



COMMUNITY AWARENESS OF POSTPARTUM DEPRESSION

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Conflicts of Interest: Nil

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Abstract:

Introduction: Postpartum depression (PPD) is among the most common complications that occur after delivery and has very serious effects on the family, mother, and even the baby. Postpartum depression occurs in about 10% to 15% of women during the first year after delivery.

Study Design: Descriptive cross-sectional study, using data from different populations

Place and Duration of Study: Ali Fatima hospital, Raiwind Road, Lahore, Pakistan, for six months.

Objectives: We aimed to explore the awareness of postpartum depression and its symptoms among women with postpartum depression.

Methods: Logistic regression and chi-square tests were used to analyze awareness of postpartum depression and its symptoms and the baby blues symptoms for women with postpartum depression.

Results: Awareness of PPD varied according to the demographic profiles of the respondents (family structure, education, and employment status). The prevalence of postpartum depression was higher in the uneducated group of women (48.7%) compare to the women (26.6%) who completed the secondary or higher level of education. Young age during pregnancy increases the risk of depression. The lack of awareness of the symptoms of PPD is concerning considering the significant prevalence of PPD.

Conclusions: The higher prevalence of PPD suggested the importance of mental health support system for the low income and less educated women. Maternal mental health services should be integrated with existing maternal health services. The primary maternal health care staffs should be provided the basic PPD screening and its primary management training, so that they can refer the PPD cases for appropriate mental health services when needed.

Introduction

Postpartum depression (PPD) is among the most common complications that occur after delivery and has very serious effects on the family, mother and even the baby [1]. Postpartum depression occurs in about 10% to 15% of women during the first year after delivery [2]. The Diagnostic and Statistical Manual shows that PPD can occur from four weeks after childbirth. In Asian countries prevalence of PPD ranges from 4% to 60%[3]. Pakistan has the highest prevalence rates that range from 30% to 60%. Studies show that the burden of PPD is common in developing countries [3]. PPD may be as a result of excitement, tension associated with imminent delivery, new burdens, and responsibilities resulting from childbirth and alterations in hormones after delivery [4]. Genetic susceptibilities and hormonal changes in puerperium play a big role in PPD cases [4]. Another great risk factor for PPD is depression before pregnancy.

Literature Review:

The American Psychiatric Association (APA, 2013) classifies PPD as a major depressive disorder. Symptoms of PPD include impaired concentration, loss of appetite, low libido, early morning awakening, lack of interest, thoughts of suicide, thoughts of harming the baby, and feelings of guilt[5]. PPD mainly emerges within a year after childbirth compared to other forms of depression that manifest within a month.

A plethora of studies have been established to determine ways of preventing PPD; however, no studies in awareness of PPD have been evaluated in the community [6]. Over the past 6 to 10 years, people have been getting information about PPD from health units, health professionals, and media sources such as newspapers, internet sources, radio, and television. Face-face communication on PPD should be the primary method to rely on information, but instead, websites that do not meet the reading

level of grade 5 are used and may contain inaccurate information [7]. The purpose of this research is to measure awareness of PPD in the general population. Women need social support networks during the postpartum period to get help in case they experience PPD.

Most of the patients and primary healthcare givers overlook PPD despite multiple contacts during visits to the clinics. Often, PPD is dismissed by many as a natural occurrence following a pregnancy [8]. Appropriate screening tools may help in the management and even recognition of this condition. Women with PPD require medical intervention unlike those with baby blues. Postpartum blues mainly peak in the fifth day after childbirth and one presents with feeling overwhelmed, sad, irritable, and even one might have crying spells[9]. The incidence of postpartum blues is reported to be up to 85% in the general population. Symptoms of baby blues however, do not interfere with the mother's function ability and her care for her baby. Screening of all mothers during pregnancy i.e., both in the antepartum and postpartum period should be indicated [10]. This screening process helps identify women at risk of getting the condition. The most commonly used screening tool is the Edinburgh Postnatal Depression Scale (EPDS), which is a 10-item self-rated questionnaire. A score of 10 or an affirmative answer to suicidal thoughts need further medical evaluation. A positive screen can be followed up with the Montgomery-Asberg Depression Rating Scale (MADRS), which further differentiates depressed from non-depressed patients [11].

A study Heh and Fuh et al. showed that women at high risk of PPD who received supporting information at six weeks after childbirth had lower EPDS scores at three months, although awareness of symptoms by those women was not assessed [6]. Another study carried out by Sealy showed that women at lower risk of PPD who were given pamphlets that had symptoms of PPD at six weeks had lower EPDS scores. Many women reported knowing about PPD though they could only recognize a few symptoms. Some of the most common symptoms identified by women include sadness (87%), appetite/sleep problems, thoughts of harming the baby, anger (45%), anxiety, and thoughts of harming self (33%). Other symptoms such as hopelessness and even isolation were barely recognized by most of the women (5%).

Studies carried by Logsdon showed that the main reason behind the lack of awareness on PPD was because most of the healthcare providers not being aware of the condition. There is a need to identify symptoms of PPD for the successful management of the condition [7]. Limited resources on the disorder led to the need for researchers to insist on the inclusion of the PPD curriculum in training so that the problem could be assessed and at the same time, treated. This curriculum was included in nursing training centers so that they could train new mothers to enhance awareness of the disorder, and recognition of the symptoms for appropriate interventions.

There is a need to research on awareness of PPD since their help-seeking behaviors when they have depressive symptoms can greatly be affected by their social support networks [12]. The recovery of postpartum women with PPD can also be affected by the support systems. Family, friends, and significant others are key for women while they assess their problems and try to get empathy and empowerment from them since they have a connection to them. Once affected, women have their symptoms discredited; they feel psychologically isolated, feeling of negative self-worth, or even a feeling of negative self-worth. Most of these women end up not socializing with their friends. Women with symptoms who went to support groups received emotional support that helped invalidate their feelings [13].

Knowledgeable social support systems, especially friends and family, assist new mothers in identifying PPD symptoms [14]. The paucity of awareness of PPD among different communities has been the main reason behind this research. The paper is aimed at knowing the awareness levels of PPD in the general population, and the symptoms are known by the people.

Aims and Objectives:

- To determine the extent to which people are aware of PPD.
- To determine the extent to which people aware of PPD know symptoms of the disorder.

Methodology:

This chapter contains details on the methods of sampling, data collections, and presentations that were used to achieve the study objectives.

Study Design

The cross-sectional analytical study design was employed. The study used a semi-structured questionnaire and key informant interviews to obtain quantitative and qualitative data (15)

Study duration:

Six months

Study settings:

Ali Fatima hospital, Raiwind Road, Lahore, Pakistan, provided a centralized location to access the target population.

Sample size:

Cochran Formula was used to calculate the sample size (16) i.e.

$$N = Z^2 pq/d^2$$

Where

N is the sample size

Z has a value of 1.96 for a 95% level of confidence

p is estimated the level of awareness for postpartum depression taken to be 0.5

q is 1-p that is 0.5

d is the margin of error with a value of 0.096

● *Substituting for the variables:*

$$N = (1.96)^2 \times 0.5 (1-0.5)/0.096^2$$

$$N = 100$$

So,

Sample Size = 100

Data collection procedure:

A semi-structured questionnaire was distributed randomly to the women who attended Ali Fatima hospital, Raiwind Road, Lahore, Pakistan. Key informant discussion was conducted among hospital staff, which included Nurses, Physicians, Residents, and Technicians.

Data analysis plan:

The software Statistical Package for Social Sciences Program (version 10) was used to analyze data. First, the proportion of individuals who were aware of PPD was calculated using 95% CIs. Logistic regression was used to evaluate the awareness of PPD related to the demographic profiles of the respondents (gender, education, and employment status). The total number of symptoms of PPD reported was calculated, and analysis of variance was used to evaluate whether there were significant differences concerning family structure. Probability (p) values less than .05 (two-sided) were considered to be statistically significant.

Ethical consideration:

- Informed consent was taken.
- The anonymity of the respondents was ensured.
- Collected data remained confidential throughout the study.

RESULTS**Awareness of PPD**

A small number of respondents were aware of the term PPD (39.6%). Awareness of PPD, however, varied according to the demographic profiles of the respondents (Table 1). The prevalence of postpartum depression was higher in the uneducated group of women (48.7%) compare to the women (26.6%) who completed the secondary or higher level of education. The majority of patients with PPD were younger, <30 years. Also, the probability of respondents who were employed and earning more than 20000 / month being aware of PPD was 4 times that of individuals who earned less than 20000/month. The presence of children under 13 years of age at home meant that those women were more aware of PPD than those who did not have children under 13 years.

Table 1: Association of Awareness of Postpartum Depression and Demographics

Variable	Odds ratio(CI)	Significance
Age		<0.01
Less than 30 years	0.23(0.17-0.33)	
More than 30 years	0.54(0.46-0.62)	
Economic status		<0.01
Less than 20000/month	14.09 (11.65-17.04)	
More than 20000/month		
Education		<0.01
<primary	0.31 (0.25-0.38)	
>primary	0.61 (0.51-0.73)	
Women with children 13 years of age at home	0.61 (0.41-0.93)	0.21

Awareness of the symptoms of PPD

Among the respondents who were aware of PPD, sadness was the most frequently recognized symptom (63.2%), followed by frustration/irritability (26.0%), sleep/appetite problems (20.6%), feelings of guilt toward the baby (19.0%), and anxiety/fears (12.2%) (Table 2). Less than 5% of respondents recognized the harm to self or the baby, hopelessness/ helplessness, or social isolation as symptoms of PPD.

The group consisting of women with children under 13 years of age at home identified a greater number of symptoms (mean of 1.08 ± 1.04) than those who had children 13 years of age or older. Respondents who had more than primary education were more aware of the symptoms of sadness (63.6%) and frustration/irritability (26.3%), as compared with respondents who had less than primary education (sadness 55.8%; frustration/irritability 18.7%).

Table 2: Awareness of the Symptoms of Postpartum Depression (PPD) and symptoms of baby blues.

Awareness of symptoms	Women with children under 13 years at home	Women with children 13 years or above at home	P-value
Sadness	63.2%	67.8%	<0.001
Frustration/ irritability	26.0%	18.8%	<0.001
Sleep/ appetite problems	33.3%	22.2%	<0.001
Guilt towards baby	27.2%	24.0%	<0.001
Anxiety/ fears	16.1%	12.9%	<0.001
Aware of baby blues	22.5%	73.1%	<0.001
Symptoms of baby blues the same as PPD	42.5%	18.1%	<0.001
Symptoms of baby blues: 2 weeks or less	12.9%	8.9%	<0.001

Awareness of the Baby Blues

Small number of respondents (22.5%) were aware of the baby blues (Table 2). In addition, only 12.9% of respondents were aware that the symptoms associated with the baby blues should not extend beyond two weeks. Also, respondents with a lower level of education were less aware of the baby blues (9.1%), and of the similarities of the symptoms between PPD and the baby blues (14.1%), as compared with respondents with a more than primary education (awareness of baby blues 65.5%; symptoms are the same 33.0%).

Discussion

The prevalence of postpartum depression was higher in the uneducated group of women (48.7%) compared to the women (26.6%) who completed the secondary or higher level of education. The prevalence of depression was more common in currently employed mothers compared to unemployed mothers. The likelihood of depression among the mothers who worked before pregnancy but left their work due to pregnancy is also higher than the likelihood of depression in other groups of mothers. Women working especially professional careers, have a reduced risk of postpartum depression. Therefore,

low education and low income are associated with the risk of postpartum depression.

Age of participants was also significantly associated with post-partum depression. Participants whose age ranges are from 15 to 24 years are 58% times more likely to develop post-partum depression than those who have age greater than 30 years. The highest level of depression has been reported in mothers aged 13–19 years while the lowest rate has been seen in women with the age more than 30 years.

A moderate number of respondents were aware of postpartum depression (39.5%) as compared to with baby blues (22.6%). However, awareness of PPD varied according to the demographic profiles of the respondents (family structure, education, and employment status). The lack of awareness of the symptoms of PPD is concerning considering the significant prevalence of PPD. Psychosocial interventions such as support groups have been reported as effective [17]. The effectiveness of this intervention in the management of postpartum depression (PPD) has been established by Holden [18].

Conclusion

The higher prevalence of PPD suggested the importance of mental health support system for the low income and less educated women. To reduce and prevent the morbidity, Antenatal mothers with high risk for psychiatric morbidity should be identified at right stage, in a clinic and given proper focus in terms of counseling and education to mother, husband and to the family to alleviate forthcoming stress in her confinement. Maternal mental health services should be integrated with existing maternal health services. The primary maternal health care staffs should be provided the basic PPD screening and its primary management training, so that they can refer the PPD cases for appropriate mental health services when needed. They are also needed to educate about the contextually relevant risk factors of PPD as part of the training component. Moreover, research is required to develop the low cost non-pharmacological management of PPD cases in the informal settlement of urban poor.

References

- Affonso, D. D., De, A. K., Horowitz, J. A., & Mayberry, L. J. (2000). An international study exploring levels of postpartum depressive symptomatology. *Journal of psychosomatic research*, 49(3), 207-216.
- Siu, A. L., Bibbins-Domingo, K., Grossman, D. C., Baumann, L. C., Davidson, K. W., Ebell, M., ... & Krist, A. H. (2016). Screening for depression in adults: US Preventive Services Task Force recommendation statement. *Jama*, 315(4), 380-387.
- Klainin, P., & Arthur, D. G. (2009). Postpartum depression in Asian cultures: a literature review. *International journal of nursing studies*, 46(10), 1355-1373.
- Brummelte, S., & Galea, L. A. (2016). Postpartum depression: etiology, treatment and consequences for maternal care. *Hormones and behavior*, 77, 153-166.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (5th ed.)*. Washington, DC: American Psychiatric Association.
- Heh, S. S., & Fu, Y. Y. (2003). Effectiveness of informational support in reducing the severity of postnatal depression in Taiwan. *Journal of Advanced Nursing*, 42(1), 30-36.
- Logsdon, M. C., & Hutti, M. H. (2006). Readability: An important issue impacting healthcare for women with postpartum depression. *MCN: The American Journal of Maternal/Child Nursing*, 31(6), 350-355.
- Yonkers, K. A., Smith, M. V., Gotman, N., & Belanger, K. (2009). Typical somatic symptoms of pregnancy and their impact on a diagnosis of major depressive disorder. *General hospital psychiatry*, 31(4), 327-333.
- Beck, C. T. (2006). Postpartum Depression: It isn't just the blues. *AJN The American Journal of Nursing*, 106(5), 40-50.
- Sheeder, J., Kabir, K., & Stafford, B. (2009). Screening for postpartum depression at well-child visits: is once enough during the first 6 months of life?. *Pediatrics*, 123(6), e982-e988.
- Furukawa, T. A. (2010). Assessment of mood: guides for clinicians. *Journal of psychosomatic research*, 68(6), 581-589.
- Dennis, C. L., & Chung-Lee, L. (2006). Postpartum depression help-seeking barriers and maternal treatment preferences: A qualitative systematic review. *Birth*, 33(4), 323-331.
- Nicole, L., Duffett-Leger, L., Stewart, M., Hegadoren, K., Dennis, C. L., Rinaldi, C. M., & Stoppard, J. (2007). Canadian mothers' perceived support needs during postpartum depression. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 36(5), 441-449.
- Scrandis, D. A. (2005). Normalizing postpartum depressive symptoms with social support. *Journal of the American Psychiatric Nurses Association*, 11(4), 223-230.
- Lorraine KA, Lopes B, Ricchetti-Masterson K, Yeatts KB. ERIC notebook. Chapel Hill: The University of North Carolina at Chapel Hill, Department of Epidemiology Courses: *Epidemiology*; 2013. p. 710.
- Bartlett, J. et al. (2001). *Organizational Research: Determining Appropriate Sample Size in Survey Research*.
- Beck CT, Records K, Rice M. Further development of the postpartum depression predictors inventory-revised. *J Obstet Gynecol Neonatal Nurs*. 2006;35(6):735-45.
- Holden JM, Sagovsky R, Cox JL. Counseling in a general practice setting: controlled study of health visitor intervention in treatment of postnatal depression. *BMJ*. 1989;298(6668):223-6