

FREQUENCY OF POSTNATAL DEPRESSION AT A TERTIARY CARE HOSPITAL

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ABSTRACT

Objectives: To determine frequency of postnatal depression, among patients presenting at a tertiary care hospital in Peshawar.

Materials and Methods: This study was conducted at Obstetrics and Gynecology Department, Post-graduate Medical Institute, Hayatabad Medical Complex, Peshawar from September 2010 to March 2011. This was a cross sectional (descriptive) study on 133 patients who were 6-12 weeks postnatal. Edinburgh Postnatal Depression Scale (EPDS) was used to detect postnatal depression.

Results: In this study, out of 133 participants, Post natal depression was found in 40 subjects, based on EPDS score of >12, resulting in prevalence of 30%.

Conclusion: Postpartum depression is a substantial clinical, economic and social problem which mostly goes unrecognized unless routine screening in postpartum period is performed.

Key Words: Postnatal, postpartum depression, Edinburgh Postnatal Depression Scale.

INTRODUCTION

Depression is common and costly, particularly for women in their child bearing years. The World Health Organization has identified major depression as the 4th leading cause of burden among all diseases¹ which, by 2020, is expected to be the 2nd leading cause of disability in the world². The burden is greatest for women, with a lifetime risk for major depression disorder of 20%, approximately twice the rate seen with men³. Depression following childbirth or postpartum depression is increasingly recognized as a unique and serious complication of childbirth, with an estimated prevalence in the 12-month postpartum period of up to 21.9%⁴.

The reported prevalence of postpartum depression in western societies is 10-15%⁵. A study done in Rawalpindi, Pakistan by Munir A et al reported prevalence of postnatal depression as 33%⁶. Mothers' depressive symptoms include diminished mood, pleasure, energy, concentration and self-worth, psychomotor retardation, changes in appetite and sleep, and suicidal ideation¹. Although DSM-IV specifies that the symptoms of postnatal depression must begin within 4 weeks after delivery⁷, many experts believe that women remain at increased risk for depression for up to 1 year after delivery⁸.

These symptoms can markedly impair their sense of well-being, marital and other key relationships, work performance and productivity relationships with their infants, and infants' behavioral, cognitive and physical development⁹. Known risk factors for postpartum depression include personal or family history of major depressive illness, poverty, lack of social support, marital/ relationship discord, low educational level and unplanned/ unwanted pregnancy¹⁰.

Given the potentially serious consequences of postpartum depression, it is unfortunate that the rates of diagnosis and treatment of this serious problem are low, primarily because of lack of recognition. This study intends to reveal the prevalence of postnatal depression in this underprivileged part of the world. Such study has never been conducted in Peshawar and thus statistics in this regard are lacking. The data collected from this study will lead health professionals in taking steps for prevention and early recognition of postnatal depression as well as prompt intervention. Thus the burden of this least recognized but serious complication of child-bearing can be reduced. The objective of this study was to determine frequency of postnatal depression, among patients presenting at a tertiary care hospital in Peshawar.

MATERIALS AND METHODS

This study was conducted at out-patient department of Obstetrics and Gynecology, Post-graduate Medical Institute, Hayatabad Medical Complex, Peshawar from September 2010 to March 2011. It was a cross sectional (descriptive) study in which non-probability purposive sampling was used. Sample size was 133, using 33% frequency of

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postnatal depression⁸, 95% confidence interval and 8% margin of error, under WHO software for sample size determination.

All women, 6-12 weeks postpartum, both primipara and multipara, attending the out-patient Department of Obstetrics and Gynecology Unit, Hayatabad Medical Complex, Peshawar were included in the study. Postnatal women suffering from psychotic disorder or learning disability, severe medical disorders or hypothyroidism, detected from previous records were excluded from the study. Also, those with neonatal/ infant demise were not included. These conditions act as confounders and if included, would introduce bias in the study.

Before starting data collection, permission was taken from the hospital's ethical committee. Patients meeting the inclusion criteria, who were 6-12 weeks postnatal, attending the out-patient department were selected. The purpose of the study was explained to the patients. It was explained that the confidentiality of the patient would be maintained. Written informed consent was taken. A set of two questionnaires, one comprising of EPDS and another regarding obstetric (parity, mode of delivery, postnatal duration) and demographic (name, age, address) data of the subjects, were verbally administered to all the subjects, after translating them to Pashto. The EPDS is a 10-item self-reporting scale validated for screening antepartum and postpartum depression. Each statement is rated on a scale from 0 to 3, resulting in a possible score ranging from 0 to 30. Seven of the 10 items are reverse scored. A cut-off score of >12 was used to indicate possible postpartum depression¹¹ and those scoring 12 or less were considered non-depressed. All information collected was recorded on to a proforma. Exclusion

criteria was strictly followed to control confounders and bias in the study results.

Data analysis was done by using SPSS version 10. Mean \pm standard deviation was calculated for all numerical values i.e. age and EPDS score. Frequency and percentage were calculated for all categorical/ qualitative variables i.e. parity, mode of delivery and postnatal depression. Postnatal depression was stratified among age, mode of delivery and parity to see the effect modifiers. Results were presented in the form of tables and graphs.

RESULTS

In total 133 patients the age ranges from 20 to 42 years with mean of 26.23 ± 2.64 Most of the subjects 100(75%) were aged between 21-40 years. 21(16%) were in age group of >40 years and other 12(9%) were <20 years. As shown in Table 1.

Most of the patients 84(63%) were mutiparas and the rest 49 (37%) were Primipara. Regarding mode of delivery, 112(84%) delivered vaginally, and rest 21(15.78%) had Cesarean section. Out of 133 patients 94(70%) were non depressed (EPDS<13) and rest 39(30%) were depressed (EPDS >12. As shown in figure 1. Comparison of patients by age, prity and mode of delivery is shown in Table 1.

Table 1: Showing age distribution (n=133)

Age (in years)	Frequency	Percentage
<20 years	12	9%
21-40 years	100	75%
>40 years	21	16%
Total	133	100%

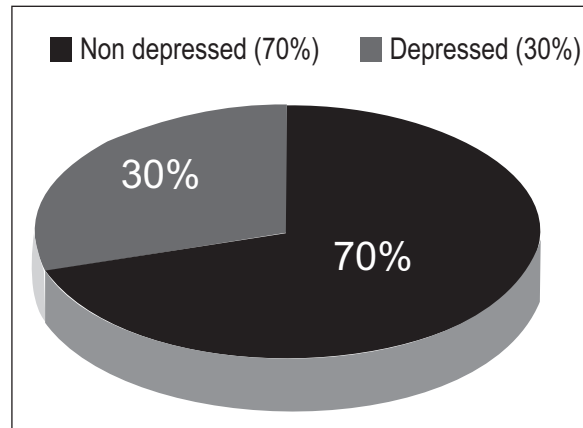


Fig 1: Showing frequency of Postnatal depression

Table 2: Comparison of Depressed and Non-Depressed Patients by Age, Parity & Mode of Delivery

Variable		f (n=133)	Depressed (n=40)	Non-Depressed (n=93)
Age	<20 yrs.	12 (9%)	5 (12.5%)	7 (7.5%)
	21-40 yrs.	100 (75%)	23 (57.5%)	73 (78.5%)
	>40 yrs.	21 (16%)	12 (30%)	9 (9.6%)
Parity	Primi Gravida	49 (37%)	17 (42.5%)	32 (34.4%)
	Multi Gravida	84 (63%)	23 (57.5%)	61 (65.5%)
Mode of Delivery	Vaginal Delivery	112 (84%)	32 (81%)	81 (87%)
	C-Section	21 (16%)	8 (19%)	12 (13%)

DISCUSSION

Postpartum depression is a debilitating condition which usually goes unrecognized, leading to patient agony. In this study, out of 133 participants, 40 subjects had postpartum depression, leading to a prevalence as high as 30%. Similar results were shown in other studies done in Pakistan like Munir A et al⁹ and in other developing countries like India¹² and Nepal¹³. However, this figure is higher than quoted in studies done in the western countries^{4,5}. This may be attributed to lack of antenatal care and psychological support, socioeconomic adversity and worsening geopolitical situation of our country, especially in its northern belt. Recognizing the seriousness of these disorders, the recently published NICE guideline for the clinical management of antenatal and postnatal mental health (2007) emphasized the importance of prediction and detection of maternal depression in pregnancy and postnatal period¹⁴. The US Preventive Services Task Force, too, has recommended routine depression screening for adults in practices that have systems in place to ensure accurate diagnosis, effective treatment follow-up. However, most health care services in Pakistan do not have such systems in place, for either general or post-partum depression⁹, hence the high rates of postpartum depression.

When the ages of depressed and non-depressed subjects were analysed, it was found that postpartum depression was more common in the teenage (12.5% vs 7.5%) and in mothers above 40 years (30% vs 9.6%). This may be explained by the fact that pregnancies in both extremes of reproductive age are high-risk pregnancies and the evidence from this study suggests that postpartum depression is an additional risk in both these already high risk groups.

In this study, we did not find any relationship between parity and postpartum depression. Fewer reports regarding this variable exist in other studies. Castordai⁵ found a strong association between multiparity and postnatal depression.

Regarding mode of delivery, again, there was no significant association with postpartum depression even though more patients with postpartum depression in this study delivered by caesarian section (19%) as compared with those who were non-depressed (13%). These results are consistent with those in studies by Ather Muneer⁶ and Tashkori¹².

This study was carried out in the outpatient department of Obstetrics and Gynaecology Unit, on mothers coming for their routine postnatal visit. Studies of postpartum depression screening demonstrate that it is feasible in outpatient clinical settings, either during mothers' postpartum visits³ or during infants' well-child visits¹⁵. However, several studies have confirmed that informal assessment or non-assessment for postpartum depression identifies less than one-half of cases or

potential cases⁹. Therefore, formal depression scoring should be a part of routine postnatal checkup.

This study's reliability and validity could be ascertained from the fact that the assessment tool, that is EPDS, has been validated as an appropriate instrument for screening postpartum depression^{11,16}. However EPDS is more difficult to use with non-literate women due to its format and it is also time-consuming. For routine screening of postpartum depression, a more user-friendly instrument should be developed. Also for subjects who cannot read or write, pictorial cue-cards or visual rating scales could be included¹⁷. Recent guidelines issued by NICE recommend the use of brief case-finding questions to identify possible postnatal depression, with the use of EPDS as part of subsequent assessment or monitoring¹⁴.

Being carried out in a tertiary care hospital, the study sample may not be a true representative of all postnatal patients as it does not address postnatal depression in primary care. Therefore, it is recommended to replicate the study in primary care to ensure the generalization of the finding to the whole population. Also a larger sample of population should be taken to additionally assess the risk factors for postpartum depression.

CONCLUSION

Proper psychological care is needed in postpartum period to reduce the postnatal depression.

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