Correlation of Feeding Practices and Health Profile of Children

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Abstract

Infants and children are assets of a country. The nutritional status of the infants mainly depends on feeding practices. Breastfeeding has been suggested as an influencing factor which can help in reduction of occurrence of respiratory and gastrointestinal tract infections most often associated with childhood deaths. One hundred and fifty mother-infant dyads were selected by convenience sampling technique. Structured checklists were used to assess the history of feeding practices and past physical illness in children. Physical assessment of children in the form of anthropometric measurements was done. The results of the study revealed that feeding practices had significant negative correlation with physical illness (r = -0.340, p<0.001) in the children. No significant correlation was found between anthropometric measurements of the children and feeding practices of mothers (r = 0.056, p >0.05). Children with good feeding practices had less physical illness as compared to children with average or poor feeding practices. Hence, it is recommended that exclusive breastfeeding must be provided to every child.

Problem statement

A correlational study on feeding practices and health profile of the children visiting well baby clinic at a selected hospital, Ludhiana, Punjab.

Objectives

1. To assess the feeding practices among mothers of the children.
2. To assess the health profile of the children.
3. To find out the relationship of feeding practices with health profile of children.
4. To find the association of feeding practices and health profile of children with selected socio-demographic characteristics.

Literature Review

A retrospective cohort study by Bogen et al (2012) on 73,458 children concluded that breastfeeding was associated with a reduced risk of obesity in white children whose mothers had not smoked in pregnancy.

A cross-sectional study done by Sinhababu et al (2010) on 647 children below 2 years to assess the infant and young child feeding practices in West Bengal revealed that 13.6 percent children were given breastfeeding within one hour of delivery; and 57.1 percent of children were exclusively breastfed. Complementary feeding at 6-8 months of age was started in 55.7 percent children.

Duijts et al (2010) in a prospective cohort study...
study on 4164 children in Netherland concluded that exclusive breastfeeding until the age of 4 months and partially thereafter were associated with a significant reduction in respiratory and gastrointestinal morbidity in infants.

Hengerstermann et al. (2009) conducted a case control study on 399 infants at Philippines. The findings revealed that exclusively formula-fed infants were more likely to be hospitalised for any infection like pneumonia as compared to exclusively breastfed infants.

**Need for study**

Breastfeeding is most important for the health of a child. In some communities, there are certain myths regarding breastfeeding and giving colostrum to newborn. People discard the colostrum and give pre-lacteal feed to the newborn. These practices have a great impact on the health profile of the children.

Despite the known advantages and the awareness created by government and non-government organisations, many mothers still do not practice breastfeeding according to the recommendations.

Hence, the investigator felt the need to conduct a correlational study on feeding practices and health profile of children.

**Methodology**

A correlational design was used to determine the correlation between feeding practices and health profile of the children between 6 months to 2 years of age, visiting well baby clinic at Dayanand Medical College and Hospital, Ludhiana.

The total number of 150 children along with their mothers was included as study sample by convenience sampling technique.

In order to assess the correlation between the feeding practices and health profile of the children, structured checklists were developed and interview schedule was divided into three parts as mentioned below:-

Part A:

i) **Sociodemographic data**;

ii) **Birth History**

Part B: Checklist to assess the feeding practices of mothers

Part C:

i) **Anthropometric measurements**;

ii) Checklist to assess the history of physical illness of the children

The tool was found to be highly reliable and valid. Pilot study was conducted before the main study to assess the feasibility.

After explaining the purpose of the study, verbal consent was taken from the mothers of the children. Ethical clearance for the study was taken from the institutional ethical committee.

**Results**

**Feeding practices:** More than half (52%) of the mothers had good feeding practices, 40.7 percent had average feeding practices and 7.3 percent had poor feeding practices. Almost all of the mothers (97.33%) breastfed their babies and cleaned their breast before breastfeeding. Majority (96%) of the babies were breastfed during sickness. Majority of the mothers (88.67%) gave colostrum to their newborns.

Further, in feeding practices the study revealed that breastfeeding within half an hour or four hours after birth was initiated by less than half (46%) of the mothers. Less than half...
(42%) of the children had received prelacteal feed. More than one-fourth (26.67%) of the children received cow’s/ buffalo’s milk before 6 months of age. Less than one-fourth (24.67%) of mothers exclusively breastfed their babies.

Complementary feeds were started in 18.67 percent children before 6 months of age.

**Anthropometric measurements:** The weight of majority of children (89.33%) was between 3rd - 97th percentiles. The height in 92.67 percent children and head circumference in 87.33 percent children was between 3rd - 97th percentiles. Almost all the children (98.67%) had mid-upper arm circumference of 13.5 cm or more.

**Past physical illness:** Majority of the children (82.67%) suffered from respiratory tract infections in past. Less than two-third (61.33%) children had episodes of diarrhoea in past and more than half (53.33%) of children experienced fever in past.

A statistically non-significant weak positive correlation \( r = 0.056, p>0.05 \) was found between feeding practices and anthropometric measurements of children. A statistically significant negative correlation \( r = -0.340, p<0.001 \) was found between the feeding practices and past physical illness of children. Children with good feeding practices had history of less physical illness as compared to children with average or poor feeding practices.

A statistically significant association was found between the past physical illness and the number of siblings. More the number of siblings more were the past physical illness. Further the study revealed statistically significant association between education of father and past physical illness of children. Children of illiterate fathers had higher scores of past physical illness as compared to the children of educated fathers. A statistically significant association was found between the anthropometric measurements of children and their gestational age at birth. The mean score of anthropometric measurements was higher in term babies.

**Discussion**

A similar study was conducted by Odu & Dotun (2007) on 200 nursing mothers at Nigeria; they found that 18.5 percent of the children suffered from diarrhoea and 10.5 percent suffered from fever in past.

Another study supporting the findings of this study was done by Alarcon ML, Villalpando S & Fajardo A (1997) on 170 mother infant pairs at Mexico. The findings revealed a negative correlation between respiratory tract infections and duration of breastfeeding \( r = -0.17 \) \( p<0.02 \). Similarly a negative correlation was found between diarrhoea and duration of breastfeeding. \( r = -0.17, p<0.02 \).

**Conclusion**

It is concluded that children with good feeding practices had history of less physical illnesses as compared to children of average or poor feeding practices. Hence it is recommended that exclusive breastfeeding for first 6 months must be provided to every child.

**Implications**

1. As breastfeeding protects against various infectious diseases, nurses should educate the ante-natal and post-natal mothers regarding importance of breastfeeding.
2. As majority of deliveries these days are in hospitals, nurses must ensure no pre-lacteal feed are given to neonates.
3. The disadvantage of formula milk / top feed need to be emphasised. There should be more educational programme for general population regarding the importance of breastfeeding.

**References**

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