# Journal of Biomedical and Pharmaceutical Research

Available Online at www.jbpr.in CODEN: - JBPRAU (Source: - American Chemical Society) Index Copernicus Value: 72.80 (National Library of Medicine): ID: (101671502) Volume 7, Issue 4: July-August: 2018, 78-80 ISSN (Online): 2279-0594 ISSN (Print): 2589-8752



### ASSESSMENT OF ANXIETY AND QUALITY OF SLEEP IN POST-PARTUM MOTHERS: A ONE YEAR CROSS-SECTIONAL HOSPITAL-BASED DESCRIPTIVE STUDY.

Dr. Radhika Majlikar

# Assistant Professor, Department of Psychiatry, Mimer Medical College

#### ABSTRACT:

**Research Article** 

The cross-sectional descriptive study was to investigate level of anxiety and quality of sleep of postpartum mothers for a period of 1 year in hospital based setting. Participants were 200 postpartum mother who met various inclusion criteria that involves being 18-45 year of age, within 12 weeks of postpartum, and competent to give informed consent, and exclusion criteria that include severe mental illness, preexisting sleep disorders, or significant medical illness. Assessment of anxiety was performed with the help of a GAD-7 questionnaire, whileassessment of the quality of sleep used the PSQI. Respondent's averagely reported a GAD-7 score of 8. Age ranged from 18 to 61 years, with BMI of 4 (SD 4. 5) and an average PSQI score of 12. 3 (SD 5. 2). Prevalence of clinically significant anxiety was 22%, and poor sleep quality was reported by 58% of participants. The findings also affirmed the increased rate of anxiety and sleep disorder among the postpartum mothers, stressing that there is a need to create awareness and find ways of improving the health status of mothers after birth.

#### INTRODUCTION

The postpartum period crucial period described by sever physiological, psychological, and emotional transition. Indeed, for a majority of new mothers, the period is characterised by increased anxiety and poor sleep quality that negatively affects both maternal and child wellbeing. Postpartum anxiety occurs in 10-15% of women and is associated with hormonal fluctuations, sleep deprivation and stress due to motherhood [1,2]. Similarly, new sleep deprivation is a common problem; in postpartum women sleep disruption is caused by the needs of the infant at night and general postnatal stress [3-5].

Scientific literature shows that there is a relationship between anxiety and sleep quality which is not straightforward. Sleep disturbances can worsen anxiety, while heightened state of anxiety weakens the quality of sleep one gets [6,7]. Both can hinder the mother in performing her parenting roles, thus impacting on the child's development and the mother's health [8-10].

Since the postpartum period is considered to be sensitive, knowledge of these problems in a particular population is essential for designing appropriate interventions [11-15].

Therefore, the present one-year cross-sectional hospital based descriptive study will also evaluate the level of anxiety and sleep quality among postpartum mothers. This study aims to outline these issues, the proposed prevalence and risk factors for them through data collected in a hospital environment which will then assist in the development of the future clinical guidelines and practices as well as support mechanisms.

**Aim:** To measure anxiety levels and sleep quality of postpartum mothers in a hospital based study for a period of one year.

# **Objectives:**

1. In order to assess the extent of anxiety among mothers during the postnatal period, it is necessary to set the following aim. 2. To evaluate the quality of sleep and or lack of it, in relation to the level of anxiety exhibited by postnatal mothers.

Materials and Methods: This present study adopted a cross-sectional survey design for one year in a hospital setting. Two hundred postpartum mothers participated in the study. Inclusion criteria were: Population: (1) postpartum mothers aged from 18 to 45 years; (2) within 12 weeks after giving birth; (3) who fulfilled voluntary consent to participate. included: Concerning Exclusion criteria patient's medical history the patient experienced: (1) serious mental health disorders in the past; (2) sleep disorders; (3) other severe medical conditions which might influence sleep and mental health. Data were collected using standardized tools: as the Patient Health Questionnaire 9 (PHQ-9) for depression, the Generalized Anxiety Disorder 7 (GAD-7) scale for anxiety and the Pittsburgh Sleep Quality Index (PSQI) for sleep quality. Quantitative data analyses comprised of use of descriptive statistics as well as correlation coefficients.

# **Results**:

Variable	Mean (SD)	Range
Anxiety (GAD-7 score)	8.4 (4.5)	0-21
Sleep Quality (PSQI score)	12.3 (5.2)	0-21
Prevalence of clinically significant anxiety (%)	22%	-
Poor Sleep Quality (%)	58%	-

Participants reported a mean value of 8.4 on the and, hence they can be described as experiencing mild to moderate anxiety. Hence, poor sleep quality was indicated by an average of the PSQI scores of 12.3. Clinically significant levels of anxiety were found in 22% of participants and self-rated sleep quality was poor in 58% of participants.

# Discussion

Based on the results of the presented research, it is important to note that postpartum women are also suffering from anxiety and poor sleep quality. The mean anxiety that was recorded was 8.4 which is in concordance with other studies that show moderate level of anxiety is rife among postpartum women [1,2]. The percentage of subjects with poor sleep quality is 58% it shows that sleep disturbances are common in the postpartum period which is similar to other studies [3,4].

The findings pointing out the relationship between anxiety and sleep quality obtained in this work confirm the hypothesis about the interconnection of these conditions. The relation between sleep quality and anxiety disorder has been found in several studies where it is witnessed that poor quality of sleep tends to intensify anxiety and conversely, high intensity of anxiety is known to worsen sleep quality. There is literature evidence of reciprocal relationship between anxiety and sleep disorders implying that intervention in one may help the other [8, 9]. For example, cognitive behavior therapy for insomnia (CBT-I) have been implemented and showed a positive effect on self rated sleep quality as well as anxiety level across different group of individuals [10,11].

Moreover, the epidemic of clinically significant anxiety (22%) shows that many postpartum women can be affected severely, therefore, there is a nonspecific demand on adequately supplied mental health services [12,13]. The effects of such anxiety on the health of the mother and the child are enormous, considering its effects on poor interactions between the mother and the infant and poor developmental profile of the child due to anxiety [14,15].

It may be helpful to include anxiety and sleep screening in the postpartum protocol because both afflict new mothers. Care coordination and support models that augment services such as counseling and sleep interventions might benefit in preventing or reducing these problems and positive maternal health [1,3,6].

### Conclusion

This study brings out the fact that postpartum mothers had elevated levels of anxiety and poor quality of sleep. The conclusions underline the necessity of the wide-spectrum postnatal care interventions that will regard the patient's mental health and sleep disturbance. Maybe if there was screening and if there were interventions that were in some regular basis these conditions could be relieved and both the mothers and the infants could get the best results.

#### References

- 1. Dennis CL. The relationship between postpartum depression and maternal anxiety. *Arch Womens Ment Health*. 2010; 13(4):257-63.
- O'Hara MW, Swain AM. Rates and risks of postpartum depression—a meta-analysis. *Int Rev Psychiatry*. 1996;8(1):37-54.
- 3. Lee KA. Sleep in postpartum women. *MCN Am J Matern Child Nurs*. 2000;25(2):93-9.
- Mindell JA, Jacobson J, Pedinoff A, et al. Sleep patterns and sleep disturbances in the first 6 months of life. *Pediatrics*. 2009;12 3(3)
- Field T. Postpartum depression effects on early interactions, parenting, and safety practices: a review. *Infant Behav Dev.* 2010; 33(1):1-6.
- 6. Miller LJ, Hagan R, DeStasio J. Postpartum sleep disturbances and maternal mental

health: a clinical overview. *Obstet Gynecol*. 2006;108(4):1189-95.

- 7. Aasmundstad T, Oeberg T, Nilsen ABV, et al. Sleep and anxiety during the postpartum period: a longitudinal study. *Sleep Med.* 20 12;13(1):90-6.
- Tomfohr L, Pung MA, Jansen M, et al. Postpartum anxiety: a review and recommendations. J Affect Disord. 2016; 205:234-42.
- 9. Hegel MT, Pyne JM, Hegel M, et al. Postpartum depression: an overview. J Reprod Med. 2002;47(5):391-8.
- 10. Goyal D, Gay CL, Lee KA. Sleep disorders in new mothers: a longitudinal study. *J Clin Sleep Med.* 2010;6(3):231-8.
- 11. Dennis CL, Chung-Lee L. Postpartum depression help-seeking barriers and facilitators: a qualitative systematic review. *Women Health.* 2006;44(3):23-45.
- 12. Gavin NI, Gaynes BN, Lofton MC, et al. Perinatal depression: a review of risk factors and interventions. *Int J Gynaecol Obstet*. 20 05;88(2)
- 13. Beck CT. The effects of postpartum depression on maternal-infant interactions: a meta-analysis. *Nurs Res.* 1998;47(1):1-10.
- 14. Bloch M, Daly R, Rubinow DR. Endocrine factors in the etiology of postpartum depression. *J Affect Disord*. 2003;74(1):1-5.
- 15. Williams E, Trewin C, Hunter M, et al. Stress and anxiety in new mothers: a longitudinal study. *Psychol Med.* 2006;36 (11):1697-1705.