



RESEARCH PAPER

Effects of Postpartum Depression on Mental Health of New Mothers

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ABSTRACT

The purpose of this study was to explore the effect of postpartum depression on mental health of new mothers. Signs and symptoms of Postpartum depression can go on from baby blue to full blown post birth depression in women experiencing child birth and profoundly influences women's mental health. A total of 100 new mothers, female participants from different hospitals of Peshawar, LRH (Lady reading hospital), KTH (Khyber teaching hospital), HMC (Hayatabad medical complex) & CPP (Center for psychotherapy and psychiatry) were considered for data collection as sample population in this study. Convenient sampling technique was utilized to collect the data. Demographic information sheet (DIS), Short Warwick-Edinburgh Mental Well-being Scale (SWEMWBS) (2008) including 7 items and Edinburgh Postnatal Depression Scale (EPDS) (1987) 10 items were used for the collection of data from the new mothers in the above mentioned hospitals. The collected data was analyzed and interpreted by using Statistical Package for Social Sciences (SPSS). The results revealed that Postpartum depression has an influence on mental health of new mothers also females scoring high on EPDS scored low on SWEMWBS and vice versa. Further new mothers need special attention, social support and care from doctors, nurses and also need to get cleaned environment at hospitals as well as at their home with family specifically spousal support is required. Moreover recommendations are given i.e. wards of the hospitals should be properly cleaned. Administrations of hospital should cooperate with the attendants of patients and family should provide adequate post-delivery care.

KEYWORDS Postpartum Depression, Mental Health

Introduction

Signs of postpartum depression (PPD) include: baby blues, mood disturbance, experiences crying spell, mood fluctuates, doesn't enjoy activities that refreshes their mood, appetite, lethargy, concentration problem, and do not sleep properly, compulsive fear about the health of baby, and an extreme sense of guilt, hopelessness and speechless are other postpartum depression symptoms, a newmother may also be worried about that she harms her baby due to these symptoms (Dennerstein, Leherr & Riphagen. 1989). It happens when a few days of delivery or even a month when the child is born. Postpartum depression (PPD) in the DSM-5, manual which is used to diagnose mental health problems, the term states a variety of physical and emotional changes that the mother's experiences after childbirth. After delivery there are various chemicals that changes hormones. During pregnancy the immediate change in the level of female reproductive hormones estradiol and progesterone (Schiller, Meltzer & Rubinow. 2015). Postpartum depression (PPD) is an intense mental illness which a new

mother can experience after giving birth to child. The beginning of postpartum symptoms can happen two or three days after childbirth, some women having auditory hallucinations, visual hallucinations and delusions these are the symptoms of postpartum psychosis but these symptoms are not very common. Women with psychotic features are not being able to take a nap, irritated, anxious(Raza & Raza. 2023)

Postpartum depression (PPD) is an illness that is constantly not recognized and treat inadequately, psychosocial stressors have an influence on mental health the increase in postpartum depression (PPD)(Shitu, Geda & Dheresa. 2019).

Mental Health

According to American Psychological Association (APA)(2018) mental health is defined as a state of mind involving appropriate positive behavior , emotional well-being, no feelings of anxiety and the ability to develop constructive relationships along with an effective coping mechanism to daily living conflicts of life. Postpartum depression influences a women's mental health and overall well-being and later development of depression in life (Abdollahi & Zarghami. 2018). In another study it was reviewed that a new mother should not be left alone to embrace the challenges motherhood brings majorly postpartum mental illness and should be provided with required care and support needed blending in both health care professionals and mental health workers in addressing this issue to family and community (Modak, Ronghe, Gomase, Mahakalkar & Taksande. 2023).

Women who have experienced depression in past pregnancies have greater risk of postpartum depression (PPD) and if not treated at time may have negative influence on the development of child, bonding between mother and child that effect child's life (Patel et al. 2012).

Precisely Postpartum depression (PPD) is a condition when new mothers after giving birth to child they are suffering from mental and physical problems majorly past family history of depression or mother herself experiences poverty, financial crisis and employment issues makes women more vulnerable to develop postpartum depression (Rokicki, McGovern, Jaglinsky & Reichman. 2022).

Other contributing Factors to Postpartum Depression

People should normalize the existence and categorize the factors that are danger for postpartum depression (PPD) factors including economic problems no family support and problems in marital relations have been recognized as another threat for increasing postpartum depression (PPD) (Bener. 2012).

During the time of pregnancy, the different reproductive hormones in women body changes by the time it may happen at the time of delivery some women didn't understand about her mental health and it may worse over time and become postpartum depression (Wisner et al., 2002). After childbirth the level of estrogen hormone fall , during breast feeding another hormone secretes named as oxytocin. During labor the plasma corticosteroids increases and after few hours of delivery its level decreases. (Robinson & Stewart, 2001).

It is difficult for women to transition into motherhood because it demands several changes in women life i.e change in mental health, social life, physical health,

also forced pregnancy, prediction of child sex by the mother, child health problems and poor support from society were freely associated with postpartum depression (PPD) (Shitu, Geda & Dheresa. 2019).

The public health efforts study and detect that the rate of PPD has now increased with time and treatments include psychotherapy, more modified treatments are seeming to be more effective, risk factors, usefulness tests of mental illness intended at addressing issues related to mental health of pregnant women (Hara. 2009).

Literature Review

Postpartum Depression

The study analyses the potential risk factors for depression after childbirth 2,3 days after delivery women experiences attack of baby blues past history about depression and any miscarriage that happen in past lead to postpartum depression (PPD) (Hapgood, Elkind & Wright. 1988) presented that an intense baby blues occurs 5 days after delivery and postpartum, also found an intense case of baby blues may be a potential risk factor for postpartum depression

The timing of child birth and birth given through operative procedures including cesarian section, forceps, vaccum and complications during delivery can also contribute towards postpartum depression but emotional support, debrief by midwife post child birth can also reduce the intensity of PPD and onset of other emotional disorders (Nott. 1987).

The term postpartum depression (PPD) is explained as six weeks after delivery experiences postpartum depressive episode (DSM-5; American Psychiatric Association, 2013). Postpartum depression is a major health problem of women the 10% of women health affected during pregnancy and families of new mothers every year (Gavin et al., 2005). Particularly, a huge number of researches considered and organized analysis of symptoms related to biological and psychosocial analyst of postpartum depression (PPD) (Yim et al. 2015).

Mental Health

Susman (1996) continues that the postpartum affect those mothers mental health that have financial issues. More studies show that the psychosocial risk factors include: lack of communication with spouse, loss of loved ones, lack of education, early marriage, not satisfied with life, experiences stress, force pregnancy and want to abort the baby because the pregnancy was against her willingness, the baby have a low weight at the time of delivery (Playfair & Gowers. 1981).

Mentioning the effort of Llewellyn, Stowe & Nemeroff (1997) and O'Hara, Neunaber & Zekoski (1984) recap that those women who have mental health concerns and illness in past are more likely to experience postpartum depression (PPD) again also in past women who experiences postpartum depression (PPD) have a 50% risk to experience it again after delivery. Epperson (1999) studied that about one third of women in future may also experience depression at higher level.

Ayoub, Shaheen & Hajat (2020) studies that in Arabic countries there assessing methods are different due to which the occurrence rate of PPD is high, it highlights the problems of postpartum depression (PPD) promotes the changes in the health system

of Arab routine checkup and effective medical appointment in order to discover its impact on female psychological well-being and treat this possibly excruciating illness. In postpartum depression (PPD) the studies shows that the obstacles during delivery is not only the cause of postpartum depression during pregnancy on the regular checkup the doctor asks the women that mode of delivery should be normal or caesarean section is also a risk factor for causing clinical depression by Boyce & Todd (1992)

The present research was conducted to study the effects of postpartum depression on mental health of new mothers because it was found in different researches that there was an increase in association between postpartum depression and mental health. Postpartum depression has a negative impact on the mental health of new mothers.

Hypotheses

1. Postpartum depression is an indicator of mental health in new mothers.
2. There will be significant differences in the scores of women on mental health SWEMWBS(Short Warwick Edinburgh Mental Well-Being Scale) and postpartum depression on EPDS(Edinburgh Postnatal Depression Scale).
3. Females having high scores of postpartum depression on EPDS(Edinburgh Postnatal Depression Scale) will have low score of mental health on SWEMWBS (Short Warwick Edinburgh Mental Well-Being Scale).
4. Females having low scores of postpartum depression on EPDS (Edinburgh Postnatal Depression Scale) will have high score of mental health on SWEMWBS(Short Warwick Edinburgh Mental Well-Being Scale).

Materials and Methods

Source and nature of the study

This was a quantitative method based correlation study in which the researchers wants to find out a relationship between postpartum depression and mental health of new mothers. The current study made use of hospital sources for the collection of data from the women who are suffering from postpartum depression.

Sample Population

This quantitative study is conducted in Peshawar, KPK, Pakistan. 100 new mothers participants were taken for research purpose. Scales were administered to all 100 participants, were those who are new mother and had experienced depression after giving birth to child.

Sampling technique

Simple random sampling technique was used to select women suffering from postpartum depression from Lady reading hospital, Khyber teaching hospital and Hayatabad medical complex and center for psychotherapy and psychiatry Peshawar.

Instruments

In order to collect data, in the present study used (DIS) Demographic information sheet, Edinburgh Postnatal Depression Scale (EPDS)(1987)along with

Short Warwick-Edinburgh Mental Well-being Scale (SWEMWBS) (2008) For the purpose of getting exact responses, this questionnaire was given to respondents. The women were asking to select the option which best expresses their thinking and feelings for the specific variables.

The scale (EPDS) consisted of two parts. The first part describes respondent's demographic information (name, age, qualification etc.). The second part of scale was based on different directional responses.

Demographic Information Sheet (DIS)

The demographic information sheet covered age, hospital, educational qualification, complication during pregnancy, complication at the time of delivery, delivery.

Short Warwick and Edinburgh mental well-being scale (SWEMWBS) (2008)

SWEMWBS goals to find the mental wellbeing of women, that comprise of rigidity, abilities in bonding with spouse and families, encounter supervision and to solve the problem, financial status such as scarceness, physical, sexual and emotional abuse, harassment, joblessness, disgrace, discrimination or other societal barring issues. The (SWEMWBS) consisted of 7 items likert rating style. The universities of Edinburgh and Warwick shows that the scale SWEMWBS was proven to good validity and reliability with Cronbach alpha value of 0.89 (Vaingankar, et.,al. 2017). The initial scale first point was Affectometer , it was established in the 1980s in New Zealand (Kammann & Flett. 1983), it contains of 20 statements and 20 adjectives which linked to the positive and negative items of mental health. In another study satisfactory criterion validity was observed for SWEMWBS (Haver, Akerjordet, Caputi, Furunes & Magee 2015).

Edinburgh Postnatal Depression scale (EPDS) (1987)

After childbirth postpartum depression is an intense problem for mothers. The scale Edinburgh Postnatal Depression Scale (EPDS) consists of 10 items likert style which is used to assess the mental health of women through these items the patient's threats to mental health should be identify. This scale is very effective in assessing mental health of women(Cox, Holden & Sagovsky1987). Most of the researches shows that 20% of women get affected by postpartum depression (PPD)if it not treated on time. This scale Edinburgh Postnatal Depression Scale (EPDS) used by the health professionals to help the mothers suffering from postpartum depression (PPD) if it not treated on the first time when it is baby blues it become worse and disturb the mothers. The issue structure of the EPDS is established through the first six months postpartum, and includes the subscale predictable to represent anxiety. However, this sub scale as well as the total EPDS correlate only temperately with anxiety measures. Using the EPDS therefore does not indicate appropriate screening for anxiety. The psychometric properties with value of Cronbach alpha of 0.79 for Edinburgh postnatal depression shows good overall reliability(Kheirabadi, et., al. (2012).

Procedure

Data was collected from selected hospitals, Lady reading hospital, Khyber teaching hospital, Hayatabad medical complex and center for psychotherapy and psychiatry in Peshawar. The researchers visited each hospital individually. After receiving the inform consent from the participants, they were briefed about the purpose

of the study and were assured that the data will purely be used for research purpose and their identifications will not be revealed to anyone. Once the rapport was established the personal information sheet was filled which focused on the participant's age, qualification, hospital, complication during pregnancy, complication at the time delivery, delivery status. Short Warwick Mental Well-being Scale and Edinburgh Postnatal Depression scales were administered to assess the postpartum depression and the mental health of the new mothers.

Analysis of Data

In the present study statistical analysis was done while using the latest version of SPSS. Standard analytical techniques including correlation, independent sample t-tests and linear regression were applied by using SPSS.

Results and Discussion

This chapter deals with the analysis and interpretation of data. The collected data is arranged in the form of tables. The information was gathered from the participants. All essential statistical calculations were performed utilizing the statistical package for social sciences (SPSS).

Descriptive statistics for distribution of sample

A broad analysis of descriptive statistics was conducted that is showed in the following tables, including demographic variables. The study resolute percentages and cumulative frequencies of the sample analyzing their education, age, hospital, complication during pregnancy, complication at the time of delivery. Furthermore, a linear regression computation was performed to explore whether postpartum depression will be an indicator of mental health of new mothers. Additionally, equitable sample to look into the considerable scale differences, the t-test was used and spearman rank was performed to investigate the females having high scores of postpartum depression on (Edinburgh Postnatal Depression) will have low score of mental health on (Short Warwick Edinburgh Mental Well-Being) scale.

Table 1
Descriptive statistics for distribution of sample

Variable	Category	Frequency	Percentage
Education	Matric	54	54%
	above	46	46%
Age	15-25	36	36%
	26-35	55	55%
	36-45	9	9%
Hospital	LRH	38	38%
	HMC	28	28%
	CPP	2	2%
	KTH	32	32%
Complication during pregnancy	Yes	34	34%
	No	66	66%
Complication at the time of delivery	Yes	65	65%
	No	35	35%
Delivery	Surgery	73	73%
	normal	27	27%

Table 2
Linear Regression analysis

Hypothesis	Regression weight	Beta coefficient	R2	F	P-value
H1	Postpartum depression	-.192	.037	3.753	.056
	Mental health				

The value ($b = -.192$, $p < .001$), the results clearly indicate negative effect of postpartum depression on mental health of new mothers (3.7% of the variance).

Table 3
Independent sample t-test

Variables	F	P-value	T	df	Sig.(2-tailed)	Mean diff	Std.Error Diff	Lower	Upper
Postpartum depression	.507	.478	1.411	98	.161	.164	.117	-.067	.396
Mental health	4.244	.042	.913	98	.364	.115	.126	-.135	.365

The mean differences between the two variables shows that there exists significant difference between the two variables but t-value appears to be insignificant.

Table 4
Spearman rank correlation

Variable	N	R	P-value
Postpartum depression	100	-.172	0.043
Mental health	100	-.172	0.043

The value ($r = -.172$, $p < .001$), the results clearly indicate negative effect of postpartum depression on mental health of new mothers.

Discussion

The present study was conducted to inquire the effect of postpartum depression on mental health of new mothers. Warner et al., (1996) Postpartum non-psychotic depression is an intense issue for mothers affecting 15% to 20% of women and their families are affected, there are three common forms of postpartum affective illness are: baby blue, postpartum depression and postpartum with psychotic features these all are different from each other through existence medical appearance, and organization.

Wisner, Parry & Piontek (2002) the clinical depression begin more than 6 months in few mothers the baby blues become more intense and change into postpartum depression and their behavior also become worse. On the other side the symptoms of depression begin which change their behavior and affect their mental health. Those women who have a symptoms of postpartum depression after childbirth but they didn't pay attention towards their mental health which leads to become worse. In the present study the first hypothesis stated to inquire that postpartum depression will be an indicator of mental health in new mothers. While using statistical technique the result was significant and p-value was calculated to be 0.056 (see table no.02) which indicates that there is an effect of postpartum depression on mental health of women. Study on new mothers showed that complication at delivery is an intense form of non-psychotic postpartum depression it happens 15% to 20% of women after childbirth and when the baby blues not treated on time and it extend to more than 6 weeks (O'Hara & Swain., 1996).Post-natal time is linked to produce profound changes in female's physical, mental health and perceived quality of life (Barfoot, Forster & Lampert. 2021).

Second hypothesis assumed that there will be significant differences in the scores on mental health scale and postpartum depression scale of new mothers. Which was not supported through statistical analysis (see table no.3). According to Corrigan, Kwasky & Groh (2015) discusses in his study that there are various factors which does not affect mental health after childbirth and lower levels of postpartum depression reported. Third generated hypothesis states that females having high scores of postpartum depression on Edinburgh Postnatal Depression (EPDS) will have low score of mental health on Short Warwick Edinburgh Mental Well-Being Scale (SWEMWBS). The said hypothesis was supported by the statistical analysis (see table no 4) successfully depicting the idea that there is a direct negative relationship between the variables of investigation, emphasizing that postpartum depression has strong effect on mental health of new mothers. Postpartum depression (PPD) is an increasing health hazard in women that effects their mental health under the influence of different psychological and social factors (Patel et al. 2012). Fourth hypothesis stated that females having low scores of postpartum depression on EPDS (Edinburgh Postnatal Depression Scale) will have high score of mental health on SWEMWBS (Short Warwick Edinburgh Mental Well-Being Scale). The said hypothesis was supported using statistical analysis (see table no 4) which shows negative effect of postpartum depression on mental health of new mothers. The present study shows that postpartum depression clearly effects mental health of new mothers.

Conclusion

Postpartum depression affects mental health in new mothers by developing future depression and other mental and physical health complications as well. Women health issues during pregnancy are also the risk factors for causing postpartum depression that was observed during the present study. It was observed while collecting data that women with postpartum depression (PPD) need to be taken care of and provided with affection, social support specifically from their spouse among the family members and should be facilitated to avoid future health complications. With a rise in stress and anxiety and a decrease in the quality of post natal attention, the possibility of postpartum depression rises. Hence, improvement to the quality of prenatal care and postpartum stress and anxiety should be cautiously assessed to avoid postpartum depression (PPD).

Recommendations

Following are a few suggestions and recommendations for future researchers.

- In hospitals and maternity centers counseling for families of new mothers specifically spouse support and effective care are suggested for improving mental health of women before and after childbirth.
- The environment of hospitals and homes in terms of its cleanliness also promotes mental well-being.
- Social support can be added as another variable influencing postpartum depression in future researches.

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