

## **Project Report**

on

## Assessment of Weaning Practice for 6-23 Months Child and the Knowledge of Pregnant and Lactating Mother among the Rural People - a case study of Naogaon Thana in Bangladesh.

## Submitted to

## Dr. Sheikh Mahatabuddin

Head, Department of Nutrition and Food Engineering (NFE)

## Supervised by

Dr. Amir Ahmed

Faculty, Department of Nutrition and Food Engineering (NFE)

## Submitted by

**Oiendrila Baroi** 

ID: 171-34-606

## **Department of Nutrition and Food Engineering**

Daffodil International University

Date of Submission: 29-05-2021

#### LETTER OF TRANSMITTAL

Date: 29 May, 2021 The Head Department of Nutrition and Food Engineering (NFE) Daffodil International University

#### Subject: Submission of Internship Report.

#### Dear Sir,

It is a great pleasure to submit my Project Report, as a partial requirement and a prerequisite for completion of the BSc. in Nutrition and Food Science Program. I believe it is one of my great achievements to pursue and successfully complete my project work under the supervision of **Dr**. **Amir Ahmed**, Associate Head, Department of Nutrition and Food Engineering, Daffodil International University. This report is based on my work entitled "Assessment of Weaning **Practice for 6-23 Months Child and the Knowledge of Pregnant and Lactating Mother among the Rural People - a case study of Naogaon Thana in Bangladesh." I have got the opportunity to work as an intern at icddr,b in the Health System and Population Study Division for four months, under the supervision of <b>Dr. Sabrina Rashid**, Associate Scientist. The concept and the research framework were greatly assisted by both of my supervisors. I have completed my data collection through an interactive procedure by visiting the respondents' house at Noagoan. However, I strongly believe that I have maintained the ethical standard of research and also satisfied the basic research methodology in my project.

I shall be highly obliged if you are kind enough to accept this project report and provide me your valuable judgment. It would be my immense pleasure if you find this report useful and informative to have an apparent perspective on the issue.

Thank you again for your support and patience.

Oiendila Barai

**Oiendrila Baroi** ID:171-34-606 Nutrition and Food Engineering (NFE) Daffodil International University

## **DEDICATION**

This research work is dedicated to my beloved father **Mr. Francis Baroi**, my mother **Ms. Mondira Baroi** and my husband **Mr. Deliush Boidya** who gave me the support and courage to complete this work successfully.

#### LETTER OF RECOMMENDATION

This is to certify that the project report entitled "Assessment of Weaning Practice for 6-23 Months Child and the Knowledge of Pregnant and Lactating Mother among the Rural People - a case study of Naogaon Thana in Bangladesh." has been submitted for assessment to the examination committee by Oiendrila Baroi bearing ID: 171-34-606, Department of Nutrition and Food Engineering (NFE), Daffodil International University (DIU).

I am pleased to declare that this project report is entirely written by the author and all the related works have been conducted by the intern under my strong supervision and observation. This is a piece of original work and has not been submitted or published anywhere for any other purpose.

I strongly recommend the approval of the report by the authority and I also pursue a positive and fair evaluation of this work.

I wish her all the success in life.

Yours Sincerely

Dr. Amir Ahmed Faculty Nutrition and Food Engineering (NFE) Daffodil International University

Dr. Sheikh Mahatabuddin Head of the Department Nutrition and Food Engineering (NFE) Daffodil International University

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#### ABSTRACT

Malnutrition among Bangladeshi children especially in some rural areas remain unacceptably high. The indicators of malnutrition among young children and mothers are directly associated with the behaviors related to feeding practices. Evidence suggests that behaviors need to be changed either at the individual, family or health service provider level if a sustainable change in levels of malnutrition are to be achieved. However, behavioral change is a complex process that requires a clear understanding of current behaviors and the local socio-cultural context that impact these behaviors, and consequently, the nutritional status of women and children. It is anticipated and also evident in some study that they do not know much about weaning or the complimentary food for the children. As well as, child health workers in villages are also not expert in this respect. A household survey involving in-depth interviews and personal observation was conducted, attempting to assess the weaning practice and knowledge of pregnant and lactating mother about weaning and complementary foods. Among 52 families in Naogoan Thana of the Naogoan district only 13.46 % children, whose age is 6-23 months get complementary foods. Except those 7 families other family members and mothers do not know much about this weaning or complementary food. In these family's children eat the same food which is made for the other family members. In this work I also found that most of the village pregnant and lactating mothers does not eat properly. They do not get proper nutrition due to lack of knowledge. Most of the respondents in this case ware illiterate that's why they don't know much about the importance of nutrition. Weaning practice is also inappropriate and inadequate. Although, some initiatives from the government and some NGOs have been taken to educate pregnant and lactating mother about nutritional wellbeing but these endeavors are also found insufficient and irregular. Pregnant women and lactating mothers are still advocated by illiterate family members in terms of nutritional wellbeing in the studied area.

Keywords: Weaning Practice, Breastfeeding, Malnutrition, Bangladesh.

#### **CHAPTER - 1**

#### **1. INTRODUCTION**

Weaning is the cycle of step by step presenting a human baby or other well evolved creatures to what in particular will be its grown-up eating regimen while pulling out the stockpile of its mother's milk. In some culture, weaning advances with the presentation of taking care of the youngster food that has been pre chewed by the parent alongside proceeded breastfeed, a training known as pre mastication. The training was significant all through mankind's set of experiences in that it normally gives a kid an enormously improved protein source notwithstanding forestalling iron insufficiency. Nonetheless, pre masticated food from parental figures of lower financial status in regions of endemic infections can bring about the death of the illness to the kid (WHO, 2015).

How and when to wean a human newborn child is dubious. The American Academy of Pediatrics suggests taking care of an infant just bosom milk for the initial a half year of its life (Onis et al., 2016). Numerous mothers find breastfeeding testing, particularly in present day times when numerous moms need to re-visitation of work moderately not long after the introduction of their child.

The American Academy of Pediatrics, the World Health Organization, the National Health Service Choices UK, and the National Health and Medical Research Council in Australia prescribe holding up until a half year to present child food. Notwithstanding, many infant food organizations market their "stage 1" nourishments to youngsters somewhere in the range of 4-and-a-half-year-old with the insurance that the food is intended to be devoured notwithstanding bosom milk or equation and is only for "practice". These training nourishments are by and large delicate and runny. Models incorporate crushed products of the soil. Certain nourishments are prescribed to be stayed away from. The United Kingdom's NHS suggests retaining nourishments including those "that contain wheat, gluten, nuts, peanuts, nut items, seeds, liver, eggs, fish, shellfish, cows' milk and delicate or unpasteurized cheddar" until a child is a half year old, as they may cause food hypersensitivities or make the infant sick. Nonetheless, proposals, for example, these have been raised doubt about by research that recommends early openness to potential allergens doesn't improve the probability of sensitivities, and at times diminishes it (Onis et al., 2016).

Proof from clinical preliminaries shows that sustenance instruction of relatives about baby weaning rehearses presumably positively affects children's weight and tallness at a year contrasted and ordinary administration of weaning.

Regardless of what age infant food is presented, it is for the most part an extremely muddled undertaking, as small kids don't have the coordination to eat "neatly". Coordination for utilizing utensils appropriately and eating with skill requires a long time to create. Numerous children start utilizing utensils somewhere in the range of 10 and 14 months, however most won't have the option to take care of themselves adequately well until around 2 or 3 years old (WHO, 2015).

Under nutrition remains a major contributor to the global burden of disease. Globally, many women are chronically underweight or suffer micronutrient deficiencies, including anemia during pregnancy (38% of pregnant women globally; 46% and 49% of pregnant women in Africa and South-East Asia, respectively (WHO 2011 & 2015), mostly due to iron deficiency (Stevens et al., 1995 and 2011). Chronic under nutrition among girl's increases risk of inability to achieve full height potential (Onis et al., 2016) and long-term obstetric complications (Dewey et al., 2011) that contribute to high global maternal mortality ratios (216 per 100,000 live births), mostly in developing regions (~99%) with Sub-Sharan Africa sharing the largest burden (66%) followed by Southern Asia (22%) as discussed in Trends in Maternal Mortality (1990-2015). Maternal under nutrition also contributes to intra-uterine growth restriction (IUGR) during pregnancy leading to low birth weight (LBW), babies born small for gestational age (SGA), and thus to neonatal complications and increased risks of death and disability among the surviving children (WHO, 2018). Despite significant progress made since 1990, global under-five child mortality remains high at 43 per 1000 live births, i.e. 16,000 deaths each day (UN IGME, 2015).

More than 3 million (approximately 45%) of all child deaths annually are linked to under nutrition including IUGR, suboptimal breastfeeding, stunting, wasting, and vitamin A or zinc deficiency [Black et. al., 2013). SGA births alone cause more than 800,000 neonatal deaths annually [Bhutan, et. al., 2013). Stunting is also a risk for long-term harms, such as impaired cognition, poor educational performance, and lowered adult productivity and reduced earnings (Onis et al., 2016). Globally, over 159 million under-five children are stunted and 50 million wasted (Bhutan et al., 2013); most (~95%) live in Africa and Southern Asia. Recognizing these relationships, better

nutrition and survival are now central to the sustainable development goals (SDGs). Goal 2 aims to "end hunger and all forms of malnutrition by 2030", and at least 12 out 17 SDGs use nutrition-relevant target indicators (UNICEF, 2014). The World Health Organization's member States have endorsed global targets for improving maternal, infant and young child nutrition by 2025, specifically by improvement of diet and nutrition of both mothers and children to reduce anemia in women, low birth weight, childhood stunting and wasting (WHO, 2014).

Bangladesh has made significant improvement in decreasing mortality rates; maternal mortality rates decreased from 322 in 2001<sup>1</sup> to 170/100,000 live births in 2013 (National Institute of Population Research and Training, 2011), infant mortality rates fell from 87 in 1993 to 38/1000 live births in 2014 (WHO, 2014), and child under-5 mortality rates dropped from 133 in 1993 to 46/1000 live births in 2014. According to National Institute of Population Research and Training, 2011, in spite of considerable progress made in some health indicators, undernutrition remains a serious public health problem in Bangladesh. One in five women (15-49yrs) are undernourished (Eardley et al., 2012) and 42% of all women age 15-49, who have ever been married, are anemic (Abeshu et al., 2016). In 2014, the prevalence of stunting, underweight and wasting among under 5 children were 36%, 33% and 14% respectively (Bangladesh Demographic and Health Survey, 2014). Children also suffered from widespread micronutrient deficiencies. According to the National Micronutrient Survey, (Eardley et al., 2012) the prevalence of subclinical vitamin A deficiency and iron deficiency anemia among preschool children (6-59 months) is 20.5% and 10.7%, respectively. Appropriate infant and young child feeding (IYCF) is an important determinant of nutrition among children. However, only 57% of mother's initiate breastfeeding within the first hour of birth, 55% of mothers exclusively breastfeed their infant under 6 months, 63% of 6-23 months old children are fed at least the minimum number of times and only 23% of mothers give age-appropriate complementary food to their children of 6-23 months of age. (Eardley et al., 2012).

The Enhancing Nutrition Services to Improve Maternal and Child Health (ENRICH) in Africa and Asia is a multi-year, multi-nation program, planning to improve the wellbeing and sustenance

status of moms, newborns and children in select regions of Bangladesh, Kenya, Pakistan and Tanzania. ENRICH is implementing a basket of integrated interventions to simultaneously reduce multiple health burdens in these five countries, including stunting, wasting, anemia, and maternal and child mortality. This program plans to provide interventions to promote integrate and ensure delivery, access and utilization of essential health and basic nutrition services for mothers, pregnant and lactating women, and children under two years of age through employing a gendersensitive approach.

This project can use the existing Government platform to implement 5 major interventions:

- health workforce capacity development
- improvement of Government's health management information system,
- improve micronutrient supply chain management,
- make bio-fortified foods available in the study area and
- develop strategy for behavior change communication through the existing government platform.

This project baseline survey revealed the magnitude of the health and nutrition problems in the program area. The prevalence of stunting, underweight and wasting among under age 5 children in Naogaon were 31%, 21% and 6.5%, respectively. Only 62% of mothers initiated breastfeeding within 1st hour of birth, 70% of mothers exclusively breastfed their infant under 6 months, 89% of 6-23 months old children were fed at least the minimum number of times and only 39% of mothers gave age appropriate complementary food to their children of 6-23 months of age. Although these indicators are better than the national average, there is much scope of improvement. In Bangladesh 46.84% of the village woman (age around 25+) are illiterate and 52.75% male (age above 25) are illiterate.

The majority of the nutrition indicators relate to behaviors that need to be changed either at the individual, family or health service provider level. However, behavior change is a complex process that requires a clear understanding of current behaviors and the local socio-cultural context that impact these behaviors, and consequently, the nutritional status of women and children. Barriers and facilitators for behavior change need to be identified and understood, and communication

strategies be developed using this information. The current formative research is meant to inform the communication strategies for project activities.

#### CHAPTER - 2

#### 2. LITERATURE REVIEW

Motuma Adimasu Abeshu (2016) found on his research that Hand crafted correlative nourishments in Ethiopia depend overwhelmingly on oats and vegetables. Accordingly, the eating regimens have great energy thickness regardless of whether ampleness of day by day energy admission was clashing. Notwithstanding, the eating regimens are low in supplement thickness of micronutrients, including those marked by the WHO as "issue supplements." The weight control plans need creature source food sources just as products of the soil. Admission of micronutrients, for example, iron, zinc, and calcium, from hand crafted correlative nourishments was extremely low (Abeshu et al., 2016)

This paper attempted to survey proposals and works on rotating around corresponding taking care of. Regardless of whether numerous significant territories were covered, the accompanying impediments ought to likewise be noted. To begin with, the survey centers around proposals for full-term youngsters with normal bosom milk consumption and doesn't address necessity for non-breastfed and non-full-term kids. Moreover, due accentuation was given to taking care of practices dependent on hand crafted correlative food sources in agricultural nations, for example Ethiopia (Abeshu et al., 2016)

In this research Eardley, Bishop and Prescott found that 87 examinations were incorporated. Between rater dependability was acceptable (kappa = 0.8). Study system and nature of announcing were poor. The predominance of CAM utilizes differed generally inside and across EU nations (0.3-86%). Commonness information showed considerable heterogeneity random to report quality; along these lines, we couldn't pool information for meta-examination; our report is account and dependent on expressive measurements. Home grown medication was most ordinarily revealed. CAM clients were predominantly ladies. The most well-known purpose behind use was disappointment with customary consideration; CAM was broadly utilized for musculoskeletal issues (Eardley et al., 2012)

Lange, Visalli, Jacob, Chabanet, Schlich and Nicklaus (2013) worked on 203 mothers and were approached to record every food offered to their newborn children from the earliest starting point

of the weaning time frame to the age of 15 months and to score the acknowledgment of every nourishment for the initial 4 introductions. The nourishments were grouped into classifications (for example natural products, vegetables...). The connection between singular attributes (maternal age, training level, equality, parental figure during weaning and newborn child sexual orientation) and elite breastfeeding length, age at the commencement of weaning, age at the presentation of every food classification, number of new food sources presented from all classes and the baby's acknowledgment of every food was examined. At last, the connection between taking care of practices and babies' acknowledgment of new nourishments was dissected.

72 percent of the babies were only breastfed from birth for a middle length of 68 days. Overall, the age at the commencement of weaning, 5 months, was as per the current French proposals. The quantity of new food sources presented was 13.4 every month all things considered and contrasted starting with one newborn child then onto the next with no relationship with singular attributes. The responses to new nourishments were positive in 90% of the cases however varied by food classes. In the early weaning time frame, products of the soil were the least decidedly acknowledged food sources; nonetheless, the normal acknowledgment pace of these nourishments mirrors babies' positive responses. The previous vegetables were presented, the higher the acknowledgment of new vegetables was. At last, new food acknowledgment was essentially connected with the quantity of various nourishments offered in the initial two months of weaning, especially for products of the soil (Lange et al., 2013).

Author/year	Purpose/aim	Design	Sample size	Dependent variables	Finding
Amy Brown, Sara Wyn Jones & Hannah Rowan (2017)	To define that Does all infants traditionally introduced to solid foods using spoon- feeding of specially prepared infant foods.	Pre test and post test	55	Introduced solid foods, specially prepared infant foods	This methodology includes permitting babies to self-feed family nourishments, urging the baby to establish the tone and admission of the feast. Defenders of the methodology trust it advances smart dieting conduct and weight acquire directions, and proof is beginning to construct encompassing the strategy
Hannah Rowan, CristenHarris (2011)	To determine the significant changes in dietary intake during weaning	Pre test and post test	110	Solid food Introduction and Dietary intake change of family	No huge changes in dietary admission during the initial three months of weaning, in any case, guardians offered their youngsters 57% of similar food sources they were burning- through. Results recommend that BLW doesn't prompt dietary changes among guardians during the weaning cycle.

## **CHAPTER - 3**

#### **3. OBJECTIVES**

#### **3.1 GENERAL OBJECTIVE**

This exploratory study will provide an insight about the weaning practice among infants aged 6-23 months and knowledge of weaning and complementary foods of their parent as well as some pregnant and lactating mothers in Naogoan Thana of Naogoan district which will ultimately support the government programme to achieve its goals against malnutrition.

#### **3.2 SPECIFIC OBJECTIVES**

- 1. Assessment of feeding practice of child, pregnant women and lactating mother who do not get the complementary food and proper nutritious food.
- 2. Explore and understand the nutrition related behaviors and challenges of pregnant women and caregivers (e.g. mothers) of infants and young children.
- 3. Explore and understand the nutrition related services and communications provided by the government health services, community health workers and other providers working in nutrition/health with pregnant women and caregivers of infants and young children, as well as document their challenges in providing these services/communications.

## **CHAPTER - 4**

#### 4. METHODOLOGY

This is an exploratory research and consolidated with both quantitative and subjective measures. Nonetheless, subjective measures are discovered solid hugeness. The investigation includes following techniques:

#### 4.1. DESIGN

This study is based on primary data collected from selected rural family. The study to a great extent rely on researcher's own observational data as well.

#### **4.2 SAMPLING**

#### **Population:**

-	Parents
-	Health workers
-	Care giver

#### **Techniques:**

- Simple Random Sampling (SRS) was employed for interview with parents

- A heterogeneous group was chosen based on preset criteria

#### **4.3 DATA COLLECTION METHOD:**

#### Method:

- Personal Interview
- Observation

#### **Instruments:**

- Semistructured Questionnaires and Interview Guide.

#### **4.4 SAMPLE SIZE**

The data were collected using qualitative methods mostly. The objective was to obtain the range of responses/observations described in detail from a sample of diverse individuals/informants related to the study topics. As sample size calculation is driven by data saturation, the actual sample size for all the qualitative methods are given in table -1

METHODS	RESPONDENTS	SAMPLE SIZE	AGE RANGE	SEX
	Pregnant women	5	19-35 Years	Female
	Lactating mothers of infants 0-6	5	18-45 years	Female
	Mothers with children 6-23 mo. (6-11m -3, 12-23m-2)	5	20-30 Years	Female
	Father with children 6-11 month	2	21-28 Years	Male
	Father with children 12-23 mo.	4	25-35 years	Male
Key informant	Health care workers	4	40-51 years	Female
interview	Community health worker	4	27-37 years	Female
Observation	Feeding observation of children	4	10-16 Month	Female and male
	Health facility	8	N/A	N/A
Household trials	Feasibility of MNP Feeding adequate amount of food Feeding 4 types of food everyday	5 6 6	7-23 Month olds	Female and male

## TABLE: 1 METHODS AND SAMPLE SIZE

Household trials	Eating vitamin A rich foods daily Take 1 IFA daily Eating 4 types of foods everyday	6 6 6	Pregnant /lactating Lactating women Lactating women	Female
Food attribute	Pregnant women	5	18-30 Years	Female
exercise	Mother with children 8-12 mo	5	19-35 Years	Female
	Child (6-23 month)	10	7-18 Month	Female
Dietary recall	Pregnant mother	4	20-25 Years	Female
	Lactating mothers	4	2-37 Y ears	Female
	Child 7-23m month (7-11m -3, 12-24 m-6)	9	7-17 Month	Female
Market survey	Market stored where food purchased	4	N/A	N/A
Free listing	Pregnant and lactating mother	10	17-40 Years	Female
	Mother with children 6-23 month	10	19-42 Years	Female

## 4.5 SAMPLE SELECTION (CRITERIA / PROCEDURE)

For household selection the researcher purposively selected the household. As the researcher is studying infants and young children and also pregnant mother so the households were chosen which met these three categories of peoples. More specifically, selected infants and young children of the caregivers who do not have any medical conditions that preclude usual feeding.

#### **4.6 COLLECTION OF DATA**

A market study was directed to distinguish nearby supplement rich nourishments that are accessible and available for pregnant ladies, mothers, and babies and little youngsters. Two nearby business sectors/stores were visited to recognize the accessibility and cost of the nourishments. The irregularity of explicit nourishments was additionally dictated by investigating with nearby merchants. The key foods list was used to conduct food attributes exercise for mothers to understand their perceptions about using the foods during pregnancy and lactation and for young infants. In this exercise, cards with different foods were shown to the caregivers and a series of questions were asked about each food. The researcher explored both barriers and facilitators for consuming these foods.

The researcher conducted in-depths interviews with open-ended questions to explore topics such as healthy pregnancy, dietary practices, consumption of Iron and Folic acid (IFA), influential household members and interactions with CHWs. The researcher interviewed pregnant women to learn about their perspectives, knowledge, and practices related to nutrition during pregnancy and during lactation, as well as IYCF. I also explored the various roles of other members in the household and community with respect to healthy nutrition during pregnancy and lactation. With fathers and grandmothers of young children aged 6-23 months, I explored their perspectives, knowledge, and practices/decisions/role related to feeding of infants and young children (IYC) and growth.

#### 4.7 ANALYSIS OF DATA

For in-depth interviews data was audio recorded, transcribed verbatim and checked. Transcripts were coded using a coding scheme based on topics in the prepared guides and an initial reading of transcripts. An iterative process that allows for the emergence of new codes was used. Common patterns/themes were identified, and matrices created to reduce data.

## CHAPTER – 5

#### **5.1 FINDING**

#### **Attributes of Respondents:**

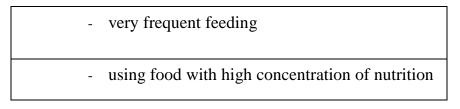
Most of the infant get the same food which prepare for the whole family as well as, This thing is same for the Pregnant and Lactating mother.

The people group individuals were mothers and fathers of small kids who were met. Mothers were both primiparous and multiparous (table 2). Most had 2-11 years of family life; every one of them were housewives and generally were individuals from helpless family. Fathers were equitably dispersed among the various degrees of schooling.

WHO recommended some weaning food for infant as well as some way of feeding.

Those are:

1. two main way of feeding for baby and making sure these baby get enough nutrition-



0.

2. what food are best for babies during weaning period -

-	good for baby
-	easily available for family
-	not expensive

Staple food is always less expensive in all country, that's why WHO recommended this staple food. it can be rice, wheat, potato etc. and this contain lots of carbohydrates and others nutrients. as well as some others food such as green leafy vegetables, food from animal, oil and fat, beans, fruits etc.

Among all of this varieties of food, some are less expensive and easily available food poor people. But most of poor baby can't get proper nutrients and food. but why? Where is the problem then?

There is some causes for which baby can't get enough food and nutrients:-

- **Misconception** ( for example beef, this is considered expensive food, but there have some alternative animal food but village people considered as undesirable)
- Save of time (In village some mothers work at field or other place so they don't get enough time to make special food for baby)
- Use less fuel (They want to save fuel because of poverty it is an issue, so they don't prefer to make special food for baby)
- Lack of information (Some mothers don't know about frequency of feeding, and the proper amount of food for baby as well as they don't know about supplement which can get from health worker)
- Lack of knowledge ( for example some time some food are available at house but mother don't prefer to provide this to the children because they know that this food are harmful for baby)
- Lack of awareness (counseling and health checkup is important for those mother and baby but those mother never go to the health complex for this.)
- **Poverty** (because of poverty sometimes whole family members eat rice with only green chilly onions, in this family a special food for a baby is not possible)

Characteristics	Mother % (n)	Father % (n)	
	N=46	N=6	
Age (y) range	18-45	21-35	
(mean age)	(26)	(27)	
Parity			
Primipara	17	-	
Multipara	<b>2</b> 9	-	
Schooling(y)			
0-5	33	2	
6-10	11	2	
10+	2	2	
Occupation			
Housewife/unemployed	46	0	
Employed	0	6	
Household income [Bdt]			
4000-8000	23		

Table 2: Background information of the community members

8100-12000	16
12000+	7

I interviewed were between 32-49 years of age. They were mostly females. There were CHCPs who were male. The FWA and FWVs were employed by the family planning directorate and the CHCPs were employed by the health directorate of the health ministry. They were evenly distributed based on their length of training and their positions. I chose frontline workers from both health and family planning directorate as they are supposed to be providing nutrition education and services to the mothers in the community.

#### Table 3: Foods available in the market

Available food in the markets	Considered Costly	Considered Not Costly	Potential Priority Food
Dry fish(chanda, shrimp shutki (1)			
Small fish (3) Farming fish ( Indian Tilapia, Silver carp, Yellowtail catfish ) (3)		Farming fish Indian Tilapia, Silver carp, Yellowtail catfish	
Beef, highbred chicken	Beef		highbred chicken (3)

Egg (duck egg, Egg of High breed chicken, Eggs from free range duck and chicken)	Eggs from free range duck and chicken	Eggs from high breed chicken	
Tomato, Pumpkin, Eggplant, Lady finger , <i>Potol</i> , biter gourd, Cauliflower, Cabbage		Eggplant	Eggplant
Red Spinach, Lafa shak, Spinach, Ghor baista shak		Red Spinach, Lafa shak, Spinach, Ghor baista shak	
Potato, Carrots		Potato	Potato
Brown chickpea, Red Lentils, Yellow split lentil, Chickpea, black lentils, <i>Anchor</i> dal	Red lentils, Chickpea	Split lentil, Brown chickpea	Black lentils, Split lentil
Apple Orange Granes Inicing			
Apple, Orange, Grapes, Juicing orange	Orange, grape	Apple	

Food Category	Foods selected
Flesh foods Meats Fish (dried/fresh) Chicken/birds offal	<ol> <li>Fish (<i>Ruhi, silver cup, Telapia, Pangas, Puti, Koi, shing, Taki, Tengra</i>, )</li> <li>Dried Fish( small fish, prawn )</li> <li>Birds(broiler chicken, duck)</li> <li>Mutton</li> <li>Chicken liver</li> </ol>
Eggs	<ol> <li>Chicken egg,</li> <li>duck egg</li> </ol>
Milk/milk products	<ol> <li>Cow milk</li> <li>Sweets made with milk</li> <li>Rice cake (pitha) made with milk</li> </ol>
Green leafy vegetables	Red Amaranth , <i>Kochushak, Lafa</i> leaves Radish leaves, <i>Pui</i> shak, Spinach Local leafy vegetables
Other vegetables	Eggplant ,2.Bitter gourd, Palwal, Bottle gourd ,Tomato*,Cabbage ,Lady finger, Pumpkin*
Root vegetables,	Potato, Radish, Carrot *
Fruits	Papaya *, mango*, Apple, Orange, Banana, Mango, Kalo Jam, Guava, Grapes, Litchi, Watermelon

 Table 4: Key foods list (from free listing and market survey)

	Legumes/pulses (Beans, lentils)	Red lentil, Black lentil, chickpea, Peas, Broad bean
	Seeds or nuts ( Peanuts)	Peanuts, Jackfruit seed

\*Rich in Vitamin A

#### **5.2 PREGNANT AND LACTATING WOMEN**

#### **ASPORATION FOR PREGNANCY**

During pregnancy mother talked about needing to be solid and to have a sound kid. They talked about the significance of good food to guarantee that both mother and embryo is sound and the conveyance abandons difficulty. As one mother said "*If I eat well, the infant will be sound and the conveyance will work out positively.*" Although mothers talked about their yearnings for the unborn youngster they were not extremely express about their goals for pregnancy past the soundness of both her and her kid and wish for a straightforward conveyance. Moms discussed raising cows to get milk during pregnancy however none of them talked about setting aside cash for conveyance.

# **5.3 PERCEPTION OF HEALTH AND BEING HEALTHY DURING PREGNANCY AND LACTATION**

Ladies have away from about the significance of being solid during pregnancy and lactation. A pregnant lady is viewed as solid in the event that she can play out her everyday tasks with no actual issues. A few mother portrayed absence of actual issues, for example, shortcoming, cerebral pain, dull face an eyes, expanding of the face, issues in development, dazedness, hearing issues and so forth are the characteristic of good wellbeing during pregnancy. Ladies fell that pregnant moms need to eat well nourishments, for example, meat, fish, milk, eggs and vegetables during pregnancy. Eating well nourishments will guarantee great physical and emotional well-being. Hefty work and insufficient rest likewise lead to infirmity during pregnancy. One mother stated, "to keep the mother solid mother need to take care of legitimate food, and in the event that the

mother taking care of isn't well, at that point how might youngster get food, that why mother need to take great food."

For lactating mothers notwithstanding having energy to remain dynamic, capacity to enough breastfeed their newborn children is an indication of good wellbeing. As one mother clarified." If I am not well at that point will my youngster get bosom milk from me? No she won't". As one mother stated, one mother stated, "my two kids breastfeed, that is the reason I feel debilitated, on the off chance that I had capacity I would take care of other reciprocal food to my more seasoned kid, at that point I would have better wellbeing." Mothers apparent that sufficient amount of food is required during lactating to guarantee that mother has energy and can enough take care of her kid.

## 5.4 FOODS FOR MOTHERS DURING PREGNANCY AND LACTATION

Most pregnant ladies referenced that they take 2/3 significant meals and seldom light snacks (muri, gur etc.) during the day. They realized that pregnant ladies should take food often however in limited quantities. As one pregnant mother referenced that, "I used to bring snacks home so I can eat something with water. I would bring molasses home so I can take little molasses while drinking water. I additionally brought treats so I can take this with water".

Food type (animal source foods)	Positive attributes	Negative attributes
Fish	-Nutritious	-May cause allergic reaction
	-Has vitamin/ protein/ calcium	(Puti and shrimp)
	-Good for health	-Expensive to buy
	- Helps to keep us active	-Do not like the smell /taste
	-Helps with milk production	

Meat/chicken	<ul> <li>-Provides vitamin/ calcium/animal protein</li> <li>-Nutritious</li> <li>-Good for health</li> <li>-Widely available (farmed chicken)</li> <li>-Helps with milk production</li> </ul>	-May cause allergic reaction (beef, farmed chicken) -High consumption may lead to hypertension -Expensive to buy -Only available during Korbani Eid(beef)
Egg	-Nutritious -Provide vitamin/ energy -Delicious -Reduces body ache -Good for health -Produced at home	<ul> <li>-Excess consumption can cause diarrhea</li> <li>- Should not be consumed if one is suffering from Jaundice (according to local healers)</li> </ul>
Milk	<ul> <li>-Nutritious</li> <li>-Provide vitamin/energy</li> <li>-Produced at home (available)</li> <li>-Good for health</li> <li>-Nutritious for the baby</li> <li>-Makes you feel healthy</li> <li>-Reduces weakness and vertigo</li> </ul>	-Not available as they don't have a cow -Not well tolerated -Causes diarrhea -Causes cough and cold

Lentils, products of the soil accessible for the moms are viewed as useful for wellbeing (6B). It is a conviction that nourishments eaten by lactating moms can influence the wellbeing of their breastfed kids straightforwardly. Irregularity of nearby natural products was likewise hindrances for their utilization. A couple of moms referenced that if the male relatives didn't care for a particular food, it was not bought for the family. As found in this discussion: Mother: What my husband brings (from market) I eat.

Interviewer: Do you tell him what to bring or does he bring what he wants?

Mother: Sometimes I have to tell him. He brings the meat and fish based on his liking. Other things I tell him to bring...

Interviewer: What other thing?

Mother: Turmeric, onion, chili and other vegetables

Food type	Positive attributes	Negative attributes
Leafy greens	-Nutritious -Provides vitamin/energy -Good for health -Easily available (without greens how can we eat rice?) -Tasty	<ul> <li>Lafa leaves can cause chest congestion</li> <li>Both Pui and Lafa leaves can be harmful for children and cause cough and cold</li> </ul>
Other vegetable Eggplant ,Bitter gourd, Palwal, Bottle gourd ,Tomato*,Cabbage ,Lady finger, Pumpkin*	-Nutritious -Provides vitamin/ calcium, energy -Healthy -Good for eyes -Good to eat -improves milk production -widely available/produced on own land	<ul> <li>-Egg plants can cause allergic reaction</li> <li>-Husband does not bring (lal shak)</li> <li>-Ladies finger can cause cold for children</li> </ul>

## Table 5B: Attributes of lentils, fruits and vegetables (for pregnant and lactating women)

Fruits Papaya *, Apple, Orange, Banana, Mango, Kalo Jam, Guava, Grapes, Litchi, Watermelon	<ul> <li>-Provides vitamins/ calcium/ iron/energy/protein</li> <li>-Nutritious</li> <li>-Good for bones and teeth</li> <li>-Home produced</li> </ul>	-Not available outside season -Sour fruits can cause cough and cold
Yellow and red fruits and vegetables Pumpkin, carrot, mango, jackfruit, papaya	-Nutritious -Provides vitamin/vitamin A -Carrots and tomatoes are widely available -helps us to stay healthy	Those that need to be bought are expensive
Lentil	-Good for health if eaten during hot weather	-Black lentil can cause cough and cold for mother and the child

## Table 6: Dietary practices of pregnant and lactating mothers

Feeding Practice	Pregnant women n=4 %	Lactating women n=4 %	
Feeding Practice (last 24 hour)			
Ate 4 or more times:	100%	100%	
Ate reasonable quantity of food at each meal:	75%	100%	

Ate an animal product:	100%	50%	
Ate a dairy product/milk ?	25%	0%	
Ate a vitamin A rich vegetable or fruit?	25%	0%	
Feeding Practice (last week)			
Ate an animal product at least 5 times in last week	100%	100%	
Ate a vitamin A rich vegetable or fruit daily at least 5 times in the last week?	25%	25%	
Ate seeds/nuts at least 2-3 times in the last week?	0%	0%	
Ate beans/pulses at least 2-3 times in the last week?	75%	25%	
Consumed IFA or another similar vitamin?	25%	0%	
Ate bio-fortified food in the last week?	0%	0%	

Table 6 depicts the genuine taking care of training of the pregnant lactating moms in 24 hours or seven days going before the study. As far as dietary variety pregnant ladies were improving in wording burning-through creature source nourishments, dairy and nutrient A rich food sources over the most recent 24 hours. Nuts and seeds were not devoured by the ladies by any means. Just

pregnant ladies revealed burning-through IFA tablets. There were no reports of utilization of bio braced nourishments.

#### **5.4 FEEDING PRACTICES OF PREGNANT WOMAN**

#### **ANIMAL SOURCE FOODS:**

During in-depth meetings the pregnant ladies in our investigation detailed that they generally attempt to incorporate animal source nourishments and vegetable in their day by day suppers. Among the animal source nourishments eggs, meat of poultry chicken and fish were generally devoured. In spite of the fact that absence of craving during pregnancy blocked food utilization, a few moms detailed that creature source nourishments assisted them with devouring food sources as they were a great idea to eat. Most pregnant ladies announced that they had the option to acquire creature source nourishments based on what was accessible or filled in the family. A few moms discussed developing chicken and cows at home. One moms talked about getting fish from a neighborhood. As one mother stated, "We purchase fish from the market. Yet, we likewise get fish by depleting the little dump close by. During precipitation neighborhood fish, for example, catfish, Shol, puti, koi, tengra, chingri assemble in the dump. In the little jettison there was a ton of fish"

Pregnant ladies revealed having issues with smell of certain nourishments as they didn't have craving or couldn't manage the smell. As one mother stated, "in the event that I see the high variety chicken I can't eat anything, additionally I can't eat biam fish and chang fish". Nonetheless, a few moms announced that this issue of absence of craving or affectability to smell occurred during early pregnancy and the issue normally settle itself during late pregnancy. As one pregnant lady said "His (youngster) father isn't at home currently, that is the reason I am not ready to purchase (creature source nourishments) and can't eat". Hindu moms referenced that they are not permitted to eat chicken so they typically burn-through fish, egg and milk. Some mother referenced that on the off chance that they needed to purchase the animal source food from the market, family unit monetary condition was significant thought for guaranteeing accessibility of the creature source nourishments.

#### **VITAMIN-A RICH FOODS:**

Moms generally didn't comprehend which nourishments were plentiful in nutrient A. They believed most vegetables and a few organic products to be rich wellsprings of nutrients. As one pregnant stated, "I feel better. I don't feel hungry continually. I am glad to eat vegetables". Moms referenced burning-through various types of vegetables consistently as they were acceptable wellsprings of nutrient and thusly useful for the soundness of both mother and the unborn youngster. Vegetables were frequently acquired from home creation, gathering from zones around and the house hold and accessible for buy from nearby market. Organic products were eaten just when they were home delivered during season or if the spouse got them from market. This finding was confirmed by discoveries from dietary review and food property work out. They additionally find out about explicit nutrient rich nourishments from their family members. As one pregnant ladies stated, "Doctor requested that I eat verdant vegetables... (she) additionally advised me to eat these in enormous amount. You need to eat red amaranth, Kochu Shak which is plentiful in nutrient. You need to eat these (nourishments) as they will help improve blood course (during pregnancy)". A couple of moms referenced absence of hunger and taste as boundaries to eating certain vegetables One mother stated, "I can't eat pumpkin, as I don't discover any taste on it, it's sort of boring".

#### FEEDING PRACTICES OF LACTATING WOMAN

During lactation period moms referenced eating 3-4 times each day. During this stage nourishments were chosen to guarantee that moms have energy to work and to create enough milk for the infants.

#### **ANIMAL SOURCE FOODS:**

All the lactating moms referenced devouring creature source nourishments during the interview. Creature source nourishments are viewed as useful for wellbeing and a portion of these food sources are valued for their impact on bosom milk creation. One mother stated, "through this (creature source) food sustenance arrive at our body." Similar conclusions are communicated by another mother " when I eat meat my energy increments and I feel well. These (expanded energy

and prosperity) are indications of wellbeing ". Another mother stated, " in the event that I drink cow's milk, my kid will get bosom milk from me and my wellbeing will be acceptable".

Regarding hindrances to eating creature source nourishments moderateness was referenced as the fundamental obstruction like the pregnant ladies. Nonetheless, a few moms referenced diminishing specific nourishments because of their apparent negative impact on bosom milk creation as supported by food ascribes work out. Some lactating mother referenced maintaining a strategic distance from egg and milk during breastfeeding their kid. As one mother stated, "I don't drink milk. In the event that I take milk youngster will experience the ill effects of looseness of the bowels and here and there from hack".

#### **VITAMIN-A RICH FOODS:**

Like our discoveries about information on nutrient a rich nourishments among pregnant ladies, lactating moms likewise didn't regularly have an away from of nutrient A rich food sources. Notwithstanding, they comprehended that vegetables are acceptable wellspring of nutrients and useful for wellbeing and consequently, attempted to consolidate them in their everyday suppers. Generally vegetables were obtained through neighborhood advertises however a few moms referenced family development and getting vegetables (verdant greens) from around the family unit. A couple of others referenced eating nutrient rich vegetables as they saw that it will build their bosom milk creation. One mother stated, "on the off chance that I take green and new vegetables like cucumber and carrots, at that point a ton of milk will go to my bosom".

Moms likewise referenced that they abstained from eating specific nourishments on the off chance that they see any negative impact of the food on youngster wellbeing. As one mother stated, "on the off chance that I take kocu shakand women finger my kid would experience the ill effects of hack and cold".

#### USE OF IRON FOLIC ACID SUPPLEMENT DURING PREGNANCY AND LACTATION:

Most of the moms are ignorant about IFA supplementation during pregnancy. Moms detailed that IFA utilization assist them with expanding blood in their bodies by the researcher. As one mother said "I heard that iron tablet can deliver blood and I need to take one piece for each day". Anyway a couple of moms announced hearing adverse impact of IFA utilization also. A couple of moms

saw that in the event that they take IFA, the embryo will be enormous inside the belly and they will confront trouble during conveyance and may require cesarean area. As one mother referenced "they gave me iron and calcium tablets from the medical clinic (during pregnancy) I didn't take them... Why? Well I thought youngster (in my belly) will become huge and there is likelihood of Caesar (c area) Instead (of the medication) I had milk, egg, juice which assisted my kid with developing enough .... Not all that much... I would not like to have Caesar (situation)"

# 5.5 SOURCES OF KNOWLEDGE ABOUT DIET DURING PREGNANCY AND LACTATION:

A couple of moms detailed acquiring dietary data from wellbeing offices that they visited. Other talked about gaining from TV about what to eat during pregnancy. Family members and companion of the moms, for example, moms, relatives, sisters-in-law, neighbors likewise gave dietary guidance during pregnancy from their own insight. In any case, when we got some information about the idea of data got from various sources they were conventional in nature. The most well-known taking care of guidance was to eat more and eat "great" (valo khaber) food and eat in ordinary spans during pregnancy. One mother found out about significance of milk utilization from TV.

NGO laborers who visit their homes and the yard gatherings by NGOs as great wellspring of data. Schools were additionally referenced as a wellspring of dietary data during lactation. School going kids achieve data ideal weight control plans to their folks from school. One dad said " I came to think about this from the school and furthermore from NGO's wellbeing laborers that visit to discuss how to take care of lactating moms".

# ROLE OF FAMILY AND OTHER COMMUNITY MEMBERS WHO INFLUENCE DIETARY PRACTICE OF MOTHERS

Relatives are local area individuals from various kinds assume a compelling part in the dietary act of pregnant and lactating moms. Spouses were notice as the main individual for moms as she attempts to actualize dietary counsel. Spouses are frequently the primary workers in the family and approach market. So when moms need to execute any counsel identified with acquisition of food or meds or in the event that she needs to get to wellbeing offices, she needs the consent and assets from her better half. A few moms detailed that their spouses help them with family tasks and childcare. One pregnant lady stated, " you know whether I need to accomplish any weighty work he (spouse) causes me, he generally advices me about taking care of, he discovers which food will be beneficial for me and advises me".

Mother: It is important to listen to your husband most (laugh)

Interviewer: Do you listen (to your husband)?

Mother: Yes I do

Interviewer: Why do you do that?

Mother: He says and I listen. I have to listen to what he says.

#### 5.6 FEEDING INFANTS AND YOUNG CHILDREN

#### **BREAST FEEDING**

Breastfeeding was an extremely basic practice locally and guardians of little youngsters were educated about the significance of breastfeeding. The CHWs referenced that there is a culture of giving pre lacteals here. As one CHW said " I advise them 'when you have your conveyance at home please put the child to bosom first'. Yet, in our general vicinity individuals will in general give sugar water and nectar first." Parents thought about selective bosom taking care of. As one dad said " I realize that babies should be fed only bosom milk for 6-7 months. My children and children around me were taken care of that way." Most of the youngster keeps breastfeeding up to 12-multi month. Sufficiency of bosom milk creation was referenced as a fundamental condition. As one dad said "kids needs just bosom milk after birth. My child was allowed for half year. Breastfeeding is as yet proceeding with rice. We took care of bosom milk since enough was being delivered" The social standard with respect to breastfeeding was clarified by a dad "I was breastfed until 23 months age. My child will keep (breastfeeding) until he is 3 years of age". In spite of valuing breastfeeding, guardians connected bosom milk sufficiency to maternal eating routine during pregnancy and lactation. As one mother clarified "the day I headed to sleep without supper the following day my youngster didn't get any bosom milk." Anyway guardians has likewise referenced discovering data about breastfeeding from more seasoned family members, neighbors and media (TV, newspaper).

#### **COMPLEMENTARY FEEDING**

During the meetings with the moms I found that kids matured to two years were given a different eating regimen of correlative food sources. Parent talked about giving food, for example, milk, egg, distinctive verdant vegetables, fish, meat, (chicken, hamburger), potato, eggplant, organic products (apple, grapes, orange, date, carrot) and khichuri (cooked with various rice, lentil, vegetables, zest) to their youngsters alongside bosom milk. As one mother stated, "I gained from my folks and others that milk, egg, vegetables, kochu shak contains colossal measure of nutrient." Among significant data source were more established family members (mother by marriage, father-in-law, mother, father), teacher, wellbeing laborers and media (TV). One dad stated, "my better half consistently follow the exhortation of my father in-law. My significant other's senior sister is teacher and her mom is a wellbeing laborer. So we generally follow their advices with respect to youngster taking care of."

Moms didn't like to cook for the kids independently. The way that little youngsters were given food from family food sources was exhibited from the accompanying depiction from one father of a year old kid "When I feed (my kid) I feed from my plate. I can wash the food with water for my youngster to lessen (salt and flavor) so he can eat and his gut can be filled. We just make one curry. Whatever I eat, he eats. Whatever his mom eats, he eats." Another father said "Both I and her mom feed her. In a bowl we blend rice in with curry and make it delicate for her to eat."

Utilizing the key food list created we got some information about the particular ascribes of the accessible nourishments that they took care of little youngsters. Eggs and fish were viewed as more accessible than other creature source food sources.

Regarding foods grown from the ground for youngster's mother through they were helpful for kid wellbeing despite the fact that accessibility and home creation were significant variables for their utilization (table 7B). Green particularly Lafa greens had some unsafe characteristics and a couple of moms would not like to take care of it to the youngsters. Moms discussed greens causing

Food type (animal source foods)	Positive attributes	Negative attributes
Fish	-Nutritious -Has vitamin/ protein/ calcium -Good for health/ become healthy - Helps to child growth/get strength/ - Always available	-Bone -During stomach illness it cannot be fed to the child
Meat/chicken/ (offal)	<ul> <li>-Nutritious</li> <li>-Has vitamin/ protein/ calcium</li> <li>- Chicken liver is source of nutrition</li> <li>- Produces blood/increase height , growth/ brain development</li> <li>- Increase appetite /tasty</li> </ul>	-Expensive (Beef ) not always available
Egg	<ul> <li>Has all types of nutrition</li> <li>Has vitamin/ protein</li> <li>Available at home</li> <li>Tasty</li> </ul>	- This can cause chest congestion
Milk	-Nutritious -Has vitamin/ protein - Get strength -Help to brain development	-Child do not want to drink - Chest become filled with cough

# Table 7A: Attributes of animal source foods for children

Table 7B:	Attributes	of fruits and	vegetables fo	r children
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Food type	Positive attributes	Negative attributes
Leafy greens	-Nutritious -Has vitamin -Helps to child growth/ - Improve eye's power / clean the blood -Can cultivate in own land/ always available.	<ul> <li><i>Lafa</i> leaves can be harmful for children and cause cough and cold</li> <li>When child is suffering from dysentery cannot feed this <i>Lafa</i> leaves</li> <li>Greens can cause diarrhea</li> </ul>
<b>Other vegetable</b> Eggplant, Bitter gourd, Palwal, Bottle gourd, ,Cabbage ,Lady finger	-Nutritious -Has vitamin - Helps to child growth/ give strength/ clean the blood -Available at home - Child become healthy	No negative attributes
<b>Vitamin A rich fruits and vegetables</b> Pumpkin, tomato, mango, papaya	-Nutritious, - good for health -baby stays healthy -available in the house/in the area	No negative attributes

<b>Fruits</b> Apple, guava, orange	-Has vitamin C D, B / Nutritious/ has calcium - Can produce at home	-Banana consumption can lead to cold and cough
	- Help to increase height/ not become weak	

 Table-8: Feeding practice for 6-23month child (dietary recall)

Ideal Feeding Practice	Feeding
	Practice
	n=9
Last 24 hours	
1. Continued breastfeeding?	89%
<ul> <li>2. Ate an adequate number of food preparations of a solid/semi-solid/ thick consistency yesterday?</li> <li>(to be considered adequate, child must have consumed more than 2 bites)(Minimum of 2 food preparations for infants 6 – 8 months; minimum of 3 food preparations for children 9 – 11, and 12 – 23.9 months)</li> </ul>	78%
<ul><li>3. Ate an animal product yesterday?</li><li>(meat, fish, offal, chicken, bird, insects, egg)</li></ul>	56%
4. Ate a dairy product/milk yesterday?	44%
5. Ate a vitamin A rich vegetable or fruit yesterday?	44%

<ul> <li>6. Ate an adequate quantity of food for age yesterday?</li> <li>(7 – 8 months, <sup>1</sup>/<sub>2</sub> cup/small bowl; 9 – 10 months, <sup>3</sup>/<sub>4</sub> cup/small bowl; 11-12 months, nearly 1 cup/small bowl)</li> </ul>	0%
7. Child was helped/encouraged to eat yesterday?	67%
Last week	
8. Ate an animal product at least 5 times in the last week? (meat, fish, offal, chicken, bird, insects, egg)	56%
9. Ate beans/lentils at least 2 times in the last week?	11%
10. Ate a vitamin A rich vegetable or fruit at least 5 times in the last week?	33%
11. Given an iron-fortified food (food fortified especially for infants) or vitamin or mineral supplement (e.g. sprinkles, LNS) yesterday?	0%

#### **RESPONSIVE FEEDING**

I noticed lunch time taking care of for 4 little youngsters. Two kids sat with the other relatives to eat while other two were taken care of before the family feast. Two of the youngsters had their own plate/bowl. Generally, family nourishments were offered to them. Just in one case an egg that was ready for a visitor was offered to the youngster. During my taking care of perception, I saw that all the kids were assisted with taking care of by moms or other relatives. More youthful youngsters were generally taken care of by the moms. Most cases they were given family food sources to eat and offered enough food. Anyway kids didn't eat everything and when they dismissed the nourishments, moms didn't forcibly feed or urge them to eat more.

# 5.7 ROLE OF FAMILY AND MEMBERS WHO INFLUENCE DIETARY PRACTICE OF INFANT AND YOUNG CHILDREN

Most families from which I chose respondents were nuclear families. In such families' choices about newborn child taking care of is taken between the guardians. Moms are fundamentally liable for food arrangement and taking care of the baby. Grandparents and uncles some time assume a significant part as far as bringing food from the market, assisting with childcare so that moms can set up the food and perform family unit errands. Moms revealed that more established kids and individuals from more distant family and fathers (when they are home) in some cases help taking care of the kid in spite of the fact that the fundamental duty stay with the mother.

#### **CHAPTER-6**

#### **6 DISCUSSION**

#### **6.1 INFANT AND YOUNG CHILG FEEDING**

In any case, moms appear to connect impression of bosom milk insufficiency, which is a significant idea to address dependent on investigations led among mother in other country territories of Bangladesh, to satisfactory food utilization during lactation. Our exploration discoveries show that there are not huge social restrictions against taking care of creature source food sources and nutrient a rich nourishment to little youngsters. A couple of creature source nourishments, for example, meat was viewed as costly and inaccessible and a couple of different food sources were not viewed as alluring if the kid was sick with various illnesses. Most moms assisted their youngsters with eating dependent on 24-hour review and perception of supper times which is a significant finding. Moms didn't incline toward making exceptional food sources for kids and discussed utilizing family food sources for making correlative food sources. In any case, when we took a gander at the genuine utilization example of the small kids, we found that dietary variety and both recurrence and measure of corresponding food sources given to little youngsters were not sufficient. Furthermore none of the kids were given food enhancements or MNP powders despite the fact that moms thought about them and they were accessible for buy through the market and NGO wellbeing laborers. As far as CHWs giving guiding to the moms about IYCF we found that the CHWs only from time to time homed visits and moms didn't visit the wellbeing office when the youngster is well for exhortation.

#### **6.2 PREGNANCY**

It was a significant finding that mother's meaning of solid pregnancy included being dynamic and having energy just as prosperity of the embryo. Moms think about the significance of eating nutritious nourishments just as devouring sufficient amount of food sources. The CHWs once in a while gave nourishment guiding to the moms. We found that relatives of the pregnant ladies upheld them by giving data, bringing them significant nourishments, taking them to wellbeing offices and assisting them with childcare and housework. They additionally didn't devour nuts and seeds. As

indicated by the 24 hour review the pregnant ladies' utilization of IFA tablets likewise required a lot of progress since they are not burning-through it despite the fact that they think about it.

For both Vitamin A rich food sources IFA tablets it is significant that moms are directed about the significance of these food sources and micronutrients for remaining vigorous and having the option to work during pregnancy notwithstanding their advantageous impact on the hatchling.

#### **6.3 LACTATION**

As indicated by our discoveries during lactation the focal point of diet shifts from being revolved around mother's wellbeing with its impact on kid's wellbeing. While breastfeeding, the ampleness of bosom milk creation was seen to be a marker of mother's wellbeing status and sufficiency of her eating regimen. During picking of the particular nourishments moms tend to picked food sources that they see to advance creation of bosom milk (kalijeera is considered to advance bosom milk creation). They additionally attempt to evade nourishments that contrarily influence youngster wellbeing through bosom milk (lafa leaves cause diarrhea to mother and kid). At the point when we take a gander at the 24-hour dietary review for lactating ladies we found that their dietary variety were lower contrasted with pregnant ladies which shows that moms during lactation are done zeroing in on eating great quality nourishments. Accordingly, openings for the CHWs to draw in with the lactating moms are insufficient. The CHWs were not referenced as vital wellspring of data and backing at this phase of life.

The message must be made with an emphasis on significant nourishments accessible to the family units and with proposals about less expensive choices (cultivated fish, cultivated chicken, egg) when proper.

# CHAPTER - 7

## 7.1 CONCLUSIONS

In my research I focused on diets of pregnant and lactating women and infant and young children and opportunities to improve their dietary patterns. I will therefore, discuss the implication of the findings for all the three populations.

#### 7.2 RECOMMENDATIONS

For family unit preliminaries the accompanying practices ought to be tried with the goal that a superior comprehension of the hindrances and facilitators can be acquired for the advancement of BCC materials and procedure:

- 1. Consumption of nutrient A rich nourishments and IFA use for mothers during pregnancy.
- 2. Dietary variety and IFA use for mothers during lactation.
- 3. Dietary variety and satisfactory measure of nourishment for 7-multi month old babies.

The CHWs ought to be prepared and boosted and elevated to give sustenance data and administrations to the local area.

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# ANNEXURE

# Annex A. List of acronyms

Abbreviation	Meaning
МОН / МоН	Ministry of Health
MNCH	Maternal, Newborn and Child Health
MDG	Millennium Development Goal
ANC	Antenatal Care
BCC	Behavior Change Communication
BCI	Behavior Change Intervention
IYCF	Infant and Young Child Feeding
IFA	Iron and Folic Acid

# **INTERVIEW GUIDELINE**

## Guideline for Food Attributes Exercise for Infants and Young Children (English)

**Directions:** Conduct the food attributes exercise with caregivers of young children.

## **INTRODUCTION**

Introduce yourself and invite the caregiver to participate in the interview by saying, "We are talking to caregivers to learn about how children are fed".

Question	Answer	
How old is your child?	If child is <b>7-23 months</b> , continue with the interview. If the child is out of this age range, thank the mother and end the Food Attributes Exercise.	
What is your child's name?	Use the child's name during the interview where indicated by (name)	
<b>OBTAIN CONSENT</b> for the food attributes exercise: locally determined		

Start by telling caregivers there are no "right" or "wrong" answers. All answers are considered "right", and help us to learn about how young children are fed.

- 1) Take the pile of food cards and ask the caregiver to separate them into 2 piles:
- Foods she has given to the child
- Foods she has not given to the child

Use the laminated card entitled #1 Pile Sort to facilitate the sorting.

Next, take the pile of cards with foods that she has given to the child.

In the <u>Analysis Matrix #4 (A): Food Attributes</u> below, write the name of the food from the first card.

Ask the caregiver the following questions about the food, completing the corresponding columns with her answers.

• Tell me about this food, what you know about it, or what you have heard about it from others in your household or community. Anything else?

(Explore both positive and negative qualities/attributes of the food. For example, you might say "You have mentioned (a positive quality), are there other positive qualities about this food?" "How about any unfavorable qualities or comments about this food?"

• Are there additional reasons why you give this food to (name)?

(Ask specifically about availability, cost, tradition, etc. if not mentioned above)

- From what age do you give this food to a child?
- How do you prepare this food for (name)?

(For example, the caregiver might respond: mash it and mix with liquid to make it soft; grind it into flour and cook porridge; mix with rice) Include the general consistency of this food.

• How would you prepare this for a child who is beginning to eat food (from about 6 months old)? Repeat the sequence of questions above until you have asked about each food in the pile of cards that the mother has given her child.

\* \* \* \* \* \* \*

2) Next, take the pile of cards with foods that she has not given to the child.

Ask the caregiver to divide this pile into 2 more piles:

- Foods she would consider giving to her child but hasn't yet
- · Foods she would absolutely not give to her child

Use the laminated card entitled #2 Pile Sort to facilitate the sorting.

Now, take the pile of foods she would consider giving to her child.

In the Analysis Matrix #4 (B): Food Attributes below, write the name of the food from the first card.

Ask the caregiver the following questions about the food, completing the table with her answers.

• Tell me about this food, what you know, or what you have heard about it from others in your household or community. Anything else? (Explore both positive and negative qualities/attributes of the food by asking, for example, you have mentioned (a positive quality), are there other positive qualities about this food? How about any unfavorable qualities or comments about this food?

• Could you tell me why you have not yet given this food to (name)?

• From what age would you consider giving this food to a child?

• If you were to give this food to (name), How would you prepare it?

• Would you prepare it the same way for a child who is beginning to eat food (from about 6 months old)?

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3) Now take the last pile of cards with foods the caregiver would absolutely not give to her child. In the Analysis Matrix #4 (C): Food Attributes below, write the name of the food from the first card.

Ask the caregiver the following questions about the food, completing the table with her answers.

• Tell me about this food, what you know about it, or what you have heard about it from others in your household of community. Anything else?

(As the mother will likely give negative qualities/attributes of the food, explore any positive qualities by asking, "Are there any positive qualities about this food?").

- Is there any way you could prepare this food so that you could give it to (name) now?
- Is there any time or age that you could give this food to (name)?

# **Guideline for Food Attributes Exercise for Mothers (English)**

**Directions:** Conduct the food attributes exercise with mothers of infants or young children.

## INTRODUCTION

Introduce yourself and invite the mother to participate in the interview by saying, "We are talking to mothers to learn about the foods they eat.

Question	Answer
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How old is your child?       If child is less than 24 months, continu         with the interview. If the child is out of	
with the interview. If the child is out	e
with the interview. If the child is out	of
this age range, thank the mother and e	ıd
the Food Attributes Exercise.	

**OBTAIN CONSENT** for the food attributes exercise: locally determined

Start by telling the mother there are no "right" or "wrong" answers. All answers are considered "right", and help us to learn about mothers' diets.

- 1) Take the pile of food cards and ask the caregiver to separate them into 2 piles:
- Foods she has eaten in the past 3 months.
- Foods she has not eaten in the past 3 months.

Use the laminated card entitled #3 Pile Sort to facilitate the sorting.

Next, take the pile of cards with foods she has eaten in the past 3 months.

In the Analysis Matrix #5 (A): Food Attributes below, write the name of the food from the first card. Ask the mother the following questions about the food, completing the corresponding columns with her answers.

• Tell me about this food, what you know about it, or what you have heard about it from others in your household or community. Anything else?

(Explore both positive and negative qualities/attributes of the food. For example, you might say "You have mentioned (a positive quality), are there other positive qualities about this food?" "How about any unfavorable qualities or comments about this food?"

• Are there additional reasons why you eat this food? (Ask specifically about availability, cost, tradition, etc. if not mentioned above)

• How do you typically prepare or serve this food (*i.e. what is combined/served with this food in the preparation or on the plate*)?

(For example, the mother might respond, fry it and serve with rice, or cook into a stew with vegetables, etc. – it is not necessary to go in great detail).

• Is this a food eaten during pregnancy? If no, why not (e.g. food taboo during pregnancy, etc.)?

Repeat the sequence of questions above until you have asked about each food in the pile of cards that she has eaten in the past 3 months

\* \* \* \* \* \* \*

2) Next, take the pile of cards with foods that she has not eaten in the past 3 months.

In the <u>Analysis Matrix #5 (B): Food Attributes</u> below, write the name of the food from the first card.

Ask the mother the following questions about the food, completing the table with her answers.

• Tell me about this food, what you know about it, or what you have heard about it from others in your household or community. Anything else? (Explore both positive and negative qualities/attributes of the food by asking, for example, "You have mentioned (a positive quality), are there other positive qualities about this food? How about any unfavorable qualities or comments about this food?"

• Could you tell me why you have not eaten this food in the past 3 months?

3) I talked about lots of specific foods. Now I'd like to ask you, what foods are recommended to eat during pregnancy? Why? And, what foods are recommended to avoid during pregnancy? Why?

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(some of this information may have come out during the food attributes exercise, but this will help assess general knowledge on the subject). Complete the following matrix.

Food recommended to eat during pregnancy	Why recommended?	Food recommended to avoid during pregnancy	Why avoid?

4) Now I'd like to ask you about the time period after you've given birth. Is there a particular time period in which a special diet is eaten? (specify for how long).

If the mother answers yes, continue with--Tell me about the recommended foods to eat or to avoid during this period.

5) Now I'd like to ask you about the time period while you are breastfeeding. Are there particular foods to eat or to avoid eating during this time? If yes, continue with--Tell me about the recommended foods to eat and to avoid.

