

Maternal Behavioural Feeding Practices and Under-five Nutrition: Implication for Child Development and Care

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Abstract: Achieving development and improved levels of living with human resources is seriously handicapped by the biological consequences of malnutrition. This therefore underscores the pivotal importance of nutrition as an input to development. The study therefore investigated the breast-feeding, complementary feeding and attitude towards child feeding of 384 women with children between the ages of 0-24 months in Osun State. Analysis of data revealed that only 24% of the women practiced exclusive breast feeding and majority (48.8%) terminate breast feeding because they feel children were old enough at age 12 months. Children were fed only when they are hungry (49.9%) and 89.2% used feeding bottle for feeding. It was discovered that majority (81.3%) of the women have indifferent attitude towards the feeding of their children. Mothers with favourable attitude were only 20% and 3.5% had unfavourable attitude. Positive and significant association also existed between attitude of mothers towards child feeding practices and child's nutritional indicator weight-for-height ($r=0.328$; $p<0.05$). It is therefore recommended that mothers should be intimated with recommended feeding practices and be encouraged to adopt it to achieve optimal nutrition for under-five children as human is the principal agent of development.

Key words: Attitudes, child feeding, mothers, development.

INTRODUCTION

Malnutrition has been responsible, directly or indirectly, for 60% of the 10.9 million deaths annually among children under five. Well over two-thirds of these deaths, which are often associated with inappropriate feeding practices, occur during the first year of life^[4].

Behaviour is at the heart of nutrition and health. The full impact of optimal breastfeeding and complementary feeding, as measured by population level reduction in mortality, morbidity, improved health and development, will never be realized unless women and caregivers adopt recommended behaviours. Recommended behaviours change as an infant or young child grows. WHO defines optimal behaviours in child feeding as exclusive breast feeding for four to six months, breastfeeding with complementary feeding starting at about six months of age and continued breastfeeding in the second year of life and beyond^[3].

Field studies show that complementary foods introduced between four and six months of age replace nutrients from breast milk and confer no advantage on growth or development^[1,2]. As a result, UNICEF and many recommend exclusive breastfeeding for six months. An analysis by the World Health Organization has shown

that infants who receive formula/replacement feeding have a two-fold increased risk of dying in the first six months of life.

Whether or not optimal behaviours are adopted is a result of the interaction of many factors. The closest determinant relate to a woman's choice and her ability to act upon this choice. For optimal breastfeeding and complementary behaviours to occur, a woman must both wish to use them and be able to choose them. The two factors are influenced most immediately by the infant feeding information a woman receives as well as the physical and social support provided to her during pregnancy, child birth and postpartum. These factors are in turn influenced by familial, medical and cultural attitude and norms, demographic and economic conditions (including the resources to grow or purchase needed foods and maternal employment), commercial pressures and national and international policies and norms.

In Peru, the perceived appropriate age for the introduction of complementary foods is related to the caregiver's notion of when the child is ready to eat. This, in turn, is generally viewed in terms of the child's development: the presence of teeth, the "forming of the stomach," the ability to swallow food, or the demonstration of an active interest towards food.

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Recognition of these characteristics varies according to cultural setting. Certain foods are considered more appropriate for small children, such as milk, chicken liver, and, to a lesser degree, egg. The study therefore will examine maternal behavioural pattern of with regards to child feeding.

Objectives of the study: The general objective of the study is to determine maternal attitude towards feeding practices and specific objectives are to

- assess attitudes of mothers about feeding practices
- determine mothers type of attitude on feeding practices of children: and
- determine the effect of maternal attitudes on child nutritional status

Methodology: Data was collected from 384 mothers of children under 2 years of age using structured interview schedules. Interview schedule was designed with the first section addressing breastfeeding and complementary feeding practices of mothers and the second part addressing the attitude of mothers towards child feeding practices. This is the degree to which mothers view some feeding practices as the right thing to do. Respondents were asked to respond Strongly Agree, Agree, Undecided, Disagree, or Strongly Disagree to each of the eleven (11) statements given.

A five-point scale was used to measure attitude index. For Strongly Agree (5 points), Agree (4 points), Undecided (3points), Disagree (2 points)andStrongly Disagree (1point) for positive statements and vice versa for negative statements. The sum of the scores on all the 11 statements was the attitude index per mother. The maximum score was 55 while the minimum was 11.The total score was used to rate a respondent as having a negative or positive attitude toward feeding practices. Scores were classified favourable attitude, indifferent and unfavourable attitude. Scores between 21 and 30 were unfavourable; scores between 31 and 40 were neutral while scores above 40 were regarded as favourable. Weight and height of the children were also measured to the nearest centimeters for height/length and kilogramme for weight and converted to mean Z scores. Nutritional status was further categorized into stunting, wasting and underweight.

RESULTS AND DISCUSSIONS

Pattern of breast-feeding: Data depicted in Figure 1 shows that 76.0% of children were not exclusively breastfedandonly 24% were exclusively breast fed.

Termination breastfeeding: Timing for termination breastfeeding varied widely. Data presented on Fig. 2

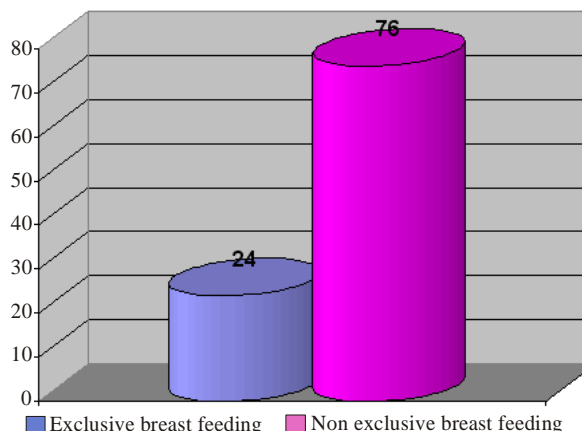


Fig. 1: Percentage distribution of pattern of breast-feeding.

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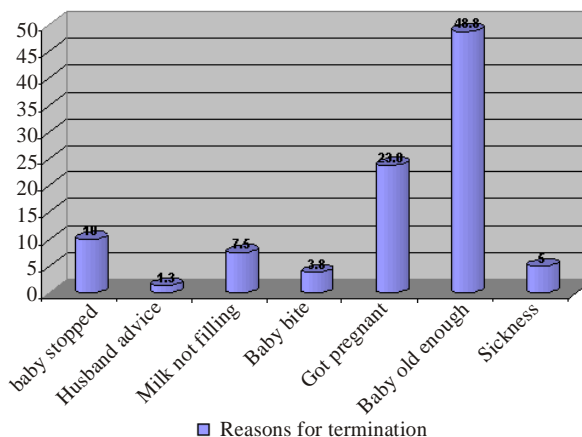


Fig. 2: Distribution of respondents by reasons for termination of breastfeeding

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shows that there were various reasons for termination of breastfeeding of children before the age of 2 years. These reasons were that baby-stopped breastfeeding by him/herself (10.0%). Husbands advised the mother to stop breastfeeding (1.3%), breast milk was not filling (7.5%), baby bites (3.8%), mother got pregnant (23.8%), baby considered old enough (48.8%) and sickness (5.0%).

Complaint about breastfeeding: Data on Table 1 shows that some mothers (19.8%) were of the opinion that breast-feeding is time consuming. Reasons given were that feeding on demand is not an easy task (7.9%), breast fed babies feed too frequently (15.8%) and that it takes

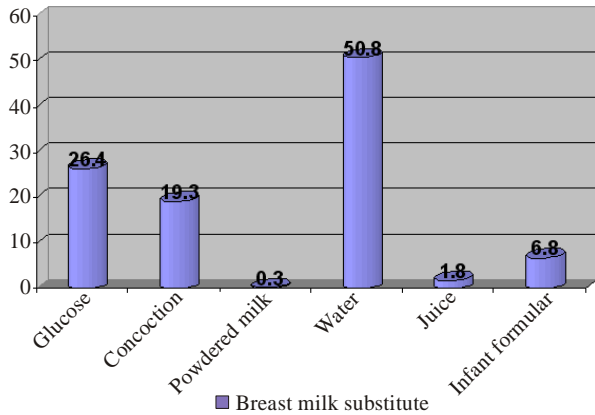


Fig. 3: Percentage distribution of breast feeding substitute
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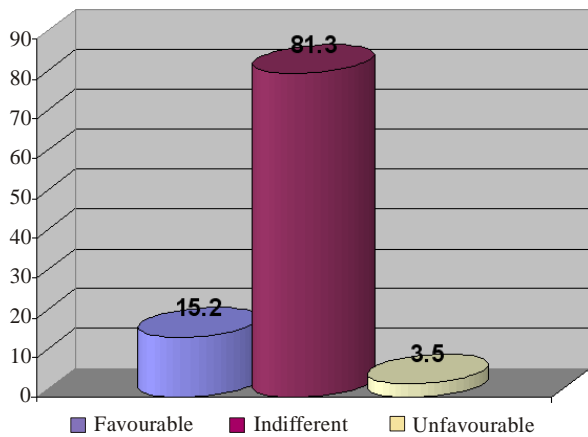


Fig. 4: Attitude of mothers towards child feeding.
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longer time to feed them. However majority of the women (52.6%) felt that there were too many other things to attend to than just breast-feeding.

Breast milk substitutes: As presented on Fig. 3, most of the children receive other things such as glucose (26.4%), concoctions (19.3%), powdered milk (0.3%), fruit juice (1.8%), infant formula (6.8%) and water (50.8%) which was the chief constituent of breast milk.

Age of complementary feeding: Data on Table 2 shows that complementary foods were introduced at different months despite the recommendations to introduce foods between four to six months of age. Some children received complementary foods before 4 months (23.0%), 27% at 4 months (27%), 3.5% at 5 months and majority

Table 1: Frequency distribution of respondent by complaints about breast feeding.

Complaints	Freq.	%
Breast feeding time consuming		
Yes	76	19.8
No	308	80.2
Reasons for time consumption		
Much work to do	40	52.6
Feeding on demand not easy	6	7.9
Takes a long time to feed	18	23.7
Feeding too frequently	12	15.8

Table 2: Frequency distribution of respondents according to complementary feeding practices.

Complementary Feeding Practices	Freq.	%
Age of complementary feeding		
>4	53	23.0
4	62	27.0
5	8	3.5
6	77	33.5
>6	30	13.0
Frequency of feeding		
On request	147	38.4
Feeding time	35	9.1
When mother eats	10	2.6
When baby is hungry	191	49.9
How baby is fed		
Feeding bottle	206	89.2
Plate and spoon	24	10.4
Both	1	0.4

(33.5%) received at 6 months. Others went beyond recommendations to introduce above 6 months (13.0%).

Frequency of feeding: The Data on Table 2 expressed that most babies were fed when they showed signs of hunger (49.9%), while 38.4% were fed on request. Some ate only when mothers were eating (2.6%), while others ate at particular feeding times determined by the mother (9.1%).

How the baby was fed: It is the recommendation of UNICEF that babies should be fed with cups and spoons. Only 10.4% follow this recommendation. Most mothers use feeding bottles (89.2%) for their babies and 0.4% of the mothers use both feeding bottles and cups and spoons (0.4%). This position is however in the urban centers, as presented on Table 3.

Attitude of mothers towards feeding practices: The attitude of mothers towards children feeding practices was studied and analyzed based on their responses to eleven attitudinal statements, which were both positive and negative. As it is presented on Table data shows that most of the women agreed with some of the positive statements. However respondents disagree with the statements cup and spoon should be used in feeding babies complementary food and health worker should develop better complementary foods though the statements have low means scores. Most of the respondents agree with the negative statements as right

Table 3: Percentage distribution of rural mothers reactions to attitudinal statements

Attitudinal statements		SA	A	U	D	SD
1 Exclusive breast feeding is a waste of time	%	23.4	46.9	8.3	8.6	12.8
2 Baby should be given breast milk on request	%	33.6	46.9	2.9	12.0	4.7
3 Complementary foods given to babies' in Nigeria should be improved nutritionally	%	34.1	47.9	12.0	5.2	0.8
4 Health worker should develop better complementary foods	%	16.1	51.0	6.0	13.5	13.5
5 Adult meals are also adequate for young children of any age	%	16.1	51.0	6.0	13.5	13.3
6 Cup and spoon should be used in feeding babies complementary food	%	0.5	5.7	4.9	49.7	39.1
7 Foods prepared ahead of time should be reheated for babies	%	2.6	14.8	7.8	43.8	31.0
8 It is necessary to boil water before drinking	%	33.6	44.8	13.8	6.0	1.8
9 Diarrhoea cannot be prevented	%	8.9	32.0	14.8	32.3	12.0
10 Diarrhoea) episode should not necessarily be treated by a doctor	%	16.9	25.5	13.8	33.3	10.4
11 Concoction is the best treatment for diarrhoea	%	19.0	40.4	13.5	19.8	7.3

except the statement foods prepared ahead of time should be reheated for babies but also the mean is weak.

Data in Figure 1 shows that 13.5% of the respondents had unfavourable attitude towards child feeding practices while 20% have favourable practices A larger percentage of 81.3% had neutral or indifferent attitude.

On location of respondent basis, the proportion of respondent that have unfavourable attitude were more in the rural communities than in the urban communities while the urban counterparts however have a higher proportion of favourable attitude toward child feeding practices.

Attitude towards feeding practices and child nutritional status: Positive and significant association also existed between attitude of mothers towards child feeding and child's nutritional indicator weight-for-height ($r= 0.328$; $p<0.05$).

Breastfeeding is universal in most Nigerian communities, both in rural and urban communities. Rarely, however do mothers follow current standard international recommendations to breastfeed infants exclusively for the first six months.

Attitude of mothers toward feeding of a child is influenced by host of factors such as her knowledge, believes, experiences and information received from different sources about feeding of a child. Belief about appropriate time of initiation of complementary foods varies across culture with earliest incidence of complementary feeding seen in this study when pap is introduced at two months. This will make children calmer at night and sleep more. Mixed feeding also "help" the mother by reducing the time she needs to spend on breastfeeding the child. Mothers do not see it as their

responsibility to source for information about the right food for baby or improvement of present foods for babies. They see it as the responsibility of health workers to develop foods for children and then pass such information to mothers. In Nigeria most research work on complementary foods do not get to mother on time and were not even taught on how to improve babies diet in antenatal clinics. Most ante and postnatal clinic concentrate more on maternal health and talk less on child health. Even when they talk about child health the immunization aspect is emphasized and nutrition is neglected for those that attend ante and post natal clinic. The women at the grass roots were neglected, most of these women practices want they have been taught by mothers of older generation and therefore the reason for higher results of malnutrition. When recommended practices are not adopted by mothers, feeding will be inadequate, complementary foods may be contaminated with the use of feeding bottles, exclusive breastfeeding practices will be low as mothers practices mixed feeding and complain about breastfeeding. These practices then predispose the child to malnutrition and the cycle continues.

Positive and significant association also existed between attitude of mothers towards child feeding practices and child's nutritional indicator weight-for-height. As mothers have right attitude toward child feeding it tends to improve the weight for age of the child, leading to better nutritional status. The full impact of optimal breastfeeding and complementary feeding, as measured by population level reduction in mortality, morbidity, improved health and development, will never be realized unless women and caregivers adopt recommended behaviours.

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