



CORRELATION OF BREASTFEEDING EFFICACY AND POSTPARTUM DEPRESSION IN URBAN AND RURAL POPULATION

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ABSTRACT

Introduction : Researches have been done to study the effect of postpartum depression on breastfeeding efficacy and is likely to be one of the important cause in general population. However , there is paucity of evidences to understand the correlation of breastfeeding efficacy and postpartum depression in urban and rural population and its comparison in mothers with LSCS and normal delivery. **Aims and Objectives:** The study was aimed to find the correlation of breastfeeding efficacy and postpartum depression in urban and rural population and to compare it in mothers with LSCS and FTND using Breastfeeding Self Efficacy Scale Short Form (BSES SF) and Edinburgh Postnatal Depression Scale (EPDS). **Methodology :** An observational study was conducted on 135 postpartum females with age group from 20-35 years in Belagavi city .Two questionnaire, BSES SF and EPDS was given to mothers and data was analyzed and recorded. **Results :** There was no significant difference found in BSES score of FTND and LSCS groups ($p=0.53$). Significant difference was found in EPDS score of FTND and LSCS groups ($p=0.002$). **Conclusion :** The study concludes that there is a co-relation between breastfeeding efficacy and postpartum depression in FTND and LSCS groups according to EPDS score

KEYWORDS

Breastfeeding Efficacy, Postpartum Depression , BSES SF , EPDS

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INTRODUCTION

Depression is one of the commonly affecting factor in most of the postnatal women which affects their physical and mental health[1]. Depression affects a mother-infant relationship due to social, psychological and hormonal Changes[3]. Along with depression there are women also suffering from postpartum anxiety counting for 11-21% [2]. Development of a good relation between a mother and a child forms through breastfeeding[4]. Breastfeeding rates at 6 and 12 months have increased over a period of years and rates of exclusive breastfeeding at 3 and 6 months, have increased over past 10 years [15]. Many studies proves breastfeeding to be beneficial for maternal and child health care[5].

In India, breastfeeding appears to be influenced by social, cultural, and economic factors. In 1991, Breastfeeding Promotion Network of India (BPNI) was born to protect, promote and support breastfeeding. Importance of breastfeeding for maternal and child health care during first six months of postnatal has been suggested according to World Health Organization (2003), the European Commission for Public Health and the American Academy of Pediatrics[5]. Cessation of breastfeeding is seen in 60% of women[6]. Behavioral changes such as obtrusive, non-interacting, can be seen in depressed mothers which can have an adverse effect on their children[7]. Maternal breastfeeding self-efficacy is defined as the confidence a women has in her ability to breastfeed her baby (cox et al.). Difficulty in breastfeeding is likely to be the root cause than choice of mother for cessation of breastfeeding[9].

Some non-modifiable factors such as maternal age, socio-economic status, education cannot be changed by the health care professionals but the modifiable factors should be considered as it has a positive impact to achieve exclusive breastfeeding[4]. Studies suggests the benefits of human milk to have a high nutritive level for both mother and child health care, however, the efficacy of breastfeeding behavior differs from a society to community to individual[10]. There are some studies which shows to have an impact on mother and child relationship causing depression which may have an adverse effect on her ability to breastfeed[9].

A study was done between postpartum depression and breastfeeding efficacy stated that postpartum depression affects breastfeeding

efficacy[5], however they included all postpartum women without classifying them into urban and rural population and normal delivery and lower segment caesarian section. Hence the present study aims to find the correlation of postpartum depression and breastfeeding efficacy in urban and rural population.

MATERIALS AND METHODOLOGY

It was an observational cross-sectional study conducted in tertiary care hospital. Females subjects from a) age group 20-35 with b) FTND, LSCS, c) primiparous and multiparous were included in this study. Exclusion criteria was a) high risk pregnancy b) medical conditions c) mothers whose infant were in NICU and PICU.

PROCEDURE

Ethical clearance was obtained from the Institutional ethical Review committee (IERC). All the participants were screened for inclusion and exclusion criteria. The study was explained in the language best understood to them and informed consent was taken before proceeding with the study. Two questionnaires were used Breastfeeding Self Efficacy Scale Short form (BSES SF) questionnaire was used to assess efficacy of the mother to breastfeed her child and Edinburgh Postnatal Depression Scale (EPDS) was used to assess the level of depression over past one week Both the scales were explained to the mother and necessary information about the scale was given provided that she could understand them well and the record was maintained.

BSES Questionnaire

Breastfeeding Self Efficacy Scale (BSES) Questionnaire was developed by (Dennis & Faux, 1999) The Breastfeeding Self Efficacy Scale (BSES) which is a 33-item scale use to determine breastfeeding self-efficacy which was later reduced to a 14 item scale The breastfeeding Self-Efficacy Scale Short Form (Dennis, 2003).

EPDS Questionnaire

The Edinburgh Postnatal Depression Scale (EPDS) designed by cox et al. is a screening tool for PPD which includes questionnaire and is sensitive to alteration in depression.

RESULT

A total of 135 sample population were screened where 70 were LSCS (30 primigravida and 40 multigravida) and 65 were FTND (23

primigravida and 42 multigravida). Mean age for FTND was 27.30 \pm 2.78 and mean age for LSCS was 26.35 \pm 2.60. Mean for FTND group of BSES was 54.47 \pm 4.20 and mean for LSCS group of BSES was 53.48 \pm 4.13. Mean for FTND group of EPDS was 15.93 \pm 4.53 and mean for LSCS group of EPDS was 17.11 \pm 4.45. There was no significance found in BSES score of FTND and LSCS groups ($p=0.53$). Significant difference was found in EPDS score of FTND and LSCS groups ($p=0.002$).

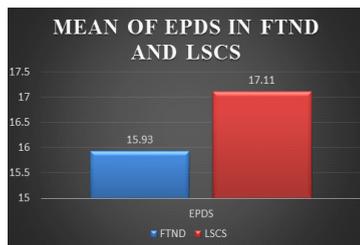
Table 1

SR NO.	PARAMETERS	FTND	LSCS
1	Age	27.30 \pm 2.78	26.35 \pm 2.60
2	Primigravida	23 (43.39%)	30 (56.60%)
3	Multigravida	42 (51.21%)	40 (48.78%)

Table 2

SR NO.	PARAMETERS	LSCS	FTND	FTND & LSCS (p value)
1	BSES score	53.48 \pm 4.13	54.47 \pm 4.20	0.53
2	EPDS score	17.11 \pm 4.45	15.93 \pm 4.53	0.002*

*P value is found to be significant in Edinburgh Postnatal Depression Score of FTND and LSCS

Figure 1: Mean difference of Breastfeeding Self Efficacy Scale Score in FTND and LSCS**Figure 2: Mean difference of Edinburgh Postnatal Depression Scale score of FTND and LSCS**

DISCUSSION

Although there were studies which were conducted to determine the breastfeeding efficacy among postpartum women in urban and rural area separately, to our knowledge this is the first study where the breastfeeding efficacy was co-related with depression and compared between urban and rural population. The study was conducted among 135 mothers, 70 LSCS (30 primigravida and 40 multigravida) and 65 FTND (23 primigravida and 42 multigravida). There was no significant difference found in Breastfeeding Self Efficacy Scale score of FTND and LSCS women. Significant difference was found in Edinburgh Postnatal Depression Scale score of FTND and LSCS women residing in urban and rural areas respectively.

According to Cox et al., mothers who are embarrassed or uncomfortable to breastfeed their child are more likely to introduce formula supplement at a very early stage as compared to women who are confident and believe that breastfeeding is healthier and cheaper and develops a good bond between a mother and child. The factors contributing for depression can be behavior, socioemotional adjustment and diverted attention of people from mother to infant. Social support indicates that it can affect maternal-child relationship postnatally. Women are twice as likely to develop depression and have more severe symptoms and present with co-morbid anxiety (Kornstein et al., 2002; Sloan and Kornstein, 2003).

A pilot study was done by Scott et al., where maternal attitudes to breastfeeding in public and its association with breastfeeding duration in European countries concluded that social norms may have a better influence on breastfeeding outcomes than a women's breastfeeding attitude and approach where The Lower Infant Feeding Attitude Scale score was used to compare infant feeding attitudes in European countries and their attitude to breastfeed in public areas.

A study done by Hinic et al. to determine the mother's confidence to breastfeed her child in early postpartum period concluded that breastfeeding self-efficacy was positively co-related with birth satisfaction, number of children, partner's support for breastfeeding and intention to breastfeed their child. The efficacy can also be improved by partner's involvement to educate about breastfeeding and its benefits to mother and child which develops a mother-child bond and to limit the use of supplement for child as the child is refrained from the nutrients of the mother's milk.

CONCLUSION

The study concludes that there is significant difference in Edinburgh Postnatal Depression Score of FTND and LSCS mothers but there was no significant difference found in Breastfeeding Self Efficacy Scale of FTND and LSCS mothers. However the difference of score in Edinburgh Postnatal Depression was moreover same when compared to urban and rural population as well as the score Breastfeeding Self Efficacy Scale. Both Urban and Rural population were equally affected which was seen when breastfeeding efficacy was correlated with depression.

FUTURE SCOPE

Awareness among the postpartum women and confidence to breastfeed their child should be developed in areas where breastfeeding is not encouraged much as well as education about importance of breastfeeding and its benefits should be given to mother as well as the family following medical camps, education in hospitals and in villages and health care guidance during their follow ups.

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