

CHILD FEEDING KNOWLEDGE AND PRACTICES AMONG NURSING MOTHERS IN ADO-EKITI, NIGERIA

Ogunsile Seyi Elizabeth

Department of Human Kinetics and Health Education, Ekiti State University, Ado- Ekiti

Abstract

This study was carried out to assess nursing mothers' child feeding knowledge and practices. Descriptive research design of the survey type was adopted in this study. One hundred and eighty five nursing mothers having babies between 0 and 24 months, randomly selected in two health facilities in Ado-Ekiti, Ekiti State, participated in the study. Self- developed questionnaire was the instrument for data collection. Data were analyzed using frequency counts, percentages, mean, ANOVA and Pearson Product Moment Correlation. All inferences were made at 0.05 level of significance. The mean scores of mothers' knowledge that children who are less than 6 months do not need water and that the ideal time to stop breastfeeding a child is after 2 years, was just a little above average ($M=1.65$, $SD=.48$; $M=1.67$, $SD=.47$) respectively. 93.5% of the nursing mothers breastfeed their babies regularly, 53.3%, 65.1%, 73.2% and 91.0% of the nursing mothers introduced water, infant formula, cereals and solid foods respectively into their babies diet after 6 months. Educational status of mothers had significant influence on mothers' knowledge ($F=3.55$, $P<0.05$). Knowledge of child feeding had significant positive relationship with mothers' practices ($R=.188$, $P>0.05$). There is need for health workers to regularly give nutrition education to nursing mothers so as to enhance their knowledge and practice of child of child feeding.

Keywords: Nursing mothers, child feeding practices, knowledge, breastfeeding

Introduction

The importance of good nutrition during infancy and early childhood cannot be over-emphasized. Adequate nutrition during the first two years of life, through optimal breast-feeding and appropriate complementary feeding practices, supplies the child's body with the right kind of nutrients and energy for good health, helps the children to grow and develop to their full potential and boosts their immunity against childhood infections (World Health Organization (WHO), 2020).

On the other hand, poor nutrition during the early years of life may result in ill-health, bring about delayed mental and motor development (WHO, 2020), increase infant mortality, cause stunted growth and other childhood health problems that could have future health implications. WHO (2009) citing Martorell et al (1994) and Pollit et al (1995), stated that adults who were malnourished in their early childhood may not be able to attain their potential height, may have reduced capacity for work and may have impaired intellectual

capacity (WHO, 2009). In addition, women who were malnourished in early childhood, have increased risk of having low birth weight babies and may have more complicated deliveries (Martin, 2004).

To ensure adequate nutrition of children in the early years of life, the role of mothers is essential. Mothers are the direct care givers of children and are responsible for making provision for the child's feeding. Mothers are the suppliers of breast milk which is considered to be the best and the major source of nourishment for infants especially during the first six month of life (Martin, Ling & Blackburn, 2016). Mothers are also responsible for providing the children with homemade diet to complement breast milk during the early years of life especially between 6 and 24months when breast milk alone can no longer satisfy the children or be enough to provide the babies with necessary nourishment.

It is not enough for mothers to feed their children. It is also important that they know the right kind of nourishment and feed their children with it. Having adequate child feeding knowledge will go a long way in enhancing mothers' child feeding practices (Nukpezah, Nuvor&Ninnoni,2018). Children of mothers with poor child feeding knowledge are likely to suffer malnutrition and have poor health status even when they have

sufficient food and health resources at their disposal. This is because such mothers may not know the importance of variety and the right amount and types of food items needed to provide their children with the required nourishment (Jemide, Ene-Obong, Edet & Udoh, 2016).

It is important that mothers have adequate knowledge of what appropriate child feeding practices entail so as to be able to make the right decisions on issues relating to child feeding. Some of the appropriate feeding practices recommended by expert for children between 0 and 24 months include initiation of breastfeeding within one hour of birth, exclusive breast feeding for the first 6months of life (WHO, 2020), not introducing water, infant formula, tea, juices or semisolids to the baby's diet until after 6months (UNICEF,2020), introducing solid foods to the child's diet after 6months and breastfeeding the child frequently and on demand till after 2 years of age (WHO,2020).

There are many factors that determine how well mother's knowledge and practice of child feeding will be. Maternal educational is one of the most commonly reported determinant factors of child feeding knowledge and practice among nursing mothers. The findings of Fadare, Amare, Mavrotan, Akerele & Ogunniyi (2019) attest to the fact that the

educational status of mothers has significant influence on mothers' knowledge of child feeding. Education enhances literacy which in turn enhances comprehension and understanding of facts. Age of mothers may also be a determinant factor of child feeding knowledge and practice. Young inexperienced mothers may tend to have inadequate knowledge of recommended child feeding practices compared to older mothers.

To ascertain the level of knowledge and practices of mothers in relation to child feeding, it is important to do a thorough assessment from time to time. This will reveal lapses in knowledge and practice and be an eye opener to the need for nutrition education intervention for such mothers. This study was therefore conducted to assess child feeding knowledge and practices with the aim of identifying lapses at which health education intervention could be targeted.

Methodology

The study adopted the descriptive research design. One hundred and eighty

five nursing mothers randomly selected from two health facilities in Ado-Ekiti Nigeria constituted the respondents for this study. The instrument for data collection is a questionnaire designed by the researcher consisting of three sections. The first section of the questionnaire contains items on the demographic attributes of the respondents. Section B consists of 10 items having a "Yes or No" response format to assess mothers' knowledge of child feeding. In this section, the correct response was coded '2' while the incorrect response was coded "1". The third section consists of 8 items having a 4 point rating scale of "Never, "occasionally", "sometimes", "often", to assess complementary food items commonly used by the respondents. One research assistant supported by nursing officials in the two selected health facilities administered the questionnaire to the selected nursing mothers. On the spot collection of instrument was adopted. Data analysis was done using SPSS version 23.0. Analysis was done using descriptive (frequency counts, percentages and mean) and inferential (ANOVA and Pearson Product Moment Correlation) statistics. Statistical significance was set at $P < 0.05$.

Results

Table 1: Demographic Attributes of Respondents (n=185)

Variable		Frequency	%
Age	<18years	5	2.7
	18-45years	173	93.5
	>45years	7	3.8
Educational status	Primary school	6	3.2
	Secondary school	24	13.0
	Diploma certificate	31	16.8
	Bachelor's degree	106	57.3
	Postgraduate	18	9.7
Frequency of breast feeding			
Regularly		173	93.5
	Not Regularly	12	6.5
Intending age for termination of breastfeeding			
	Before 2years	160	86.5
	After 2 years	25	13.5

Table 1 shows that 173 (93.5%) of the respondents were between the age of 18 and 45years and 57.3% had at least a bachelor's degree. Majority (93.5%) of the mothers breastfeed their babies regularly. Only

13.5% of the nursing mothers intend to stop breast feeding their babies after 2years.

Research Question 1: At what age do nursing mothers introduce complementary food items to their babies' diet?

Table 2: Period of Initiation of Complementary Food Items

Food items	N	Before 6months		After 6months	
		Freq	%	Freq	%
Water	92	43	46.7	49	53.3
Infant formula	63	24	34.9	41	65.1
Cereals	71	19	26.8	52	73.2
Solid foods	67	6	9.0	61	91.0

The result presented in Table 2 shows that 53.3%, 65.1%, 73.2% and 91% of the mothers introduced water, infant

formula, cereals and solid foods respectively into their babies' diet before after 6 months.

Research Question 2: What is the knowledge of nursing mothers of child feeding?**Table 3: Mothers' Knowledge of Child Feeding (n=185)**

S/N	Item	Correct		Incorrect		Mean	SD
		Freq	%	Freq	%		
1	Babies should be fed with only breast milk for the first 6 months of life	174	94.1	11	5.9	1.94	.24
2	Children below 6 months do not need to be given water	120	64.9	65	35.1	1.65	.48
3	Breast milk contains all the needed nutrients a baby needs for the first 6 months of life	176	95.1	9	4.9	1.95	.22
4	Breast milk contains enough water a baby needs for the first 6 months of life	161	87.0	24	13.0	1.87	.34
5	Babies under 6 months fed with only breast milk are more healthy than babies fed with infant formula	166	89.7	19	10.3	1.90	.30
6	Breast milk alone cannot satisfy a baby that is less than 6 months	123	66.5	62	33.5	1.66	.47
7	If babies less than 6 months old are not given water, they will be thirsty	133	71.9	52	28.1	1.72	.45
8	The ideal time to introduce semi-solid food to babies diet, is after 6 months	151	81.6	34	18.4	1.82	.39
9	Mothers need to still continue to breast feed their babies even after they have started giving them semisolid foods at 6months	179	96.8	6	3.2	1.97	.18
10	The ideal time to stop breast feeding a child is after 2years	124	67.0	81	33.0	1.67	.47

Table 3 shows that majority of the mothers have correct knowledge of almost all the items related to child feeding assessed. It is further revealed in Table 3 that the knowledge on continuity of breastfeeding, even after semisolid foods have been introduced into the babies diet, ranked best among the mothers (Mean=1.97, SD=.18) followed by their knowledge on the adequacy of breast milk

to supply all the nutrients babies need for the first 6 months of life. The knowledge that babies below 6months do not need water rank least among the mothers (Mean=1.65, SD=.48).

Research Question 3: What are the common complementary foods items used by nursing mothers to feed their babies

Table 4: Complementary feeding practices among children above 6months (n=79)

S/N	How often do you feed your children with the following?	Never (%)	Sometimes (%)	Often (%)	Always (%)	Mean	SD
1	Home made cereals	16 (20.2)	20 (25.3)	12 (15.2)	31 (39.3)	3.36	0.61
2	Ready made instant cereals	12 (15.2)	16 (20.2)	15 (19.0)	36 (45.6)	2.15	1.50
3	Fish	9 (11.4)	9 (11.4)	27 (34.2)	34 (43.0)	2.23	1.50
4	Egg	8 (10.1)	8 (10.1)	28 (35.5)	35 (44.3)	2.31	1.45
5	Solid foods (Staples)	22 (27.9)	22 (27.9)	24 (30.4)	18 (22.8)	2.32	1.43
6	Infant formula	13 (16.5)	11 (13.9)	21 (26.6)	34 (43.0)	2.07	1.45
7	Soyabeans products	25 (31.6)	17 (21.5)	15 (19.0)	22 (22.9)	2.26	1.50
8	Beans products	12 (15.2)	18 (22.8)	24 (30.4)	25 (31.6)	1.94	1.43

Table 4 shows that all complementary food items assessed except bean based food items are used by nursing mothers to feed their babies (using a cutoff point of 2.0). However, the most commonly

used complementary food items are homemade cereals ($M=3.36$, $SD=0.61$).

Hypothesis 1: Age does not have significant influence on mothers' knowledge of child feeding

Table 5: Influence of Age and Educational Status on Child Feeding Knowledge and Practice

Variable		Sum of Squares	df	Mean Square	F	P-value
Knowledge						
Age	Between groups	4.35	2			
	Within groups	662.71	182	2.18	.60	.551
	Total	667.06	184	3.64		
Educational status						
Between groups	Within groups	48.74	4			
	Total	618.32	180	12.18	3.55	.008
		667.06	184	3.44		
Practice						
Age	Between groups	1273.21	2			
	Within groups	65762.34	182	636.60	1.76	.175
	Total	67035.55	184	3.64		
Educational status						
Between groups	Within groups	1222.34	4			
	Total	65813.20	180	305.59	.84	.504
		67035.54	184	385.63		

Table 5 shows that the P-value for the influence of age on mothers' knowledge of child feeding is greater than 0.05. This implies that the influence of age on mothers' knowledge of child feeding is not significant. Hence hypothesis 1 is not rejected.

Hypothesis 2: Educational status of mothers does not have significant influence on mothers' knowledge of child feeding.

Result of data analysis presented in Table 5 shows that the P-value of the influence of educational status of mothers on knowledge of child feeding is less than 0.05 hence hypothesis 2 is rejected. This implies that educational status of mothers has a significant influence on the mothers' knowledge of child feeding. Further analysis revealed that the mothers with bachelor's degree had better knowledge of child feeding than the other mothers.

Hypothesis 3: Age does not have significant influence on mothers' practice of child feeding. Result of data analysis displayed in Table 5 shows that the P-value for the influence of age on mothers' practice of child feeding is greater than 0.05 hence hypothesis 3 is not rejected. This implies that age does not have significant influence on mothers' practice of child feeding.

Hypothesis 4: Educational status of mothers does not have significant influence on practice of child feeding

Table 5 shows that the P-value for the influence of educational status on mothers' practice of child feeding is greater than 0.05. This implies that the influence of educational status on mothers' practice of child feeding is not significant. Hence hypothesis 4 is not rejected.

Hypothesis 5: There is no significant relationship between knowledge and practice of child feeding

Table 6. Relationship between Knowledge and Practice of Child Feeding

Variable	Mean	Std. Deviation	N	R	p-value
Knowledge	18.1459	1.90403	185	.188	.010
Practice	41.6595	19.08726	185		

Result of data analysis displayed in Table 6 shows the P- value for the relationship between knowledge and practice of breastfeeding is less than 0.05 hence hypothesis 6 is rejected. This implies that there is a significant relationship between the mothers' knowledge and practice of child feeding ($r=.188$, $p<0.05$). The positive r value obtained indicates that as the mothers' knowledge of child feeding increases, their practice of child feeding improves.

Discussion

This study was conducted to assess nursing mothers' child feeding knowledge and practices. Findings of this study, unlike that of Berihu, Abera, Berhe & Kidanu (2013), and Demilew (2017), show that most of the nursing mothers have adequate knowledge of recommended child feeding practices. This is highly commendable as this is likely going to motivate the mothers to adopt recommended child feeding practices.

The findings of this study, like that of Dermilew (2017) and Fadare et al (2019), show that the educational status of

mothers had significant influence on the mothers' knowledge of child feeding. Higher maternal education was associated with better knowledge of child feeding. According to Badran (1995), Education is the pre-requisite of knowledge. It entails acquisition of intellectual and manual skills which in turn impacts on behavior. In addition, education improves literacy and helps people to understand their health needs better. It also helps people to comprehend health related information and follow health related instructions (Goldman & Smith, 2020). Increasing emphasis towards women education is therefore likely to make them better equipped for their role as mothers.

Findings of this study show that the knowledge of child feeding had a positive significant relationship with child feeding practices among the nursing mothers. This is an indication that a higher level of knowledge of child feeding was associated with improved child feeding practices among the mothers. This is in line with the submission of Nukpezah et al (2018) that having adequate child feeding knowledge will go a long way in enhancing mothers' child feeding practices.

The findings of this study on the frequency of breastfeeding shows that most of the mothers breastfeed regularly. However most of them indicated their intention to stop breastfeeding before the

age of two years. Although most of the mothers have the knowledge that breastfeeding a child should continue till 2years, not all are willing to pay the sacrifice. This is likely because most nursing mothers have to combine work with nursing a child and may not find it convenient to breastfeed for a long period.

Another interesting finding of this study is that of the period of initiation of complementary foods. Many of the mothers assessed, though having the knowledge of when complementary foods are supposed to be initiated in a baby's diet, still indicated that they initiated foods other than breastmilk to their babies' diet before 6months. It is worthy of note that to ensure healthy growth of children under 2 years of age, child feeding practices regarding the initiation of complementary foods as recommended by UNICEF (2002), must be adopted.

Conclusion

Based on the findings of this study, it can be concluded that mothers have adequate child feeding knowledge but lapses still exist in their child feeding practices.

Recommendations

Based on the findings of this study, the following recommendations were made:

1. Education of the female gender should be encouraged so as to improve their literacy level.
2. Health workers should intensify their effort on the nutrition education of pregnant and nursing mothers so as to enhance their knowledge of recommended child feeding practices.
3. Nursing mothers should be given enough support within the family setting to breastfeed regularly and continue to breastfeed their babies until 2 years of age.
4. Employers should make working conditions conducive for working mothers to adequately nurse their babies

References

- Badran, I.G. (1995). Knowledge, attitude and practice the three pillars of excellence and wisdom: a place in the medical profession. *Eastern Mediterranean Health Journal* 1(1), 1-9.
- Berihu, A., Abera, G.B., Berhe, H.&Kidanu, K. (2013).Mothers' knowledge on nutritional requirement of infant and young child feeding in mekelle, Ethiopia, cross sectional study. *Global Journal of Medical Research* 13(6), 1-13.
- Demilew, Y.M. (2017).Factors associated with mothers' knowledge on infant and young child feeding recommendation in slum areas of Bahir Dar City, Ethiopia: cross sectional study. *BMC Res Notes* 10: 191-197.
- Fadare, O., Amare, M., Mavrotas, G., Akerele, D. &Ogunniyi, A. (2019). Mother's nutrition- related knowledge and child nutritionoutcomes:Empiricalevidence fromNigeria. *PLOS ONE* 14, e0212775.
- Goldman, D.P. & Smith, J.P. (2002). Can patient self-management help explain the SES health gradient? *Proc NatlAcadSci* 16, 10929–10934.
- Jemide, J.O., Ene-Obong, H.N., Edet, E.E. &Udoh, E.E. (2016).Association of maternal nutrition knowledge and child feeding practices with nutritional status of children in Calabar North Local Government Area of Cross-River State, Nigeria.*International Journal of Home Science* 2, 293-298.
- Martin, (2004). Parents' growth in childhood and the birth weight of their offspring. *Epidemiology* 15, 308-316.
- Martin, C.R., Ling, P. 7 Blackburn, G.C. (2016). Review of infant feeding: key features of breastmilk and infant formula. *Nutrients* 8, 1-11.
- Nukpezah, R.N., Nuvor, S.V.&Ninnoni, J. (2018). Knowledge and practice of exclusive breastfeeding among mothers in the tamale metropolis of Ghana.*Reproductive Health* 15, 140-146.
- UNICEF (2020).Feeding your baby when to start with solid foods.Retrieved from <https://www.unicef.org/parenting/food-nutrition/feeding-your-baby-when-to-start-solid-foods>. 27/3/2020.

WHO (2009).The importance of infant and young child feeding and recommended practices. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK148967/> 05/05/2020.

WHO (2020).Infant and young child feeding.Retrieved from <https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding> 27/3/2020.