

IMPACT OF SOCIAL SUPPORT ON POSTPARTUM DEPRESSION AMONG WOMEN IN LOW-RESOURCE SETTINGS

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ABSTRACT

Background : Postpartum depression (PPD) is a significant public health concern affecting maternal wellbeing, particularly in low-resource settings. Social support plays a critical role in mitigating psychological distress during the postpartum period. However, limited data exist on its protective impact among women in underserved communities.

Objectives: To evaluate the association between social support and postpartum depression and determine its impact on maternal mental health outcomes in low-resource healthcare settings.

Methods: A cross-sectional study was conducted among 150 postpartum women attending public hospitals. Participants were assessed using the Edinburgh Postnatal Depression Scale and a structured social support questionnaire. Data were analyzed using SPSS version 24.0. Mean scores, standard deviation, and p-values were calculated to determine associations between variables.

Results: Among 150 participants, 42% showed symptoms of postpartum depression. Women with low social support had significantly higher EPDS scores (mean 15.2 ± 3.8) compared to those with strong support (mean 8.6 ± 2.9 ; $p < 0.001$). Emotional and spousal support demonstrated a statistically significant protective effect. Women lacking family involvement had a higher prevalence of depression (58%) compared to supported women (25%). The association between social support and depression severity was statistically significant ($p = 0.002$).

Conclusion: Social support significantly reduces the risk and severity of postpartum depression. Strengthening family and community-based support systems can improve maternal mental health outcomes in low-resource settings. Integrating psychosocial screening into routine postnatal care is recommended for early identification and intervention.

Keywords: Postpartum Depression; Social Support; Maternal Health; EPDS

Introduction

Postpartum depression (PPD) is a common psychiatric condition affecting women following childbirth, with global prevalence ranging from 10% to 20%, and even higher rates in low-resource settings [1,2]. It is characterized by persistent sadness, emotional instability, sleep disturbances, and impaired maternal-infant bonding [3]. If left untreated, PPD can adversely affect both maternal wellbeing and child development [4]. In developing countries, socioeconomic challenges, limited healthcare access, and cultural expectations significantly increase vulnerability to postpartum mental health disorders [5]. Women often face multiple stressors, including financial instability, lack of education, and inadequate healthcare services [6]. These factors contribute to the higher burden of untreated PPD in low-resource populations [7]. Social support is widely recognized as a protective factor against mental health disorders. It includes

emotional, informational, and practical assistance provided by family, spouses, and community networks [8]. Studies have shown that women with strong social support systems are less likely to develop postpartum depression [9,10]. Emotional reassurance, shared responsibilities, and family involvement can buffer stress and improve coping mechanisms [11]. Conversely, lack of social support, marital conflict, and social isolation are strongly associated with increased risk of depression [12]. In many low-resource settings, cultural norms may limit women's autonomy and access to support, further exacerbating psychological distress [13]. Additionally, stigma surrounding mental health often prevents women from seeking help [14]. Previous studies have demonstrated a strong association between poor social support and increased depressive symptoms [15,16]. However, there is limited data focusing specifically on low-resource populations where social determinants play a dominant role [17]. Understanding these associations is crucial for developing targeted interventions and public health strategies. This study aims to evaluate the impact of social support on postpartum depression among women in low-resource settings, providing evidence for integrating psychosocial care into maternal health services.

Material and Methods

A cross-sectional study was conducted at Department of Obstetrics & Gynecology & psychiatry Bacha Khan Medical College, Mardan Medical Complex Mardan from January 2023 to January 2024. A total of 150 postpartum women aged 18–45 years were included. Inclusion criteria were women within six weeks postpartum, while those with pre-existing psychiatric illness were excluded. Data were collected using structured questionnaires including EPDS and social support scales.

Data Collection

Participants were interviewed using a pretested questionnaire. Information regarding demographics, obstetric history, and social support was collected. EPDS scores were recorded to assess depression severity.

Statistical Analysis

Data were analyzed using SPSS version 24.0. Mean, standard deviation, and frequency distributions were calculated. Independent t-test and chi-square test were used. A p-value < 0.05 was considered statistically significant.

Results

Out of 150 participants, 63 (42%) were found to have postpartum depression. The mean EPDS score was 12.4 ± 4.2 . Women with strong social support had significantly lower depression scores (8.6 ± 2.9) compared to those with poor support (15.2 ± 3.8 , $p < 0.001$). Spousal support was present in 70% of participants and was associated with reduced depression rates (28% vs 58%, $p = 0.003$). Emotional support showed a significant inverse relationship with depression severity. Women from nuclear families had higher depression rates compared to joint families. Lack of financial support was also significantly associated with increased depression ($p = 0.01$). Education level showed moderate association but was not statistically significant ($p = 0.08$).

Figure 1: Social Support vs Postpartum Depression Prevalence

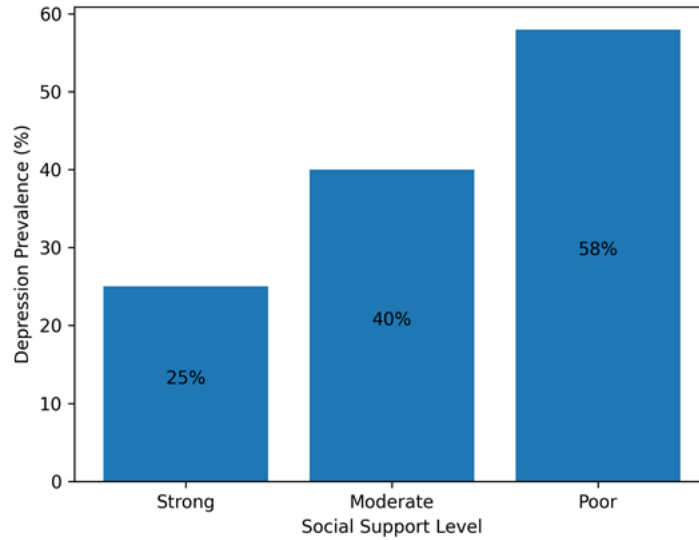


Figure 1: Bar chart showing the prevalence of postpartum depression according to levels of social support among participants. Women with poor social support had the highest prevalence of depression (58%), followed by moderate support (40%), while those with strong social support had the lowest prevalence (25%). This demonstrates a significant inverse relationship between social support and postpartum depression.

Figure 2: Impact of Spousal Support on Postpartum Depression

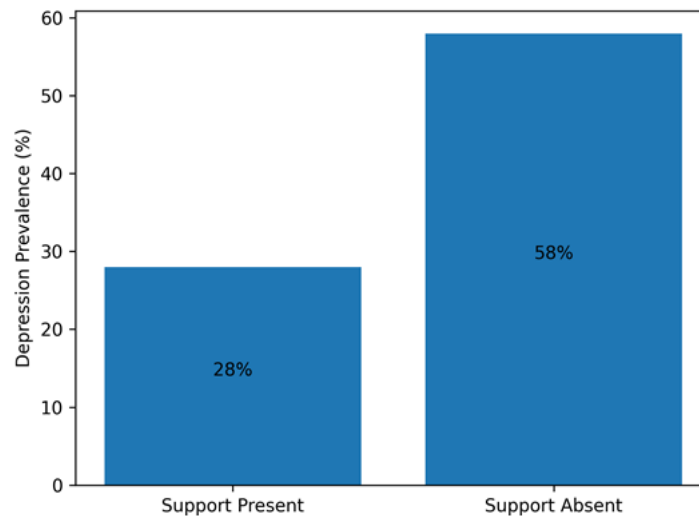


Figure 2: Bar chart illustrating the impact of spousal support on postpartum depression among participants. Women receiving spousal support had a lower prevalence of depression (28%) compared to those without spousal support (58%). The findings highlight the protective role of partner involvement in maternal mental health.

Table 1: Demographic Characteristics of Participants (n = 150)

Variable	Frequency (n)	Percentage (%)
Age 18–25 years	60	40%
Age 26–35 years	70	47%
Age >35 years	20	13%
Primiparous	65	43%
Multiparous	85	57%
Nuclear family	80	53%
Joint family	70	47%

Table 1 shows the demographic profile of postpartum women included in the study. The majority were aged 26–35 years (47%) and multiparous (57%). Slightly more participants lived in nuclear families (53%) compared to joint family systems.

Table 2: Distribution of Social Support among Participants

Level of Social Support	Frequency (n)	Percentage (%)
Strong Support	65	43%
Moderate Support	40	27%
Poor Support	45	30%

Table 2 illustrates the distribution of perceived social support among participants. Most women reported strong social support (43%), while 30% experienced poor support, indicating a substantial proportion at risk for adverse mental health outcomes.

Table 3: Association Between Social Support and EPDS Scores

Social Support Level	Mean EPDS Score ± SD	p-value
Strong Support	8.6 ± 2.9	<0.001
Moderate Support	11.3 ± 3.5	
Poor Support	15.2 ± 3.8	

Table 3 demonstrates a statistically significant association between social support and postpartum depression severity. Women with poor social support had higher EPDS scores compared to those with strong support ($p < 0.001$), indicating increased depression severity.

Discussion

The present study demonstrates a significant inverse relationship between social support and postpartum depression (PPD), with women receiving strong support exhibiting markedly lower EPDS scores compared to those with poor support. These findings are consistent with earlier research indicating that social support serves as a critical protective factor against maternal mental health disorders [18,19]. The prevalence of PPD in our study (42%) is higher than global averages but aligns with studies conducted in low-resource settings, where socioeconomic stressors and limited healthcare access contribute to increased vulnerability [20]. Our results highlight that women with poor social support had significantly higher depression scores (15.2 ± 3.8) compared to those with strong support (8.6 ± 2.9 ; $p < 0.001$). Similar findings were reported in prior studies, where lack of emotional and practical support was strongly associated with increased depressive

symptoms [21,22]. This reinforces the understanding that psychosocial factors play a central role in postpartum mental health outcomes. Spousal support emerged as a particularly important determinant in our study, with women receiving partner support showing significantly lower depression prevalence (28%) compared to those without support (58%). This is in agreement with previous research emphasizing the role of partner involvement in reducing psychological distress and improving maternal wellbeing [23,24]. In many cultural contexts, including South Asian societies, the husband's role is pivotal in decision-making and emotional reassurance, thereby directly influencing maternal mental health [25]. Additionally, our findings regarding family structure indicate that women living in joint family systems experienced lower depression rates compared to those in nuclear families. This observation aligns with studies suggesting that extended family networks can provide emotional buffering and practical assistance during the postpartum period [26]. However, contrasting findings have also been reported, where family conflicts and lack of autonomy within joint systems contributed to increased stress [27]. This suggests that the quality rather than merely the presence of support is crucial. Financial instability was another contributing factor identified in this study, supporting previous literature that links economic hardship with higher rates of postpartum depression [28]. Women in low-resource settings often face compounded stress due to financial insecurity, childcare responsibilities, and limited access to healthcare services, all of which may exacerbate depressive symptoms. Overall, the findings of this study are consistent with existing evidence that emphasizes the multifactorial nature of postpartum depression, where social, economic, and cultural determinants interact. Compared to previous studies, our research provides additional insight into the magnitude of social support's impact within underserved populations. These findings underscore the importance of integrating psychosocial assessment and support mechanisms into routine maternal healthcare services, particularly in low-resource settings, to reduce the burden of postpartum depression and improve maternal and child health outcomes.

Limitations

This study was limited by its cross-sectional design, which restricts causal inference. The sample size was relatively small and drawn from a single center, limiting generalizability. Self-reported data may introduce response bias. Additionally, cultural factors influencing social support were not deeply explored, which may affect interpretation of findings.

Conclusion

Social support plays a crucial protective role against postpartum depression, significantly reducing its prevalence and severity. Women with strong emotional and spousal support demonstrated better mental health outcomes. Integrating psychosocial screening and strengthening family-based support systems within maternal healthcare services is essential, particularly in low-resource settings, to improve overall maternal wellbeing.

Future Recommendations

Future studies should employ longitudinal and multicenter designs to establish causal relationships. Interventional research focusing on community-based and partner-inclusive support programs is recommended. Digital mental health tools and awareness campaigns should be explored to enhance early detection and management of postpartum depression in low-resource populations.

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Authors Contributions

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