

A Study to Assess the Knowledge on Breastfeeding among Group of Primi Postnatal Mothers Admitted in Selected Hospital in Kolkata, West Bengal

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Abstract: A descriptive study was undertaken to Assess the Knowledge On Breastfeeding Among Group Of Primi Post Natal Mothers Admitted In Selected Hospital In Kolkata, West Bengal. Conceptual framework of the study was based on the Health Belief Model of Rosenstoch's (1974) and Becker and Mauman's (1975). A sample of 50 primi postnatal mothers were selected by nonprobability purposive sampling technique. The findings of the study revealed that there most of the primi mothers (50%) has satisfactory knowledge. Data further reveal that there is no significant relationship between knowledge and demographic variable i. e. type of family, education of the mother. The study has implication in the field of nursing practice, nursing education, administration and nursing research.

Keywords: Breast Feeding, Knowledge, Primi Postnatal mother, Health Belief Model, Nursing Practice

1. Introduction

Breast feeding is the safest, cheapest, & best protective food for neonate. Breast feeding is the best natural feeding & breast milk is best milk. The basic food of neonate is mother's milk. Breast milk is the most effective way to provide a baby with caring environment & complete food. It meets the nutritional as well as the emotional & psychological needs of infant. But in recent times there is tendency to replace natural means of infant feeding & introduction of breast milk substitutes. So breast feeding deserves encouragement from all the concerned in the welfare of children.

“The nature has designed the provision that neonates to Breastfeed upon their mother's milk. They find their food & mother at the same time. It is complete nourishment for them both for their body & soul.”

-Rabindranath Tagore

2. Background of the Study

Breastfeeding is the complete natural way of feeding of new-born baby. It has benefit for both mother & child. . It meets the nutritional as well as the emotional & psychological needs of infant. But in recent times there is tendency to replace natural means of infant feeding & introduction of breast milk substitutes. So breast feeding deserves encouragement from all the concerned in the welfare of children.

Breastfeeding provides health, nutritional, immunologic developmental, psychological, social, economic & environmental benefits for infants. Breastfeeding also has important implications for women's health & recent research supports the benefit for women who breastfeed. Human milk has ideal nutrients factors & antibacterial substances. On the other hand, antibodies in human colostrum & milk are poorly absorbed by the new-born. This does not lessen their importance because the predominant immunoglobulin is secretory IgA. These macromolecules are secreted across mucus membranes & have important antimicrobial function.

Antibodies in human colostrum & milk are poorly absorbed by the new-born. This does not lessen their importance because the predominant immunoglobulin is secretory IgA. These macromolecules are secreted across mucus membranes & have important antimicrobial function. Milk contains secretory IgA antibodies against E. Coli & breastfed neonates are less prone to enteric infections than bottle fed neonates. Much attention has been directed to the role of maternal breast milk lymphocytes in the immunological process of the new-born. Milk contains both T & B lymphocytes. But the T lymphocytes appear to differ from those found in blood. Specifically, milk T lymphocytes are almost exclusively composed of cells that exhibit specific membrane antigens, including the LFA-1 high memory T cell phenotype. These memory T cells appear to be another avenue for the neonate to benefit from the maternal immunological experience. Lymphocytes in colostrum's undergo blast transformation in vitro following exposure to specific antigen.¹

If left alone, skin-to-skin with mother beginning immediately after birth, new-born recognize smell of mother's breasts & root towards them. If left alone, skin-to-skin neonates confined their way to the breast & attach for sucking mother-baby bonding is enhanced by breastfeeding.

Initiating breastfeeding within one hour of birth was one of the ten steps to successful breastfeeding on which the Breast Feeding Hospital Initiated was based & launched in 1992. Step 4 was “Help mothers initiate breast-feeding within a half hour of birth.” & it's explanation as provided in WHO's document, evidence for the ten steps to successful breastfeeding are as follows:

Mother in the maternity ward who have had normal vaginal deliveries should confirm that within a half an hour of birth they were given their babies to hold with skin contact, for at least 30 minutes & offered help by a staff member to initiate the breast feeding. At least 50% of mothers who had caesarean deliveries should confirm that within a half hour of being able to respond, they were given their babies to hold with skin contact. There are significant scientific

evidences to support step 4.

Breast feeding has been accepted as the most vital intervention for reducing infant mortality & ensuring optimal growth & development of children. More than 15% of 24 lakh child death could be averted in India by optimal breast feeding knowledge. Review of studies from developing countries show that infant who are not breastfed are 6 to 10 times more likely to die in the first months of life than infants who breastfed.²

The WHO global data bank on breastfeeding present by covers 94 countries & 65% of the world's infant population (<12 months) it is estimated that 35% of these infants are exclusively breastfed between 0-4 months of age.³

The total percentage of children under 3 years who are getting the breast milk within 1 hour of birth ins 46.4% & 48.4% in rural & urban area respectively. Breastfeeding knowledge of children among 0-5 months who are breastfed for at least 6 months is 69.8% & 63.3% in rural & urban areas respectively.⁴

3. Need for the study

Immediately following delivery the healthy infant should be placed on the mother's chest or upper abdomen. Early skin to skin contact between the mother & infant can facilitate breastfeeding & improve maternal infant bonding.

Initiation of breastfeeding within the first half an hour of birth is the first & most vital step towards regarding infant & under five mortality, by reducing the overwhelming high neonatal mortality rate, save one million babies-beginning with one action, one hour support & one message. This single intervention can save more than 205 lakh babies in India that is equivalent to 22% of death among new-borns. In a world where more than 10 million children die before their fifth birthday due to preventable causes, malnutrition alone kills more than half of these children, improving knowledge of breastfeeding save lives, especially in poor countries.

A UNICEF 2007 report states that India has close to 2.5 million children born every year. Out of these 1.9 million are under five children, who die in a year. Among the deceased children, 1.4 million children die just within one year of age roughly. One million children dying with malnutrition & other preventable diseases caused mainly due to poor care & inappropriate knowledge of infant feeding & given other products before six months are still common practice which increases the risk of infection, allergy, long term disease & death.

Only 23.4% new-borns across the country begin breastfeeding within hour of birth. This rate has to be improved up to 90% or more on order to achieve millennium development goals & to fight against the malnutrition & child death in India. Early initiation of breastfeeding provides quality health care for children & reduces their specific health problems. The number of studies has shown protective effect of human milk feed against sudden infant death syndrome, insulin dependent diabetes mellitus, crohn's disease, ulcerative colitis, allergic & other chronic digestive

disease.

But some of the factors is affecting the success of breastfeeding which are:-

- Mothers of newly born children do not know how to feed, what to feed, & what is the importance of feeding.
- Lack of knowledge among mothers
- Delay in getting the infant to the breast
- Provision of formula feed
- Increased level of anxiety of mother
- More over the cultural influence an inadequate or lack of health care support makes it worse.

This study conducted on knowledge, attitude, practices of breastfeeding among employed mother with below six months of age child. This study revealed that majority (45%) of the mothers had average knowledge of breastfeeding. However majority of them had no knowledge.⁵

Hence the researcher felt need to be conduct study on assess the knowledge of primi mother regarding early initiation of breast-feeding.

Problem Statement:

A study to assess the Knowledge on breastfeeding among group of primi postnatal mother admitted in selected hospital in Kolkata, West Bengal.

Purpose of the Study:

The researchers intend to assess knowledge & primipostnatal mother about early initiation of breast-feeding.

Objectives of the Study:

- To assess the level of knowledge of primi mother regarding early initiation of breast feeding.
- To find out association between level of knowledge with selected demographic variables. i. e., age, education, occupation etc.

Research Variables:

- Research variables: knowledge of primi mother regarding early initiation of breastfeeding.
- Demographic variables: age, type of family, occupation, education, income.

Operational Definitions:

- Assessment: To estimate the knowledge of primi mothers regarding early initiation of breast feeding.
- Knowledge: Refer to the correct response of primi mothers regarding early initiation of breast feeding.
- Primimother: It refers to the mother who gave birth to a child for first time.
- Early Initiation: Early initiation means within half an hour after delivery.

Inclusion Criteria:

- Mothers who have 1st child after delivery.
- Mothers who are willing to participate in the study.
- Mothers who are available on the day of data collection.

Exclusions Criteria:

- Mothers who have given general anaesthesia.

- Mothers who have pregnancy related disease & admitted after delivery.
- Mothers who are not willing to participate in the study.
- Mothers who are sick / ill.

Perception of serious problem of delayed & improper breast feeding i. e. hypoglycemia, hypothermia.

Perceived benefit of early initiation of breast feeding

Assumptions: The study is based on following assumptions

- The mothers have some knowledge regarding early initiation of breast feeding.
- They will be willing to express their opinions freely.

De-Limitations:-The study is limited to

- Primi mothers giving breast feeding to the child.
- Primi mothers who are available on the day of data collection.
- Primi mothers who are willing to participate in the study.
- Primi mothers who can understand Bengali.

Demographic Variables:

- Age.
- Education.
- Occupation of the head of the family.
- Occupation of the mother
- Monthly income of the family.
- Type of family.
- Availability of support member.

Perceive barriers like

- Education
- Superstitions
- Misconception
- Religion
- Taboos

4. Conceptual Framework

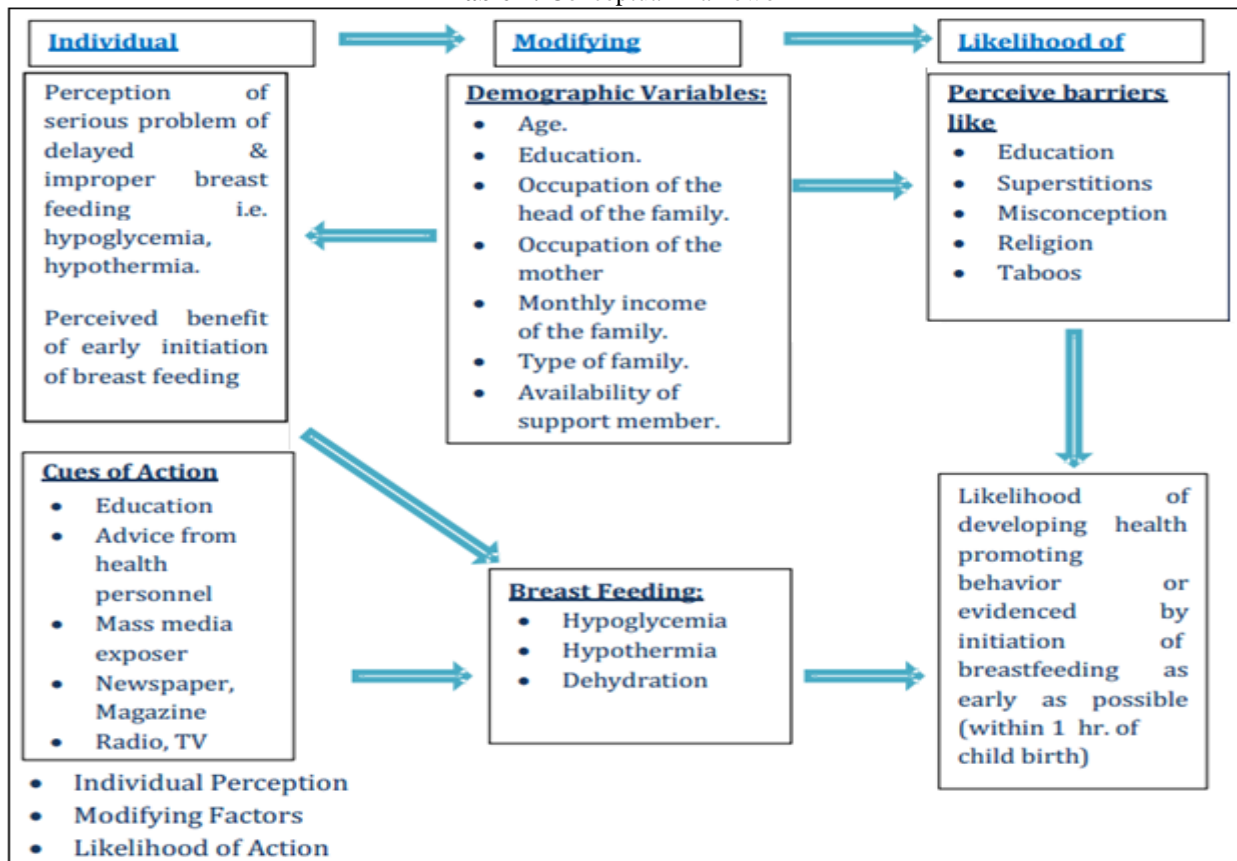
The conceptual framework conceptualizes the thinking process so that others may read & know the frame of reference basic to reach Problem. It is the process of moving from an abstract idea to concrete idea more readily in graphic form.

The research study based on **Health Belief Model (1974)**. This model postulates that health sucking behaviour is influenced by a person's perception of threat posed by a health problem & the value associated with action aimed at reducing the problem. A person's motivation to undertake health behaviour can be divided into 3 categories.

Cues of Action

- Education
- Advice from health personnel
- Mass media exposure
- Newspaper, Magazine
- Radio, TV
- Individual Perception
- Modifying Factors
- Likelihood of Action

Table 1: Conceptual Framework



Individual Perception:

In the study of individual perception refers to perceive importance of limitation of breast feeding only. Perceived the seriousness of the problems regarding not initiating early breast feeding. Perceived barriers refer to Superstitions, Misconception, Lack of education, fear etc.

Modifying Factor:

It refers to demographic variables such as age, socio-economic variables, education, occupation, income etc.

Likelihood of action:

It is that the mother will take benefit of preventive action that is early initiation of breast feeding.

5. Review of Literature

"The keys to the vast store-house of published literature may open doors to source of significant problems and explanatory hypothesis and provide helpful orientation for definition of the problem, background for selection of procedure and comparative data for interpretation of results". In order to be truly creative and original, one must read literature extensively and critically as a stimulus to thinking. It helps the research workers to develop a through understanding and into previous works and trends that have emerged. The review can also help in reaching a number of important specific goals.

The literature review covers the following area:

Knowledge regarding breastfeeding and exclusive breastfeeding.

A community based cross sectional study (2014) was carried on 307 rural mothers using systemic random sampling. The study revealed that the mothers knew that breastfeeding is the best nutritional source for the baby. The majority of the mothers had good knowledge about the advantages of breastfeeding for child. Majority (92.5%) of the mothers defined weaning as breastfeeding cessation. Most of the mother (94.8%) agreed that breastfeeding protects from infection, (91.6%) agreed that breast milk lead to loss of figure, and (83.4%) agreed that breastfeeding should be avoided during mother's illness. About 84% initiated breastfeeding immediate after delivery and 42.7% offered pre-lactal feeds to baby. About 74.2% of mother's feed colostrum. Exclusive breastfeeding was found to be associated with mother's education ($p < 0.0001$) but not with mother's age at birth, mother's occupation or place of birth. The study concluded that there was a need for health care system interventions, family interventions and public health education for campaigns to promote optimal breastfeeding practices, especially in less educated woman.⁷

A perspective longitudinal study (2013) in antenatal clinic's of five regional hospital from four cluster in Hong-Kong in which 2098 women in the 2nd trimester of pregnancy was recruit with a systematic sampling method of breastfeeding initiation, intention and duration, and found that the rate of artificial feedings and breastfeeding was 41.1% and 58.9%, where as breastfeeding initiation and initiation rate were 85.3% and 67.0%, respectively the breastfeeding duration rates were 11.1%, 10.3%, 10.7%, 26.7%, for the within

<1week, 1-3 weeks, > 3-6 week and >6 week groups. The common reason for initiation breastfeeding were that breastfeeding is beneficial for both the baby (89.8%) and mother (39.7%). Reason for weaning breastfeeding were insufficient breast milk (32.7%), tiredness and fatigue (39.7%) and return to work (29.6%). Partly relatives and nurse midwives were important supportive resource during breastfeeding. Ordinal logistic regression identified five predictive factors of breastfeeding duration. Participants who were working part time or were housewives ($p = 0.037$) had monthly family income of (<HK\$10,000) ($p = 0.034$), more than one child ($p = 0.001$), positive breastfeeding initiation ($p = 0.001$) and early breastfeeding within first hour ($p < 0.0001$) were more likely to have longer breastfeeding than their counterpart.⁸

A study (2013) on breastfeeding initiation time and neonatal mortality risks among newborn in south india among 10464 newborn. In this study they got 82.1% were first breast fed before 12 hours and 13.8% were breastfed between 12 and 24 hours. And 4.1% were breastfed after 24 hours. After adjusting for birth weight gestational age and other covariance late initiator (more than 24 hours) were at ~78% high risks of death (relative risk= (95%) confidence interval (CI = 1.03 3.10))⁹

A study (2012) was conducted regarding primi mothers knowledge regarding breastfeeding antenatal clinic of krishna hospital and medical research centre karad district in satara in which out of 590 primigravida mothers, 59.66% showed fair quality of knowledge about breastfeeding. knowledge about rooming in, family support for breastfeeding and burping after breastfeeding was 97.7%, 95.4% 93.5%. However weaning, colostrum fed hazards of bottle feeding and prelactal food was 84%, 82.7%, 75.5%, 54% respectively. Statistical associations were existed between age, education, religion, socioeconomic status, occupation of respondents with their knowledge about breastfeeding. So knowledge of breastfeeding among primigravida mothers attending ANC clinic was of fair in quality.¹⁰

A cross sectional study (2012) in chepeng community of Makwanpur districts in Nepal and using quantitative methodology on 360 mothers with two children and found that Feeding practices of mothers were found better than their knowledge level. About 35% had knowledge about early initiation of breast feeding. Exclusive breastfeeding and introduction of complementary foods at the age of six months were 81% and 90% respectively. Literature mothers were found initiating breastfeeding early than the illiterate (OR = 2.61, 95% CI, 1.59-4.27). Growth monitoring service utilization was found to have significant association with exclusive breastfeeding practices (OR=2.75, 95%CI, 1.30-5.78). Feeding diverse complementary foods was associated with average monthly family income and duration of food sufficiency. They concluded that feeding practices in chepeng community were associated with health and socioeconomic determinants. Some of the feeding practices were found good however, meal frequency for the children 9-23 months of age and feeding diverse food for children 6-23 months were found lower which needs to be in proved health education programs. Qualitative studies are needed to

explore cultural factors.11

An observational study (2012) in a tertiary teaching hospital of coastal south India. A total of 300 subjects including pregnant and nursing mothers attending the outpatient departments were required. Among the subject 36% had primary education and 12% were graduates. Majority (61%) lived in a joint family. Only 52.3% of the subjects received advice on breast feeding during antenatal visits, out of which only 19.3% had a breast examination.58.7% knew that breast feeding should be initiated within 1 hour of child birth but only 48% of the mothers who had delivered initiated breastfeeding within 1 hour.71.6% of mothers knew that exclusive breastfeeding should be practiced for 6 months. On analysis it was found that mothers with more than 1 child, vaginal delivery and an educated partner had awareness of breastfeeding and practiced healthy breastfeeding. The study emphasizes the need to counsel mothers regarding breast feeding practices early during antenatal visits and not postpone till after delivery, include the spouse for support, sensitize the health care giver and improve infrastructure for successful breastfeeding initiation.12

A study (2010) was conducted on breastfeeding in infancy, identifying the program relevant issues in India. For identifying program relevant issues to improve breastfeeding in infancy, quantitative data were collected through visit to households (n=356) in rural areas in burdwan, and urban slum areas in Kolkata and qualitative data from sub-samples applying semi structured in depth interviews (n=42) focus, group discussion (n=20) were conducted in the above sites and rural areas to determined how based designed further intervention, the analysis focus on five breastfeeding practices recommended by WHO putting baby to the breast within the 1st hour of birth, feeding colostrum and not giving fluids, food or others substances in the first of life biggest were found to be inputting baby to the breast with in the first hour of birth (76% gap) feeding coloustrum exclusively early initiation of breastfeeding from birth through 180 days (90%gap). The finding showed that huge gaps to continue to exit in early initiation of breastfeeding behaviours, mostly due to lack of awareness. The health workers instructions for promoting and supporting optimal breastfeeding are extremely low, counseling techniques should be used to reinforce specific, priority massages by health facility staff and community based workers at all contact with mothers of young infant.13

A cross sectional study (2010) was conducted and extracted from the results of a contemporary cohort conducted in 10 Maternity Hospitals in the city of Feira de Santana, Bahia, Brazil. A group of 1309 mothers and Hospitals records.47.1% of mothers initiated breast feeding within the first hour after birth.14

A study (2010) was conducted on breastfeeding promotion initiatives should focus its attention in rural wardha was observed as IMNCI guidelines. Total 99 lactating mothers were studied, about half 51 of children had at least one of the feeding problem among infants who had feeding problem 22 (43.1%) and had at least one problem in positioning the infant to the breast. Sixteen (31.4%) infant neck was twisted

or bent forward.14 (27.5%) infants had only head and neck supported instead of the whole body. Among 51 infants that had feeding problem.21 (41.2%) has at least one problem in attaching the infant to the breast. Effective breastfeeding is a function of proper positioning and attachment of the child to the mother breast.16

A descriptive study (2010) was conducted to explore the knowledge, attitude and practices of breastfeeding among postnatal mothers and factors that determine them in the neonatal division, department of pediatrics at a tertiary care hospital in south India. The data was collected from 100 postnatal mothers by trained interviewers using a structured proforma. In addition to demo-graphic data, mothers were also asked about their knowledge on and attitude towards breastfeeding and the practices they follow the knowledge of the mothers was inadequate in areas of time of initiation of breastfeeding (92%), colostrums feeding (56%), duration of exclusive breastfeeding (38%), knowledge of expressed breast milk (51%) and continuation of breastfeeding while baby is sick. Better scores correlated significantly with higher maternal rate better maternal education, higher socioeconomic status and having received antenatal care. There is still a net for programmes, which support and encourage breast feeding particularly at a primary care level, focusing more on younger, less well educated women and those from lower socio-economic class.17

A study was conducted on knowledge and practices among mothers in a rural population of North India (2009). All the mothers of infants between 0-6 months were interviewed using a pretested semi structured questionnaire. Position of the baby during breastfeeding and attachment of the baby mouth to the breast were assessed by direct observation while feeding. Out of 77 mothers 30% and 10% exclusively breast fed their infants till 4 and 6 months of age respectively. There was good attachment in 42% mother-infant pairs and infant were held in correct position by 60% of the mothers.39% of the mothers had satisfactory breastfeeding knowledge. Lack of breast feeding counseling was significantly associated with decreased rates of exclusive breast feeding at 4 and 6 months (p=0.01and 0.002 respectively). Breast feeding counseling with emphasis on correct technique can improve the exclusive breast feeding rates. 18

A community based cross sectional study (2009) was conducted on Breast Feeding practice in a rural area of uttarakhand.500 mothers having children between 0-3 years of age group were included in this study. Self administered questionnaire was used to collect information. This study finding revealed the majority of children were breastfed 93.6%. Initiation of breastfeeding within an hour was practiced by only a few mothers (21.3%). Only 5.13% of babies were exclusive breast fed till 6 months. Pre-lactal feed and colostrum was given to most of them i. e 66.03% and 87.18%.19

A study (2009) was conducted on factors affecting the initiation and duration of breastfeeding in the primary health care (PHC) that is attach to the medical college kengeri, Bangalore, Karnataka. Mother with children who were 9 month old who came to the PHC for measles vaccination

were included in the study and data was collected using the pre test questionnaires on breastfeeding or newborn practices. The study shows 97% of mothers initiated breastfeeding, 19% used pre-lactal feeds, 90% had hospital delivery and 10% were home deliveries. This study emphasizes the need for breastfeeding intervention programme specially of the mother during antenatal and postnatal checkups and practice like discard colostrums and early/late weaning that are still widely need to be addressed.²⁰

A study was conducted on breast feeding technique and related to breast feeding problem and breast feeding duration in Denmark (2009). Data on breast feeding problems and pacifier use were obtained from self reported questionnaire. The study population includes 570 mother-baby pairs with complete information on breast feeding technique. The primary outcome was duration of exclusive breast feeding. One half of the mothers showed ineffective breastfeeding technique at the first observation, most frequently ineffective position (61%) and latch (52%) In the un adjusted analysis, only sucking and milk transfer were associated with breast feeding duration. In the adjusted analysis, ineffective technique was significantly associated with mothers reporting early breast feeding problems, which thereby influence breast feeding duration. Observation of breast feeding technique may help mothers in the stage of when they are establishing breast feeding to avoid early and later problems. ²¹

A study was conducted on the feasibility of IMNCI guidelines on effective breast feeding in a rural area of North India (2008). Total 32 mothers were included in the study. After recoding the pre intervention observation related to position and attachment of the baby while feeding, a demonstration of correct breastfeeding practices was made to mothers as per IMNCI guidelines. Post intervention observation was done after a gap of 10-15 days using the same performs. It was observed that following intervention, a significant number of mothers (82.8%) were keeping the baby close to them before intervention it as 45.2%. before intervention only 9.7% had correct attachment after intervention it becomes 41.4% before intervention no one had correct position for feeding after intervention it becomes 42.5% knowledge about the positioning and attachment of infant can improve the breast feeding technique of mothers.²²

A study (2007) conducted on determinants of early initiation of breastfeeding in a tertiary neonatal unit, AIIMS, New Delhi on all mothers admitted in postnatal ward (between may June 2007) were eligible for inclusion. Mothers of the sick and preterm infant were excluded. And mothers were interviewed between 24 to 72 hours after delivery. They got the result about 32% initiated breastfeeding within 1 hour of delivery, 47% between 1-6 hour of delivery, and 21% were 6-48 hours after delivery. Only about 13% of the infant received pre-lactal feed.²³

A study (2006) was conducted five hundreds of women who were residents of leeds, Grenville or Lanark counties and who gave birth form 1st march to 1st October of 2006. Compustat consultants contacted 634 eligible women

between October 2006 and April 2007, resulting in a response rate of 79%. One of the primary objectives of survey was to identify infant feeding practices of new mothers in the try-country area.

Specifically, factors related to breastfeeding initiation. On the survey respondents, 84.9% (C. I-81.5, 88.3) reported initiation of breastfeeding within first 2 days after their baby was born. This figure represents a 3.3% increase over the initiation rates in the 2001 infant feeding survey. Logistic regression analysis of factors associated with breastfeeding initiation demonstrated that there were strong and consistent associations between higher level of education, prenatal class attendance, making the decision of how to feed the baby before becoming pregnant, and relying on a friend or relative to aid in breastfeeding decision with rates of breastfeeding initiation breastfeeding duration was also one of the primary objectives of this survey.²⁴

A cohort study (2006) of 12 months duration the mothers were recruited from two public maternity hospitals in Perth, Australia between mid-September 2002 and mid-July 2003. While in hospital, participating mothers completed a questionnaire that included questions on how they were feeding their newborn. Telephone interviews conducted at regular periods monitored changes in infant feeding practices, including expression of breast milk. Multivariate Cox regression analysis was used to explore the association between breast milk expression and the duration of any breastfeeding. Results were a total of 587 mothers, or 55% of those eligible, participated in the study. Of these 93.5% were breastfeeding at discharge from hospital. Mothers who expressed breast milk (at one or more time periods) were less likely to discontinue any breastfeeding before six months (Relative Risk 0.71, 95% CI 0.52, 0.98) than those who had never expressed milk. This study found that mothers who express breast milk are more likely to breastfeed to six months (any breastfeeding). While further research is required in different cultures to confirm these results, the appropriate use of expressed breast milk may be a means to help mothers to achieve six months of full breastfeeding while giving more lifestyle options.²⁵

6. Research Methodology

The Chapter deals with the selected Methodology adopted for the study. It includes research approach research design, variables, the selected population sample and sampling technique, the data collection tools and technique, development of structural interview schedule for data collection and plan for data analysis.

Research Approach-Non-experimental

Research Design-The research design selected for the study was descriptive Survey design. It gives the overall plan or blue print for how to handle the research process.

The Schematic diagram of research design for the present study is given in the following way.

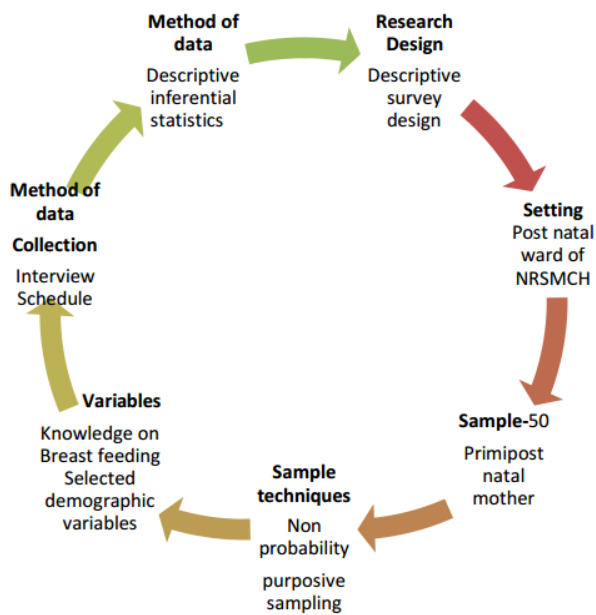


Figure 2: Schematic Diagram of Research Design

(1) Variable under study:

Research Variable: Knowledge on Breast feeding

Demographic variables: Age, Education, occupation of the Head of the family, occupation of the mother, monthly income of the family, type of family, availability of support member.

Setting of Study: (i) Setting is the more specific places, where data collection will occur. The nature of settings can influence the way people behave or feel and how they respond to question. The selection of appropriate setting is important.

Pilot Study: The study was conducted on primi post natal mother at post natal ward in NRSMCH on 09/06/2016.

Final Study: The study was conducted on Primi Post natal mothers at Post natal ward in NRSMCH from

Reasons for selection

- Availability of the subject
- Convenience of the investigators.
- Co-operation of the staffs.

Population: Primi Post Natal Mothers at post natal ward in NRSMCH, Kolkata, West Bengal.

Sample: Fifty Primi Post Natal Mothers available during date collection period.

Inclusion Criteria:

During data collection: Primi Post natal Mothers:

- Who were available in Post natal ward.
- Who are able to talk and respond to the questions asked by the interviewers and
- Who are willing to participate in study.

Exclusion Criteria:

Who have any kind of complications (Hypertension, Sepsis, Heart disease, Eclampsia, Engorged Breast, cracks Nipple, PPH, Anaemia and pueriper psychosis) and primi with caesarian section during the immediate Postnatal period.

(6) **Sampling Technique:** Non probability purposive sampling technique.

Development and Description of Tools:

A structured knowledge interview Schedule was prepared by the investigator to assess the knowledge of the primi postnatal mother regarding Breast feeding. A review of the research and non-researched Literature was done before the development of the tool.

Data Collection tool and technique

SL.No.	Tool Technique	Variables to be measured
1	Tool 1 Interviewing Part -A: Structured questionnaire for demographic data Part- B: Interviewing Structured knowledge Questionnaire on Breast feeding	Demographic data Structured questionnaire for demographic data Knowledge regarding of breast feeding

Tool I:

Part A: Structure Questionnaire for demographic characteristics.

Structure Questionnaire to obtain demographic date of subject by interview technique. The tool was developed to gather demographic information of primi postnatal mothers. These served as a background data of mothers.

Part B: Structure knowledge questionnaire regarding of breast feedings.

Description and development of the tool:

Description of Tool I:

The tool used for data collection was prepared by consulting with the experts.

The tools consist of two parts:

Part A-

Structural questionnaire on Demographic data and general information.

Demographic proforma-

This part deals with the background information and general information in respect to each client.

It consists of the following: Age

Sex

Educational status

Occupational status of the Head of the family. Occupational status of Mother.

Total monthly income of the family.

Type of family gravida

Description of tool-I: Part-B

Part-B Structured knowledge questionnaire on early initiation of breast feeding.

18 items of structural knowledge questionnaire have been developed as per the content area included in the study to

assess the knowledge of primi post-natal mothers regarding of breast feeding. All the items were multiple choice questions. A score value of 1 was allotted to each correct response. Maximum knowledge score is 18. The tool covered the area on;

- Most beneficial feeding for new born baby.
- Ideal starting time of breast feeding.
- Color of first milk.
- Knowledge about first breast milk.
- Need of colostrums.
- Best position for Breast milk.
- Meaning of exclusive Breast feeding.
- Duration of Breast feeding.
- Interval of Breast feeding.
- Satisfactory signs of baby.
- Signs of adequate Breast feeding
- Good signs of attachment of the Breast feeding.

Development of Tool

• Preparation Of Blue Print-

A blue print was prepared before constructing the questions. The item distributed to the content areas under three domains, among them 11 knowledge, 5 understanding & 2 practice. Total 18 multiple choice items were prepared for assessing the knowledge of primi postnatal mothers. Each item has 3 alternatives. A score value allotted to each correct response & (0) for every incorrect answer. The total score was 18. It was developed on the basis of blue-print-11 knowledge items (61.11%), 5 understanding (27.78%) & 2 practice (11.11%).

• Establishing Content validity

Tool along with the criteria checklist was given to three experts for validation. All three experts are expert of various nursing field. The experts were chosen on the basis of clinical expertise and teaching experience. The tools were modified as per their valuable advice.

• Pre-Testing of the tool

After validation pretesting of the tool was done by administering the tool on 10 primi post natal mothers Post Natal Ward of NRSMCH to find out the clarity, feasibility of the tool on ambiguity of the statements. Whether the mothers were able to understand the questions and the average time taken by each subject. To complete data collection was about 10-12 minutes for each sample.

• Reliability of the tool

The structured interview schedule on knowledge was administered to 10 mothers to establish the reliability of the tool. Reliability of knowledge interview Schedule was tested by split half method. The value of co-relation was found 0.82, which indicated a high reliability of the tool. So that tool was reliable for meeting the objectives.

• Development of final draft

The final draft of the tool was prepared by considering the suggestion of validators.

a) Ethical consideration

b) Formal permission had been taken from principal Govt. College of Nursing NRSMCH.

- c) Ethical clearance was obtained from ethical committee of NRSMCH.
- d) Formal permission had been taken from Principal NRSMCH.
- e) Formal permission has been taken from MSVP as well as Nursing Superintendent.
- f) Informed consent was taken from each participant.

• Pilot Study

The Pilot study was conducted at Post Natal ward of NRSMCH, Kolkata after getting formal permission from the ethical Committee. Nil Ratan Sircar Medical College and Hospital and consent from the Primi Mother taken prior sample selection. The date collection was done on 16/16/2016. The sample was selected according to the sampling criteria. The sample size was 10 primi post natal mothers. Data was collected from the primi postnatal mothers who were in Post Natal Ward. Interview on knowledge was taken when mother rested in the post natal ward. Collected data were tabulated and analyzed and statistically calculated. The finding suggested the feasibility to conduct the final study.

• Final Data Collection Procedure.

The main study was conducted on at Post Natal ward of NRSMCH.

Self-introduction was given and rapport was established with the subject of the hospital. Role of the investigator was discussed, the sample was selected according to the sample criteria and data collection was completed within Schedule. Interview on their knowledge on breast feeding taken from the Mother who met the sampling criteria. Collected data were tabulated, analyzed and statistically calculated.

Plan for data analysis

The data analysis was planned to include the appropriate statistics. The following Plan was developed:

- Frequency and percentage distribution of sample characteristic in terms of background data.
- Mean, Median, Standard deviation calculated to obtain knowledge of primi mothers regarding breast feeding.
- Chi-Square: To find out the relationship between knowledge selected demographic variables.

Summary

The present chapter deals with the methodological strategy adopted for the study. The approach of the study was non-experimental. The structured interview schedule were used to deal with the method and adapted for the presence study which includes research, approach, research design, setting of the study, variables under the study, population and the sample, sampling technique, Criteria for sample selection, description of the tools, pilot study, data collection process and plan for the data analysis.

7. Analysis and Interpretation

This chapter includes analysis and interpretation of data collected to assess the knowledge of primi postnatal mother on breastfeeding. Structured interview schedule used to collect data related to knowledge of mother in a selected hospital of Kolkata in West Bengal.

Analysis and interpretation of the data were based on the objective of the study. The obtained data were analyzed using descriptive and inferential statistics.

The objective of the study:

- 1) To assess the demographic variables of primi para postnatal mother.
- 2) To assess the knowledge of primi para postnatal mother regarding breastfeeding.
- 3) To find the association between the knowledge and selected demographic variable regarding breastfeeding (i. e age, education, type of family) among primi para postnatal mother.

The data were organized as follows:

Section A: Description of demographic characteristics of primi postnatal mother. The sample characteristics were described in terms of frequencies and percentage distribution.

Section B: Finding related to assessment of knowledge of early initiation of breastfeeding among primi para postnatal mother.

Section C: Finding related to association between knowledge and selected demographic variable. (i. e. type of

family, age of the mother, and education of mother).

Section A: Description of sample characteristics:

Table 1: Frequency and percentage distribution of samples by age, education, occupation and religion, n = 50

S. No.	Sample Characteristics	Frequency	Percentage (%)
1	Age		
	18- 25 years	43	86
	26- 33 years	6	12
	34- 41 years	1	2
2	Education		
	> 14 years	0	0
	Illiterate	2	4
	Primary	16	32
3	Occupation of Mother		
	Secondary	15	30
	Above Secondary	17	34
4	Religion		
	Housewife	50	100
	Hindu	44	88
	Muslim	6	12

The data presented in the **table-1** depict that: 43 mothers (86%) belong to the age group of 18-25 years, 15 mothers (34%) have more than secondary education, all of the mothers (100%) are housewives and 44 mothers (88%) are Hindu.

Findings related to the Types of Family among the Sample, n = 50

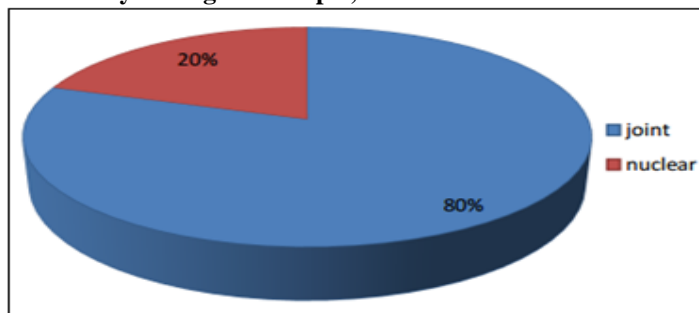


Figure 3: Pie Diagram showing the percentage of sample according to the type of family.

The data in the figure 3 shows that 40 (80 %) mothers belong to joint family and 10 (20 %) mothers belong to nuclear family.

Findings related to occupational status of the head of the family among the samples, n=50

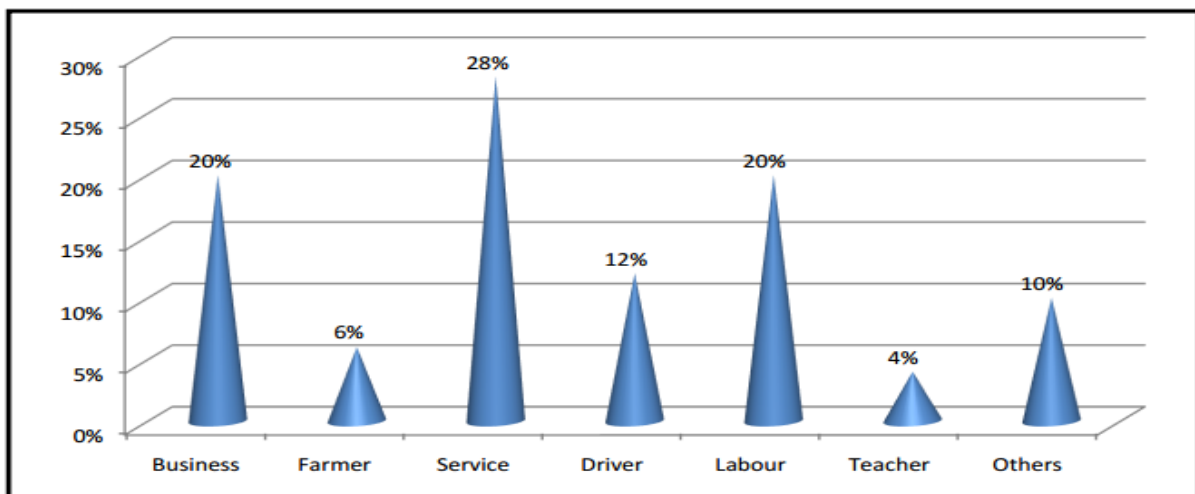


Figure 4: Cone Diagram showing the percentage of samples according to occupational status of head of the family of primi postnatal mothers.

Among all the occupations, 14 people are service holder (28%) i. e. highest and 2 people are teacher (4%) i.e. lowest.

Findings Related to the income of the head of the family among the sample, n= 50

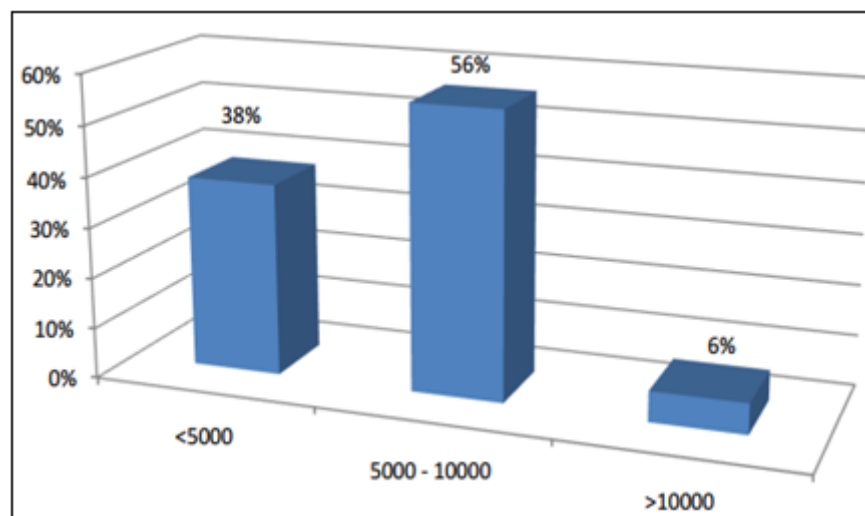


Figure 5: Column Diagram showing the percentage of the samples according to monthly income of the head of the family

The data in the figure 3 shows that 28 people (56%) belongs to the income group of 5000-10000 i. e. maximum and 3 people (6%) belongs to the income group of above 10000 i.e. minimum.

The data presented on Table-2 revealed knowledge score obtained by mothers range from (10-16), Mean knowledge score (13.3), Median (13.24) with standard deviation of knowledge score (4.367). Further data shows that 50% of mothers have knowledge score above median and 50% have knowledge score below median.

Section B:

This section deals with the findings related to the knowledge of primi para postnatal mother regarding early initiation of breast feeding.

Table 2: Mean, Median and standard deviation regarding knowledge score of primipara postnatal mothers, n=50

Variable	Standard Deviation	Range of Possible score	Range of obtained score	Mean	Median
Knowledge Score	4.367	0—18	10—16	13.3	13.24

Table 3: Frequency and percentage distribution of mothers according to their knowledge score, n=50

Category	Range of knowledge	Frequency	Percentage (%) score
Poor	1-6	Nil	- -
Average	7-12	14	28
Good	13-18	36	72

Minimum possible score: 0
Maximum Possible score: 18

Data presented in Table – 3 showed that 36 mothers (72%) have Good knowledge and 14 mothers (28%) have average knowledge regarding Breastfeeding, n=50

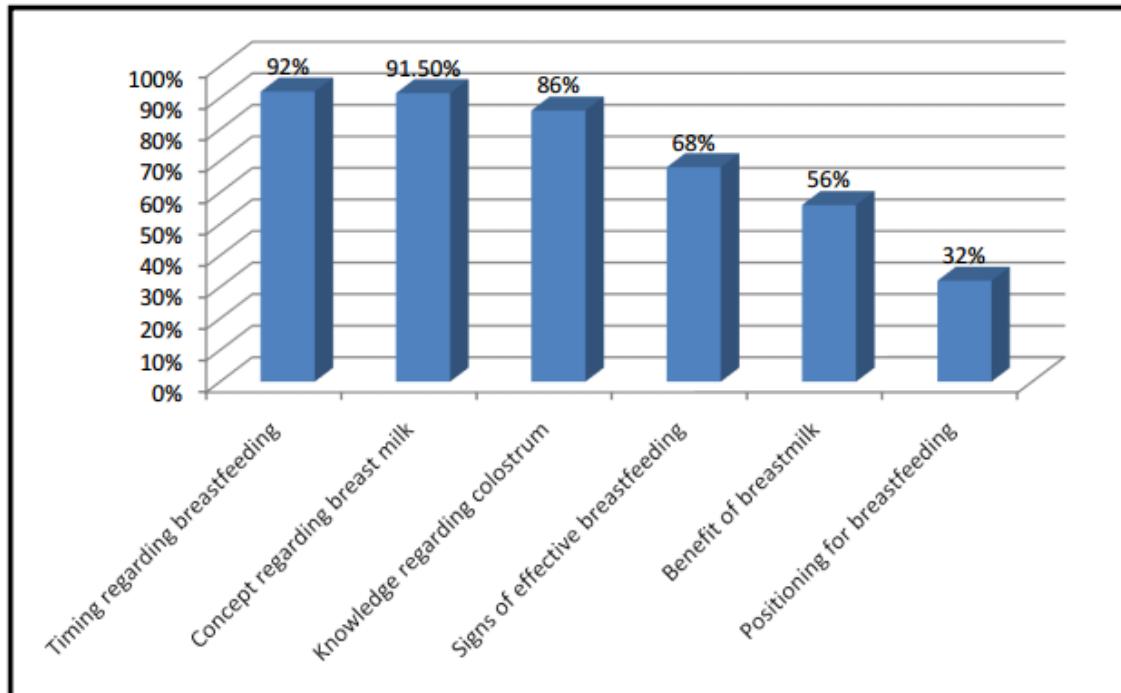


Figure 6: The Column Diagram showing areas of knowledge regarding breastfeeding among primi postnatal mothers

The above figure depicts that mothers have maximum knowledge (92%) regarding the timings related breastfeeding and minimum knowledge (32%) regarding positioning for breastfeeding.

Section C:

Table 4: Chi Square values showing association between effect of type of family with positioning of the mothers for breastfeeding, n = 50

Variable	Knowledge Score		Degree of Freedom	Chi Value	Significance
	Position for breastfeeding				
Significant	Sitting	Comfortable position			
Joint	38	2	1	0.353	Not
Nuclear	9	1			

$X^2 = 3.84, df = 1, p < 0.05$

The data presented in Table – 5 showed that the calculated chi square value was less than the table value in respect to type of family and positioning of the mother for breastfeeding which was not found to be statistically

significant at 0.05 level of significance.

So there was no significant association between the above variables with knowledge score.

Table 5: Chi Square values showing association between effect of education level of mother with benefit of mothers in breastfeeding, n=50

Variable	Knowledge Score		Degree of Freedom	Chi Value	Significance
	Improved Sleep	Reduction of Blood loss			
Education Level					
Below Secondary Significant	13	5	1	0.218	Not
≤ Secondary	25	7			

$X^2 = 3.84, df = 1, p < 0.05$

The data presented in Table – 5 showed that the calculated chi square value was less than the table value in respect to effect of education level with benefit of mothers in breast feeding which was not found to be statistically significant at 0.05 level of significance.

So there was no significant association between the above variables with knowledge score.

collected from 50 primi postnatal mothers in selected hospital in Kolkata. The analysis had been organized and presented under various sections. The findings showed that most of the primi postnatal mothers have knowledge regarding breast feeding. There was no significant association between type of family and positioning of mothers for breast feeding and educational level with benefit of mothers in breastfeeding. The data also revealed that mothers have maximum knowledge regarding the timings related breastfeeding and minimum knowledge regarding positioning for breastfeeding.

Summary:

The chapter dealt with analysis and interpretation of data

The chapter deals with major findings, conclusions, implication for nursing education, nursing administration and nursing research followed by limitations as well as recommendation for further research related to the present study.

8. Major findings of the study

Findings related to demographic characteristics:

- Majority of the study population (80%) are living in joint family and (20%) are living in nuclear family.
- Most of the mother (56%) are living in a family with income of Rs.5000-10, 000/-per month.
- Most of the mothers (86%) within the age of 18-25 yrs.
- **kGraduation level.

Findings related to the knowledge score of primi post natal mother regarding breast feeding:

- Knowledge level of most of the primi post natal mother (50%) above median value and (50%) below median value.
- 100% of mothers agree that breastfeeding is the best feeding for the baby.
- 94% of the mother having knowledge regarding benefits of colostrum.
- 84% of the mother had knowledge regarding early initiation of breastfeeding.
- 6% of the mothers have knowledge about their best position of breastfeeding.
- 96% of the mothers have knowledge regarding duration of breastfeeding.
- 96% of the mothers have adequate knowledge regarding the interval of each breastfeeding.
- 58% of the mothers have adequate knowledge regarding attachment of baby during breastfeeding.

Findings related to association of knowledge score with demographic variables i. e., type of family, education of the mother:

There is no association between the demographic variables (type of family, education of the mother) with knowledge score.

9. Discussion related to other studies

Madhu K., Sriram Chowdhury, Ramesh Masthi (2009) conducted a study on factor affecting the initiation and duration of breastfeeding. The study was conducted in P. H. C that is attached to a medical college in Kengeri Rural, Bangalore, Karnataka. This study shows 97% of the mother initiated breastfeeding, 19% used prelactal feeds.

In our study 84% of the mothers have knowledge regarding early initiation of breastfeeding.

Vyas Shaili, Sharma Parul, Kandpal S. D. et al (2009) conducted a cohort study on early initiation of breastfeeding and prevalence of exclusive breastfeeding at hospital discharge in urban and low below national targets. A total 500 mothers were included; out of these 21.3% mothers were initiated breastfeeding early to their neonates.

In our study 84% mothers have knowledge regarding early initiation of breastfeeding.

Ruksana Haider et. al (2010) conducted a study programme on relevant issues to improve breastfeeding in infancy. The biggest gap was found to be in putting to the breastfeeding within first hours of birth (70%), feeding colostrums exclusively early initiation of breastfeeding from birth through 180 days.

In our study (84%) mothers have knowledge regarding early initiation of breastfeeding and (94%) mothers have knowledge regarding benefit of colostrums.

Seena Girish and M Gandhimati (2015) conducted a study programme on knowledge of breastfeeding among postnatal mother where the knowledge of mother was inadequate in the area of initiation of breastfeeding (92%), colostrums feeding (56%), duration of exclusive breastfeeding (51%). Better scores correlated significantly with higher maternal age, better maternal education, higher socio-economic status and having received antenatal care.

In our study (84%) mothers have adequate knowledge regarding early initiation of breastfeeding, (94%) mothers have knowledge regarding importance of colostrums.

10. Conclusion

On the basis of the findings of the present study the following conclusion can be obtained that majority 50% of the primi postnatal mother have knowledge regarding important of breastfeeding. But there was inadequate in the knowledge of breastfeeding in some area.

Implication:

Breastfeeding is the best natural and breast milk is the best feeding. If continuous knowledge is given to the mother regarding breast feeding by the health personnel's then will be unending effect on the of both mother and child.

Nursing Practice:

The nurses are the backbone of the hospital that can effectively help the mother regarding breast feeding. This help can be in the form of antenatal teaching and providing assistance during breast feeding.

Nursing Education:

More practical related education should be included in the syllabus imported so that the nurse can teach and provide assistance during breast feeding.

Nursing Administration:

The nursing administration need to look more frequently into the findings from the research related problem in the organization, health care delivery system, evaluation of patient care and conductance of health programme related to breastfeeding in the hospital and community level. Nursing administration should make hospital policies and protocol about breastfeeding and also look after that whether their implemented or not.

Nursing Research:

Research has a significant role in nursing. Nursing research should recognize professional responsibility and expand, develop and refine knowledge of nursing. So that the finding of research can be published and other member of the nursing community can utilize such finding.

11. Limitations**The limitations of the study are:**

- The study was conducted on small sample and was possibly not reflective of entire population.
- The study was confined to only one hospital which poses a problem for generalization of the findings.
- The study did not include the multi para post natal mothers as it was only limited to the primipara mothers.
- No intervention was given to the mother to improve their knowledge.

12. Recommendation

On the basis of the findings of the study the following recommendations are suggested:-

- Educational programme conducted at hospital settings must help in imparting knowledge to mothers regarding breast feeding.
- Similar study can be replicated on a larger sample or in other hospital.
- Multigravida mothers can be studied separately.
- Comparative study can be undertaken to find out the knowledge level and breast feeding practice of urban, rural, slum dwelling mothers regarding knowledge and breastfeeding practice.
- Comparative studies can be undertake in govt. and private institution.
- Study to develop structure teaching programme on breastfeeding.
- Exiting policies and services regarding breastfeeding should be strengthened to promote exclusive breastfeeding.
- Study can be conducted regarding practice of breastfeeding technique.
- An interventional study may be conducted to find out the effect of educational programme on knowledge of breastfeeding.

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