

Effects of Maternal Depression on Breast-Feeding

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Abstract

Objective: To see the effects of maternal depression on breast feeding behavior.

Design: This is a cross-sectional study.

Place and duration: The study was carried out at the OPO of the Children's Hospital Pakistan Institute of Medical Sciences Islamabad from October to mid November 2001.

Subject/Methods: One hundred mothers with children of breast feeding age from 2 months to 2 years were interviewed. These women were visiting the OPD of the Children's Hospital Pakistan Institute of Medical Sciences, Islamabad for medical check up of their children. The interview included the administration of the Urdu version of Hospital Anxiety and depression Scale (HADS).

Results: Thirty eight percent of the women had stopped breast feeding and their mean score on HADS was 19.66. whereas 62% of the women were breast feeding their children with a mean score of 3.27 on HADS. Out of the non breast feeding mothers 36.8% reported that their depressive symptoms preceded cessation of breast feeding.

Conclusion: Maternal depression effects the breast feeding behavior of the mother. It causes mothers to stop breast feeding their children (JPMA 53:8;2003).

Introduction

Community studies in Pakistan show 44%-72% prevalence rates of depressive illness in women.^{1,2} Studies carried out in different parts of the world indicate that women are twice as much affected by depressive illness during the reproductive years as compared to men.³

Maternal depression can effect the whole family and more so the breast fed infant, in fact maternal depression can itself effect breast feeding. Up to 40% of women stop breast feeding in the first three months after delivery due to depression.^{4,5} Even a higher number of mothers stop breast feeding their infants by the sixth month post delivery.⁶

Early cessation of breast feeding depends on a number of factors apart from depression. These factors reside in the woman's social environment, such as, mother hood at a younger age, less information seeking by the mother, lower family income, poor maternal health, poor emotional support and in case of working women, returning to work.⁴⁻⁶

Breast feeding has nutritional advantages for the infant in the first 6 months of life.⁷ It also effects the cognitive development of the infant in the first 6 months of life.⁸ Furthermore it has psychological benefits for both mother and child.⁹ Breast feeding is a part of the care giving and hence one of the factors influencing bonding with the child and vice versa, this forms the basis of the attachment theory. Maternal depression effects this relationship negatively.¹⁰

Different studies show that breast feeding is associated with better maternal health during breast feeding period and after weaning. The longer a woman breast feeds before she

weans lesser the emotional stress, lower levels of anxiety and depression, increased self esteem and coping capacity and better social health.⁶ Furthermore maternal distress and depression may be associated with inhibition of lactation.” The current study aims at finding the effect of maternal depression on breast feeding behaviour.

Patients and Methods

Criteria

A non-probability sample of 100 women visiting the OPD of the Children’s Hospital, Pakistan Institute of Medical Sciences, Islamabad for the check-up of their children of breast feeding age (2 months to two years) were selected for the study. Informed consent and sociodemographic information regarding age, residence, education, number of children and employment status were obtained.

The sample was collected over a period of 6 weeks, starting from October to mid November 2001. These women were administered the Urdu version of Hospital Anxiety and Depression Scale (HADS).¹² The cut-off points being 7/8 below which a clinically significant syndrome is unlikely and 10/11 above which a clinically significant syndrome is probable.¹³ Data was analyzed on SPSS statistical package. Percentages were used to describe characteristics amongst the groups of non-lactating and lactating mothers. Whereas t-test and Chi-square statistics were used to match the groups of mothers on variables.

Women who were not breast feeding their children due to local breast problems such as mastitis, nipple problems, history of past and current medical or psychiatric illnesses. Similarly women, currently on treatment, where breast feeding was withheld due to drugs being secreted in breast milk, e.g. ischaemic heart disease, schizophrenia and major depressive illness, and those who could not breast feed due to medical problems, were excluded.

Results

Out of the 100 mothers, the mean HADS score of those who had stopped breast feeding was 19.66 ± 5.44 and of the 62 mothers who were breast feeding their children as per routine was 3.27 ± 5.98 . When the non-lactating and lactating groups of mothers were matched on the variables of age, parity, education and income no statistically significant difference was seen. t-value for age was 1.60 ($p > 0.05$). t-value for income was 0.02 ($p > 0.05$) and Chi-square value for parity was 0.05 ($p > 0.05$) and Chi-square value for education was 0.08 ($p > 0.05$) as shown in tables 1, 2, 3 and 4.

Table 1. Comparison of non-lactating and lactating mothers on the variable of age by t-test.

Groups	n	Mean age in years	Standard deviation	df	t-value	p-value
Non-lactating mothers	38	28.47	4.25	98	1.60	p>0.05 n.s.
Lactating mothers	62	27.02	4.70			

n.s. = not significant, df= degrees of freedom.

Table 2. Comparison of non-lactating and lactating mothers on the variable of income by t-test.

Groups	n	Mean income in Rs.	Standard deviation	df	t-value	p-value
Non-lactating mothers	38	4905.26	3521.51	98	0.02	p>0.05 n.s.
Lactating mothers	62	4890.32	3665.73			

n.s. = not significant, df = degrees of freedom.

Table 3. Comparison of non-lactating and lactating mothers on the variable of parity by Chi-square test.

Parity of the mother	Non-lactating mothers	Lactating mothers	Total	df	χ^2	p-value
Nulli-parous	12	21	33	1	0.05	p>0.05 n.s.
Multi-parous	26	41	67			
Total	38	62	100			

Note: n.s. = not significant, df= degrees of freedom, χ^2 = Chi-square

Table 4. Comparison of non-lactating and lactating mothers on the variable of education by Chi-square test.

Educational Status of mothers	Non-lactating mothers	Lactating mothers	Total	df	χ^2	p-value
Illiterate	13	16	29	1	0.80	p>0.05 n.s.
Educated	25	46	71			
Total	38	62	100			

Note: n.s. = not significant, df= degrees of freedom, χ^2 = Chi-square.

Whereas the t-value of the score of HADS of the non-lactating and lactating mothers was statistically very significant i.e., 14.09 ($p < 0.001$) as shown in table 5.

Table 5. Comparison of non-lactating and lactating mothers on the variable of age by t-test.

Groups	n	Mean HADS Score	Standard deviation	df	t-value	p-value
Non-lactating mothers	38	19.66	5.44	98	14.09	$P < 0.001$
Lactating mothers	62	3.27	5.98			

Note: df= degrees of freedom, $p < 0.001$ = statistically significant.

Of the 38 mothers who had stopped breast feeding, 14 had symptoms preceding breast feeding, 7(18.4%) reported it to be simultaneous (cessation of breast feeding and depressive symptoms), 6 (15.7%) mothers reported their depressive symptoms to precede cessation of breast feeding and 11(28.9%) mothers could not remember exactly as to when did they stop breast feeding before or after experiencing the depressive symptoms. Out of the total non-lactating mothers, 31.5% mothers had stopped breast feeding after 6 to 12 months of the delivery, 26.3% before 6 months, 26.3%, 12 to 18 months post delivery and 15.7% stopped breast feeding 18 to 24 months after delivery. The mean age of the non-lactating mothers was 28.4 ± 4.25 years.

Discussion

The percentage of mothers who stopped breast feeding in the current study is lower than the different studies carried out else where in the world.⁴⁻⁶ The reason of this might be that majority of the mothers in Pakistan practice the common cultural and religious value of breast feeding their infants for at least 24 months.

The other reason may be that majority of mothers cannot afford the alternatives to breast milk due to economic reasons. Majority of the mothers who stopped breast feeding reported, that their depressive symptoms preceded the cessation of breast feeding. This is in keeping with the studies reviewed.¹⁴ Out of the 62 lactating mothers, 17 of them in spite of being marginally distressed, were still lactating their children with a mean score of 12.2 on HADS.. whereas the remaining 45 mothers who were also lactating had zero score on HADS. These 17% of the mothers are perhaps potential non-lactating mothers if their depression were to increase.

Thirty six percent of the mothers stopped lactating⁶⁻¹² months after delivery, whereas 26.3% mothers stopped

breast feeding before 6 months post delivery. This again is in keeping to the trend seen in the studies reviewed.⁴⁻⁶

The breastfeeding behaviour of mothers apart from depression depends on age, parity, socio-economic status and educational level. All of these factors can influence cessation of breast feeding. In the current study none of the above mentioned factors influenced the breastfeeding behavior, since there was no statistically significant difference between the non-lactating and lactating mothers. The only statistically significant difference was seen

in the mean scores on HADS amongst the two groups of mothers. Perhaps the most important factor in our setup effecting breast feeding is maternal depression. Nevertheless, this study points to an important area of maternal mental health and more detailed research is needed to see the different factors that influence breast feeding behaviour of mothers apart from maternal depression. Keeping in view the findings of the current study, that maternal depression leads to cessation of breast feeding, these should be used to develop better liaison between psychiatry and other medical professionals for early detection and appropriate intervention. Reproductive psychiatry clinics, providing services to women who experience emotional problems during their reproductive life cycle, is a necessity.

References

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