TRENDS IN INFANT FEEDING PRACTICES: UNDERSTANDING MATERNAL CHOICES

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ABSTRACT

There is much controversy between breastfeeding and commercial infant formula. Very often, infant formula has caused ailment and even mortality to infants worldwide – hence the continuous campaign of the World Health Organisation (WHO) and UNICEF, along with other breastfeeding advocates, for mothers to breastfeed their children at least until 6 months of age. Infant feeding practices generally meet the baby's nutritional and immunological needs. This study of infant feeding practices is carried out on a sample of 20 mothers and infant pairs. The objective of the study is to know the feeding practices of mothers, the problems faced by working mothers, and the usage of commercial infant formula instead of breast milk. This study reflects upon the feeding practices among working women and housewives and also about the health status of the mothers.

Keywords: Feeding practice, infant, mothers, breast milk, working women

INTRODUCTION

Infant feeding practices generally meet the baby's nutritional and immunological needs. World Health Organization and UNICEF recommend a global strategy, i.e., early initiation of breastfeeding within one hour of birth and exclusive breastfeeding for the first six months. Supplementary foods that are safe and nutritious are introduced at six months of age, and breastfeeding is maintained until the child is two years old or older. Breastfeeding has a beneficial effect on the health of women.

Breastfeeding helps lose pregnancy weight faster (Kramer & Kakuma, 2012; Baker et al., 2008; Sanusi & Falana, 2013). A study revealed that breastfed women lose 4.4 kilograms in a year, compared to 2.4 kilograms for non-breastfeeding women ($P<0.5$) (Dewey et al., 1993). This underlines the effectiveness of breastfeeding, especially if practiced exclusively in the first six months, in reducing weight gain during pregnancy. Breastfeeding promotes uterine contraction, thereby reducing blood loss after delivery and promoting uterine involution (NRDC, 2005). Breastfeeding reduces the risk of type 2 diabetes and cardiovascular diseases (Davis et al., 2012). It also lowers the risk of breast, endometrial, and ovarian cancers (Labbok, 2001; NRDC, 2005; Centre for Community Child Health, 2006; Huo, Adebamowo, 2008; Sule, 2011; Davis et al., 2012). The absence of menstruation due to breastfeeding serves as temporary

contraception for some women (Kuti et al., 2007). According to a World Health Organization (WHO) study, frequent, on-demand breastfeeding is continued until two years of age or beyond. The plan includes six targets, one of which is to increase by 2025 the rate of exclusive breastfeeding for the first six months up to at least 50%. Activities that will help to achieve this include those outlined in the "Global Strategy for Infant and Young Child Feeling", which aims to protect, promote, and support appropriate infant and young child feelings.

Healthy eating was a top priority for expectant moms and mothers with at least one kid under two years old. Still, they either used expert recommendations inconsistently or in a fashion that only partially reflected their understanding of the best child-feeding practices. Although the moms used online and in-person social networks to obtain information about infant feeding, their instincts about what is best for their child were the primary guidance for their decisions. Positive, encouraging messages from reliable medical sources were appreciated, but clinicians were the least often cited source of knowledge on child feeding. A nutritious diet for their children was a top priority for expectant moms and mothers with at least one kid between the ages of 0 and 2. Nevertheless, they either used expert recommendations inconsistently or in a manner that only partially reflected their awareness of the best practices for child feeding. Although the moms used online and in-person social networks to obtain information about infant feeding, their instincts about what is best for their child served as the primary guidance for their decisions. Positive, encouraging messages from reliable medical sources were appreciated, but clinicians were the least often cited source of knowledge on child feeding. These findings can be used by clinicians to help parents make decisions on feeding their young children. Finding the best ways to collaborate with parents and support their efforts to feed their children healthily is crucial, especially in light of the high prevalence of childhood overweight and obesity, the severe short- and long-term physical and mental effects of childhood excess weight, and the significance of early childhood feeding practices on long-term health, body composition, and eating behaviors. (Weber, M. B., Palmer, W., Griffin, M., & Welsh, J. A., 2023)

In order for policymakers and the general public around the world to acknowledge the mounting scientific evidence that breastfeeding is the most evolved and suitable feeding strategy for maximizing the survival, health, and well-being of both mothers and infants, it is necessary to invest in public awareness and education. It is necessary to implement comprehensive health education campaigns aimed at the general public and policymakers in order to dispel misconceptions regarding the similarities between breast milk and commercial milk formula (Pérez-Escamilla, Rafael, et al., 2023).

According to the criteria applied in this analysis, the percentage of Indian infants who were exclusively breastfed for six months increased from 31.3% in the NFHS-4 (2015–16) survey to 43% in the NFHS-5 (2019–2021) survey. Mothers from the scheduled tribe group who gave birth at public health facilities and who got at least four prenatal visits during their pregnancy were more likely to nurse their babies exclusively for up to six months. A lower chance of being exclusively breastfed for up to six months of life was linked to younger women (less than 24 years old), low birth weight (less than 2000 g) babies, higher birth order babies (more than three), and breastfeeding that began more than an hour after birth. There was no relationship between exclusive breastfeeding for six months and the

infant's gender, wealth index, or place of residence (rural or urban). (Reddy N, S., Dharmaraj, A., Jacob, J. *et al.*,2023)

The previous studies have touched on various aspects relating to the feeding practices of mothers, but none of the studies seems to have touched the area relating to awareness regarding the feeding practices and details of the mother's as well as the child's health.

METHODS & MATERIALS

A crucial component of every research is outlining the goal and offering a convincing justification. This allows the work to be placed within the framework of the theory and evidence currently in use, as well as its real-world applications. The goal of the current study, as developed by the researchers, is to determine how breastfeeding troubles are experienced by the mother. Because there are a lot of babies in these two Rampurhat wards, they also looked into the state of feeling practices there. They are particularly interested in working with women and children. The present study helps to understand the feeding practices among working women as well as housewives and health strategies. The major objectives of the study are to know the feeding practices of mothers nowadays, to know the problems faced by working women while breastfeeding, and to explore the usage of commercial infant formula instead of breast milk.

In this study, the researchers adopted an eclectic research design. Eclectic research, better known as mixed method, is defined as a research method that describes the characteristics of the population or phenomenon that is being considered by the researchers.

The research aims to gather information about a large number of people. The present research also follows a survey research design, which helped the researcher to have a clearer understanding of breastfeeding practices.

The researchers conducted the study on the factors affecting the infant feeding practices of mothers in Ward No.- 5 & 7 in Rampurhat. These two wards are adjacent to each other, having mixed communities that consist of working women, partially working women, and housewives. The socio-economic condition of this area is average. The entire population is involved in some kind of livelihood-generating work. So, the people of these two wards are not poor. Some of them have RSBY (Rashtriya Swasthta Bima Yojana) cards and fall under the BPL (Below Poverty Line) category. Most of them have good socio-economic conditions.

The researchers used random sampling and purposive sampling methods for conducting the study by selecting mothers of various ages across these two wards. A purposive sample is a non-probability sample that is selected based on the characteristics of a population and the objective of the study. Purposive sampling is also known as judgmental, selective, or subjective sampling. This type of sampling can be very useful in situations when you need to reach a targeted sample quickly and where sampling for proportionality is not the main concern. A cross-sectional survey was conducted using an interview schedule in English language.

The researchers considered ethics to be the main component in carrying out the entire research. Prior to the data collection, each and every respondent was informed, and researchers collected the data after their consent. The researchers assured the respondents that their data would be confidential and used only for academic research purposes. The researchers tried to avoid personal biases while collecting the data.

RESULTS

Table-1: Sampling outcome

Working Women	7
Partially Working Women	3
Housewives	10
Total	20

Thus, from the above table, we can conclude that the strength of housewives is maximum and the strength of partially working women is minimum.

Table 2: Distribution of monthly income

Categories	No. of Mothers	Percentage
10000 – 30000	5	25
31000 – 60000	5	25
61000 & above	10	50

Thus, from the above table, it can be concluded that the majority of the respondents fall in the category of monthly income of 61000 and above.

Figure 1: Distribution of monthly income

Thus, from the above figure, it can be concluded] that the majority of the respondents fall in the category of monthly income of 61000 and above.

The average age of a child of the respondent in Ward No.- 5 and 7 is 3.7 months, and the median age is 4 months, respectively.

Now, the researchers have considered two sets of mothers from the sample in order to determine the usage of commercial infant formula for their babies.

Table 3: Set A

Mothers	No. of times using commercial infant formula
Mother 1	8
Mother 2	6
Mother 3	4
Mother 4	7
Mother 5	3

The mean, median, and range of using commercial infant formula are 6, 4, and 5, respectively, for set A.

Table 4: Set B

Mothers	No. of times using commercial infant formula
Mother 1	2
Mother 2	1
Mother 3	4
Mother 4	7
Mother 5	8

The mean, median, and range of using commercial infant formula are 4, 4, and 7, respectively, for set A.

Thus, it can be concluded that set A has greater mean usage of commercial infant formula as compared to set B. Both sets have the same median usage of commercial infant formula. The range for set B is more than the range of set A in terms of usage of commercial infant formula.

σ of set A = 1.89

σ of set B = 2.75

The σ of set B is more than the σ of set A. So, we can conclude that the set B mother`s usage of commercial infant formula is more dispersed than set A.

Results from Karl Pearson Coefficient of Correlation

Karl Pearson coefficient of correlation = r

Table 5: Values of variables for Karl Pearson coefficient of correlation

N	Σxy	ΣxΣy	Σx²	(Σx) ²	Σy²	(Σy) ²
20	1805	9782	3170	17956	1289	5329

r = 0.00000319

The correlation coefficient can be interpreted by observing its sign and magnitude. Since r is positive, i.e., >0, it can be concluded that age and frequency of breastfeeding are positively related variables, i.e., as age increases, there is the possibility of increasing breastfeeding. Observing the magnitude, it can be concluded that the correlation exercised between age and frequency of breastfeeding is highly weak.

Thus, from the given situation, it can be concluded that age and frequency of breastfeeding are weakly related variables with a positive relation. The researcher also tried to find out the relationship between the age and frequency of breastfeeding by the mothers. For this, they calculated the Karl Pearson coefficient of correlation, r = 0.00000319

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Establishing the relationship between age and breastfeeding practices

In order to make this study successful, the researcher initially developed two hypotheses to carry forward his research.

H_0 = The Age of women has no influence on breastfeeding practices.

H_1 = The Age of women has an influence on breastfeeding practices.

$\div^2 = 2.52$

Degree of freedom = 1

The table value of $\div^2$ at 5% of the level of significance at 1 degree of freedom is 3.84, and the calculated value of $\div^2$ at 5% of the level of significance at 1 degree of freedom is 21.4. So, the null hypothesis is not accepted, but the research hypothesis is accepted.

Thus, it can be concluded that age has an influence on breastfeeding practices.

DISCUSSION & CONCLUSION

Early initiation of exclusive breastfeeding is important, and improving rates suggest a continuation of efforts in this direction energetically. Continuation of exclusive breastfeeding practice is significantly low with the introduction of animal milk and complementary foods even before six months of age. This study mainly focused on breastfeeding practices, especially for the mother during antenatal and postnatal check-ups. The present study on the factors affecting the infant feeding practices of mothers in Ward No. 5 & 7 under Rampurhat municipality showed that the strength of housewives is maximum and the strength of partially working women is minimum. The majority of the respondents fall in the category of monthly income of 61000 and above. The average age of a child of the respondent in the Ward No. - 5 and 7 are 3.7 months, and the median age is 4 months, respectively. The researchers considered two sets of mothers from the sample in order to determine the usage of commercial infant formula for their babies. Both sets A have greater mean usage of commercial infant formula as compared to set B. Both sets have the same median usage of commercial infant formula. The range for set B is more than the range of set A in terms of usage of commercial infant formula. Since the value of r is positive, i.e., >0, it can be concluded that age and frequency of breastfeeding are positively related variables, i.e., as age increases, there is the possibility of increasing breastfeeding. Observing the magnitude, it can be concluded that the correlation exercised between age and frequency of breastfeeding is highly weak. It also can be concluded that age and frequency of breastfeeding are weakly related variables with a positive relation. The researcher also tried to find out the relationship between the age and frequency of breastfeeding by the mothers. For this, they calculated the Karl Pearson coefficient of correlation, r = 0.00000319. The correlation coefficient can be interpreted by observing its sign and magnitude. Since r is positive, i.e., >0, it can be concluded that age and frequency of breastfeeding are positively related variables, i.e., as age increases, there is the possibility of increasing breastfeeding. Observing the magnitude, it can be concluded that the correlation exercised between age and frequency of breastfeeding level is highly weak.

Thus, from the given situation, it can be concluded that age and frequency of breastfeeding are weakly related variables with a positive relation. From the hypothesis test, it can also be concluded that age has an influence on breastfeeding practices. The information regarding the advantages and

duration of breastfeeding needs to be provided for the community as a whole. Training for the traditional birth attendants and maintaining aseptic precautions with the use of clean delivery kits and community-based health education programme is needed.

REFERENCES

Baker, J.L., Gamborg, M., Heitmann, B.L., Lissner, L., Sorensen, T.I. & Rasmussen, K.M. 2008. Breastfeeding reduces postpartum weight retention. *The American Journal of Clinical Nutrition*. 88(6): 1543-1551.

Davis, S.K., Stichler, J.F. & Poeltler, D.M. 2012. Increasing Exclusive Breastfeeding Rates in the Well Baby Population. *Nursing for Women's Health.* 16(6): 460-470.

Dewey, K.G., Heinig, M.J. & Nommsen, L.A. 1993. Maternal weight-loss patterns during prolonged lactation. *The American Journal of Clinical Nutrition*. 58(2): 162-166.

Huo, D., Adebamowo, C., Ogundiran, T., Akang, E., Campbell, O., Adenipekun, A., Cummings, S., Fackenthal, J. et al. 2008. Parity and breastfeeding are protective against breast cancer in Nigerian women. *British Journal of Cancer*. 98(5): 992-996.

Kramer, M. &Kakuma, R. 2012. Optimal duration of exclusive breastfeeding (Review). The Cochrane Library; 8: 1-40.

Kuti, O., Adeyemi, A.B. &Owolabi, A.T. 2007. Breast-feeding pattern and onset of menstruation among Yoruba mothers of South-west Nigeria. *European Journal of Contraception and Reproductive Healthcare*. 12(4): 335-339.

Labbok, M.H. 2001. Effects of breastfeeding on the mother. Pediatric Clinics of North America. 48(1): 143-158.

Natural Resource Defence Council 2005. Benefit of breastfeeding.

Pérez-Escamilla, Rafael et al. (2023). Breastfeeding: crucially important, but increasingly challenged in a market-driven world. *The Lancet*, Volume 401, Issue 10375, 472 – 485.

Reddy N, S., Dharmaraj, A., Jacob, J. *et al.* (2023). Exclusive breastfeeding practices and its determinants in Indian infants: findings from the National Family Health Surveys-4 and 5. *International Breastfeed Journal*, 18, 69.

Sanusi, R. &Falana, O. 2013. The Nutritional Status of Mothers Practicing Breast Feeding in Ibadan, Nigeria. *African Journal of Biomedical Research*. 12(2): 107-112.

Sule, E.A. 2011. Breastfeeding and breast cancer, a veritable association among Nigerian women? *Continental Journal of Medical Research*, 5 (2): 1 – 5.

Weber, M. B., Palmer, W., Griffin, M., & Welsh, J. A. (2023). Infant and young child feeding practices and the factors that influence them: a qualitative study. *Journal of health, population, and nutrition*, *42* (1).

Conflict of interest: None

Role of funding source: None