Type of Manuscript: Research

A Study to Assess the Knowledge and Practice of Exclusive Breastfeeding among Mothers in Selected Pediatric Clinics at Chennai

A.Parimala[1], Motcharakkini.L[2], Hema V.H[3]

[1]M.Sc.Nursing Student, [2]Associate Professor, [3]Principal, Facultyof Nursing, Dr, M.G.R Educational and Research Institute, Chennai

Absract

Introduction: Breast feeding is considered as the pivotal factor between life and death for the vast majority of children in developing countries, but pattern of breast feeding and exclusive breast feeding is more important, which is ignored often by most mothers. **Aims & Objectives**: To assess the knowledge, and Practice of Exclusive Breast feeding among Mothers in selected pediatric clinics at Chennai. **Methodology:** A quantitative descriptive research design was adopted and samples are selected by purposive sampling technique. The data was collected by self-administered questionnaire and data analysis was done by descriptive and inferential statistics. **Result**: The study revealed that most of the mothers 46(46%) had moderate knowledge, 36(36%) had adequate knowledge and18 (18%) had inadequate knowledge of exclusive breast feeding among mothers and also most of the mothers 52(52%) had moderate practice, 40(40%) had inadequate practice and 8(8%) had adequate practice of exclusive breast feeding among mothers. In demographic variable education of mother (x=18.841,p=0.004) had shown statistically significant association with level of knowledge of exclusive breast feeding among mothers at p = 0.05 level **Conclusion**: The results concluded that a substantial positive correlation between knowledge and practice of exclusive breast feeding among women which clearly infers that when the knowledge of exclusive breast feeding among women increases their practice level also increase.

Keywords*: Exclusive breast feeding, Knowledge, Practice, Primi Mothers, Adequate, Inadequate Knowledge*

Introduction

There is no substitute for mother's love; There is no substitute for Mother`s milk."

-William Gouge

Breastfeeding is a well-recognized and prescribed intervention for improving a child's nutritional status. Breast feeding, particularly exclusive breastfeeding, and appropriate complementary feeding practices are widely recognized as vital components for infants' healthy growth and development, as well as the prevention of childhood illness[12]. Breast milk is

Corresponding author:

A.Parimala,

Faculty of Nursing, Dr.M.G.R. Educational and Research Institute, Velappanchavadi,Chennai – 600077, Tamil Nadu, India.

Email: parimalamarbin@gmail.com

Tel: 8220592716

not only the best for infants, but it is also needed[16]. Lack of breast feeding, especially exclusive breast feeding within the first few months of life, is critical because it lowers the risk factors for infant mortality and morbidity. According to the World Health Organization, increased breast feeding will save the livesof1.5millioninfants per year[1].

Breastfeeding exclusively is described as starting breastfeeding immediately after birth and not giving the baby any other solid food (including water) (GEAG ETAL., 2015, Singh et al.,2018). Breast milk is in expensive, always available, hygienic, and delivered at the proper temperature for the infant[7]. Breast feeding exclusively is beneficial to the growth of immunity as well as the infant's physiological and psychological development (Nkirigacha et al., 2016, WHO, 2013)[4].Breast milk also helps to postpone the return of fertility and lowers the risk of breast and ovarian cancer(WHO,2013)[1].

Background

Breastfeeding exclusively decreases child infection and mortality, increases mental and motor growth, and protects against obesity and metabolic diseases later in life (Horwood et al., 2001;Jones et al., 2003; Langley Evans, 2009)[9].According to epidemiological evidence, exclusively breastfeeding for the first six months boosts a baby's immune system and protects them from acute respiratory infections and diarrhea, the two leading causes of child mortality in developing countries (Cai et al., 2012; UNICEF, 2006)[5] According to estimates, 22 percent of infant death scan be avoided if breastfeeding begins within the first hour of birth, and 16 percent can be avoided if breast feeding begins within the first 24 hours (Massonetal.,2013)[15].

Need for the Study

Exclusive breastfeeding (EBF) is not optimally implemented world-wide. Estimates indicate that 42% of infants are exclusively breastfed globally[11]. In Sub –Saharan Africa (SSA), the setting with highest prevalence of infant and child mortality, sub optimal breastfeeding practices are common only 36% of SSA infants are exclusively breastfed[6]. In Tanzania, the Demographic Health Survey indicates that only 59% of infants are exclusively breastfed[3]. It has been estimated that exclusive breast feeding for the first six months could reduce more than 800,000 infant mortality[2]. Exclusively breastfed children are at lower risk of infection from diarrhea and acute respiratory infection (ARI) than infants who are mix fed in the rest six months of life. Diarrhea and ARI are the two major causes of child mortality in low and middle income countries, contributing 33% of the 6.9 million deaths occurring each year globally[7]. Exclusive breastfeeding (EBF) has also been shown to reduce mother-to-child HIV transmission compared to formula feeding[14].

Materials and Methods

Research Setting

The setting is the location where the study is conducted. The study was conducted in selected pediatric clinics, at Chennai. This setting is selected because of availability of the samples, feasibility of conducting study.

Population

The population referred to is the target population, which represents the entire group or all the elements like individuals or objects that meet certain criteria for inclusion in the study.

In this study population refers to all the Primi Mothers having children with the age of 6 months to 2 years attending Pediatric Clinics.

Sample

The term "sample" refers to a subset of the population that has been chosen to take part in the research.

Primi mothers having children with 6 months to two years of age attending Pediatric Clinic at Porur & also who satisfied the inclusion criteria.

Sample Size

The sample size for this research consisted of 100 Primi mothers who had exclusively breastfed their children between the ages of six months to two years of age.

SAMPLING TECHNIQUE

Purposive sampling technique is used in this study

SAMPLING CRITERIA

Inclusion criteria

- Breast feeding primi mothers who had children between the age 6months-2years.
- Primi mothers who gave consent to take part in the study.
- Primi mothers who can read self-administered questionnaire

Exclusion criteria

- Breast feeding mothers having children with medical conditions that prevented the practice of EBF such as Galactocemia.
- Primi mothers who were unwilling to participate.
- Primi mothers who are not present at the time of data collection.

Result

Description of Demographic Variables

In the present study, most of the women, 60(60%) were aged between 26 – 35 years, 78(78%) were Hindus, 68(68%) had college education and above, 67(67%) were housewives, 39(39%) had monthly family income of Rs.15000 – 20000, 51(51%) belonged to nuclear family, 43(43%) had vacuum and forceps delivery, 56(56%) of mothers had 0 – 6 months old child, 60(60%) received information regarding health through paramedical and 66(66%) had received knowledge regarding exclusive breast feeding.

Assess the level of Knowledge and Practice of Exclusive breastfeeding among Mothers.

The present study showed that most of the mothers 46(46%) had moderate knowledge, 36(36%) had adequate knowledge and 18(18%) had inadequate knowledge of exclusive breast feeding among mothers.

Level of Knowledge	Frequency	Percentage
Inadequate Knowledge (≤50%)	18	18.0
Moderate Knowledge (51 – 75%)	46	46.0
Adequate Knowledge (>75%)	36	36.0

The present study showed that most of the mothers 52(52%) had moderate practice, 40(40%) had inadequate practice and 8 (8%) had adequate practice of exclusive breastfeeding among mothers.

Level of Practice	Frequency	Percentage
Inadequate Practice (≤50%)	40	40.0
Moderate Practice (51 – 75%)	52	52.0
Adequate Practice (>75%)	8	8.0

Determine the Relationship between Knowledge and Practice of Exclusive breastfeeding among Mothers.

The study result showed that the mean score of knowledge among women was 19.82±4.93 and mean score of practice was 6.16±1.87. The calculated Karl Pearson's Correlation value of r = 0.338shows a substantial positive correlation between knowledge and practice of exclusive breastfeeding among women which clearly infers that when the knowledge of exclusive breast feeding among women increases their practice level also increases.

Determine the association of Knowledge and Practice of exclusive breastfeeding among Mothers with selected socio demographic variables.

The result showed that the demographic variable education of mother **(x^2=18.841,p=0.004)** had shown statistically significant association with level of knowledge of exclusive breastfeeding among mothers at p<0.01 level and the other demographic variables had not shown statistically significant association with level of knowledge of exclusive breast feeding among mothers.

This study revealed that a substantial positive correlation between knowledge and practice of exclusive breast feeding among women which clearly infers that when the knowledge of exclusive breastfeeding among women increases their practice level also increase. It is recommended that education of mother is necessary to increase their practice level.

Discussion

The study showed that most of the mothers 46(46%) had moderate knowledge, 36(36%) had adequate knowledge and 18(18%) had inadequate knowledge of exclusive breast feeding among mothers

The study findings was supported by Sandhya Jagadale (2015) conducted a cross sectional study on 35 Primi mothers to assess knowledge, attitude and practice regarding breast feeding. Samples selected by purposive sampling technique. The study found that11(31. 42%) having good knowledge, 22 (62.85%) having average knowledge and 2 (5. 71%)having poor knowledge and 19 (54. 28%) mothers were not using knowledge of practice forgiving breast feeding to new born baby.The study concluded that Majority of 60% mothers having good knowledge of breast feeding but they were not practicing the knowledge of breastfeeding.

The present study showed that most of the mothers 52(52%) had moderate practice, 40(40%) had inadequate practice and 8 (8%) had adequate practice of exclusive breastfeeding among mothers.

The study also supported byGetchew Arage (2016) in aCommunity based cross-sectional study to assess the prevalence of exclusive breast feeding practice and its associated factors among infants, Simple random sampling technique was used among 470 mother-infant pairs. The finding revealed that out of 470 mother-infant pair's samples, 453were included in the final analysis. The study concluded that a small proportion of infants are exclusively breastfed during the first 6 months. Promoting institutional delivery, revising the leave after birth, advice and counseling pregnant mothers about EBF, and enabling every mother to encourage colostrum feeding were recommended in order to increase the proportion of women practicing exclusive breastfeeding.

The study result shows that the mean score of knowledge among women was 19.82±4.93 and mean score of practice was 6.16±1.87. The calculated Karl Pearson's Correlation value of r = 0.338shows a substantial positive correlation between knowledge and practice of exclusive breastfeeding among women which clearly infers that when the knowledge of exclusive breast feeding among women increases their practice level also increases.

The study was supported byRuth NimotaNukpezah (2018)a descriptive cross-sectional study conducted in mother-infant pairs attending child welfare clinics from three health facilities in the Tamale Metropolis. It was surveyed in 393 mothers-infant pair's. This study was aimed at assessing the knowledge and practice of exclusive breast feeding. The study revealed that 39.4% initiated breastfeeding within one hour after birth. Majority of participants had heard of EBF 277 (70.5%), about 344 (87.5%) of participants believed that EBF should be practiced for 5 months in their locality. The study conclude that all the participants had some level of education background, a majority did not have adequate knowledge on EBF and EBF practice was low in the study community. They have suggest improved education at the child welfare clinics and the media should be used as a platform to educate women adequately about importance of EBF.

The result shows that the demographic variable education of mother **(x^2=18.841,p=0.004)** had shown statistically significant association with level of knowledge of exclusive breastfeeding among mothers at $p<0.01$ level and the other demographic variables had not shown statistically significant association with level of knowledge of exclusive breast feeding among mothers.

The study also supported by Dipen.V.Patel(2015), on Breast feeding Practices, Demographic Variables, and their Association with Morbidities in Children among 781 mothers in Gujarat,The result revealed that More than half of mothers (57.5%) started feeding within an hour of birth, 55.9% gave exclusive breastfeeding for six months, 89.1% of the mothers stopped breastfeeding before two years of age, 18.2% of the mothers bottle-fed the babies, and 15.6% had problems during breastfeeding in first 6 months. Early initiation of breastfeeding within one hour of birth promoted exclusive breastfeeding and breastfeeding for longer duration. Exclusive breastfeeding increased frequency of feeds. Multivariable logistic regression showed that initiation of breastfeeding after an hour of birth (p = 0.035), not providing exclusive breastfeeding for 6 months (p < 0.0001), unemployed mothers (p = 0.035), having two or more

kids (p = 0.001), and complementary feeds given by person other than mother (p = 0.007) increased hospitalization. Starting breastfeeding after an hour of birth (p = 0.045), severe malnutrition (p = 0.018), and breastfeeding for < two years (p = 0.026) increased rates of diarrhea. Breastfeeding practices were not optimum and interventions to improve these practices need to be strengthened. This study conclude that maternal illiteracy has been associated with suboptimal feeding practices. Maternal education plays a huge role in increasing the receptivity of mothers towards correct practices. Lower literacy in mothers, in addition to lack of knowledge about correct practices and recommendations, makes routine counseling by community health workers also ineffective.

Conclusion

The study concluded that to assess the knowledge and practices of exclusive breast feeding among mothers. The results concluded that a substantial positive correlation between knowledge and practice of exclusive breast feeding among women which clearly infers that when the knowledge of exclusive breastfeeding among women increases their practice level also increase. Thus the investigator concluded that educational module is effective in improving the knowledge and practice of exclusive breast feeding.

Conflict of Interest: The authors have no conflict of interest regarding the investigation.

Source of Funding : Self Funding.

Ethical Clearance: Ethical clearance is obtained from the ethical committee of A.C.S Medical College and Hospital.

Reference

1. Breastfeeding protects against hip fracture later in life. Nature Reviews Endocrinology. 2011;7(11):632– Correction for Cheng et al., KDM4B protects against obesity and metabolic dysfunction. Proceedings of the National Academy of Sciences. 2019;116(6):2384
2. Original Article JHAS 2020; 10(1):24-29 Prevalence of ... [Internet]. [cited 2021Dec9]. Available from: https://pdfs.semanticscholar.org/dd23/1a1a3baeeccb 952720a7ad c8af2049826784.pdf
3. Abeshu MA, Adish A, Haki GD, Lelisa A, Geleta B. Assessment of caregiver's knowledge, complementary feeding practices, and adequacy of nutrient intake from homemade foods for children of 6–23 months in food insecure woredas of Wolayita Zone, Ethiopia. Frontiers in Nutrition. 2016;3.
4. Ben X-M. The benefits of expressed maternal milk and donor breast milk for preventing necrotizing enterocolitis in preterm infants: Systematic review and meta- analysis. Journal of Nutritional Disorders & Therapy. 2012;02(02).
5. Bhatt N. Breastfeeding in India is disrupted as mothers and babies are separated in the pandemic. BMJ. 2020;:m3316.
6. Bjørke-Monsen A-L. Is exclusive breastfeeding ensuring an optimal micronutrient status and psychomotor development in infants? Clinical Biochemistry. 2014;47(9):714.
7. Carberry AE, Raynes-Greenow CH, Turner RM, Jeffery HE. Breastfeeding within the first hour compared to more than one hour reduces risk of early-onset feeding problems in term neonates: A cross-sectional study. Breastfeeding Medicine. 2013;8(6):513–4.
8. Dieterich CM, Felice JP, O'Sullivan E,

Rasmussen KM. Breastfeeding and health outcomes for the mother-infant dyad. Pediatric Clinics of North America. 2013;60(1):31–48.

9. First L. Breastfeeding and improved cognitive/ noncognitive development: Does the effect last post infancy and toddlerhood? Breastfeeding: Support, Challenges, and Benefits. 2018;:108.
10. Furman L. Measuring breastfeeding success. Breastfeeding: Support, Challenges, and Benefits. 2018;:48–9.
11. Infant and young child feeding. 2016; Jang GJ, Hong YR. Effects of a breastfeeding support program on the prevalence of exclusive breastfeeding and growth in late preterm infants. Child Health Nursing Research. 2020;26(1):90–7.
12. LO denise. Low prevalence of exclusive breastfeeding among hospitalized Brazilian infants. 2018;
13. Nanda S, Nanda S. Postpartum care and breastfeeding in gestational diabetes mellitus, benefits for mother and baby. Contemporary Topics in Gestational Diabetes Mellitus. 2015;:263–.
14. Rahman A. Promotion of breastfeeding and evaluation study: A community-based maternal-focused approach to promote exclusive breastfeeding in rural Pakistan. http://isrctnorg/>. 2012;
15. Woldeamanuel BT. Trends and factors associated to early initiation of breastfeeding, exclusive breastfeeding and duration of breastfeeding in Ethiopia: Evidence from the Ethiopia Demographic and Health Survey 2016. International Breastfeeding Journal. 2020;15(1).
16. Woldeamanuel BT. Trends and factors associated to early initiation of breastfeeding, exclusive breastfeeding and duration of breastfeeding in Ethiopia: Evidence from the Ethiopia Demographic and Health Survey 2016. International Breastfeeding Journal. 2020;15(1).