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Research Article

Relationship of Postpartum Sleep Quality and Breastfeeding Self-Efficacy among Primi Mothers in Postpartum Unit in Selected Hospital, West Bengal

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Abstract

The researcher conducted a descriptive study to assess" relationship of postpartum sleep quality and breastfeeding self-efficacy among the primi mothers in the postpartum unit in selected Hospital, Kolkata, West Bengal". Objectives of the study to assess the Breastfeeding Practices among primi mothers, to assess the Breastfeeding Self -Efficacy among primi mothers, to determine the relationship between postpartum sleep quality and breast feeding self-efficacy among primi mothers and also to find out the association between breast feeding practices among postnatal primi mothers with their selected demographic variables The investigator selected 100 postpartum primi mothers by using simple random sampling technique in selected hospital.

Valid standardized tool was used to collect data among postnatal primi mothers. The study findings reveal that majorities postnatal primimothers have very good sleep quality and confident about breast feeding self-efficacy. There is statistically significant relationship between postpartum sleep quality & breastfeeding self- efficacy as correlation value was (-0.3) and 't' value t_{98} =1.984 at 5% significance with 98 df. There was no statistically significant association between postpartum primi mothers sleep quality with selected socio demographic data as the chi-square is less than table value at 5% level of significance.

Keywords: Postpartum; Primimother; Postpartum Sleep Quality; Postpartum; Breastfeeding Self-Efficacy

Introduction

Sleep is a physiological need that relieves physical and mental fatigue and is an important need in the postpartum period for mothers to adapt to their new role [1]. Mothers in this critical period experience changes in their sleep patterns in that their sleep is usually interrupted at least once during the night and face an increase in nocturnal awakenings for the care and feeding of their infants [2].

While poor sleep quality is an important indicator of maternal physical and mental health [3], and a better understanding of postpartum sleep and factors related to it can help facilitate the development of interventions to improve postpartum sleep quality [4], it has often been neglected by healthcare professionals Studies have shown that persistent sleep disturbances during the postpartum period can negatively affect maternal daily functioning, breastfeeding performance, maternal satisfaction, and mother

infant interaction. In a study conducted by Behboodi Moghaddam., *et al*. on the quality of sleep in postpartum women, 62.5% of mothers had poor sleep quality and the frequency of awakening [5].

Breastfeeding best provides babies with the nutrients they need for healthy growth and development. The World Health Organization (WHO) recommends that mothers should exclusively breastfeed their children within the first six months of their lives, and then sustain breastfeeding besides supplementary foods up to the age of two years or beyond. However, approximately 40% of infants worldwide are exclusively breastfed within the first six months of their lives [6].

Sleep during the postpartum period may be hindered by a number of biological, psychological and social stressors associated with motherhood. These stressors include: physical changes such as a drop in hormones postpartum and social factors including support and infant care. Approximately 30% of mothers experience sleep disturbances following the birth of their newborn, particularly frequent night time awakenings during the first 2 to 4 weeks postpartum and shorter total sleep time (i.e., less than six hours) [7].

Breastfeeding self-efficacy, which is one of the structures of social cognitive theory of Bandura, is referred to the mothers' beliefs and confidence in their ability to successfully perform breastfeeding. Therefore, it is a valuable framework that predicts the maternal breastfeeding behavior, self-confidence, and ability to perform this task [8].

In this regard, Kingston., *et al*. (2007) has remarked that the enhancement of maternal breastfeeding self-efficacy would increase the possibility of breastfeeding through self-motivating thoughts. In addition, this perception has a significant relationship with increased duration of exclusive breastfeeding [9].

Furthermore, in a study conducted by Turner and Papinczac, it was demonstrated that the breastfeeding mothers were not capable for that, their level of breastfeeding self-efficacy was significantly low [10]. Also, in two studies carried out by Ebrahimi and Hasanpour (2010) as well as Hatamleh (2006), the majority of the mothers were reported to have low breastfeeding self-efficacy scores [11].

On the other hand, in a study performed by Varaei., *et al*. (2009), more than half of the mothers obtained a high score in breastfeeding self-efficacy. Breastfeeding self-efficacy reflects the mother's confidence regarding breastfeeding, and it positively affects breastfeeding [12].

In national and international studies, it has been stated that the rate of breastfeeding-related sleep disorders in postpartum women is very high. It is emphasized that especially in mothers who suffer from sleep disorders, fatigue and lack of concentration increase, that they avoid breastfeeding and tend to feed their babies with. One of the most important factors that negatively affect the breastfeeding process is the low level of breastfeeding self-efficacy perception. Sleep quality is a critical factor affecting quality of life. Sleep disorders can cause tiredness, fatigue, daytime functional problems, and depression [13].

Background of the Study

The World Health Organization (WHO) considers adequate feeding in childhood as the most efficient intervention to promote childhood health, and WHO recommended that children should be exclusively breastfed until 6 months of life of age or over and complimentary up to 2 years and to initiate breastfeeding within one hour of life. India improved exclusive breastfeeding from 46.4% in 2006 to 54.9% in 2016 and early initiation of breastfeeding almost double from 23.4% to 41.6% during the same period. India's target is to increase the rate of exclusive breastfeeding to 69% by 2025 [6].

Self-efficacy was defined as the belief in influencing the events that effect his/her life [6]. Self-efficacy, which is a dynamic process that involves cognitive, motivational, emotional, and selection processes, is also expressed as the predictor of health-related behaviors [6]. Self-efficacy is one of the determinants of a range of behaviors like breastfeeding ability [14].

Breastfeeding self-efficacy reflects a mother's confidence in breastfeeding and affects the onset and duration of breastfeeding as a modifiable factor [8-10].

Following delivery of the placenta at birth, there is a rapid decline in maternal progesterone levels, which precipitates maternal

sleep disturbances. Successful lactation requires adequate release of the hormones prolactin and oxytocin from the pituitary gland Sleep modulates endocrine activity of the hypothalamic-pituitary-adrenal axes [15].

Breastfeeding self-efficacy shows that 53.4% of the breastfeeding mothers had a high level of satisfaction. The results indicate that the household income, sort of delivery, and breastfeeding self-efficacy was related to breastfeeding satisfaction. Breastfeeding self-efficacy is the most influential factors in maternal breastfeeding,

satisfaction. Breastfeeding confidence describes a woman's belief or expectation that she possesses the knowledge and skills to successfully breastfeed her infant. These expectations are based on information gained from prior breastfeeding experience, observation of other women breastfeeding, support and encouragement from individuals whose opinions are respected, and the physiological reaction to the prospect or act of breastfeeding. In many countries, including India, there is a widespread belief that colostrum (the nutritionally dense liquid produced by a mother immediately after her baby's birth) is impure or "dirty"; hence it is often expressed and then thrown away. The baby is then fed formula for the first few days of its life [16].

Aims and objectives.

To find out the postpartum sleep quality and the breastfeeding self-efficacy among the primimothers and to determine the relationship between postpartum sleep quality & breastfeeding self-efficacy among the primimothers.

Materials and Methods

The researcher adopted a descriptive research study considering convenience sampling technique. Total population of this study was 100 postnatal primimothers. Research approach was Quantitative research approach and design was descriptive research design. For pilot study postnatal primi mothers were selected from postnatal ward, R.G. Kar Medical College & Hospital, Kolkata.

Semi structured questionnaire schedule for background information, general education, household income, type of the family, food habit and marital status of postnatal primimothers. Standarized tool such as Pitsburgh Sleep Quality Scale was used for assessment of postnatal primimothers sleep quality and Breast Feeding Self-Efficacy Scale-Short Form was used to assess the breastfeeding self-efficacy level among postnatal primimothers.

For final study postnatal primimothers were selected from Malda Medical College and Hospital, West Bengal.

For data collection postnatal mothers inclusion criteria included subjects who were postnatal primimothers have cesarean birth and who have 5th, 6th and 7th postnatal day, whose baby well cried immediately after birth and mothers who can understand Bengali.

Albert Bandura's (1997) Self-Efficacy Model was used as a conceptual framework.

Results

The study findings revealed that 98% participants belong the age group of 18-27 years and 59% participants were belonging the Hindu and 41% were from Muslims by religion. Majorities of postpartum primi mothers received H.S and above education and 45% of postpartum primimothers fall under the categories of below 10,000 household income and 75% postpartum primi mothers belongs to the joint family.

Majority of postpartum primimothers about 68% have in very good sleep quality, and only 2% postpartum primimothers have poor sleep quality.

About 50% postpartum primimothers have moderate sleep quality and also 50% of postpartum primimothers have confident about Breast-feeding self-efficacy. The present study revealed that Breastfeeding self-efficacy among primi mothers, (73%) had good self-efficacy, (27%) had average self-efficacy and none of them had poor self-efficacy about breast feeding.

In this study (53%) post-partum primimothers have confident about breastfeeding self efficacy.

Figure showing Negative correlation between postpartum sleep quality and breastfeeding self-efficacy of postpartum primimothers. Low score of postpartum sleep quality indicates very good sleep quality and high score of breast-feeding self-efficacy indicates very confident about breastfeeding self-efficacy. Above figure shows there is significant correlation in negative

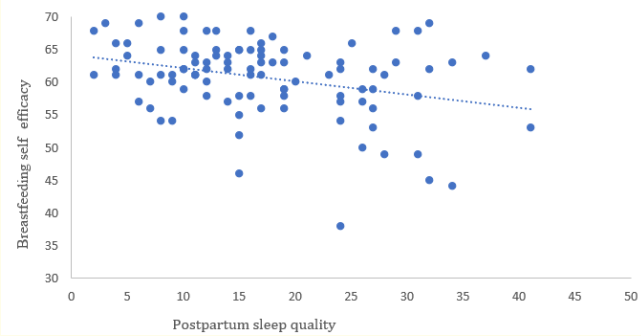

Figure 1

direction between postpartum sleep quality and breastfeeding self-efficacy of postpartum primimothers.

There was significant correlation in negative direction between postpartum sleep quality and breastfeeding self-efficacy as 'r' value was 0.31.

There was only statistical association between religion with postpartum sleep quality and breastfeeding self-efficacy with their selected sociodemographic data but there was no statistical association between other selected sociodemographic data with postpartum sleep quality& breastfeeding self-efficacy. There was statistically significant relationship between postpartum sleep quality and breastfeeding self-efficacy as evident from 't'value (1.984). For identifying the relationship between postpartum sleep quality and breastfeeding self-efficacy unpaired 't' test was used and results were significant at 0.05 level of significance with the df 98 of postnatal primi mothers which showed the correlation in negative direction that indicate if postpartum sleep quality is increases then breastfeeding self-efficacy will be increase. The study findings were supported by the findings of Mojgan Mirghafourvand, Mahin Kamalifard, Fatemeh Ranjbar and Nasrin Gordani (2014), Carolina Marina de Sa Guimaraes., *et al*. (2015), Sponholz, Monica Oliveira Batista Oria., *et al*. (2016), and Cochrane Pregnancy and Childbirth Group´s Trials Register (WHO) (2017).

Conclusion

The World Health Assembly has set a goal of increasing the rate of exclusive breastfeeding to at least 50% by 2025 in India. A, nationwide programme named - 'MAA' (Mothers' Absolute Affection) to be implemented across States, starting from August 2016 provides an opportunity to improve rates of breastfeeding and appropriate child feeding practices in the country. IYCF (Infant, Young, Children Feeding) trainings started for ANMs of all sub-centres in a phased manner After the launch of the 'MAA' programme for early initiation, exclusive breast feeding for at least 6 month and supplementary for up to 2 years. Another training programme is conducted WHO for ANM & ASHA about postnatal care based on PNC guideline. W.H.O recommended all women should be encouraged to mobilize as soon as appropriate following the birth. They should be encouraged to take gentle exercise and make time to rest during the postnatal period. Present study shows that there is statistically significant relationship of postpartum sleep quality and breast-feeding self -efficacy. Thus, study suggest that continuing supervision and monitoring is required from all level of administration and nursing education. The present study has been observed that there are good postpartum sleep quality and they are more concern about their baby to breast feeding. It is also observed that majority of the mothers have confident about breast feeding. Implication The present study has important implication to Health Care Delivery System, nursing practice, nursing education, nursing administration and nursing research.

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Conflict of Interest

There was no conflict of interest of the study.

Bibliography

1. Hansen K. "Breastfeeding: a smart investment in people and in economies". *Lancet* 387.10017 (2016):416.

2. Dennis C. "The Breastfeeding Self-Efficacy Scale: Psychometric Assessment of the Short Form". *Journal of Obstetric, Gynecologic, and Neonatal Nursing* 32.6 (2003):734-744.

3. Tuthill EL., *et al*. "Breastfeeding self-efficacy: A critical review of available instruments". *Journal of Human Lactation* 32.1(2016):35-45.

4. Alus Tokat M., *et al*. "Translation and psychometric assessment of the Breast-feeding Self-Efficacy Scale-Short Form among pregnant and postnatal women in Turkey". *Midwifery* 26.1 (2010):101-108.

5. Brockway M., *et al*. "Interventions to Improve Breastfeeding Self-Efficacy and Resultant Breastfeeding Rates: A Systematic Review and Meta-Analysis". *Journal of Human Lactation* 33.3 (2017): 486-499.

6. World Health Organization. Infant and young child feeding (2020).

7. Bandura A. "Self-Efficacy" 1994. (2020).

8. Jacqueline Giovanna De Roza., *et al*. "Exclusive breastfeeding, breastfeeding self-efficacy and perception of milk supply among mothers in Singapore: A longitudinal study". *Midwifery* 79 (2019).

9. Habibe Bay., *et al*. "The effect of postpartum sleep quality on mothers' breastfeeding self-efficacy level 2023, Early Child Development and Care". *Early Child Development and Care* 193.2 (2022):1-12.

10. Seyhan Çankaya. "The relationship of breastfeeding self-efficacy with relationship satisfaction and family function in mothers during the first year postpartumv 2022". *Early Child Development and Care* 192.16 (2022).

11. S Fata and SU Atan. "The relationship between fatigue and breastfeeding self-efficacy". *Nigerian Journal of Clinical Practice* 21.11 (2018): 1408-1414.

12. Aslıhan Aksu and Duygu Vefikulucay Yilmaz. "The relationship of postpartum sleep quality and breastfeeding self-efficacy of Turkish mothers". *Scandinavian Journal of Caring Sciences* 33.4 (2019):833-839.

13. Gay, Lee, and Lee, 2004; Wolfson, Crowley, Anwer, and Bassett, 2003; Fata and Atan,2018; Aksu and Yılmaz, 2019; Yang., *et al*., 2020.

14. Wambach and Genna, 2016.

15. Balsarek and Lee, 2017; Van Cauter and Tasali, 2017.