*Original Research Article*

Practices of Complementary Feeding Amongst Breastfeeding Mothers Attending Immunization Clinics in Makurdi, Benue State

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ABSTRACT

|  |
| --- |
| **Aims:** To assess complementary feeding practices amongst breastfeeding mothers attending immunization clinics in Makurdi, Benue State, with specific objective to determine their knowledge, attitudes and practices of complementary feeding.**Study design:** Cross-sectional descriptive study.**Place and Duration of Study:** Benue State University Teaching Hospital immunization clinic, Benue State Ministry of Health Epidemiological unit immunization Clinic and Benue State Family Support and Planning immunization Clinic, between January and December 2023**Methodology:** We included 108 clients, selected using random sampling technique, by proportional allocation; 20 from BSUTH immunization clinic, 35 from the Benue State Epidemiological clinic and 53 from FSP clinic. Data was collected from respondents, using a well-structured self-administered questionnaire. A pre-testing of our questionnaire was done at the Federal Medical Center immunization clinic Makurdi, using 10 random respondents, before carrying out our actual data collection from our clients. **Results:** Out of 108 respondents, majority 91.7% agreed that they gave additional foods to breast milk. 75.0% said complementary feeding is a good practice. About half 52.8% of respondent cited ≤6 months as the proper age of starting complementary feeding. Majority 98.1% said the type of food given to the child depends on the age, while 94.4% said it’s appropriate to breastfeed alongside complementary feeding. About half 53.7% introduced complementary feeding at 6 months and above; while 33.3% introduced it between 3-5 months, and a few of the respondents 13.0% introduced it between 0 – 3 months.**Conclusion:** In conclusion, the majority of our respondents had good knowledge of complementary feeding, evident by the 91.7% who give complementary food alongside breast milk. Also, a good attitude toward complementary feeding (75.0%) and only 1.9% disagree with the practice of complementary feeding. |

*Keywords: Complementary feeding, Knowledge, Attitude, Practice.*

1. INTRODUCTION

Complementary feeding is the corner stone of child’s nutrition. This involves complementing breast milk or breast milk substitute with other foods, from the age of six months, appropriate for sustaining normal growth and development while breastfeeding continues till two years or beyond1.

Breastfeeding, according to Okeahialam2, offers the best nourishment for a child's optimal growth and maintenance within the first months after birth. After that, it is no more sufficient in terms of both quality and quantity for the child's proper growth and development. Complementary feeding must be done on time, which means that babies should start ingesting meals other than breast milk at the age of six months3.

It should not be done before the age of six months or after the age of six months. It should be sufficient, which means that it should have a good nutritional value. It should be safe during preparation and administration; all measures should be taken to minimize contamination and it should be appropriate meaning that the foods should be in sufficient quantity and texture acceptable to the infant4.

Similarly, Abeshuet al3 stated that complementary foods refer to foods and liquids other than breast milk or infant formulas. They are needed for nutritional and cognitive reasons throughout the second half of the first year of life, as well as to help with the change from breast milk to family foods.

Complementary foods are anticipated to be high in energy density with adequate protein composition, required vitamins and minerals to meet the nutrient needs of the infant. Traditional complementary foods in most cases are made from mono cereal gruel such as millet, guinea corn, maize, sorghum and are deficient in essential amino acids, particularly lysine. A combination of cereal, tuber, vegetables and sea foods in formulating complementary food may help to provide the deficiency inessential amino acids and micronutrients in mono cereal traditional complementary foods4.

Complementary feeding is critical for the proper nutrition of babies and young children since it ensures their growth, health, and development. Appropriate child feeding techniques and parental behaviors have a positive impact on infant and young child growth5.

In most of the countries analyzed, for example, a review of data sets from numerous Latin American countries revealed that adequate breastfeeding and complementary feeding practices were favorably associated with child height-for-age6.

Between the ages of 6 and 23 months, the transition from exclusive nursing to family eating takes place. Many infants begin to suffer from malnutrition at this age, contributing significantly to the high prevalence of malnutrition among children under the age of five years around the world. Complementary foods should be added to the child's diet during this time5.

It is required to bridge the energy, iron, and other important nutrients gap between what is delivered by exclusive breastfeeding and the infant's overall nutritional needs. This gap widens as people become older, necessitating a greater input of energy and minerals, particularly iron, from sources other than breast milk7.

Every year, almost one million Nigerian children under the age of five die, with an estimated 11 million children under the age of five dying worldwide. In Nigeria, an estimated 2 million children suffer from SAM, but only two out of every ten of these children receive treatment. Wasting and stunting are symptoms of dietary insufficiency that occur suddenly or over time. Furthermore, underweight reflects both acute and chronic dietary deficient exposures8.

Stunting, underweight, and thinness were found to be prevalent in 41.6 percent, 18.2 percent, and 20.0 percent of school students in a rural Southeastern Nigerian community9.

Measles, malaria, diarrhea, pneumonia, and other infections are common among malnourished children10. Children who are malnourished and have micronutrient deficiencies early in life have a lifelong deficit in cognitive and physical development, according to research. It has been stated that growth has slowed as a result of a lack of complementary food in terms of quality, quantity, and frequency of meals11.

Globally, 6.9 million children below the age of five years died in 2011, and 33% of these deaths are linked to malnutrition. Nutrition plays a vital role in the development and health of children. Children during the first two years of life are particularly vulnerable to growth retardation, micronutrient deficiencies, and common childhood illnesses such as diarrhoea and acute respiratory infections12, 13.

UNICEF describes the complex causes of malnutrition under two main categories, immediate and underlying causes. Immediate causes of malnutrition are inadequate dietary intake and illness. The underlying causes that lead to inadequate dietary intake and infectious disease include inadequate household access to food, poor health services, unhealthy environments, and inadequate care of children and women14.

1. methodology

**2.1 Research Design**

Cross-sectional, descriptive study was used to analyses the data of variables collected at one given point in time across the sample population; it was used to describe characteristics that exist in the study population. The research design was effective, since it evaluated the knowledge and attitude as well as assessed the practices of complementary feeding amongst the breastfeeding mothers.15

**2.2 Research Area**

The study was carried out at three (3) health facilities in Makurdi, Benue State, Nigeria. The state is located in the North-Central region of the country. Its geographic coordinates are longitude 7° 47’ and10° 0’ East, latitude 6° 25’ and 8° 8’ North.

First facility was the immunization clinic of the Benue State University Teaching Hospital, second was the immunization clinic of the Benue State Ministry of Health Epidemiology unit and the third was Benue State Family Support and Planning immunization clinic.

A pre-test was done to authenticate our questionnaires, at the immunization clinic of Federal Medical Center Makurdi.

**2.3 Sample Size**

A minimum sample size was determined using the formula below:

 (16)

Where;

n= Minimum sample size.

z = Normal deviate at 95% confidence interval.

*P* =National prevalence of timely initiation of complementary feeding= 47.9%17

q = complementary probability of *p*, q= (1-*p*) = 1-0.48 =0.52

d =Absolute precision i.e., degree of precision at 95% confidence interval and is 0.05 (i.e., 5%)

**n** = 1.962 x 0.48 x 0.52

0.0025

=383.5

Therefore, the minimum sample size is 384.

Since the study population is less than 10,000, adjustment for the infinite factor was done using the formula below.

(17)

Where;

 n1 = the sample size after adjusting for the infinite factor.

 n = the original sample size.

 N= the study population.

 n1 = 384

 1+ $\frac{384}{150}$

 n1=108.

Therefore, 108 sample size was used.

**2.4 Sampling Technique**

Multistage Sampling technique was used for the study.

**Stage 1**

Three immunization clinics in Makurdi were selected by convenience sampling technique, considering the feasibility of our study, and the absence of logistic constraints. Thus, BSUTH, Benue State Ministry of Health Epidemiology unit and Benue State FSP clinic was used for the study.

**Stage 2**

We did a pre-test, using Federal Medical Center, Makurdi, to ascertain loop holes in our questionnaires, for possible modification, to enhance our actual study accuracy and time management.

**Stage 3**

We verified the immunization clinic days in our various study areas, to enable us properly plan our strategy for data collection.

**Stage 4**

Selection of the clients/respondents was done by obtaining the list of all the patients attending the various immunization clinics of the hospitals of interest, and numbers were proportionately allotted, to designate specific numbers to be collected from each of the various clinics for the research, using the formula below and questionnaires were subsequently administered to appropriately selected clients.

Number of children per-clinic=

Sample Size (108.00) X No. Breastfeeding Mothers attending immunization clinic

 Sample Frame

Proportionate allocation of respondents is as shown in the table below;

**Table 1:** Proportionate allocation of respondents

|  |  |  |
| --- | --- | --- |
| Hospital | Total Clients Per-clinic (daily) | Total proportionate respondents |
| BSUTH immunization clinic | 40 | 20 |
| Benue State Ministry of Health Epidemiology Unit immunization clinic | 70 | 35 |
| Benue State FSP immunization clinic  | 105 | 53 |

**Brief Discussion of Table:**

The total number of clients attending immunization clinics daily in BSUTH, Epidemiology unit and FSP are 40, 70 and 105 respectively, as shown above. If the total is 215, and the sample size of this study is 108, thus;

If 215 is to 108

Then the respondents’ per-clinic in BSUTH, Epidemiology unit and FSP respectively was calculated as expressed in the formula below,

= Clients X Sample size (108)

 Sample Frame (215)

**2.5 Study Population**

The children undergoing immunization at BSUTH, Epidemiology unit and FSP clinic were used for the study.

**2.5.1 Inclusion Criteria**

All consenting breastfeeding mothers of children brought for immunization within the study area in Makurdi were included into the study.

**2.5.2 Exclusion Criteria**

All non-consenting breastfeeding mothers of children brought for immunization within the study area in Makurdi were excluded, as well as mothers with sick children.

**2.6 Data Collection Tool**

Both self- and interviewer administered questionnaire was used.

**2.7 Pre-testing of Data Tool**

About 10% of sample size questionnaires were prepared and pre-tested at Federal Medical Center Makurdi, and the pre-test was carefully analyzed and corrections subsequently made on the questionnaire, before proper study was conducted; this was to eliminate errors and delays during actual study.

**2.8 Data Collection Procedure**

Data was collected using both self- and interviewer administered questionnaire collection methods; this way, both educated and non-educated clients were properly accounted for.

The purpose of the study was explained to the breastfeeding mothers and an informed verbal consent was obtained from them before there were given the questionnaires to fill. The researchers were around to clarify areas of difficulty in the questionnaire to the respondents. Before retrieval of the questionnaire from each respondent, the completed questionnaires were checked and missing information was returned to the respondents to fill the missing information. Administration of questionnaires was done between 10am-4pm when most respondents were in the clinics.

**2.9 Data Management and analysis**

Data collected was checked for completeness and analysis was done using the statistical package for social sciences (SPSS) version 23. Variables were expressed in tables.

3. results and discussion

**3.1 Results**

The total number of respondents used for the study was 108 and the response rate was 100%, all represented in tables below.

**Table 2: Socio-demographic Characteristic of the Respondents**

|  |  |  |
| --- | --- | --- |
| **Variables** | **Frequency N=108** | **Percent (%)** |
| **Ethnic Group**TivIdomaHausaIgedeOthers | 482712 516 | 44.425.011.1 3.715.1 |
| **Occupation**BusinessFarmingHousewifeCivil ServantsOthers | 38133122 4 | 35.212.028.720.4 3.7 |
| **Educational Level**NonePrimarySecondaryTertiary |  4143060 |  3.713.027.855.6 |
| **Religion**ChristianityMuslim | 9414 | 87.013.0 |
| **Type of Family**ExtendedNuclear | 2385 | 21.378.7 |
| **Age**21-30 years31-40 years41-50 years | 5250 6 | 48.246.3 5.6 |
| **Age at marriage**≤ 2021-2526-30≥31 |  4593213 |  3.754.629.612.0 |
| **Age became pregnant**≤ 2021-30≥31 |  78931 |  6.582.411.1 |
| **Child's Position**1st Child2nd Child3rd Child4th Child5th Child6th Child | 31361810 7 1 | 28.733.317.1 9.3 6.5 0.9 |

**Table 3: Knowledge of Mothers Attending Immunization Clinics in Makurdi, Benue State Regarding Complementary Feeding**

|  |  |  |
| --- | --- | --- |
| **Variables** | **Frequency N=108** | **Percent (%)** |
| **Gives breast milk alongside complimentary feeding**NoYes |  999 |   8.391.7 |
| **The necessity of complementary feeding**NoYes |  4104 |  3.796.3 |

**Table 4: Attitude of Mothers Attending Immunization Clinics in Makurdi, Benue State**

 **Regarding Complementary Feeding**

|  |  |  |
| --- | --- | --- |
| **Variables** | **Frequency N=108** | **Percent (%)** |
| **Complementary feeding is a good practice**AgreeDisagreeStrongly agree | 81 225 | 75.0 1.923.1 |
| **Frequent hand washing and good hygiene practices is important for healthy complementary feeding**AgreeStrongly AgreeDisagree | 61 146 | 56.5 0.942.6 |
| **The proper age of starting additional food other than breast milk**≥ 5 months≤6 monthsI don't Know | 4457 7 | 40.752.8 6.5 |
| **The type of food given to the child depend on age**NoYes |  2106 |  1.998.1 |
| **Type of food given at 6 months when addition food is needed?**NAN/cerelacMashed/formulaPap/AkamuRice and Beans | 12 65535 | 11.1 5.650.932.4 |
| **Give breast milk alongside complimentary feeding**Don't knowYes |  6102 |  5.694.4 |

**Table 5: Breastfeeding Practices of Mothers Attending Immunization Clinics in Makurdi, Benue State**

|  |  |  |
| --- | --- | --- |
| **Variables** | **Frequency N=108** | **Percent (%)** |
| **Daily breastfeeding frequency**1-10 times11-20 timesOn demandNil | 4258 4 4 | 38.953.7 3.7 3.7 |
| **Night breastfeeding frequency**1-5 times6-10 timesNil | 94 8 6 | 87.0 7.4 5.6 |

**Table 6: Complementary Feeding Practices of Mothers Attending Immunization Clinics in Makurdi, Benue State**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **Level** | **Frequency N=108** | **Percent (%)** |
| **Age complementary feeding was introduced**0-2 months3-5 months6 months and above |  | 143658 | 13.033.353.7 |
| **Daily complementary feeding frequency** 1-2 times3-5 timesOn demand |  | 1491 3 | 13.084.3 2.7 |
| **Current complementary foods**NAN/cerelacMashed/formulaPap/AkamuRice and Beans |  | 11 66031 | 10.2 5.655.628.7 |
| **Child feeds from own bow**Eat from family potOwn BowOthers |  | 1987 2 | 17.680.6 1.9 |
| **Child’s food is prepared by**Mother onlyMother or FatherSiblingsOthers |  | 98 2 2 6 | 90.7 1.9 1.9 5.6 |

**3.2 Discussion**

Our research revealed that the respondents were largely from the Tiv ethnic group (44.4%), followed by Idoma (25.0%) and Hausa (11.1%). Meanwhile, 55.6% had a tertiary level of education, with majority falling between the age group of 20-30 years, which is about 48.2%, out of which majority got married between 21-25 (54.6%); this might be due to the fact that women here value early marriage, as well as building a family life. The research done by Kingsley AppiaBimpong et al, which showed that mother’s/care giver’s knowledge of infant feeding recommendations greatly contributes to the practice of complementary feeding; this is because, the older the mother/caregiver, the higher her likelihood of proper complementary feeding practices18.

Similarly, over half (56.5%) of the respondents in this study stopped breastfeeding their child from 18months and above, 37.0% stopped below 9 months, while 6.7% stopped at 12 months; Kingsley AppiaBimpong et al publication also showed that, 68% of the mothers/care givers knew the recommended duration for continued breastfeeding. Regarding the recommended age at which a baby should be given complementary foods, 72% rightly said after 6 months18, which implies adequate general knowledge.

Majority (91.7%) of the respondents gave complementary foods in addition to breast milk, similarly, most (96.3%) of them also agreed that giving additional food with breastfeeding is necessary, both of which implies a good knowledge of complementary feeding. Similarly, research conducted in Kibera informal settlements, where care-givers felt that it was not possible to breastfeed exclusively for the first six months of a child’s age because they felt the breast milk was not sufficient, hence their justification to introduce solid food earlier than 6 months of age19. A study conducted in selected urban areas in Nepal also showed a good knowledge amongst majority (98.7%) of mothers16.

Majority (75%) of respondents, agreed that complementary feeding is a good practice, while 98.1% said the type of complementary food given depends on the age of the child, which is true, but may differ in a few societies, due to ethnical food variations. But this is affected by poverty, as revealed in research conducted in Nairobi informal settlements which showed that poverty contributes the highest percentage to severe acute malnutrition among infants and young children, and that almost all the children admitted to OTP come from the informal settlements19.

When asked how many times (in terms of frequency) should complementary feeding be given, majority (84.3%) said 3-5 times, 13.2% said 1-2 times, while 2.7% said on demand. This shows inadequate knowledge, as infants usually eat in-between meals, in small quantities, which can increase their need for feeding above 3-5 times. As such, designating number of times to feed a child every day, might be defective. This is well captured in a publication by WHO and National Infants and Young Children Feeding Guidelines, which recommends, exclusive breastfeeding in the first six months of life and initiation of appropriate, adequate and safe complementary feeding at 6 months of life while feeding on demand continues till 2 years or beyond17.

Over half (55.6%) of the respondents give their child pap/akamu, 28.7% give rice and beans, while 10.2% give NAN/Cerelac, which implies that not all mothers/caregivers are able to afford NAN (which has high protein constituents), which may be due to poverty. A study done where ccomplementary feeding practices have been reported to be sub-optimal in poor settings; findings from that study in one informal settlement revealed a high (94%) consumption of starchy foods, with very low (9%) consumption of animal source food. This translated to 13.5% and 15.4% of children who attained minimum dietary diversity and minimum acceptable diet respectively19.

4. Conclusion

This study concluded that majority of respondents had good knowledge of complementary feeding, evident by the 91.7% who give complementary food alongside breast milk. Also, a good attitude toward complementary feeding was seen in majority (75.0%), as well, majority (53.7%) were aware that complementary feeding is to be commenced at 6 months and above. However, only a minority (2.7%) know that complementary feeding for infants should be given on demand – which means that as good as the knowledge and attitude of breastfeeding mothers is towards complementary feeding, majority have wrong practices. Therefore, breastfeeding mothers will benefit from government policies geared towards educating them on the need to liberally feed their growing infants after 6 months – by organizing weekly sensitization seminars in immunization clinics around health facilities around communities and low-resource settings.

Ethical approval AND Consent

A letter of introduction, written and signed by the Head of department, was collected from the department of Epidemiology and Community Health, College of Health Sciences, Benue State University, and permission was sought from the officers in charge of the various immunization clinics. As well, the College board for research committee approved an ethical clearance for the study. The respondents were informed about the objective and purpose of the study and verbal consents was gotten from each respondent, before questionnaire administration. Confidentiality was ensured and information gotten was recorded anonymously. There was no significant risk to the participants since no invasive procedure was involved; except for time given.

**LIMITATIONS**

Common limitations like language barriers, inconsistencies in data entry, recall bias amongst others, were avoided by ensuring interpretations was done where necessary, required information in questionnaires were well explained for correct inputs, clients tasked to recall and accurately input data.

**DECLARATION / DISCLAIMER (Artificial Intelligence)**

Author(s) hereby declare that the project titled “Practices of complementary feeding amongst children attending immunization clinics in Makurdi, Benue State,” was carried out by us; and during the generation of our manuscript, NO generative AI technologies such as Large Language Models (ChatGPT, etc) and text-to-image generators have been used.

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Abbreviations

BSUTH: Benue State University Teaching Hospital

FSP: Family Support and Planning

SAM: Severe Acute Malnutrition

UNICEF: United Nations Children’s Fund

OTP: Out-patient Therapeutic Program

NAN: Nestle milk

AI: Artificial Intelligence

**CONSENT**

CONSENT FOR THE STUDY OF **PRACTICES OF COMPLEMENTARY FEEDING AMONGST WOMEN ATTENDING IMMUNIZATION CLINICS IN MAKURDI, BENUE STATE.**

Good day Ma, we are (**ABRAHAM JOSHUA MSONTER**, **ORUM TERTSEGHA CLETUS** and **ABRAHAM OCHANYA OLIVIA**) 600 level medical students from the Department of Epidemiology and community Health of the Benue state University Makurdi, Benue State. We are carrying out a study on, **PRACTICES OF COMPLEMENTARY FEEDING AMONGST WOMEN ATTENDING IMMUNIZATION CLINICS IN MAKURDI, BENUE STATE.**

This study is aimed at finding out knowledge, attitude and practices of complementary feeding amongst women attending immunization clinics in Makurdi, Benue State. Participation in the study is voluntary and any information provided is confidential and will be kept so. You are at liberty to withdraw from this study at any time without any negative consequence.

Your consent indicates that you understand the above conditions of participation in this study, that you have had the opportunity to have your question answered by the researchers and that you agree to participate in this research by filling the questionnaire. It also means that you are aware of the topic.

Thank you.

**QUESTIONNAIRE**

**PRACTICES OF COMPLEMENTARY FEEDING AMONGST CHILDREN ATTENDING IMMUNIZATION CLINICS IN MAKURDI, BENUE STATE**

*This questionnaire is intended to help in the study of the practices of complementary feeding amongst children attending immunization clinics in Makurdi, Benue State. Information given on this questionnaire shall be treated with absolute confidentiality. Names are not required*

**A: SOCIAL DEMOGRAPHIC CHARACTERISTICS**

**(BABY**)

1. Date of birth of child…………………………………………………....
2. Age of child in months ……………………….. ………………………..
3. What was your child’s birth weight …………………………………….
4. What is the order of birth of this child? ………………………………..

**(MOTHER)**

1. What is your age ………………………. (Years)
2. What was your age at marriage....................?
3. At what age did you became first pregnant? ...............................
4. What is your level of education?[ ] Primary [ ] Secondary [ ] Tertiary [ ] None
5. Occupation of mother?a. house wife [ ] b. farming and agriculture [ ] c. Government employee [ ] d. Business [ ] e. others (specify) …………………………………..
6. What is your Family type? a. Nuclear [ ] b. Extended [ ]
7. What is your tribe? Tiv [ ] Idoma [ ] Igede [ ] Others (Specify)………………
8. What is your religion? Christianity [ ] Islam [ ] Others (Specify)………………
9. What is your Marital Status Single [ ] Married [ ] Divorced [ ] Separated [ ] Widowed [ ]Cohabiting [ ]
10. How many people in your family feed from the same pot?.......................
11. What is your family’s source of income? a. Agriculture [ ] b. Government employee [ ] c. Business [ ] d. Others……………………. (you can tick more than one)

**B: GENERAL INFORMATION ABOUT BREAST FEEDING**

1. Has your child had any infection in the past two weeks? a. Yes [ ] b. No [ ] c. Don’t Know [ ]
2. Has your last child ever been breastfed? a. Yes [ ] b. No [ ] c. Don’t Know [ ]
3. When did you start breastfeeding this child? a. The very first day after delivery [ ] b. The second day [ ] c. The third day [ ] d. The fourth day [ ] e. Don’t Know [ ]
4. If breastfeeding began on day one, please indicate the hours after delivery Breastfeeding commenced? a. Within 30 minutes after birth [ ] b. Within one hour after birth [ ] Within two hours after birth [ ] d. Don’t Know [ ]
5. Are you still breastfeeding your child? a. Yes [ ] b. No [ ] If the answer is no, what age did you stop breastfeeding the child? Specify……………………………….. (Months)
6. Do you give water to your child? a. Yes [ ] b. No [ ] c. don’t Know [ ] If 21 is yes, at what age of the child did you start? Specify..................................... (Months)
7. Have you started giving complementary foods to the child? a. Yes [ ] b. No [ ] c. don’t Know [ ] If yes to 22, at what age of the child did you start? Specify ……………………. (Months)
8. Do you give the child breast milk alongside complementary feeding? a. Yes [ ] b. No [ ] c. Don’t Know [ ]
9. On the average how many times do you breastfeed your child in a day? a. Two times [ ] b. Three times [ ] c. Four times [ ] d. Five times [ ] e. Six times [ ] f. Greater than six times [ ] g. Don’t Know [ ]
10. How many times do you breastfeed during the night? ..................................................

**C: KNOWLEDGE OF MOTHERS ABOUT COMPLEMENTARY FEEDING PRACTICES**

1. Is it necessary to give additional food to the breast feeding child? a. Yes [ ] b. No [ ] c. Don’t know [ ]
2. If yes, what is the proper age of starting additional food other than breast milk? a. Before 6 months [ ] b. At 6 months [ ] c. After six months [ ] d. Don’t Know [ ] e. ………..months
3. In your opinion do the type of food given depends upon age of the child? a. Yes [ ] b. No [ ]
4. What type of food should be given at 6 months when additional food other than breast milk starts? a. Soft beans [ ] b. Rice [ ] c. Soft yam [ ] d. Fruits pieces [ ] e. Pap [ ] f. Don’t Know [ ]
5. In your opinion, is it proper to give breast milk alongside complementary feeding? a. Yes [ ] b. No [ ] c. Don’t know [ ]
6. What number of times (frequency) does your child need to fed per day? a. Ones [ ] b. Twice [ ] c. On demand [ ]
7. What quantity of food should be given to your child? a. Large [ ] b. Small [ ] c. Don’t know [ ]
8. How should the food you give to your child be? a. Soft [ ] b. Solid [ ]c. both soft and solidd. Don’t know [ ]
9. Is it necessary to wash hand before preparing food? Yes [ ] No [ ]

If yes, give reasons for 34? (list four reasons)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. If yes, how often do you wash your hands before feeding your child?
2. always [ ] b. sometimes [ ] c. rarely [ ] d. never [ ]
3. Can child face any problem if mother is not careful about giving additional food? Yes [ ] No [ ]
4. If yes, what problem can arise? Indigestion [ ] Vomiting [ ] Diarrhea [ ] Tuberculosis [ ] others (specify) …………………………….. (you can thick multiple options)
5. How can you prevent such problem? Introduction of additional food according to age [ ] Proper amount of additional food [ ] Introduce large amount of additional food [ ] Others……………………………………..
6. Can you list 5 benefits of complementary feeding?

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. List some health problems that can occur to a child when additional food (complementary feeding) is not started at proper age?

Underweight [ ] Inactive child [ ] Short height [ ] others (specify)………………………

1. From where did you get information about additional food? Health institution [ ] Radio, T.V etc[ ] Family members [ ] others (specify)……………..

**D: ATTITUDE OF MOTHERS TOWARDS COMPLEMENTARY FEEDING PRACTICES**

Tick as appropriate

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Questions | Agree | Strongly Agree | Disagree | Strongly Disagree |
| 1. Complementary feeding is a good practice
 |  |  |  |  |
| 1. It is better to do complimentary feeding alongside breastfeeding
 |  |  |  |  |
| 1. Family food can serve as complementary foods
 |  |  |  |  |
| 1. Complementary feeding should be given on demand
 |  |  |  |  |
| 1. A frequent hand washing and good hygiene practice is important for healthy complementary feeding
 |  |  |  |  |

**E: CURRENT PRACTICE OF COMPLEMENTARY FEEDING AMONG MOTHERS**

1. At what age of your child did you introduce addional food to the breast milk of your child? ............ Months
2. How many times per-day do you give the child complementary foods? .............times
3. Are you still breastfeeding your baby? a) Yes b) No
4. What are you giving the child currently as food?
5. Only breast milk b. pap/other semi solid foods only c. family foods and pap/other semi solid foods
6. List all the things you gave your baby yesterday as food.

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. Mention/tick ingredients used in producing your baby’s pap?

|  |  |  |  |
| --- | --- | --- | --- |
| Cereals  | Tubers | Legumes | Others (specify) |
| Maize | Cocoyam | Soy bean |  |
| Millet | Sweet potatoes  | Groundnut |  |
| Sorghum |  |  |  |
| Rice  |  |  |  |

1. Does your child have his/her own bow or eats from family pot? a) Own bowl b) family pot
2. Who prepare food for child?

a. mother b. Father c. siblings d. others (specify) ………………………….