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Infant Feeding Practices Among Mothers of Children Between 6-24 Months Attending Immunization Clinic at National Hospital Abuja

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Abstract
Background: Adequate nutrition in the first year of life is the main standard for the healthy growth and development of a child. Investigations have revealed that many infants and children do not receive optimum feeding during the first two years of life which directly affects their survival, growth and development. In many countries, less than one in four children aged six to twenty-four months of age do not meet the criteria of dietary diversity and feeding frequency that are appropriate for their age. **Aim**: The study assessed infant feeding practices of mothers of children between the age range of 6-24 months. **Methods:** A descriptive research design was used to conduct the study in the Immunization Clinic of the National Hospital Abuja. An adapted World Health Organization (WHO) questionnaire was used to seek Socio-demographic variables of the mothers, breastfeeding patterns and complementary food consumption patterns of the infants and children in the study location. Data was analyzed using frequency tables and percentages. Chi-square statistics were used to test for relationships among variables. Significance was taken at P< 0.05. **Results:** The findings revealed that out of 210 children studied, 55.7% were male and 43.3% were female. More than half (59.5%) of the mothers were full housewives and the majority of them (97.6%) breastfed their children and there was no significant relationship between the baby's sex and any breastfeeding practice assessed. The mothers in the study area fed their children only cereal-based complementary foods (grain-based); most of them did not give food from other food groups to their babies. **Conclusion:** In conclusion, a high rate of breastfeeding practice was observed. 97.6% of the breastfeeding mothers had ever breastfed their children and more than half (55.7%) of them gave vitamin/other medicine drops as 48.1% of them gave plain water the previous day, showing that they did not practice predominant feeding, resulting into many children not having access to a variety of foods, which is an indicator of diet quality. Hence, nutrition education and more enlightenment campaigns to the public and study population are imperative.

Keywords: Between 6-24 months of age, Breastfeeding practices, Complementary feeding practices
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Introduction

Nutrition throughout the entire life cycle plays an important role in growth and development, suffice to say that, nutritional stages are ingestion, digestion, absorption, transport, assimilation and excretion (Medicinenet, 2021) and this goes a long way to say that good nutrition is the key to good mental and physical health, more so, eating of a balanced diet is an important part of good health for everyone and according to National Kidney Foundation (NKF, 2019), the kind and amount of food you eat affects the way you feel and how the body works. An adequate diet is one that provides enough nutrients, fibre and calories to maintain health, and nutrient-dense foods are defined as foods that contain many essential nutrients per calorie. Moreover, according to Med.libretexts.org, (2021), a nutrient-dense diet provides the highest level

of nutrients and fibre for the lowest number of calories.

Appropriate feeding practices in the early months and years of life are important to achieve optimal health outcomes, and intellectual and social development, as a child's future is shaped mainly within the first 1,000 days between conception and age two and this is why the World Health Organization recommends exclusive breastfeeding from birth to six months of age, followed by introduction of appropriate complementary foods and continued breastfeeding for up to two years. Furthermore, during infancy and early childhood, inappropriate infant feeding practices, nutrient deficiencies and frequent infections result in underweight and stunting, which affects about 159 million children under five years of age in low and middle-income countries (International Atomic Energy Agency,(IAEA, 2021). World Health Organization (2019) recommends that infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development and health, and posits that early nutritional deficits are linked to long-term impairment in growth and health. And added that malnutrition during the first 2 years of life causes stunting, leading to the adults being several centimetres shorter than his or her potential height. Based on the evidence of the effectiveness of interventions, achievement of universal coverage of optimal breastfeeding could prevent 13.0% of deaths occurring in children less than 5 years of age globally, while appropriate complementary feeding practices would result in an additional 6.0% reduction in under-five mortality. Going forward, the Pan American Health Organization (PAHO, 2014) in its contribution said that infant feeding practices affect the health of both the child and the mother and that feeding practices are an important determinant of children's nutritional status, which is directly related to the risk of becoming sick and dying.

Bhandari *et al*,(2016) in laying credence to WHO,(2019) and PAHO (2014), said that the embryonic stage and early childhood years are the phases of maximum growth and development, coinciding with a period of great susceptibility to the sub-optimal environment with early, as well as, long-term consequences as it is in this context that optimal feeding of infants and young children is critically important. Hence, a healthy diet helps to protect against malnutrition in all its forms, as well as non-communicable chronic diseases (NCDs), such as diabetes, heart disease, obesity, stroke and cancer. Healthy dietary practices start early in life-breastfeeding fosters healthy growth and improves cognitive development, and may have longer-term health benefits such as reducing the risk of becoming overweight or obese and developing NCDs later in life (WHO, 2020). Breast milk is the primary food for young babies; however, breast milk alone is not enough to meet increased nutritional requirements as they grow older. Since these young children continue to grow at a fast rate and may also have undeveloped organs, hence the recommendation of continued breastfeeding in addition to other foods (complementary foods) till they are 18 to 24 months of age (www.feedingminds.org/fmfh/nutritionlessons, (2013).

Regular feeding with the right kind of foods and breast milk to ensure that young children get adequate energy and nutrients for normal growth and development is of vital importance. A baby is supposed to triple its birth weight and increase its length by 50 per cent in the first year of life. Extra high energy and protein nutrients as well as iron and vitamins are especially important to meet the demands of the baby's rapid growth. Preparing foods for children at this age requires special preparation to ensure that the foods are safe, soft and easy to eat and digest, as well as healthful. There is a need to include nutrient-dense foods, such as oil, fruit, vegetables, legumes and animal products in the baby's diet so as to meet the nutritional requirements

of growing babies (www.feedingminds.org/fmfh/nutritionlessons, (2013).

All infants and children have the right to good nutrition according to the "convention on the right of the child". However, limited numbers of children receive nutritionally adequate and safe complementary foods. Greater than 820,000 children's lives could be saved from malnutrition and its related diseases annually among under 5 children, if all children 0-23 months were breastfed adequately (WHO, 2021).

Infant and Young Child Feeding (IYCF) practices directly affect the health, development and nutritional status of children less than two years of age and, ultimately, impact child survival. Improving IYCF practices in children 0-23 months of age is therefore critical to improved nutrition, health and development (UNICEF, WHO, 2021).

Thus, a need to investigate the infant feeding practices of mothers of children between 6-24 months attending the Immunization Clinic at National Hospital Abuja.

Statement of Problem

Feeding children 6-24 months of age on breast milk and other adequate and safe complementary foods is a major problem in developing countries as it affects their survival, growth and development by not allowing them to reach their full potential. Exclusive breastfeeding till the age of 6 months is rare in developing countries and complementary feeding (CF) are introduced at an early stage which is linked to the development of chronic conditions such as childhood obesity, celiac disease, diabetes, and eczema. Improper feeding practices together with a high prevalence of infectious diseases are the main causes of malnutrition during the first 2 years of life (El-Asheer *et al*.,2021).

Justification for Study

In many countries, less than one in four children aged six to twenty-four months of age do not meet the criteria of dietary diversity and feeding frequency that are appropriate and investigations have revealed that many infants and children do not receive optimum feeding during the first two years of life which directly affects their survival, growth and development. In Nigeria and Abuja, especially in Abuja Municipal Area Council, a lot of children within the age bracket of 6-24 months are seen malnourished with stunted growth and other children's diseases like anaemia and kwashioko, and one wonders what actually must cause conditions or illnesses. Hence, this study aimed to find out the Infant Feeding Practices among mothers of children between 6-24 months attending the Immunization Clinic at National Hospital Abuja.

Significance of Study

This study has many dimensions to the assessment of infant feeding practices among mothers of 2-24-month-old children attending the Immunization Clinic in National Hospital Abuja. The study will among other things add to the body of existing knowledge in the health profession, more so, will serve as a baseline for future study. This study in addition to the above, will equip health professionals such as Nurses, Midwives, and Public Health Nurses with the necessary knowledge of the infant feeding practices of mothers with six to twenty-four months children.

Materials and Method

Study Area

The study was conducted in National Hospital Abuja. The Hospital was selected because it's a tertiary hospital where many mothers of under two children receive child welfare services. The Hospital was originally designed to cater for the needs of women and children in Nigeria and their West African sub-region to reduce morbidity and mortality rates and carry out extensive research into the peculiar causes of women and children-related diseases in Africa.

After the recruitment of manpower from home and abroad, the Hospital commenced operations on September 1st, 1999. However, for the vast majority of Nigerians to benefit from the services and modern equipment in the Hospital, the scope of its operation was expanded to accommodate male patients. Initially christened "National Hospital for Women and Children", the National Hospital Abuja, came into effect on May 10th, 2000. The physical structure was constructed by the Arab Contractors and later modified by Julius Berger [Nigeria] Plc. While the medical equipment was supplied and installed by Philips Projects (B.V.).

Phase 1 of the Hospital contains 200 beds, but the Centre presently has 850 beds. A residential estate, with ancillary facilities, has been put in place for the benefit of staff and this provides accommodation for about 120 members of staff and their families

Study Design

A cross-sectional descriptive design was adopted in assessing the Infant Feeding Practices among Mothers of children between 6-24 months attending the Immunization Clinic at National Hospital Abuja, FCT, Abuja.

Study Population

The study population of this study were mothers of 6-24 months children attending the Immunization clinic at National Hospital Abuja.

Sample Size Determination

A suitable size of 200 mothers of 6-24 months children attending the Immunization clinic at National Hospital Abuja was chosen using the Taro Yamane method, $n = N/(1+N(e)^2)$ = where n = Sample size; N = Population under study; e = Marginal error = 5%(0.05); and Confidence Interval = 95%. Thus; $n = 600/(1+600(0.05)^2 = 600/(1+600(0.0025) = 600/(1.5+1.5) = 600/3 = 200$. To make room for attrition and increase representatives, 5% of the calculated sample size was added, bringing the total sample size to 210.

Ethical Consideration

Ethical approval for this study was obtained from the Health Research Ethics Committee of National Hospital Abuja(NHA/EC/049/2021). Permission was also taken from the respondents, and the decision to take part in the study was made voluntary and can withdraw if they wish. They received enough information to enable them to make an informed decision about participating or not and also received assurances that the information obtained from them in this study is entirely and solely for academics has no mischievous intent and will be handled with the utmost confidentiality. Except for the respondents/participants' time spent on the questionnaire and interview, there were no other significant costs associated with the study participants.

Study Instrument

The instrument for this research work was a modified World Health Organization (WHO) questionnaire which sought information such as demographic data, breastfeeding practices and complementary feeding practices of mothers whose children were aged 6 to 24 months in the study location. A systematic random sampling technique was used to select 210 mothers whose children's ages ranged between 6-24 months from the study location according to a random starting point and a fixed periodic interval. This interval called the sampling interval was calculated by dividing the population size of the respondents who were mothers of 6-24 months children by the desired sample size a starting number or integer was chosen and an interval was taken of every nth number, to give a sample size of respondents used for the study.

Reliability of the Adapted Instrument

The reliability of the adapted instrument was tested using a test-retest method. Fifteen questionnaires representing 7.5% of the sample size were distributed to mothers of children between 6-24 months of age attending the Immunization Clinic in Lafia Local Government Area of Nasarawa State. After the pre-test, the respondents were given health education on the subject matter and

advised to come back after one week for a check-up. Then the second test was administered after one week to the same respondents, after harvesting the data, Chronbach alpha (α) using the Statistical Package for Social Sciences (SPSS Version 26) was calculated to test for the reliability/stability of the instrument, and an index value of 0.84 was obtained repeatedly indicating that the instrument was reliable and stable.

Data Analysis

The data collected were analyzed using Statistical Package for Social Science (SPSS, Version 20) Descriptive statistics was used to generate frequencies and simple percentages, while, inferential statistics (Chi-square statistics) was used to test for associations between variables, and level of significance was taken at $p < 0.05$

Results

Table 1: *Breasting Feeding Practices*

Variables	Frequency (n)	Percentage (%)
Has your child ever been breasfed?		
Yes	205	97.6
No	4	1.9
Don't know	1	0.5
Was your child breasfed yesterday during the day or night		
Yes	190	90.5
No	14	6.7
Don't know	6	2.9
Was your baby breastfed in either a spoon, cup or bottle yesterday during the day or night?		
Yes	86	41.0
No	64	30.5
Don't know	60	28.6
Was your child is given any vitamin drops or other medicines as drops yesterday during the day and night?		
Yes	117	55.7
No	86	41.0
Don't know	7	3.3
Was your child given ORS yesterday during the day or night		
Yes	33	15.7
No	165	78.6
Don't know	12	5.7
Plain water		
No response	5	2.4
Yes	102	48.6
No	102	48.6
Don't know	6	2.9
Infant formula such as (cerelac)		
Yes	91	43.3
No	101	48.1
Don't know	18	8.6

Milk such as tinned, powdered, or fresh animal milk		
Yes	85	40.5
No	113	53.8
Don't know	12	5.7
Juice or juice drink?		
Yes	64	30.5
No	135	64.3
Don't know	11	5.2
Clear broth?		
Yes	31	14.8
No	140	66.7
Don't know	39	18.6
Yoghurt?		
Yes	52	24.8
No	139	66.2
Don't know	19	9.0
Thin porridge?		
Yes	34	16.2
No	156	74.3
Don't know	20	9.5
Any other liquids such as gruel?		
Yes	69	32.9
No	131	62.4
Don't know	10	4.8
Any other liquids?		
Yes	69	32.9
No	124	59.0
Don't know	17	8.1
Infant formula such as (cerelac) times		
None	115	54.8
Once	20	9.5
Twice	42	20.0
Thrice	19	9.0
4 times	10	4.8
More than 4 times	3	1.4
Milk such as tinned, powdered or fresh milk?		
None	130	61.9
Once	23	11.0
Twice	33	15.7
Thrice	9	4.3
4 times	10	4.8
More than 4 times	4	1.9
Yoghurt?		
None	167	79.5
Once	23	11.0
Twice	19	9.0
Thrice	1	0.5

Think about when your child woke up yesterday. Did he/she eat anything at that time?		
Yes	183	87.1
No	21	10.0
Don't know	6	2.9

Table 1 shows the breastfeeding practices of the mothers. The table revealed that the majority of the mothers (97.6%) had ever breastfed their children, 1.9% had never breastfed their children and 0.5% of them did not know if they had ever breastfed. Most of the mothers (90.5%) breastfed their babies the previous day, 41% also fed their children breast-milk through other means on the previous day, 55.7% gave their babies vitamin/other medicine drops the previous day,78.6% of the mothers did not give their babies ORS the previous day. The result also showed that 48.6% of the mothers gave their babies plain water the previous day, about 48.1% of the mothers did not give their babies infant formula, 58.8 did not give their babies other milk products, 64.3% of the mothers did not give their babies juice drinks, 66.7% did not give their babies clear broth, 66.2% did not give yoghurts, 62.4% did not feed their children with other liquids such as gruel, while 59% did not feed their babies with any other liquid at all.

The result further revealed that among the mothers, 20% gave their children infant formula twice a day, 9.5%, 9%, 4.8%, and 1.4% gave their children infant formula once a day, three times a day, four times a day and more than four times a day respectively. Also, 15.7% of the mothers gave their children milk twice a day, while 11% gave yoghurt once a day. Further, the majority of the mothers (87.1) claimed their children ate when they woke up in the middle of the night the previous day.

Table 2: *Complementary Food Consumption Pattern*

Variables	Frequency	Percent
Porridge, bread, rice, noodles, or other food made from grains		
Yes	128	61
No	70	33.3
Don't know	12	5.7
Pumpkin, carrots, squash, or sweet potatoes that are yellow or orange inside		
Yes	54	25.7
No	149	71
Don't know	7	3.3
White potatoes, white yams, manioc, cassava, or any other foods made from roots		
Yes	65	31
No	135	64.3
Don't know	10	4.8
Any dark green leafy vegetables		
Yes	53	25.2
No	143	68.1
Don't know	14	6.7
Ripe mangoes, ripe papaya		
Yes	36	17.1
No	155	73.8

Don't know	19	9.0
Any other fruit vegetables		
Yes	67	31.9
No	119	56.7
Don't know	24	11.4
Liver, kidney heart, or other organ, meat		
Yes	35	16.7
No	165	78.6
Don't know	10	4.8
Any meat such as beef, pork lamb, goat, chicken, or duck		
Yes	45	21.4
No	155	73.8
Don't know	10	4.8
Eggs		
Yes	70	33.3
No	133	63.3
Don't know	7	3.3
Fresh or dried fish, shellfish, or seafood		
Yes	44	21
No	160	76.2
Don't know	6	2.9
Any foods made from beans, peas, lentils, nuts, or seed		
Yes	50	23.8
No	151	71.9
Don't know	9	4.3
Cheese, yoghurt, or other milk product		
Yes	55	26.2
No	146	69.5
Don't know	9	4.3
Any oil, fats, or butter, or foods made with any of these		
Yes	40	19
No	160	76.2
Don't know	10	4.8
Any sugary foods such as chocolates, sweets, candies, pastries, cakes, or biscuits		
Yes	34	16.2
No	166	79
Don't know	10	4.8
Condiments for flavour, such as chillies, spices, herbs, or fish powder		
Yes	22	10.5
No	179	85.2
Don't know	9	4.3
Grubs, snails, or insects		
Yes	13	6.2
No	188	89.5
Don't know	9	4.3
Foods made with red oil, ref palm nut, or red palm pulp sauce		
Yes	35	16.7
No	166	79
Don't know	9	4.3
Did your child eat any solid, semi-solid, or soft foods yesterday		

during the day or at night?		
Yes	52	24.8
No	158	75.2
How many times did your child eat solid, semi-solid, or soft foods other than liquids yesterday during the day or at night?		
None	137	65.2
Once	18	8.6
Twice	16	7.6
Thrice	17	8.1
4 times	10	4.8
beyond 4 times	8	3.8
Did your child drink anything from a bottle with a nipple yesterday during the day or night		
Yes	126	60
No	65	31
Don't know	19	9.0

Table 2 shows the result of complementary food consumption patterns for the subjects. From the result, 61% of the mothers fed their babies with grain-based foods, 33.3% of them did not, and 5.7% had no idea if their babies consumed grain-based foods. The result also showed that 71% of the mothers did not give their babies pumpkin, carrots, squash, or sweet potatoes that are yellow or orange inside, 64.3% did not give their babies foods made from roots/tubers, 68.1% did not give any dark green leafy vegetables, 73.8% of the mothers did not give ripe mangoes or ripe papaya, 56.7% did not give any other fruit vegetables to their children. Further, the result showed that 78.6%, of mothers, did not give their babies liver, kidney, heart, or another organ, meat, 73.8% did not give their babies any meat, 63.3% did not give eggs to their babies, 76.2%, of the mothers did not give fresh or dried fish to their babies, 71.9% did not give their babies any foods made from beans, peas, lentils, nuts, or seed, 69.5% did not give their babies cheese, yoghurt, or other milk product 76.2% of the mothers did not give their babies oil, fats, or butter, or foods made them, 79% of the mothers did not give any sugary foods, 85.2% of the mothers did not give their children condiments for flavour (such as chilies, spices, herbs, or fish powder) 89.5% of mothers did not feed their babies with grubs, snails, or insects, and 79% of the mothers did not feed their babies with food made with red oil. Only 24.8% of the mothers did and the remaining 75.2% did not. For those that fed their babies with solid food, 8.6% of the mothers fed them with solid food once a day, 8.1%, 7.6% 4.8% and 3.8% fed them thrice a day, twice a day, four times a day and beyond four times a day with solid food respectively. Also, 60% of the babies drank from a bottle with a nipple the previous day.

Table 3: *Factors Affecting Breastfeeding Practice (Tables Merged)*

		Child's gender			
Mothers' breastfeeding practices	**Not determined N(%)**	**male N(%)**	**Female N(%)**	**P-value**	***r***
Has your child ever been breastfed				0.088	0.118
Yes	2(1.0)	116(55.2)	87(41.4)		
No	0(0.0)	1(0.5)	3(1.4)		
Don't know	0(0.0)	0(0.0)	1(0.5)		

Did your child eat any solid, semi-solid, or soft foods yesterday during the day or at night?				0.421	0.056
No response	1(0.5)	52(24.8)	38(18.1)		
Yes	1(0.5)	30(14.3)	21(10.0)		
No	0(0.0)	35(16.7)	32(15.2)		
Was your baby breastfed in either a spoon, cup or bottle yesterday during the day or night?				0.413	0.057
No response	1(0.5)	30(14.3)	24(11.4)		
Yes	1(0.5)	50(23.8)	35(16.7)		
No	0(0.0)	36(17.1)	28(13.3)		
Don't know	0(0.0)	1(0.5)	4(1.9)		
Was your child is given any vitamin drops or other medicines as drops yesterday during the day and night?				0.943	-0.005
No response	0(0.0)	3(1.4)	1(0.5)		
Yes	2(1.0)	61(29.0)	54(25.7)		
No	0(0.0)	52(24.8)	34(16.2)		
Don't know	0(0.0)	1(0.5)	2(1.0)		

	Mother's education				
Mothers' breastfeeding practices	**No response N(%)**	**Primary to tertiary N(%)**	**No school N(%)**	**P-value**	**r**
Has your child ever been breastfed				0.307	-0.071
Yes	33(15.7)	162(77.1)	10(4.8)		
No	2(1.0)	2(1.0)	0(0.0)		
Don't know	0(0.0)	1(0.5)	0(0.0)		
Did your child eat any solid, semi-solid, or soft foods yesterday during the day or at night?				0.702	0.027
No response	17(8.1)	67(31.9)	7(3.3)		
Yes	11(5.2)	40(19.0)	1(0.5)		
No	7(3.3)	58(27.6)	2(1.0)		
Was your baby breastfed in either a Spoon, Cup, or Bottle yesterday during the day or night?				0.019	0.161
No response	16(7.6)	38(18.1)	1(0.5)		
Yes	12(5.7)	68(32.4)	6 (2.9)		
No	6(2.9)	55(26.2)	3(1.4)		
Don't know	1(0.5)	4(1.9)	0(0.0)		
Was your child given any vitamin drops or other medicines as drops yesterday during the day and night?				0.487	-0.048
No response	0(0.00)	4(1.4)	0(0.0)		
Yes	21(10.0)	87(41.4)	9(4.3)		
No	14(6.7)	71(33.8)	1(0.5)		

Don't know		0(0.0)	3(1.4)	0(0.0)			
			Mother's Age				
Mothers' breastfeeding practices	**No response N(%)**	**20-25 N(%)**	**26-30 N(%)**	**31-35 N(%)**	**36 and above N(%)**	**P-value**	***r***
Has your child ever been breastfed						0.387	0.06
Yes	4(1.9)	35(16.7)	60(28.6)	80(38.1)	26(12.4)		
No	0(0.0)	0(0.0)	3(1.4)	1(0.5)	0(0.0)		
Don't know	0(0.0)	0(0.0)	0(0.0)	0(0.0)	1(0.5)		
Did your child eat any solid, semi-solid, or soft foods yesterday during the day or at night?						0.436	0.054
No response	3(1.4)	12(5.7)	30(14.3)	30(14.3)	16(7.6)		
Yes	0(0.0)	14(6.7)	21(10.0)	15(7.1)	2(1.0)		
No	2(1.0)	9(4.3)	12(5.7)	36(17.1)	9(4.3)		
Was your baby breastfed in either a Spoon, Cup or Bottle yesterday during the day or night?						0.007	0.185
No response	0(0.0)	15(7.1)	22(10.5)	16(7.6)	2(1.0)		
Yes	3(1.4)	12(5.7)	20(9.5)	36(17.1)	15(7.1)		
No	1(0.5)	8(3.8)	19(9.0)	28(13.3)	8(3.8)		
Don't know	0(0.0)	0(0.0)	2(1.0)	1(0.5)	1(0.5)		
Was your child given any vitamin drops or other medicines as drops yesterday during the day and night?						0.845	-0.014
No response	0(0.0)	0(0.0)	2(1.0)	1(0.5)	1(0.5)		
Yes	3(1.4)	20(9.5)	33(15.7)	42(20.0)	19(9.0)		
No	1(0.5)	15(7.1)	28(13.3)	37(17.6)	5(2.4)		
Don't know	0(0.0)	0(0.0)	0(0.0)	1(0.5)	2(1.0)		

				Mother's occupation					
Mothers' breastfeeding practices	**No response N(%)**	**Apprentice N(%)**	**Artisan N(%)**	**Housewife N(%)**	**Civil Servant**	**Trader N(%)**	**Others N(%)**	**P-value**	***r***
Has your child ever been breastfed								0.756	0.022
Yes	3(1.4)	7(3.3)	3(1.4)	101(48.1)	48(22.9)	18(8.6)	25(11.9)		
No	0(0.0)	0(0.0)	0(0.0)	3(1.4)	0(0.0)	0(0.0)	1(0.5)		
Don't know	0(0.0)	0(0.0)	0(0.0)	0(0.0)	1(0.5)	0(0.0)	0(0.0)		
Did your child eat any solid, semi-solid, or soft foods yesterday during the day or at night?								0.043	-0.140
No response	3(1.4)	4(1.9)	3(1.4)	26(12.4)	30(14.3)	14(6.7)	11(5.2)		
Yes	0(0.0)	2(1.0)	0(0.0)	28(13.3)	8(3.8)	4(1.9)	10(4.8)		
No	0(0.0)	1(0.5)	0(0.0)	50(23.8)	11(5.2)	0(0.0)	5(2.4)		
Was your baby breastfed in either a Spoon, Cup or Bottle yesterday during the day or night?								0.702	0.027

No response	0(0.0)	2(1.0)	0(0.0)	30(14.3)	7(3.3)	7(3.3)	9(4.3)		
Yes	3(1.4)	2(1.0)	2(1.0)	45(21.4)	22(10.5)	6(2.9)	6(2.9)		
No	0(0.0)	3(1.4)	1(0.5)	28(13.3)	17(8.1)	5(2.4)	10(4.8)		
Don't know	0(0.0)	0(0.0)	0(0.0)	1(0.5)	3(1.4)	0(0.0)	1(0.5)		
Was your child given any vitamin drops or other medicines as drops yesterday during the day and night?								0.889	-0.01
No response	0(0.0)	0(0.0)	0(0.0)	1(0.5)	1(0.5)	2(1.0)	0(0.0)		
Yes	3(1.4)	7(3.3)	3(1.4)	45(21.4)	33(15.7)	11(5.2)	15(7.1)		
No	0(0.0)	0(0.0)	0(0.0)	58(27.6)	12(5.7)	5(2.4)	11(5.2)		
Don't know	0(0.0)	0(0.0)	0(0.0)	0(0.0)	3(1.4)	0(0.0)	0(0.0)		

P=0.05

Table 3 shows the factors affecting mothers' breastfeeding practices. The result revealed that the babies' sex has no significant relationship with whether the babies have ever been breastfed (P-value = 0.088), whether the children ate solid, semi-solid or soft food the previous day (P-value = 0.421), whether the babies are fed by other means other than their mother's breast (P-value = 0.413) and whether the babies are fed with vitamins and/or other medicine as drops the previous day (P-value = 0/943). The result also revealed that mother education has no significant relationship with whether the babies have ever been breastfed (P-value = 0.307), whether the children ate solid, semi-solid or soft food the previous day (P-value = 0.702), and whether the babies were fed with vitamins and/or other medicine as drops the previous day (P-value = 0.487) while a significant positive but weak relationship existed between mothers' education and whether the babies are fed by other means other than their mother's breast (P-value = 0.019; r = 0.161). More so, there is no significant relationship between mothers' age and whether the babies have ever been breastfed (P-value = 0.387), whether the children eats solid, semi-solid or soft food the previous day (P-value = 0.436), and whether the babies are fed with vitamins and/or other medicine as drops the previous day (P-value = 0.845) while a significant positive but weak relationship existed between mothers' age and whether the babies are fed by other means other than their mother's breast (P-value = 0.007; r = 0.185). Finally, the result revealed that mother's occupation does not have a significant relationship with whether the babies have ever been breastfed (P-value = 0.756), whether the babies are fed by other means other than their mother's breast (P-value = 0.702) and whether the babies are fed with vitamins and/or other medicine as drops the previous day (P-value = 0.889) while a significant weak but negative relationship exists between mother's occupation and whether the children eats solid, semi-solid or soft food the previous day(P-value = 0.043; r = -0.140).

Discussion

Optimal breastfeeding of children under two years of age can prevent under-five mortality in developing countries (Atimati and Adams, 2020). The result of this research revealed that the majority of the mothers included in this study, 205 (97.6%) had ever breastfed their children. This is in line with the work of Adewuyi and Adefemi(2017) who reported 58% and 97.8% in their systematic review of breastfeeding in Nigeria. Most of the mothers (90.5%) breastfed their babies the previous day. This may be attributed to the fact that children depend solely on breast milk as their major source of nutrients at that age, cultural reasons, or the various advocacies for breastfeeding (especially exclusive breastfeeding) in recent times and based on children's demand. Chiejina *et al*, (2017) revealed that 80% of mothers in Nigeria

breastfed their children as many times as the children wanted the breast milk. 41% of the mothers fed their children breast milk through means other than their breast, this may be as a result of different factors, including mothers' work and school schedule, baby's feeding frequency, family and cultural influence etc. The result of the research also showed that more than half of the mothers (55.7%) gave their babies vitamin/other medicine drops as 48.6% of the mothers gave their babies plain water the previous day. However, 53.8 did not give their babies other milk products, 64.3% of the mothers did not give their babies juice drinks, 66.7% did not give their babies clear broth, 66.2% did not give yoghurts, while 59% did not feed their babies with any other liquid at all. This means that most of the mothers in this study did not practice predominant feeding, however, the result of this study did not corroborate the work of Ogbo *et al*, (2015) who reported that the predominant feeding trend had increased in Nigeria in these last few decades. The reason may be because the majority of the mothers are full housewives and therefore optimally breastfeeding their children or because of increased advocacy for exclusive breastfeeding over the years (Kearns *et al*, 2016).

On complementary food consumption patterns, the result of the analysis showed that apart from cereal (grain-based), most mothers do not feed their babies other food groups. The low proportion of mothers feeding their babies with cereal consumption (61%) in this study corroborates the pattern recorded by Olatona *et al*, (2014) who reported 65.9% cereal consumption in their research.

Onah *et al*, (2014) found a relationship between exclusive breastfeeding and maternal educational level, socioeconomic status and the mode of delivery.

Moreover, the analysis of the effect of factors affecting breastfeeding practices such as babies' sex, mothers' education, age and occupation against breastfeeding practices such as whether the babies have ever been breastfed, whether the children ate solid, semi-solid or soft food the previous day, whether the babies are fed by other means other than their mother's breast and whether the babies are fed with vitamins and/or other medicine as drops the previous day, showed that there was no significant relationship between baby's sex and any breastfeeding practice assessed. This may be due to the advocacy and sensitization about breastfeeding that are everywhere. Sen *et al*, (2020) pointed out that health promotion messages regarding breastfeeding may help mothers to improve their breastfeeding knowledge and practices. Breastfeeding mothers in Abuja being an urban community is open to awareness campaigns due to their access to all forms of communication (Ukegbu *et al*, 2011).

This result is similar to the findings of Sen *et al*, (2020) who reported a rapid reduction in gender discrimination in terms of breastfeeding practices in Bangladesh. Furthermore, the result showed that the mother's education does not have a significant effect on all the variables of breastfeeding practices except whether the babies are fed by means other than their mother's breast where the mother's education has a weak positive significant effect (P-value = 0.019; r = 0.161), this may be as a result of the fact that majority of the breastfeeding mothers in this research are educated. Maternal education is a determinant of their access to information on breastfeeding practices. This is in line with the report of Chipojola *et al*, (2020) who both observed that educated mothers tend to have higher odds of practicing bottle feeding. Similarly, maternal age does not have a significant effect on breastfeeding practice variables except whether the babies are fed by means other than their mother's breast where the mothers age has a weak positive significant effect (P-value = 0.007; r = 0.185). Many researchers have similarly ascertained the relationship between maternal age and breastfeeding practices (Sinshaw *et al*, 2015; Kelaye, 2017). However, the report of this

study follows that of Sen *et al* (2020) who observed that mother age has no significant association with early initiation of breastfeeding.

Nevertheless, maternal occupation has no significant effect on breastfeeding practices except on feeding babies with complementary foods (whether the children eat solid, semi-solid or soft food) the previous day. A significant negative weak relationship exists between the mother's occupation and their attitude toward feeding babies with complementary food (P-value = 0.043; r = -0.140). Since the majority of the mothers are full housewives, there is a high tendency that they will not likely feed their babies with complementary foods as much as they are able except in cases where they believe that breast milk is no longer enough for the babies (Setegn *et al*, 2012). Getachew and Haileyesus, (2016) noted that child refusal to take breast milk and mothers returning to work are some of the factors leading mothers to not give breast milk, as well studies have shown that working mothers were more likely to practice bottle feeding compared to non-working mothers (Chipojola, *et al*, 2020) which is consistent with the findings of this survey.

Conclusion
(Now in line with the main aim)

In conclusion, the study has shown that 97.6% of the breastfeeding mothers had ever breastfed their children (a high rate of breastfeeding practice) as the majority of them practised optimal breastfeeding rather than predominant breastfeeding revealing that many of the children never had access to a variety of complementary foods which is an indicator of diet quality.

Recommendation

Nursing mothers should be encouraged to practice predominant breastfeeding. Moreover, there is a need for nutritional education and enlightenment campaigns in order to create more awareness among the study population on the importance of dietary diversity.

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