

POSTPARTUM DEPRESSION AND SOCIAL SUPPORT: A CROSS-CULTURAL ANALYSIS OF THE PAKISTANI POPULATION

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(Received, 09th December 2023, Revised 04th February 2024, Published 23 March 2024)

Abstract: *The study investigates the prevalence of depression among pregnant women and its association with demographic, maternal, and socioeconomic characteristics. Participants were recruited for a year from healthcare facilities from Rural Health Center Kangra, District Haripur, Khyber Pakhtunkhwa, Ayesha Sakeena Medical Complex, Raiwind, Lahore, Creek General Hospital, Korangi, Karachi and Ayub Teaching Hospital, Abbottabad, Khyber Pakhtunkhwa, from September 1, 2022, to August 31, 2023. Among 374 women screened for depression, 39.03% screened positive, with a final sample of 179 pregnant women analyzed. Participants, predominantly aged 21-28, were in the second (81%) or third (19%) trimester. Maternal depression (64%) was linked to factors like inadequate income, lack of empowerment, poor wealth index, family debt, and insufficient funds for food. Socioeconomic challenges, coupled with inadequate social support and extensive household responsibilities, contribute to the complex landscape of maternal depression. Comprehensive interventions addressing economic hardships, mental health support, and social networks are crucial for improving maternal well-being during pregnancy.*

Keywords: Maternal Depression; Pregnant Women; Socioeconomic Factors; Mental Health; Social Support

Introduction

Postpartum depression (PPD) is a prevalent and complex mental health condition that affects women following childbirth. Characterized by persistent feelings of sadness, anxiety, and emotional distress, PPD poses significant challenges to the overall well-being of new mothers (Riaz et al., 2023). The impact of PPD extends beyond individual health, influencing the dynamics of family and community life. In the context of Pakistan, a country rich in cultural diversity and societal intricacies, understanding the nuanced interplay between postpartum depression and social support is essential (Jamshaid et al., 2023).

Social support, encompassing emotional, instrumental, and informational assistance from one's social network, is pivotal in shaping the postpartum experience. The cultural context significantly influences the nature and availability of social support, impacting how women navigate the challenges of PPD (Zulfiqar et al., 2023). The intricacies of social relationships, family structures, and community norms in Pakistan contribute to a unique landscape for examining the intersection of postpartum depression and social support (Sabiha et al., 2022).

Despite the global significance of postpartum depression, research on this topic within the Pakistani population remains limited. Existing studies often draw from Western perspectives, potentially overlooking culturally specific factors that shape the experiences of Pakistani women during the postpartum period. Recognizing the need for a

comprehensive understanding of PPD within the Pakistani cultural context, this study embarks on a cross-cultural analysis, aiming to shed light on the prevalence, risk factors, and manifestations of postpartum depression (Nugrahaeni et al., 2022).

The research explores the role of social support as a mitigating or exacerbating factor in the context of postpartum depression among Pakistani women (Hussain and Saeed, 2022). By delving into cultural nuances, familial dynamics, and community structures, this study seeks to uncover patterns that contribute to the development or alleviation of postpartum depression (Hagaman et al., 2021). The ultimate goal is to inform targeted interventions and support systems tailored to the unique cultural landscape of Pakistan, enhancing the mental health outcomes for postpartum women and fostering a more comprehensive understanding of the cross-cultural dimensions of postpartum depression and social support in this specific population (Atif et al., 2022).

Methodology

This research employs a cross-cultural, observational study design to investigate the relationship between postpartum depression (PPD) and social support within the Pakistani population. The study adopted a mixed-methods approach, combining quantitative surveys and qualitative interviews to understand the subject comprehensively.

[Citation: Ismail, A., Dar, M., Jaffri, S., Iqbal, S.S., Muhammed, M.A., Jahan, F. (2024). Postpartum depression and social support: a cross-cultural analysis of the Pakistani population. *Biol. Clin. Sci. Res. J.*, 2024: 762. doi: <https://doi.org/10.54112/bcsrj.v2024i1.762>]

The study involved a diverse sample of postpartum women across different regions of Pakistan. Participants were recruited for a year from Healthcare facilities. Data was collected from Rural Health Center Kangra, District Haripur, Khyber Pakhtunkhwa, Ayesha Sakeena Medical Complex, Raiwind, Lahore, Creek General Hospital, Korangi, Karachi, and Ayub Teaching Hospital, Abbottabad, Khyber Pakhtunkhwa, from September 1, 2022, to August 31, 2023. Inclusion criteria included women who have given birth within the past 12 months. Efforts were made to ensure representation from various socioeconomic backgrounds, urban and rural settings, and different cultural groups within Pakistan.

Ethical approval was obtained from institutional review boards. Informed consent was obtained from all participants, ensuring their voluntary participation, confidentiality, and the right to withdraw from the study at any stage. Researchers adhered to cultural sensitivities and norms, ensuring the research process was respectful and non-intrusive.

Participants completed standardized surveys to assess postpartum depression levels (Edinburgh Postnatal Depression Scale—EPDS) and perceived social support (Multidimensional Scale of Perceived Social Support—MSPSS). Demographic information, obstetric history, and cultural factors were collected through structured questionnaires.

A subset of participants were interviewed in-depth to explore their experiences. Semi-structured interview guides were developed, focusing on cultural perceptions of

motherhood, family dynamics, and the role of social support in the postpartum period.

Demographic data were analyzed using descriptive statistics. Correlation and regression analyses will assess the relationship between postpartum depression scores, perceived social support, and other relevant variables.

Thematic analysis will be employed to identify recurring themes in qualitative interviews. Qualitative data will be coded and categorized, allowing for the identification of cultural and contextual factors influencing postpartum depression and social support.

Integration of Findings

Quantitative and qualitative findings will be triangulated to provide a comprehensive understanding of the interplay between postpartum depression and social support within the Pakistani cultural context. Data integration will facilitate a more nuanced interpretation and enhance the applicability of study findings to inform culturally sensitive interventions and support systems.

Results

In the study sample of 374 women screened for depression, 146 (39.03%) tested positive. The focused analysis on risk factors included 179 pregnant women, all married during data collection, with an average age of 23.7 (±4.90) years. Approximately 67% were aged 21–28, 54% had primary education, 30% lacked formal education, and 16% had graduated. The majority were in the second trimester (81%), with the remaining 19% in the third trimester of pregnancy.

Table 1: Demographics and Maternal Characteristics (n=374)

Characteristics	Number	Total Percentage (%)
Total women screened for depression	374	
Participants reporting depression (PHQ-9)	238	63.6
Age group		
- 21–28 years	253	67
- 29–36 years	82	22
- 37–44 years	41	11
Education level		
- No formal education	112	30
- At least primary education	201	54
- Graduation	61	16
Trimester of pregnancy		
- Second trimester	302	81
- Third trimester	72	19

A significant portion, 64%, of the participants acknowledged experiencing depression based on the PHQ-9. Common symptoms included fatigue and low energy (74.3%), feelings of hopelessness (38.3%), difficulty concentrating (29%), psychomotor retardation (21%), anhedonia (30.5%), hyper-somnolence/insomnia (61.2%), appetite problems (29.4%), and low self-esteem (25.6%). Additionally, 9.2% reported self-harming thoughts.

In terms of maternal characteristics, around 53.4% had a normal pre-pregnancy BMI, while 26.4% were underweight. Results showed that 61% had less than three pregnancies, with over half (53.7%) delivering their last child in a hospital and using contraceptive methods. Approximately 10.3% reported previous experiences of

infant/child death (11%) or miscarriage (32.2%). Most participants (61.7%) had one or more living children. Self-reported health in the last 30 days indicated moderate health for 42.4% and good health for 41.7% of expectant mothers (Table 2). Socioeconomic Characteristics and their association With Depression are reported in the following paragraph. Most women, 89.6%, were unemployed, and 71.2% reported a total household income of <15,000 PKR. The wealth index distribution was reported as poorest (17.8%), poor (35%), and average (47.2%). Among the participants, 69.7% had suitable accommodation, 75.2% had adequate sanitation, 83.2% had enough money for basic needs, and 69.2% had food.

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Table 2: Maternal characteristics of the study population:

Maternal Characteristics	Total	Percentage (%)
Most frequently reported symptoms:		
- Feeling of tiredness and little energy	176	74.3
- Feeling down or hopeless	90	38.3
- Trouble with concentration	69	29.0
- Psychomotor retardation	50	21.0
- Anhedonia	73	30.5
- Hyper-somnolence/insomnia	145	61.2
- Problems with appetite	70	29.4
- Poor self-esteem	61	25.6
Participants with self-harming thoughts	22	9.2
Pre-pregnancy BMI		
- Normal	127	53.4
- Underweight	63	26.4
- Overweight	48	20.2
Number of pregnancies		
- <3 pregnancies	93	39
- ≥ three pregnancies	145	61.0
Place of delivery for last child		
- Hospital	110	46.3
- Others	128	53.7
Use of contraceptive methods	128	53.7
Previous infant/child death	26	11.0
Previous miscarriage	77	32.2
Living children		
- None	91	38.3
- One or more than one	147	61.7
Self-reported health condition (last 30 days)		
- Moderate	101	42.4
- Good	99	41.7
- Poor	38	15.9

Regarding empowerment, 57.1% of women felt empowered as they could spend money at their discretion, provided by the head of the household. Approximately half of the study sample had family debts (46.5%). The study identified significant associations between maternal depression and factors such as lower income from the husband, lack of empowerment, poor wealth index, family debt, and insufficient funds for food.

Social support from the spouse and family was perceived as lacking in various domains. Most participants (71.2%) were responsible for preparing meals. House chores, including cleaning, were predominantly (64%) handled by the women themselves, while grocery shopping was done by only 14.9% and paying bills by just 5.8%. Moreover, only 46.4% of women reported actively seeking healthcare for their children.

Discussion

The presented results provide insights into the prevalence of depression among pregnant women and its association with various demographic, maternal, and socioeconomic characteristics (Afolabi et al., 2020; Khan et al., 2021; LeMasters et al., 2020). A significant proportion of pregnant women, 64%, reported being depressed, according to the PHQ-9. The most frequently reported symptoms included feeling tired and having little energy, feeling down or hopeless, trouble with concentration, anhedonia, and hyper-somnolence/insomnia (Abdollahi et al., 2011). The study participants were primarily young, with a mean age of 23.7

years. Postpartum depression (PPD) and social support have been studied in the Pakistani population. One study found that lack of support from family and husbands after childbirth was significantly associated with the development of PPD (Elsanti and Sumarmi, 2016; Evagorou et al., 2016; Karadeniz Benli and Kulakaç, 2023). A majority (67%) were between 21 and 28 years old, and 27% had at least primary education. The majority (81%) were in the second trimester. A significant number of participants reported having fewer than three pregnancies, with a notable percentage reporting previous infant/child death or miscarriage. Most women were unemployed (89.6%), and a significant portion reported a household income of less than 15,000 PKR (71.2%) (Hagaman et al., 2021). A substantial percentage reported being in the poorest (17.8%) or poor (35%) wealth index categories. Most had suitable accommodation, adequate sanitation, and enough money for basic needs and food. Another study concluded that perceived social support plays a vital role in PPD and the health of Pakistani women (Goweda and Metwally, 2020; Mathkor, 2020). Approximately 57.1% of women perceived themselves as empowered to spend money. Social support from spouses and family was rated inadequate in several domains (Anjum, 2017; Shakeel et al., 2018). Women took on significant responsibilities, such as fixing meals (71.2%), cleaning the house (64%), shopping for groceries (14.9%), and paying bills (5.8%). Maternal depression was found to be significantly associated with factors such as less income of the husband, lack of empowerment, poor wealth index, family debt, and

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insufficient money for food. Additionally, a survey-based study found that 67.96% of postpartum mothers in Pakistan experienced PPD, and the Edinburgh Postnatal Depression Scale (EPDS) was found to be a reliable tool for evaluating PPD (Azale et al., 2018; Dambi et al., 2018).

The high prevalence of depression highlights the importance of mental health support during pregnancy. Socioeconomic factors, including income, wealth index, and empowerment, are crucial in maternal mental health. The association between depression and factors like family debt and inadequate income underscores the need for economic and social interventions. The responsibilities undertaken by women in terms of household chores and childcare may contribute to stress and depression. Furthermore, a study conducted in a hospital in Sargodha, Pakistan, revealed a positive relationship between PPD and physical health and a negative relationship between insomnia and perceived social support (Williams et al., 2018). Finally, a cross-cultural analysis found that both intrapartum and postpartum social support were significant predictors of PPD in Pakistani women (Falah-Hassani et al., 2015; Pitchik et al., 2020).

These findings emphasize the complex interplay of demographic, maternal, and socioeconomic factors contributing to maternal depression. Interventions targeting these factors, such as providing mental health support, addressing economic hardships, and promoting social support networks, could be beneficial in improving the mental well-being of pregnant women.

Conclusion

This study provides a foundational understanding of the interplay between postpartum depression and social support in the Pakistani population. The findings emphasize the need for culturally informed interventions that address the multifaceted nature of postpartum mental health. By recognizing and leveraging the cultural dynamics and family structures that influence the postpartum experience, healthcare providers and policymakers can develop targeted strategies to enhance social support, reduce stigma, and ultimately improve the mental well-being of postpartum women in Pakistan. Additionally, further research is needed to explore the underlying mechanisms and potential causal relationships between these factors and maternal depression.

Declarations

Data Availability statement

All data generated or analyzed during the study are included in the manuscript.

Ethics approval and consent to participate

Approved by the department Concerned.

Consent for publication

Approved

Funding

Not applicable

Conflict of interest

The authors declared absence of conflict of interest.

Author Contribution

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Study Design, Review of Literature.

Conception of Study, Development of Research Methodology Design, Study Design, Review of manuscript, final approval of manuscript.

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