A descriptive study to assess the actual and perceived problems in lactation among primi mothers in a selected hospital of Guwahati, Assam

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Abstract

Background: Breast milk has its socioeconomic psychological, biological and immunological aspects. According to the recent National Family Health Survey (NFHS)-4 that was released last year, 41.6% children under 3 years of age were breastfeed within one hour of birth in 2015-2016 as compared to 23.4% in 2005-2006. Close to 55% of country’s children are exclusively breastfeed which was 46% till about a decade ago.

Objective of the study: To assess the actual and perceived problems in lactation among primi mothers in a selected Hospital of Guwahati, Assam.

Material and Method: The study adopted a descriptive research design, 170 samples were recruited using convenient sampling technique. Socio Demographic Performa and self administered checklist questionnaire for assessing the actual and perceived problems in lactation among primi mothers were used to collect data. Descriptive and Inferential statistics were used to analyse the data.

Result: The study revealed that, out of 170, majority i.e. 102(60.0%) respondents were in between the age group 18-26 years, 58(34.1%) respondents were in between the age group of 35-44 years, 10(5.9%) respondents were in between the age group 45-55 and none of the respondents were above 55 years. 9(5.30%) respondents had mild range of actual problems in lactation whereas 8(4.70%) respondents had mild range of perceived problems in lactation, 137(80.60%) respondents had moderate range of actual problems in lactation whereas 141(82.90%) respondents had moderate range of perceived problems in lactation and 24(14.10%) respondents had severe range of actual problems in lactation whereas 21(12.40%) respondents had severe range of perceived problems in lactation among primi mothers. There is no significant association of actual and perceived problems in lactation among primi mothers with their selected demographic variables such as age, religion, educational status, and type of family, occupation, and family income, mode of delivery and sources of information on breastfeeding problems. Thus, research hypotheses is accepted and null hypotheses is rejected. There is significant positive correlation between actual problems in lactation and perceived problems in lactation among primi mothers (r=0.264, p=0.001) at 0.001 level of significance. Present data shows that when increase in actual problems in lactation, there is also increased in perceived problems in lactation.

Conclusion: The study clearly suggests that majority of the respondents have moderate level of actual and perceived problems in lactation. The study also shows that when increase in actual problems in lactation, there is also increased in perceived problems in lactation.

Keywords: Primi mothers, breast milk, National Family Health Survey, Assam

Introduction

“A newborn baby has only three demands. They are warmth in the arms of her mother, food from her breasts and security in the knowledge of her presence. Breastfeeding satisfies all three”

Exclusive breastfeeding is the practice of feeding infant for the first six months of life on breast milk only, without any other type of food, not even water. Exclusive breastfeeding recommended as the best feeding alternative for the infants up to six months and has a protective effect against mortality and morbidity. During the breastfeeding period, many experiences lactation problem that leads to cessation of breastfeeding. The common actual lactation problems related to breastfeeding are breast engorgement, plugged duct, breast infection and insufficient milk supply; originate from conditions that lead the mother to inadequate empty the breasts [1].
Breastfeeding has been recognized by the American Academy of Paediatrics as the optimal sole source of nutrition in infants. It has many benefits to both infant and mother. Exclusive breastfeeding has the single largest potential impact on child mortality of any preventive intervention. Despite the advantages of breastfeeding, many women choose not to breastfeed for a variety of reasons. Others initiate breastfeeding but stop due to problems that arise [2]. Breastfeeding has been establish on our planet for more than forty thousand years but in the last few decades only its benefits have been scientifically established. Now “breast is best” for a neonate and is a universal concept. Inspite of worldwide campaign for promotion of breastfeeding, achievements are not as desired. There are many factors which affects breastfeeding practices in our country [1]. There are some common breastfeeding problems that can result in ineffective breastfeeding. Many mothers may experience some difficulties when beginning to feed the baby. Most of the feeding problem can be easily managed. Many problems in lactation may be avoided by correct breastfeeding practices. Causes of locational failure are psychological stress, lack of self confidence and incorrect breastfeeding practices include pre lacteal feeds, delay onset of breastfeeding, painful breast or nipple conditions, weak or preterm baby, schedule feeding, positions are attachment and physical causes include extreme maternal under nutrition, extremely sick mother [1].

Background of the study

Human milk is the ideal and unique food for infants. It is the sole source of nutrition for the first six months of life with continued intake for the first year and as long as desired thereafter [3]. Breast feeding is a natural process that seems to have been adversely affected by the modernization of society. Though it is now widely accepted that breast milk is best for the baby, it is also a well known fact that exclusive breast feeding rates in early infancy are still low. The number of studies have shown that deficit in the knowledge of practices regarding exclusive breast feeding amongst postnatal women’s and lack of adequate information given to mothers are the major factors responsible for the low rates of exclusive breast feeding. Maternal education, race and socioeconomic factors are also known to influence breast feeding knowledge and practices [2].

Breast feeding promotion network of India, (BPNI) says, the infant aged (0–5 months) who are not breast feed have seven fold and fivefold increased risk of death from diarrhoea compared to the infants who are exclusively breast feed. To reduce the infant mortality rate and improvement in the health status and development of infants and young children, breast feeding is very important [2].

Breast milk has its socioeconomic psychological, biological and immunological aspects. Human milk is known to be an ideal, the safe and complete food for infants made available at a suitable temperature, helps to promote normal development of an infant. It is known to enhance the child immunity and the additional cost of milk [2].

According to the recent National Family Health Survey (NFHS)-4 that was released last year, 41.6% children under 3 years of age were breastfed within one hour of birth in 2015-2016 as compared to 23.4% in 2005-2006. Close to 55% of country’s children are exclusively breastfeed which was 46% till a decade ago [1].

International baby food action network (IBFAN) is a nongovernmental organization working with Imetyksen Turkey to protect and promote by collaborating community and legislative levels. It also collaborate with CRC (convention on the right of the child) to collect and analyze data on infant and child feeding in Finland. IBFAN 2011 received a report from Hasunen and Rynanen (2006), the demonstrated 99% of the finished mothers initiated breastfeeding in the maternity ward, 60% mothers continued exclusive feeding until the age of one month and 50% mother’s breastfeed exclusively at the three months and only 1% of the mothers breastfeed exclusively until the newborn was six months. These figures are depicted at the lowest in Scandinavian countries. Breastfeeding exclusively differs depending on a couple of factors including personal, physical, psychological maternal factors, economic factors and breastfeeding awareness (IBFAN 2011) [3]. Breast milk is not only the best but is also a must for the babies. Lack of breastfeeding especially exclusive breastfeeding during first few months of life is important as it reduces the risk factors for the infant mortality and the morbidity rate. WHO estimates that 1.5 million of infant’s life can be saved each year through increased breastfeeding [5].

Aim

To assess the actual and perceived problems in lactation among primi mothers in a selected hospital of Guwahati, Assam.

Method and materials

The methodology of the study includes Research Approach, Research Design, Development and Description of Tool, Setting of the study, Population, Sample and sampling technique, Pilot study, Data collection procedure and plan for data analysis and summary. This study was done to assess the actual and perceived problems in lactation among primi mothers in a selected Hospital of Guwahati, Assam. The study adopted a descriptive research design, 170 samples were recruited using convenient sampling technique. In this study, quantitative research approach was used. Variables included in the present study were study variables and demographic variables. The study was conducted in post natal ward, Guwahati Medical College and Hospital, Assam. In this study, the target population were primi mothers admitted in GMCH, Assam. In this study, the accessible population were primi mothers admitted in post natal ward. A self administered checklist questionnaire was used to assess the actual and perceived problems in lactation among primi mothers in selected hospital of Guwahati, Assam. The techniques used for this study were self administered checklist questionnaire. The tool consists of Demographic Data (age, religion, educational status, type of family, occupation, family income, mode of delivery and information on breastfeeding problems) and Self administered checklist questionnaire on actual and perceived problems in lactation among primi mothers. Validity of the tool was established in consultation with the guide and experts from the field of Obstetrics and Gynaecological Nursing on the basis of their expertise, experience and interest of the problem being studied. The recommendation and suggestions were incorporated and finalized for main study. Percentages of agreement for each item were taken. For demographic data, one item was
removed and the rest were retained with modification. For self-administered checklist questionnaire, some items were removed and necessary modification and simplification of the language were done. The tool was translated from English to Assamese and validated by 3 experts Professor from Assamese department. The best item was selected and validated. Back translation was done from Assamese to English was given to expert Professor and validated. The tool was tested for its reliability on the basis of small sample from the population i.e. 17 postnatal primi mothers. The reliability was established by using Karl Pearson’s Correlation with split half method. The reliability of both self administered checklist questionnaires was 0.8 and 0.7 which was found to be reliable. For pre-testing of the tool self administered checklist questionnaire was pretested on five postnatal primi mothers to determine the clarity and time required for completing the questions the average time taken was 15-20 minutes. The Ethical consideration was obtained on 4th May, 2018 from the institutional ethics committee, Army Institute of Nursing c/o 151 Base Hospital, Guwahati. Formal permission was taken from Principal of GMCH and the HOD of Obstetrics and Gynaecological department. The participants have been informed about the anonymity and confidentiality of their information. Both informed and written consent were obtained from the participants. The period of pilot study was from 23rd December to 29th December, 2018. To conduct the pilot study, investigator took the ethical clearance from respected authority. The investigator took permission from the HOD of Obstetrics and Gynaecological Department, GMCH. participants were selected based on the convenient sampling technique. Data collection was done from 4th February 2019 to 2nd March 2019. The data collected from the subjects was organized and tabulated. The data were grouped and analyzed in terms of objectives of the study by using descriptive and inferential statistical measure, which are necessary to provide substantial summary of the results. The collected data were analyzed on the basis of objectives. Collected data was coded and transformed to the master sheet for statistical analysis. Demographic data represented in terms of frequency and percentage. Chi square test was used for finding out association of risk factors with selected demographic variables. Analysis and interpretation of the data are done according to the study objectives and hypotheses. The collected data were coded and organized in a master sheet and analysed by using the SPSS 20 software.

Results
The study was conducted on 170 postnatal primi mothers in a selected hospital of Guwahati, Assam. The study revealed that, out of 170, majority i.e. 102(60.0%) respondents were in between the age group 18-26 years, 58(34.1%) respondents were in between the age group 27-35 years and none of the respondents were above 45 years. 10(5.90%) respondents were in between the age group 36-45 years and none of the respondents were above 45 years. 9(5.30%) respondents had mild range of actual problems in lactation whereas 137(80.60%) respondents had moderate range of actual problems in lactation whereas 141(82.90%) respondents had severe range of actual problems in lactation whereas 21(12.40%) respondents had severe range of perceived problems in lactation among primi mothers.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>Standard Deviation</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual problem</td>
<td>5.60</td>
<td>5.00</td>
<td>6.00</td>
<td>2.95</td>
<td>0.22</td>
</tr>
<tr>
<td>Perceived problem</td>
<td>6.54</td>
<td>6.00</td>
<td>10.0</td>
<td>3.69</td>
<td>0.28</td>
</tr>
</tbody>
</table>

The data presented in table 1 indicates that the mean score of actual problems in lactation was 5.60 whereas perceived problem mean score was 6.54. The median score of actual problem was 5.00 whereas median score of perceived problem was 6.00. The mode score of actual problem was 6.00 whereas mode score of perceived problem was 10.00. Actual problem SD=2.95 whereas perceived problem SD=3.69. Standard error of actual problem was 0.22 whereas standard error of perceived problem was 0.28. It is evident that, the score of perceived problem was higher than the score of actual problem in lactation among primi mothers.

<table>
<thead>
<tr>
<th>Range</th>
<th>Actual problems</th>
<th>Perceived problems</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Score</td>
<td>F</td>
</tr>
<tr>
<td>Mild</td>
<td>&lt;2</td>
<td>9</td>
</tr>
<tr>
<td>Moderate</td>
<td>2-8</td>
<td>137</td>
</tr>
<tr>
<td>Severe</td>
<td>&gt;8</td>
<td>24</td>
</tr>
</tbody>
</table>

Data presented in table 2 shows that 9(5.30%) participants had mild range of actual problems in lactation whereas 8(4.70%) participants had mild range of perceived problems in lactation, 137(80.60%) participants had moderate range of actual problems in lactation whereas 141(82.90%) participants had moderate range of perceived problems in lactation and 24(14.10%) participants had severe range of actual problems in lactation whereas 21(12.40%) participants had severe range of perceived problems in lactation.

Fisher’s exact test was computed in order to determine the significance of association of actual and perceived problems in lactation among primi mothers with selected demographic variables. Inferential statistics was computed to determine significant association between the actual problems in lactation among primi mothers and their selected demographic variables at 0.05 level of significance. There is no significant association of actual and perceived problems in lactation among primi mothers with their selected demographic variables such as age, religion, educational status, and type of family, occupation, and family income.
mode of delivery and sources of information on breastfeeding problems. Thus, research hypotheses is accepted and null hypotheses is rejected.

Table 3: Karl’s Pearson correlation coefficient between actual and perceived problems in lactation among primi mothers. N=170

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>r-value</th>
<th>‘P’ value</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual problems</td>
<td>5.60</td>
<td>0.264</td>
<td>0.001</td>
<td>S**</td>
</tr>
<tr>
<td>Perceived problems</td>
<td>6.56</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

S** = highly significant at 0.001 level of significance

There is significant positive correlation between actual problems in lactation and perceived problems in lactation among primi mothers (r=0.264, p=0.001) at 0.001 level of significance. Present data shows that when increase in actual problems in lactation, there is also increased in perceived problems in lactation.

Discussion
In the present study, 170 postnatal primi mothers were selected by convenience sampling technique. The actual and perceived problems in lactation among primi mothers were assessed by self administered checklist questionnaire. The findings of the study have been discussed with reference to the objectives and relation to the findings of other studies. In the present study, the mean score of actual problems in lactation was 5.60, the median score is 5.00, the mode score is 6.00 and SD=2.95. Standard error is 0.22. The present study shows that 9(5.30%) respondents had mild range of actual problems in lactation, 137(80.60%) respondents had moderate range of actual problems in lactation and 24(14.10%) respondents had severe range of actual problems in lactation.

Similar study was conducted by Nazem B. Lamia AD 2009-2010 conducted a study to identify breastfeeding problems in primipara mothers in early postnatal period. The result shows that the age of the mothers in this study range between 15-40, most of them were house wives (85.4%) and from urban area (83.7%). The results of the study showed lacking of antenatal education of primigravida about breastfeeding only 8% of mothers received breastfeeding education reflecting real breastfeeding problems especially in early postnatal period which is critical period in starting and continuation of breastfeeding.

In the present study, the mean score of perceived problem was 6.54. The median score of perceived problem is 6.00. The mode score of perceived problem is 10.00. Perceived problem SD=3.69. Standard error of perceived problem is 0.28. The present study shows that 8(4.70%) respondents had mild range of perceived problems in lactation, 141(82.90%) respondents had moderate range of perceived problems in lactation and 21(12.40%) respondents had severe range of perceived problems in lactation among primi mothers.

Similar study was conducted by Rajan BP, Sindhu S. conducted a study on awareness and difficulties encountered by the postnatal mothers during breastfeeding. The study reveals that knowledge and attitude of postnatal mothers towards breast feeding is not satisfactory up to the limit. There is still need for the programmes which supports and encourages breast feeding.

The present study findings revealed that, there is no significant association of perceived problems in lactation among primi mothers with their selected demographic variables like age of the subject, religion, educational status, type of family, occupation, family income, mode of delivery, sources of information about breastfeeding problem. Thus null hypothesis is accepted and research hypothesis is rejected. Similar to this study, Kamath SP, Garg D, Khan MK, Jain A, Baliga BS. (2016) conducted a study on Perceptions and Practices regarding Breastfeeding among Postnatal Women at a District Tertiary Referral Government Hospital in Southern India. Study reveals that, Importance of breast feeding was known to most mothers. Few perceptions related to breast milk and feeding along with myths and disbeliefs should be rectified by health education.

The study finding revealed the obtained correlation between actual problems in lactation and perceived problems in lactation. There is significant positive correlation between actual problems in lactation and perceived problems in lactation among primi mothers (r=0.264, p=0.001) at 0.001 level of significance. Present data shows that when increase in actual problems in lactation, there is also increased in perceived problems in lactation.

Similar study was conducted by Deborah E. Carter MC. Conducted a study on “Parenting Self-Efficacy and Perception of Insufficient Breast Milk” This study explored the relationship between parenting self-efficacy (PES) and perception of insufficient breast milk.

Cross-sectional descriptive correlational study was adopted. The study reveals that, there was a significant correlation (r = 0.487, p < .01) between the self-efficacy and perceived insufficient milk scores. Regression analysis revealed that 23% of the variance in PIM was explained by PES, after maternal age, education, and parity had been taken into account. The discussion was done in accordance with the objectives of the study. The actual and perceived problems in lactation among primi mothers was found in accordance with the ranges of the variables such as mild, moderate and severe problems. There was no significant association of actual and perceived problems in lactation among primi mothers with their demographic variables. There was significant positive correlation between actual problems in lactation and perceived problems in lactation among primi mothers (r=0.264, p=0.001) at 0.001 level of significance.

Recommendations
On the basis of the findings, the following recommendations can be offered for further research:

- A similar study can replicate on the larger sample for future generation.
- A similar study can be conducted in another field of research.
- A similar study can be conducted to assess the actual and perceived problems in lactation among all the postnatal primi mothers.
- A comparative study also can be conducted among primipara and multipara mothers.
Conclusion
The present study was conducted to assess the actual and perceived problems in lactation among primi mothers in a selected hospital of Guwahati, Assam. The findings reveal that majority of the respondents have moderate and severe level of actual problems in lactation (80.60%) with the mean value of 5.60 and standard deviation of 2.95.

The study findings also reveals that majority of the respondents have moderate (82.90%) level perceived problems in lactation with a Mean of 6.56 and Standard Deviation of 3.7.

The study finding also reveals that there was no significant association of actual and perceived problems in lactation among primi mothers with their selected demographic variables. There was positive significant correlation between actual and perceived problems in lactation among primi mothers with r=0.264, p=0.001 at 0.001 level of significance.

Every effort must be taken to educate primigravida mothers during pregnancy and give the mothers to help to start breastfeeding as early as possible.

References