To Study the Risk Factors of Postpartum Depression in Women from Middle-Class Families and its Overall Impact on Family Life

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Abstract

The objective of this article is to determine the risk factors associated with postpartum depression in women and its broader impacts on affected individual's families. For the purpose of this research a total of 200 postnatal women with postpartum depression and one-year-old toddlers were included in this cross-sectional study through a multiphase selection strategy. The study was conducted in Islamabad, Pakistan. Among postnatal women, the most common risk factors of postpartum depression were due to the difficulties faced by women during delivery and pregnancy (82% extreme depression, 40% mild depression), Gender biasness (81.5% extreme depression, and 40% mild depression) and health concerns of a baby throughout gestation period (81.5%, extreme depressed and 35%, mild depressed) Social stereotype associated with delivery methods and pregnancy(81%, extreme depressed and 40, mild depressed) and lactation difficulties (63%, extreme depressed and 33, mild depressed). After childbirth, the postpartum phase is a crucial period for mothers, and it is frequently underestimated and overlooked, leading to substantial health risks. This timeframe is particularly susceptible to various complications i.e., a variety of mood disorders like PPD which is a significant depressive episode that begins within 30 days of birth, and such disorders result in adverse outcomes that affect the mental health of a mother and disturb the entire family life. It is imperative to conduct early evaluations and offer personalized guidance regarding social support and coping strategies to identify and prevent postpartum depression in this particular demographic.

Keywords: Postpartum Depression, Childbirth, Socioeconomic Position, Predisposing Variables, Woman's Health, Risk Factors and Mental Health

Introduction:

For many women, pregnancy represents a significant life milestone, marked by notable psychological and physiological shifts that can heighten their susceptibility to the development or relapse of mental health conditions. Antenatal depression among these disorders imposes a major health concern for pregnant women. Postnatal period, also referred to as the postpartum phase, commences immediately after childbirth and typically spans six to eight weeks. Postnatal blues, a prevalent condition observed in approximately 15% of women globally, emerges as a significant public health issue impacting both mothers and their families. In Pakistan, postnatal depression is frequently observed in women, with prevalence rates ranging from 28% to 63%, placing the country among the highest in Asia for such occurrences. Approximately1/3 of women experience postnatal depression, with the majority exhibiting moderate to severe symptoms. Postpartum depression profoundly impacts mothers, infants, and their families in Pakistan. Various factors, including human, environmental, racial,

economic, and social elements, contribute to this challenge. Furthermore, antenatal depression can influence both fetal development and the subsequent temperament and behavioral patterns of the child during their early years (Khan, 2015).

Numerous risk factors contribute to the onset of postnatal depression, with hormonal fluctuations being identified as a primary underlying cause. Moreover, emotional factors play a significant role, encompassing issues such as disrupted sleep patterns, challenges in mother-infant bonding, heightened paternal anxiety, stress arising from inadequate support from partners or family members, feelings of powerlessness, and a sense of losing control over one's life (Kim, 2020). Hence, there is a need for further exploration into the determinants that contribute to the progression of antenatal depression into postpartum depression among women. This study encompasses an analysis of factors such as socio-demographics, clinical characteristics, family support, and individual coping abilities to cope with postpartum depression (Yen, 2021).

Methods:

A cross-sectional study was carried out to examine the factors contributing to postnatal depression among the participants. Both quantitative and qualitative research methods were employed. The research was conducted at 3 major hospital setups in Islamabad Capital Territory, including Federal General Hospital, Poly Clinic, and PIMS Hospital. The study sample was comprised of 200 participants, and data collection was facilitated through a structured questionnaire featuring 30 closed-ended questions. Women with histories of stillbirths, abortions, prior psychiatric conditions, or neurological disorders were not included in the study. The Edinburgh Postnatal Depression Scale (EPDS) served as the screening instrument. Depressed mothers were screened using the Edinburgh Postnatal Depression Scale (EPDS). And the recent birth-related data were collected with the hospitals' consent. All the participants were between the ages of 15-49 years old and had at least one toddler up to one year old. Data on socio-demographic variables such as age, educational background, occupation, income, and family structure, along with obstetric variables including gestational intentions and complications, as well as the mode of delivery, were collected. Additionally, psychosocial factors such as attitudes, resilience, depressive life events, and social support, along with depressive symptoms and other relevant explanatory variables, were obtained through a structured interview.

The Edinburgh Postnatal Depression Scale (EPDS) is widely recognized as the predominant screening tool for postpartum depression. Specifically designed for women who are either pregnant or have recently given birth, this self-reported scale consists of 10 questions. It has been validated as an efficient and effective method for assessing the risk of postnatal depression. Each question is scored on a 4-point scale, ranging from 0 to 3, with

higher scores indicating greater severity of symptoms.

Statistical Analysis*:* Data is stored and analyzed through the utilization of IBM-SPSS version 24.0. Quantitative variables were reported by Mean& and standard deviation & and qualitative variables were reported by frequency and proportion. P-values less than 0.05 were considered statistically significant. The occurrence of postpartum depression was taken as a dependent variable, while risk factors were identified as the independent variables.

Results:

A total of 200 participants were enrolled in the study. Women aged between 15 and 49 were selected. The results revealed that 12% were between the ages of 15-20, 22% were between 21- 25 years old, 42% of the respondents were between the ages of 26-30, and 19% were between the ages of 31 and above.
The results were categorized into two associated analyses variant and bi variant analysis. As postnatal despair is impacted, the following table shows the association between the postal stress lifestyle and associated factors.

Table I: A relation between gender of baby and incidence of postnatal despair depression

Incidence of Postnatal despair	**Gender of baby**		**Total**
	Boy	**Girl**	
Not depressed	55	23.5	78.5
	27.5%	11.7%	100.0%
Mild depressed	19	21	40
	9.5%	10.5%	100.0%
extremely depressed	35	46.5	81.5
	17.5%	23.2%	100.0%
Total	109	91	200
	54.5%	45.5 %	100.0%
Chi-square: 25.694 Sig : 0.		Value of Gamma: 0.393, Sig: 0	

The value of chi-square (25.64) indicates a substantial link among the variables (P = 0.01), while the value of Gama (0.939) indicates a significant correlation between female children and postnatal despair. It was shown that moms who gave birth to a girl had a greater chance of developing neurological dysfunction in the postnatal time. Postnatal despair is more common in females who deliver a girl, and it hurts the mom and her baby contact. According to the conceptual framework, a child's unwanted gender has a detrimental impact on the mom and

infant's relationships regarding their intimate bond.

Table II: The relationship between baby health issues throughout gestation, particularly participants' late prenatal care, and the occurrence of postnatal despair.

Incidence of postnatal despair	Child Health risks			Total
	Low	Medium	High	
Not depressed	33	16.5	12.5	62
	21.0%	8.2%	6.25%	100.0%
Mild depressed	17	29	8.5	35
	8.5%	14.5%	4.25%	100.0%
Extremely depressed	36.5	28	17	81.5
	18.2%	14%	8.5%	100.0%
Total	103	59	38	200
	51.5%	29.5%	19.0%	100.0%
Value of chi-square: 13.45, Sig.: 0.005		Value of Gamma: 0.2 6, Sig.: 0.006		

The value of the chi-square (13.45) indicates that the variables are related. Gamma (0.26) reveals a favorable correlation between baby medical issues and mother postnatal despair incidence. It shows that moms who have children with health issues are more stressed in the postnatal time. It indicates that if the children's life is poor, the risks of postnatal despair are higher Premature birth, breathlessness, early delivery, water scarcity, cardiac trouble, and the child's motions ceased at the beginning of life were all documented difficulties throughout gestation Sucking difficulties, light complexion, stomachaches, chilly hands and feet, and birth complications were among the newborn term's issues. In the initial cycle, postnatal despair has a detrimental impact on the mom-to-baby bond and the parental job. According to relational relations, the situation is exacerbated when mothers receive inadequate help in raising a child. The research reveals the influence of postnatal despair on infants' overall fitness, resting periods, and loss of weight, as well as the effect of postnatal despair on female empowerment. Moms with more depressed feelings gave birth to underweight infants. By assisting women in their adjustment to parenting, postnatal assistance may help to improve antenatal health.

Table III: Relationship between Stereotype and incidence of postnatal despair

incidence of postnatal despair	**Middle to High Income**			**Total**
	Low	**Medium**	**High**	
Not depressed	20.5	31	27	78.5
	10.2%	15.5%	17.5%	100.0%
Mild depressed	11.5	19	9.5	40
	14.4%	9.5%	4.75%	100.0%
Extremely depressed	13	33	35	81
	8.3%	20.5%	21.9%	100.0%
Total	45.5	83	71.5	200
	22.8%	41.5%	35.8%	100.0%
Value of chi-square: 12.39, Sig.: 0.003		Value of Gamma: 0.15	Sig.: 0.001	

The significant level of (P=0.003), the chi-square value (12.39) indicates a link between independent and dependent variables. The values of gamma (0.15) revealed a positive association between social stigmas and the likelihood of responders developing postnatal despair. Females who are subjected to societal stigmas or are forced to engage in certain behaviors are more likely to acquire postnatal despair than those who may not be restricted at all. Mothers must observe certain standards for eating, cleanliness, nursing, sexuality, and baby care throughout the postnatal time. According to studies, conservative families position females in situations that make it impossible for them to proceed with their daily activities. The most common limitations in this research had been that females were not allowed to leave the house after dusk during gestation or within 40 days after delivery or encounter a mother whose little one had died during gestation. They must also eat food, maintain an iron near the child, and not keep the child's garments for more than 40 days.

Table IV: The relationship between lactation difficulties and the incidence of postnatal despair

Incidence of postnatal despair	Problem in lactation			Total
	Low	Medium	High	
Not depressed	27	14	12	53
	23.3%	16.4%	10.3%	100.0%
Mildly depressed	17	12	4	33
	25.7%	6%	2%	100.0%
Extremely depressed	41	13	9	63
	20.5%	6.5%	4.5%	100.0%
Total	85	44	25	200
	55.2%	28.6%	16.2%	100.0%
Value of chi-square: 12.25, Sig: 0.002		Value of Gamma: 0.23, Sig: 0.005		

As evidenced by the value of chi-square (12.25), cross-tabulation analysis finds a clear correlation (P=0.002) among the independent and dependent (lactating) variables, and the result of gamma (0.23) suggests a significant correlation. It suggests that females who had trouble nursing were much more likely to be stressed throughout their postnatal time than women who did not. Post-natal despair is said to be more common in mothers who did not breastfeed their babies or who discontinued nursing too soon. Post-natal despair chances are also increased in moms who have difficulty beginning or sustaining breastfeeding (Vigod, 2016).

Discussion:

Education Barriers for Women in Rural Areas

About 50% of the respondents were uneducated, with many facing poor schooling due to various factors. Restrictive socioeconomic environments, ignorance, lack of resources, and inadequate school facilities were among the challenges cited. Tradition, early marriage, and societal expectations were identified as major obstacles for women in rural regions, limiting their educational opportunities (Vigod, 2016).

Role of Women in the Household

The majority of interviewees perceived their role in the family as centered on bearing and rearing children, along with household chores. Cultural views and traditions were highlighted as significant factors contributing to

women's lower educational levels. The prioritization of marriage over education for girls by their families further exacerbated the issue (Hahn, 2018).

Challenges in Prenatal and Postnatal Care

Maternal difficulties were attributed to poor nutrition, lack of knowledge about pregnancy and childbirth, and a shortage of medical facilities in rural areas. Homebirths, often due to the unavailability of trained health providers, were identified as a source of complications. Unplanned deliveries were linked to higher maternal risks, potentially leading to postnatal depression. Unsafe abortions, particularly those performed by inexperienced traditional birth attendants, were identified as a major contributor to postpartum illness (Hahn, 2018).

Health Risks and Complications

Mothers reported experiencing various health issues, including anemia, blood pressure fluctuations, nausea, abdominal edema, traumatic birth, and vaginal bleeding. Gastrointestinal discomfort was prevalent among 50% of the subjects, indicating the multifaceted health challenges faced by these women (Hahn, 2018).

Social and Economic Factors Impacting Mental Health

Stressful life events, lack of social support, aggression, and male preference were identified as factors contributing to maternal mental health issues. Reduced economic status, in-law dynamics, and health concerns were described as significant traumas. The respondents highlighted the importance of emotional support during pregnancy and postpartum, emphasizing the need for a stronger emotional connection with their partners (Vigod, 2016).

Postnatal Depression and Its Consequences

Postnatal women commonly experience episodes of weeping, stress, anger, exhaustion, and eating disorders. Misconceptions about dietary practices during pregnancy were prevalent, indicating the influence of cultural beliefs. The discrepancy between societal expectations of motherhood and the realities faced by these women contributed to psychological distress (Vigod, 2016).

Impact on Mothers' Lives and Well-being

Postnatal depression had a profound impact on the lives of mothers, affecting their ability to care for their infants. Fear of inadequate childcare due to financial constraints and poor living conditions added to their stress. Mothers were found to be in poor health, struggling to manage household chores and agricultural responsibilities, showcasing the pervasive challenges faced by women in rural areas (Gulamani, 2013)

Discrimination, Stigma, and Mental Health

A significant portion of the respondents, often illiterate and with low socioeconomic standing, felt embarrassed discussing their mental health issues. Discrimination against women had both financial and emotional implications, contributing to the prevalence of postnatal depression in these communities (Gulamani, 2013).

Conclusion

Gender development plays a pivotal role in a nation's progress. However, Pakistani women have traditionally been confined to roles centered on reproduction, childcare, and household duties, excluding them from active participation in the development process. The postpartum period, often neglected and perilous, poses significant challenges for both mothers and infants, with the highest occurrence of problems and deaths (WHO, 2013). Recovery after childbirth, adapting to motherhood, and grappling with the psychological effects are time-consuming processes. Postpartum depression (PPD), a notable concern, manifests as a severe episode within 30 days of birth, significantly elevating the risk of mood disorders.

The lack of awareness about mental health issues, especially PPD, is apparent among women, particularly those with limited education. Illiteracy, influenced by a conservative socio-cultural environment and inadequate resources, contributes to this unawareness. Physical complaints such as anemia, blood pressure issues, vomiting, body swelling, difficult births, and postpartum hemorrhage are prevalent, serving as potential risk factors for PPD. Rural women, especially, lack knowledge about the signs and symptoms of postpartum depression.

Quantitative studies reveal that most mothers exhibit depression symptoms postpartum, as evidenced by scores on the EPDS. Common symptoms include crying episodes, anxiety, anger, exhaustion, and eating and sleeping disorders. The negative impact of PPD extends to a mother's attachment to her child and husband. Lack of support from the husband, rooted in insecure bonding, contributes to maternal stress, aligning with attachment theory (Wiffen and Susan, 1998). In essence, addressing these key issues is imperative for the well-being of mothers, infants, and families.

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