, particularly for first-time mothers who may lack prior experience and face uncertainty about the childbirth process. Recent evidence confirms that primigravida women often report a coexistence of positive anticipation and psychological distress, especially in the second and third trimesters<sup>17, 18</sup>. The presence of moderate distress alongside positive emotional states highlights the complexity of maternal psychological adaptation during pregnancy. Moreover, studies have shown that pregnancy-related anxiety, particularly concerns about fetal well-being and delivery complications, remains prevalent even among women with adequate social support, emphasizing the multifactorial nature of maternal mental health<sup>19</sup>. A key finding of this study is the strong positive correlation between social support and psychological well-being. Women who reported higher levels of perceived support also demonstrated better emotional stability, coping ability, and overall well-being. This finding is consistent with a growing body of recent evidence indicating that perceived social support is a significant protective factor against antenatal anxiety and psychological distress<sup>20, 21</sup>. Studies have shown that pregnant women with strong support systems exhibit lower levels of stress and depression and higher levels of life satisfaction and emotional resilience<sup>22, 23</sup>. This finding aligns with the stress-buffering theory, which posits that social support mitigates the negative effects of stress by enhancing coping mechanisms and resilience. Empirical research supports this theoretical framework, demonstrating that emotional and informational support can significantly reduce the psychological burden associated with pregnancy-related stressors<sup>24, 25</sup>. Emotional support, such as empathy and reassurance, helps women regulate their emotional responses, while informational support

provides knowledge and guidance that reduces uncertainty and enhances perceived control. In particular, recent studies have highlighted that women who receive adequate emotional and informational support are more likely to interpret pregnancy-related challenges more positively and exhibit greater confidence in managing health concerns, childbirth expectations, and lifestyle adjustments<sup>26</sup>. Furthermore, partner involvement and healthcare provider support have been shown to significantly improve coping strategies and reduce perceived stress levels, reinforcing the multidimensional role of social support in promoting maternal psychological well-being.

The regression analysis further reinforced the importance of social support, identifying it as the strongest predictor of psychological well-being even after controlling for sociodemographic variables. This suggests that social support is not merely associated with well-being but plays a significant independent role in shaping maternal mental health outcomes. A recent multivariate study by Sabet et al., (2025) similarly reported that perceived social support remained the most robust predictor of antenatal psychological well-being after adjusting for age, education, and income, highlighting its independent and protective effect. Additionally, education and income levels were found to be significant predictors, indicating that women with higher socioeconomic status may have better access to resources, information, and coping strategies that promote psychological well-being. This is consistent with findings from previous study<sup>27</sup>, who demonstrated that higher educational attainment and stable income were associated with improved coping capacity, reduced anxiety, and better psychological outcomes among pregnant women.<sup>28,29</sup> These findings have important clinical and public health implications. Integrating psychosocial assessment into routine antenatal care is essential to identify women at risk of poor psychological outcomes. Healthcare providers, particularly nurses and midwives, play a critical role in fostering supportive environments, offering counseling, and encouraging partner involvement in prenatal care. Structured interventions aimed at enhancing social support—such as family education programs, peer support groups, and couple-based counseling—may significantly improve maternal well-being. In the context of healthcare systems in developing and conflict-affected regions, strengthening community-based support mechanisms is particularly important. Leveraging existing family structures and community networks can provide cost-effective and culturally appropriate strategies to enhance maternal mental health. Additionally, improving access to antenatal education and mental health services can further empower women and reduce psychological distress during pregnancy.

Despite the valuable insights provided, the findings should be interpreted in light of the study's limitations. The cross-sectional design precludes causal inferences, and the use of self-reported measures may introduce response bias. Furthermore, the study was conducted in a specific geographic setting, which may limit generalizability. Future research employing longitudinal designs and larger, more diverse samples is recommended to better understand the dynamic relationship between social support and psychological well-being across pregnancy and postpartum periods. Overall, this study highlights the critical importance of social support as a protective factor for maternal psychological well-being. Enhancing supportive networks and integrating psychosocial care into antenatal services should be prioritized to improve maternal and neonatal outcomes.

## CONCLUSION

This study highlights the significant role of social support in shaping the psychological well-being of first-time pregnant women. Participants reported generally high levels of perceived support, particularly from husbands and family members, alongside moderate levels of psychological well-being. A strong positive relationship was identified between social support and maternal mental health, with social support emerging as the most influential predictor of psychological well-being. The findings emphasize that emotional, informational, and practical support are essential in helping first-time mothers cope with the psychological challenges associated with pregnancy. Women who receive adequate support are more likely to demonstrate emotional stability, confidence, and effective coping mechanisms, whereas limited support may increase vulnerability to anxiety and stress. From a clinical perspective, these results underscore the importance of integrating psychosocial assessment and support into routine antenatal care. Healthcare providers, especially nurses and midwives, should actively engage partners and family members in maternal care and provide targeted counseling to strengthen support systems.

In conclusion, enhancing social support networks represents a practical and culturally appropriate strategy to improve maternal psychological well-being. Policymakers and healthcare planners should prioritize interventions that promote family involvement and community-based support to ensure better maternal and neonatal health outcomes.

## Implications and Recommendations

The findings of this study have important implications for clinical practice, nursing education, health policy, and future research. The strong association between social support and psychological well-being underscores the need to move beyond purely biomedical models of antenatal care toward a more holistic, psychosocial approach that addresses the emotional and social needs of first-time pregnant women. From a clinical perspective, routine antenatal care should incorporate systematic screening for psychological well-being and perceived social support. Nurses and midwives are in a pivotal position to identify women at risk of psychological distress and to provide early interventions. Integrating brief, validated screening tools into antenatal visits can facilitate timely identification and referral. Additionally, counseling sessions should not be limited to the pregnant woman alone but should actively involve husbands and close family members, given their critical role as primary sources of support.

In terms of practice, structured support interventions should be developed and implemented within antenatal care settings. These may include couple-based education programs, peer support groups for first-time mothers, and community-based maternal support networks. Such interventions can enhance emotional resilience, reduce anxiety, and promote positive pregnancy experiences. Healthcare providers should also deliver clear and consistent health education to address fears related to childbirth, fetal health, and pregnancy-related changes. At the policy level, there is a need to formally integrate

maternal mental health services into primary healthcare systems. Policymakers should prioritize the development of national guidelines that emphasize psychosocial care as a standard component of antenatal services. Training programs for healthcare professionals should include competencies in mental health assessment, communication skills, and culturally sensitive care. Furthermore, public health initiatives should aim to raise awareness about the importance of social support during pregnancy and encourage family and community involvement. Within the context of resource-limited and conflict-affected settings, leveraging existing family structures and community networks is a practical and cost-effective strategy. Community health workers can play a vital role in extending support services beyond healthcare facilities, particularly in rural or underserved areas. Digital health solutions, such as mobile-based education and support platforms, may also offer innovative ways to enhance access to information and emotional support. For nursing education, the findings highlight the importance of preparing future nurses with the skills required to address psychosocial aspects of maternal care. Curricula should incorporate training on maternal mental health, communication, counseling, and family-centered care approaches. Future research is recommended to build on these findings through longitudinal studies that can better establish causal relationships between social support and psychological well-being. Experimental and interventional studies are also needed to evaluate the effectiveness of specific support programs. Additionally, exploring other influencing factors—such as cultural beliefs, partner involvement, and healthcare accessibility—would provide a more comprehensive understanding of maternal mental health dynamics. In summary, enhancing social support systems should be considered a key strategy for improving psychological well-being among first-time pregnant women. A coordinated effort involving healthcare providers, educators, policymakers, and communities is essential to ensure that maternal mental health is adequately addressed within antenatal care services.

### Conflict of interest

The authors declare no potential conflict of interest.

### Ethical approval

Ethical approval for the study was obtained through a thorough process. A detailed proposal, including the research title and methodology, was submitted to the Scientific and Ethical Committee at the College of Nursing, University of Mosul, Iraq, which granted formal approval. Ethical clearance was also secured from the collegiate committee for medical research ethics at the University of Mosul, per **Administrative Order No. (49) dated 28/10/2025**. Additionally, the Ethical Research Committee of the Ninevah Health Directorate provided official permission under **Administrative Order No. (35516) dated 10/9/2025**. The study's objectives and framework were clearly outlined and approved.

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