QUALITATIVE RESEARCH
ON INFANT FEEDING
IN JIGAWA STATE, NIGERIA

Research & Marketing Service Ltd.
RMS Job No. 1396

for

Wellstart International’s Expanded Promotion of Breastfeeding Program

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ACRONYMS AND HAUSA TERMS

This volume reports the findings of the qualitative assessment of breastfeeding and infant feeding practices of the inhabitants of Dutse in Jigawa State, Nigeria. A table of contents and appendices are provided for easy reference. As much as possible, appropriate quotations to support the study findings are included. The quotations are verbatim opinions expressed during the Focused Groups Discussions (FGDs). Throughout the report, acronyms and Hausa words are used, followed by an English explanation. These terms are also defined below to assist readers’ understanding/appraisal of the report.

ACRONYMS

CAN  Christian Association of Nigeria
CHEWs  Community Health Extension Workers
ECWA  Evangelical Church of West Africa
EDI  Extended Depth Interview
EPB  (Wellstart) Expanded Promotion of Breastfeeding Project
FGD  Focus Group Discussion
FOMWAN  Federation of Muslim Women Association of Nigeria
LGAs  Local Government Areas
MCH  Maternal and Child Health
NGO  Non-governmental Organization
ORT  Oral Rehydration Therapy
PHC  Primary Health Care
RMS  Research & Marketing Services Ltd.
TBA  Traditional Birth Attendant
USAID  United States Agency for International Development

HAUSA TERMS

Abinchin-gina jiki  body building foods
Alala  steamed bean pudding
Allah  God
Dabino  date palms (that bear a small fruit with a long nut inside, which grows only in arid countries. It usually turns dark brown and sweet as it dries).
<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dawa</td>
<td>guinea corn</td>
</tr>
<tr>
<td>Duri</td>
<td>forced feeding</td>
</tr>
<tr>
<td>Gero</td>
<td>millet</td>
</tr>
<tr>
<td>Kayan yaji</td>
<td>spices</td>
</tr>
<tr>
<td>Kauri</td>
<td>lead sediments, honey and palm dates juice extract given to infants to protect them from the evil ones</td>
</tr>
<tr>
<td>Koko</td>
<td>gruel, i.e. pap made out of millet or guinea corn</td>
</tr>
<tr>
<td>Kunika</td>
<td>conception before weaning</td>
</tr>
<tr>
<td>Kwalli</td>
<td>lead sediments</td>
</tr>
<tr>
<td>Kwarya</td>
<td>calabash</td>
</tr>
<tr>
<td>Ladayi</td>
<td>ladle</td>
</tr>
<tr>
<td>Laya/Guru</td>
<td>local family planning amulets</td>
</tr>
<tr>
<td>Madara</td>
<td>fresh cow’s milk</td>
</tr>
<tr>
<td>Moin-moin</td>
<td>steamed beans</td>
</tr>
<tr>
<td>Ngozoma</td>
<td>traditional birth attendant</td>
</tr>
<tr>
<td>Nono</td>
<td>cow’s milk</td>
</tr>
<tr>
<td>Purdah</td>
<td>traditional practice of confining married women to their homes. In this practice, a woman is not expected to go out of her home without the prior permission of her husband. Even then, she has to cover herself, especially the face, by wearing a long robe, and she must go out only at night to protect herself from public view.</td>
</tr>
<tr>
<td>Sabulun sallo</td>
<td>native black soap</td>
</tr>
<tr>
<td>Tsamiya</td>
<td>pap spiced with potash or tamarind</td>
</tr>
<tr>
<td>Tuwo</td>
<td>corn flour, solid foods</td>
</tr>
<tr>
<td>Yadi</td>
<td>Dutse city</td>
</tr>
</tbody>
</table>
INTRODUCTION

BACKGROUND

Wellstart International’s Expanded Promotion of Breastfeeding (EPB) Program is a private, non-profit organization dedicated to the promotion of healthy families through the global promotion of exclusive breastfeeding. With a tradition of building on existing resources, Wellstart works co-operatively with individuals, consultants, institutions, and governments to expand and support the expertise necessary for establishing and sustaining optimal infant feeding practices worldwide.

The health benefits to the infant of exclusive breastfeeding for up to six months are undisputed, especially in low-income populations living in unhygienic conditions. Breastmilk provides unequaled nutrition and contains anti-bacterial and anti-viral agents that protect the infant from disease. Exclusive breastfeeding (no prelacteal/post-partum fluids, no water, milks or foods whatsoever) for the first six months of life significantly reduces the rates of diarrheal disease and acute respiratory infections, the most common killers of young children in developing countries. Mothers also benefit from breastfeeding since it decreases the risk of post-partum hemorrhage, breast cancer, ovarian cancer, and anemia. Furthermore, breastfeeding’s fertility-suppression effect plays a critical role in child spacing. In Africa, it is estimated that breastfeeding averts as many births as all modern contraceptive methods combined.

In Nigeria, Wellstart International commissioned two formative research studies -- one in Oyo and Osun and one in Jigawa (Dutse) State, the subject of this report. This study was intended to focus on key issues that non-governmental organizations (NGOs) and Wellstart EPB need to address in order to improve breastfeeding and child-feeding practices.

FOCUS OF STUDY

This qualitative assessment of knowledge, attitudes, and practices concerning breastfeeding and infant nutrition aimed to achieve insights and a deeper understanding of mother-infant feeding behaviors in both rural and urban areas of Dutse - Jigawa State. How decisions concerning infant feeding are made, including the influence of fathers, grandmothers, and health workers, was thus part of the study.

SPECIFIC OBJECTIVES

The specific objectives of this research were:

- To improve understanding of mothers’ and other family members’ beliefs about infant feeding, their reasons for current practices relating to child nutrition, and constraints to changing behavior.

- To investigate current beliefs on infant feeding of various community-based health workers who may be involved in implementation of EPB activities, and to assess their motivations and constraints for providing counselling on infant feeding/nutrition.

- To gather information that will guide the development of an effective IEC component and community interventions to improve feeding practices and child nutritional status.
RESEARCH METHODS

Being formative and exploratory in nature, the study was conducted using the qualitative techniques of Focus Group Discussions (FGDs) and Extended Depth Interviews (EDIs). FGDs were held with mothers and other family members (i.e. fathers and grandmothers) who influence child feeding, and EDIs were conducted among mothers, community-based health workers, traditional birth attendants (TBAs), Federation of Muslim Women Association of Nigeria (FOMWAN) members and opinion leaders. Local dialect (Hausa) was mainly used for the general convenience of the respondents.

Since infant feeding was the main focus of this study, the study specifically involved those who take care of children and persons who influence their practices:

- **Mothers:** The mother forms the key target respondent. Due to the focus of this study (infant nutrition), mothers invited for the groups were those who have children under two years of age.

- **Fathers:** In the African tradition, the father is the main breadwinner and tends to make the major decisions in the house. Hence, fathers with children under two years were spoken with to determine the extent of their influence on the upbringing of their children.

- **Grandmothers:** This group comprised all those who may be regarded as elderly female advisers to the parents of a child, not necessarily the biological grandparents of the child. They were basically recruited based on the belief that their influence/expertise on such issues goes beyond their own immediate families.

- **CHEWs:** (Community Health Extension Workers) This category included community health workers attached to hospitals and clinics. They have a major involvement in teaching and encouraging interest on infant nutrition by children’s caretakers.

- **TBAs:** Respondents in this category deal with traditional methods of delivering children. Particularly in rural areas, they wield considerable influence on the general welfare of the child. Thus, it was considered important to know the extent of their influence on the mothers concerning infant nutrition.

- **Opinion Leaders:** Participants in this category included those who influence a large section of opinion within each locality. For instance, chairmen of Local Government Areas (LGAs), religious leaders and leaders of female organizations, e.g. of women’s church fellowships or of market women’s associations.

- **FOMWAN:** A few members of this group were included in the study due to their perceived influence on women in this area. At the end of the study, they were also de-briefed because they may be involved in the implementation of household trials in the area.

STUDY DESIGN

Different qualitative techniques were used to collect data from each of the categories listed above. While the FGD technique was appropriate for mothers, fathers and grandmothers, it was not appropriate for the opinion leaders or CHEWs/TBAs. The techniques used are outlined below.
FGDs
These involved mothers, fathers and grandmothers only. A typical group discussion involved 6 to 8 respondents. It is believed that a group which is not too large will allow individuals the opportunity to articulate their own views, encourage cross-fertilization of ideas, and enable in-depth probing by the moderator.

**Number and Composition of Groups**

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Dutse</th>
<th>Limawa</th>
<th>Jaudi</th>
<th>Ruru</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literate Mothers</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Illiterate Mothers</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Literate Fathers</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Illiterate Fathers</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Grandmothers</td>
<td>3</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
<td><strong>7</strong></td>
<td><strong>2</strong></td>
<td><strong>2</strong></td>
<td><strong>1</strong></td>
</tr>
</tbody>
</table>

EDIs
The purpose of the EDIs was to enable the research team to confirm the earlier findings from the groups and also to afford us the opportunity to observe how mothers actually take care of their children. EDIs were conducted among mothers with children under two years of age, FOMWAN members, opinion leaders, CHEWs and TBAs. Details of the interviews among these categories of respondents follow:

**Number and Composition of EDIs**

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Dutse</th>
<th>Limawa</th>
<th>Jaudi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers With Children</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 5 months</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>6 - 11 months</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>12 - 24 months</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Opinion Leaders</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chairman of LGA</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Village Head</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Women Leader</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Religious Leader</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>22</strong></td>
<td><strong>8</strong></td>
<td><strong>7</strong></td>
<td><strong>7</strong></td>
</tr>
</tbody>
</table>

Locations
The entire study was conducted in four communities of Dutse, Jigawa State. The four selected communities are: Dutse metropolis (represented by Gaya and Katangare districts), Jaudi, Limawa, and
All these communities are homogenous in terms of culture. Each community is described in detail below:

**Dutse Metropolis**
Dutse was selected to represent the urban opinion of Jigawa state residents. Dutse, a newly created state capital about three hours drive from the ancient city of Kano, turned out to be more of a semi-urban settlement than an urban area. The following structures were used by the research team to arrive at this conclusion:

- The population of the town is very small.
- Electricity/water supply is not very constant.
- There is only one major tarred road in town. All other service roads are untailed.
- There are no intra-town taxis. *Achaba* or *Okada*, local motorbikes, are the only means of transportation.
- Only one general hospital and Evangelical Church of West Africa (ECWA) dispensary hospital are available.
- There are one polytechnic and three secondary schools.

However, fast development appears to be taking place, judging from the number of on-going projects noticed by the research team.

The people within this community are mainly Hausas and are by occupation farmers, traders and workers with the local ministries.

**Limawa**:
This town was used to represent the opinion of the Hausa rural population. It is about forty-five minutes drive from Dutse city. Limawa has no electricity or pipe-borne water supply, even though electrical installations were visible. The general hospital in Dutse provides the nearest health care. In spite of its nearness to Dutse (by northern Nigeria inter-town distance standards), Limawa still lags behind in terms of availability of basic amenities.

**Jaudi**
This is a Fulani rural settlement. It is about two hours drive from Dutse. Electricity and water supply are virtually non-existent. Jaudi has only one dispensary that was generally said to be inadequate. Members of this community are mainly cattle rearers and farmers by occupation.

**Ruru**
Another rural Fulani settlement which happens to be close to Jaudi (roughly about forty-five minutes drive from Jaudi). One grandmothers’ group was conducted in this town. In terms of availability of basic amenities, Ruru is far behind Jaudi.

**Fieldwork and Respondents’ Selection**
Research & Marketing Services Ltd. (RMS) staff recruited house to house to allow some degree of randomness in the choice of respondents. This also afforded the opportunity for a wider selection of respondents because, in each building, it was ensured that not more than one member was invited. Annex I contains the recruiting guides for FGDs.
Generally, the respondents in all communities were very receptive and cooperated with the research team. The warm reception received facilitated recruiting. Language was not a barrier as all personnel who worked on this project are Hausa-speaking.

Discussion Guides and Stimuli Material
The discussion guides used for the different categories of respondents for the FGDs and EDIs are appended to this report as Annexes II through VIII.

Other stimuli materials used for the study included:

- primary health-care child health charts;
- pictures of women/fathers/children/grandmothers cut out from magazines/newspapers; and,
- photographs of children (taken on location).

Timing
Fieldwork for this study took place mid-May 1995. Transcribing of tapes was an on-going process during the fieldwork period. However, it was impossible to complete the transcribing process during fieldwork. Thus, content analysis and transcribing were completed in July 1995 in Lagos.

Training Program
A rigorous training of the two moderators involved in the study was organized by Wellstart for five days at Ibadan prior to the study. During the training program, moderators were exposed to the techniques of leading group discussions, note-taking skills, etc. Moderators practiced mock groups in Ibadan using the techniques they were taught. Three practice FGDs were conducted in the nearby village of Onigambari, while practice EDIs were also conducted at Eleta Catholic Hospital in Ibadan.

Analysis
The tapes of all the FGDs and EDIs were fully transcribed, and their content was analyzed by several variables, including:

- area (i.e. urban or rural);
- sex;
- participant type, i.e. the mother, grandmother, opinion leader etc.;
- literacy level;
- relevant topics; and,
- separation from infant, i.e. whether the mother is away from the child for more or less than four hours a day.
SUMMARY

This formative research was conducted to gain an in-depth understanding of breastfeeding and infant feeding practices and people’s reasons for them in Jigawa State in northeastern Nigeria.

GENERAL DISCUSSION OF CHILDREN

Virtually all respondents have children under two years of age. Respondents expressed strong superstitions, especially grandmothers and rural mothers, concerning their children. A person rarely will state the number of children he or she has because children are believed to be from God and therefore might die if counted. Also, some of the respondents, especially illiterate grandmothers and rural mothers, are wary of telling the names or ages of their youngest children to total strangers for fear of them dying before their ‘time’. However, the literate urban respondents do not share in this belief.

Virtually all mothers, irrespective of their social and working inclinations, claimed to take care of their children themselves. If mothers must be absent from home, they prefer to delegate such functions to their mothers or mothers-in-law rather than to child-minders or nannies. The belief that child care is the sole responsibility of the mother is still very strong among all community members, particularly amongst fathers.

PERCEPTION OF CHILD HEALTH

The vast majority of the mothers perceived their children under two years to be healthy. They claimed to be able to tell this from close observation of their children. Eating or playing well, not crying too often, regular bowel movements and being sensitive to the immediate environment (reacting to heat, sun, cold, etc.) are all indications of the fact that a child is healthy.

Amongst the fathers, indications that the child is sick include: sudden quietness, withdrawal of a hitherto active child from the other children or ‘ignoring’ daddy when he comes back home from work instead of welcoming him. Fathers also depend on their wives for a regular update on the health status of their children.

Grandmothers generally attested to the fact that their grandchildren are healthier than their own children were. They feel that the high infant mortality rate prevalent during their youth, due to ignorance and nonchalant attitudes, is no longer the order of the day because of the emphasis now placed on hygiene and children’s eating habits.

On the whole, good food and cleanliness (i.e. general hygiene) were perceived as being essential for a child’s good health. Eating of foods like beans, meat, rice, and vegetables is generally believed to contribute to the healthy growth of an infant. In this regard, health workers were generally commended by mothers, who claimed to receive awareness/education at ante-natal clinics on the type of food to be given to an infant to aid its healthy growth. Interestingly, breastmilk was also perceived as being a component of 'good' food for the child, especially by the fathers and grandmothers.

PARENTOOD (PROBLEMS AND PLEASURES)

Having children is usually a source of great joy to most parents. Many parents claimed to experience inner pride in their status as parents. A child who is obedient, doing well in school, and who follows the parents’ moral and traditional values usually makes his/her parents happy. Any deviation from these ideals tends to bring great sadness to the parents.
The current economic problems being experienced in the country, which restrain some parents from properly caring for their children, remain a major source of worry. Also, sudden illness or poor performance in school are other sources of parent worry.

By and large, parents believe that the joy experienced in having children far outweighs its accompanying problems, which are usually temporary setbacks that have solutions.

To openly boast about one's children is not a common practice, as it might be interpreted to mean an open mockery of others. Thus, parents keep their parental pride to themselves.

**DREAMS/ASPIRATIONS FOR CHILDREN**

Parents generally harbor high aspirations for their children. Most parents hope that their children will be 'better' than them in terms of achievements and educational pursuits. Although the future looks so bleak, many parents expressed some consolation in the insurance their children provide during old age. Based on this, many parents ensure that they give their children the best now so that they will not be disappointed in the future. In order to ensure that their desired goals for their children are achieved, parents do the following for their children:

- ensure that they are properly educated (both western and religious education are acquired with the same zeal),
- constantly pray for them, and
- ensure that the children remain constantly healthy.

**ROLES OF PARENTS IN CHILD-CARE**

Traditionally, it was believed that a man's role in the life of his child was mainly financial, while the mother was expected to provide for the child's physical and emotional needs. However, the research revealed that child-care is now a joint function. Fathers actively participate in such child-care tasks as bathing and feeding their children. In fact, it is now a thing of pride for a man to be involved in such roles.

A noticeable proportion of fathers also claimed to extend their hitherto supervisory roles to that of actual instruction. Many fathers claimed to instruct the mother on the type of food to be given to the child and the duration of breastfeeding before weaning. Fathers ensure that such instructions are carried out to the letter or else their wrath is incurred. As a result of fathers' sudden interest in child-care, more mothers attested to being more serious with their child-care roles to avoid any problem in their homes.

Mothers who live with their daughters or daughters-in-law appear to have more influence on them than those who do not. The major roles grandmothers play in child-care include ensuring that the child is well fed on time and making sure that breastfeeding is practiced for a longer period before completion of weaning. Interestingly, grandmothers recommend two years as the ideal time for ending breastfeeding, a period most mothers considered too long.

**BREASTFEEDING PRACTICES**

Breastfeeding is generally seen as a key part of an infant's diet. After delivery, infants are usually introduced to breastmilk almost 'immediately'. The concept of 'immediately' is relative, however. In the urban area, 'immediately' means within the first five hours of delivery, while in rural areas, it means the next day and, in some cases, a day or two after.
Irrespective of whether a baby is delivered in a hospital or at home, water is the first thing usually given. Some urban mothers add glucose to the water given to the child before breastmilk. However, in rural areas, a mixture of lead sediments (*kwalli*), honey and date palm extract is the first fluid given to a child. The main reason given for this practice is the general belief that a newborn child is thirsty. In addition, most mothers do not know that late introduction breastmilk to the child could affect its flow. Hence, they need further education in this regard.

Colostrum is generally perceived as bad and unimportant to a child, especially in the rural areas. On the other hand, exposure and regular contacts with health workers tend to have made urban mothers realize the importance of colostrum to the child. Apart from being perceived as nutritive, it is also believed to be 'good' in the sense that it contains antibodies that can help keep the child immune against possible infections until the child starts developing his/her own natural immunity.

Grandmothers and in particular TBAs emerged as the major pressure groups on mothers towards discarding of colostrum. To them, colostrum is bad for the child’s health. In fact, a few grandmothers in Ruru, believing that a child fed on colostrum will die, are totally against giving it to the newborn. Even education by health workers in this regard is usually doubted and disregarded.

Breastfeeding for the infant’s first three months is largely practiced, albeit supplemented with water. Breastmilk is not perceived as having enough water to sustain the child, especially in arid Dutse, where people perceive a need for constant drinking of water to avoid dehydration.

As the child grows older, breastmilk is said to be supplemented mainly with millet or guinea corn pap (*koko*) with groundnut paste. Because too much sugar is considered bad for the child due to its perceived tendency to cause diarrhea, most mothers add little if any sugar. Also, they believe that the groundnut paste is enough to sweeten the gruel.

Generally speaking, sevrage (completion of weaning) takes place after one or one and half years as the child is considered old enough at this age to be weaned. Until this period, most mothers claimed to breastfeed their children about five to seven times a day on average. For many, it is usually on demand, normally until the child rejects the milk.

No spontaneous mention of problems associated with breastfeeding was recorded. However, upon prompting, breast abscess, ‘bad’ milk, nipple inversion and insufficient milk emerged as known problems, but none of the respondents claimed to have personally experienced any of them. Nevertheless, these occurrences are not generally perceived as problems as such, since traditional methods of coping exist (see below).

Breastfeeding in public is widely frowned upon. A nursing mother is expected to be modest by always covering herself with a veil if the need arises for her to breastfeed in public. Some fathers said they would be so embarrassed to see their wives breastfeeding ‘openly’ that they would not even mind their children being bottle-fed to prevent such situations.

Regarding whether a nursing mother can get pregnant while still breastfeeding, the majority of the respondents said it is possible. In spite of this belief, respondents had difficulties in admitting openly to the use of family planning methods. The few who claimed to use family planning methods used the I.U.D., condoms, pills and withdrawal. The non-use of family planning methods were largely attributed to ‘rumors’ associated with their use, the most popular of which is the fact that such methods will have a negative repercussion on the fertility of the woman concerned.

Interestingly, feeding infant formula in bottles is not common. Few working mothers claimed to feed their babies with infant formula. It was also discovered that even though a noticeable proportion claimed
to use feeding bottles, the main thing it is usually used for is gruel (koko), i.e. pap or water, particularly when going out.

CONCLUSION

Based on the findings of this study the following conclusions can be drawn:

♦ Exclusive breastfeeding is rarely practiced, since the norm is to augment breastmilk with ordinary water from the beginning. Thus, mothers need to be further educated that the best practice is exclusive breastfeeding, which means administration of breastmilk alone. In addition, the educational campaign should also emphasize the fact that breastmilk in itself contains enough water to sustain the child.

♦ Colostrum is still widely discarded due to the belief that it is bad and capable of killing babies. Much public education is still required in this regard. A key to changing perceptions of colostrum is to convince the TBAs, who are the main people spreading false information.

♦ Mothers widely trust health personnel for giving reliable information on health issues relating to their children. Therefore, more health workers need to be educated in this regard so that they can pass on the useful information. Health workers expressed their willingness to cooperate, but they claim to lack visual materials, e.g. posters and calendars, as well as vehicles. Thus, in order for this campaign to be successful, the identified constraints need to be addressed.

♦ Since purdah (the practice of confining married women to their homes) is still widely practiced, the program must design innovative ways of disseminating information to this set of mothers. For instance, the many FOMWAN members could be used for the general campaigns, i.e. they could be educated and paid to go from house-to-house to educate mothers. Radio can also be used, as listening to radio appears to be common among these mothers.

♦ Mothers, especially in the rural areas, largely recognize the role that good hygiene plays in having healthy children. However, they still have many poor hygienic practices and require further education.

♦ Low levels of education/self esteem and belief in ‘rumors’ are the major constraints to acceptance of modern family planning methods. Such negative rumors need to be addressed and the benefits of having some control over fertility more widely disseminated.

♦ Most mothers discontinue breastfeeding as soon as they discover that they are pregnant. Mothers need to understand that they can continue nursing the child for as long as their health permits, since their breastmilk has nothing to do with the developing foetus. It is strongly advised that the program help dispel this practice, as many children appear to be suffering from it.

♦ The supplementary diet/weaning foods given to children in this area have little nutritional value. Thus, household trials need to be conducted to test the acceptability and feasibility of possible recommendations towards improving young children’s feeding. Again, FOMWAN members can be used for this purpose.
SECTION 1: DETAILED FINDINGS FROM FGDs

GENERAL DISCUSSION OF CHILDREN

To create rapport, the groups generally commenced with the moderator asking participants questions relating to their families in general and on their young children, especially their infants. Even though virtually all the respondents were eager to talk about their youngest children, they would not state the number of children they had, based on the strong superstitious belief still prevalent in this area. Since children are considered as 'gifts' from God, they should not be counted nor should their names be given to total strangers. People believe that if they do, the children might die. In fact, in the grandmothers' group, some found the question 'unusual' and refused to respond.

"We don’t count the number of our children, and we talk less of our grandchildren. I have plenty of them and if you ask me anything again about that, I will just keep quiet."

"It is not our culture to talk about our children to people we don’t know. Our tradition forbids it; it is not good at all. I can tell you about their health or names but not their number."

Grandmothers, Dutse

The only exceptions to this strong superstitious belief were the working mothers and fathers (who have a different educational background/social exposure). These respondents proved to be more confident/willing to tell the research team about their families without any reservation.

Research shows that having large families is the order of the day in Dutse. This was deduced from the fact that those who agreed to tell the research team the number of their children have between two and ten, spaced at least eighteen months apart. The use of family planning methods is still very low in Dutse judging from the fact that it is common to find a father of 30 years having about six children.

Marriage among sexually active teenagers and adults is usually contracted very early in Dutse. This was evident from the fact that some of the groups, especially in rural areas, had mothers as young as fifteen years old who claimed to already have two children.

"I have seven children and they are all boys. The youngest of them is called Aminu and he is about 10 days old today."

Literate Father, Dutse

"I have two children. The first one is two years old while this one [holding child] is four months old."

Literate Mother, Dutse

As expected, marked differences were unearthed during the groups on child-care patterns based on respondents' educational and occupational status. Most fathers in the semi-urban area (Dutse) claimed to belong to the working class, while their rural counterparts were either petty traders, small-scale businessmen, or farmers.

Regardless of their educational levels, the majority of mothers claimed to be full-time housewives. However, in Dutse a noticeable proportion belong to the working class, and many were teachers. The grandmothers, on the other hand, mainly involve themselves in petty in-house trading to augment the family income.
"I'm not working at all. All I do is serve my children and operate my kitchen."

Illiterate Mother, Limawa

"I work with the women's center. I teach other women how to sew and knit sweaters."

"I teach in a primary school. I teach English and Arabic to primary four pupils."

Literate Mothers, Dutse

"I'm not doing anything. I'm a full time housewife because I'm in purdah. Sometimes, I sew caps and give my husband to sell them in the town for me. I also rear chicken."

Illiterate Mother, Jaudi

PERCEPTIONS OF CHILD HEALTH

A healthy looking child was generally said to be a source of joy to his/her parents and usually the 'cynosure' of all eyes in a social gathering. That is, other mothers will envy the mother in focus as they will want to carry the child and cuddle/play with him or her.

Virtually all the respondents claimed that their children are healthy because they eat well, play well, are growing (physically) bigger, and are sensitive to their immediate environment (by way of using their five senses). In addition, regular bowel movements are an indication to the respondents that their children are healthy.

For the fathers who claimed to be rarely at home, noticeable indications that the child is healthy include (1) the way their children welcome them when they come back from work and (2) the way their much younger children focus their attention on them or the happy look on the child's face as soon as the father walks in.

The grandmothers' group revealed them be more sensitive towards the children than even their biological parents. This finding was deduced from the fact that they tend to be more observant by way of keeping a 'closer look' on the children while they go about their chores in the house. Thus, to this set of respondents who rarely have any formal education, inactivity or constant crying of the child is an indication that the child is unhealthy. Many of the grandmothers however, said that their grandchildren are healthy and that their daughters or daughters-in-law have proven to be more competent than they are in caring for their grandchildren. This they attributed to the availability of modern child-care facilities that support mothers.

When asked to compare the health status of their own children and that of their grandchildren, the grandmothers acknowledged that their children were not as healthy as their grandchildren are. They claimed that the high infant mortality rate of their youth, caused by neglect or ignorance, has declined tremendously over the time. They attribute this positive development to education, the heterogenous setting of many urban towns (i.e. mixing with other tribes and adapting their ways of life), and the divine blessing of Allah (God).

Most grandmothers claimed that their grandchildren were healthy, but a few claimed they are often ill (in particular with sickle cell, fever, diarrhea, and whooping cough). Interestingly, these respondents viewed a child's inactivity not as a sign of ill health but as a sign of tiredness or dehydration. However,
upon prompting, some of them agreed that a child's inactivity or sudden quietness could be a result of ill health, particularly for children who are not talking yet.

"A child that is quiet does not necessarily mean that he is sick. It could be that he is just naturally quiet."

Illiterate Father, Jaudi

"When I see my child moving his hands and part of his legs when he sees me, I feel happy because it is an indication to me that he is okay."

"My daughter is very healthy because she is not yet two years old, but she looks like somebody that is almost three and she is also hyperactive."

Illiterate Mothers, Limawa

"My child is healthy because the mother confirms that to me every Friday when I go home." (This father does not live with the mother due to his job transfer.)

"My child is healthy because I can see it physically. It is plain and clear enough. He rides his bicycle and plays with his toys and with the other children."

"If my wife gives my child breastmilk first thing in the morning and he doesn’t reject it, that way, I know that he is healthy."

"I feel happy when I wake up in the morning to see my daughter alive."

"I feel happy to see him healthy, especially when he sees me and he wriggles his hands and legs."

Literate Fathers, Dutse

"My son is healthy because he does not fall sick often. He plays around, his skin is fresh, he laughs, has a beautiful body and does not cry often."

"I know that my child is healthy because every morning when he wakes up, the first thing he will do is sit on his toilet [i.e. exercise his bowels]. That means his whole system is working. He crawls to the neighbors, and plays a lot except when he is sick."

"My small boy is healthy. He doesn’t normally cry and he is growing up a little bit faster. I mean, he is putting on weight and he sucks his mother’s breastmilk very well. Anytime they give him he doesn’t reject it."

"My own child is not healthy. He is a 'sickler'. His mother is always complaining that his temperature is high, he doesn’t eat well, he cries a lot and keeps to himself a lot."

Illiterate Fathers, Limawa
Forced feeding (*duru*) is usually practiced if a child refuses to eat either due to ill health, stubbornness, or sudden loss of appetite, which is said to be common. To do this, a child is placed face down on the mothers' lap and his nostrils are blocked, thus forcing the child to take gulps of the gruel (pap or *koko*) since he/she has to breathe through the mouth.

Although the hospital personnel widely claimed to be against this practice due to the obvious fact that the child might suffocate or the food might go the wrong way, some mothers/grandmothers, especially in rural areas, are still indulging in this practice. Their stubbornness in this regard, in spite of the incessant education they claimed to receive is an indication that certain ‘deep-rooted’ traditions/practices common in this area might be difficult to drop. Notably, many urban mothers claimed not to indulge in the practice of forced feeding due to the same fears as the health personnel.

Interestingly, good food was generally perceived as being essential for good health. Participants generally agreed that food (especially body-building foods -- usually referred to in the local parlance as *abinchin-gina jiki*) is important in aiding the healthy growth of a child. Apart from aiding the strong development of the child’s bones, people also believe that it gives ‘blood’, makes child ‘stronger’, ‘healthy-looking’ and ‘robust’.

Respondents' understanding of good food was sought. Good food was generally said to include: meat, bone-stock, beans (mashed or steamed into *alala*, i.e. *moin-moin*, or even fried into beans cake), vegetables, fruits, rice or spaghetti (mainly the locally sourced ones - wheat is widely grown in Dutse). Additionally, *koko* (pap or *akamu*) -- usually enriched with palm oil, cray fish, tamarind (*tsamiya*), groundnut paste, and other foods -- is also considered to be good for a growing child (in this case, aged three months plus) by both urban and rural mothers.

The doctors, nurses and midwives were commended generally for doing a good job in this regard. Some urban mothers claimed that during ante-natal clinics, they are usually advised by the health personnel on feeding practices and the type of ‘good food’ that a nursing mother and/or her growing infant should take. These are usually listed out for the mother. In fact, during the EDIs, one of the CHEWs claimed to sometimes ask the mothers to be accompanied by their husbands to the hospital, since the father is essential for the disbursement of funds to meet this need.

Notably, infant formula was not perceived as adding any nutritional value to the child’s health; rather, it was generally seen as a ‘luxury’ by the rural mothers and as a ‘matter of necessity’ by the working mothers in the urban area. In fact, even to these mothers, infant formula is perceived more as a supplement than a substitute for breastmilk. Hence, they only give their babies infant formula because they cannot be physically present to breastfeed due to work pressures. A few rural mothers see infant formula as ‘good food’ for the child, as they feel it is responsible for the ‘healthy’ and ‘robust’ looks of many urban children whom they claimed to envy. But these mothers cannot afford infant formula for their own babies.

"I usually give my child pap using a cup and a spoon. I don’t use a feeder [feeding bottle]. Apart from the fact that they advise us not to be using a feeder in the hospital because it can cause infection for our children, my child doesn’t even like it at all."

**Literate Mother, Dutse**

Cleanliness was also considered essential for attaining good health. Mothers in particular claimed to bathe their infants at least once a day, wash their children’s clothes, and (in urban areas) sometimes iron them as part of their efforts to ensure that the children remain clean. Infant feeding utensils were also claimed to be thoroughly washed with soap and water before re-use as another step towards maintaining
proper hygiene for the child. In fact, some urban mothers (particularly those who use feeding bottles) claimed to use saline and tepid water solution in cleaning/sterilizing these feeding bottles/utensils.

Indeed, only a few working class mothers used feeding bottles. However, some of the working mothers expressed their preference for bowls, spoons and cups in order to avoid the use of bottles (referred to as ‘feeders’). Alternatively, they have several collections to avoid the re-use of a particular one while the mother is away for fear of the nanny/helpers not being able to maintain the mothers’ level of hygiene. Interestingly, the use of bottles was generally said to be discouraged by hospital personnel. In addition, none of the rural women attested to using a feeding bottle.

In actual fact, the issue of cleanliness was said to be emphasized to the urban mothers at the hospitals (in ante-natal clinics) right from when they are pregnant. The health of the mother, they added, was usually stressed by the doctors as being an integral part of keeping the child healthy.

"Good personal hygiene is essential for the child to be healthy. I take personal interest in the hygiene of my child. In fact, I make sure my child is always looking clean all the time."

"I ensure that the baby is bathed twice a day and his clothes are constantly washed and ironed as well. And if there is any prescribed tablet, I make sure they don’t miss taking it."

Literate Fathers, Dutse

Even though many of the respondents realize the essentials for maintaining high hygienic standards, it was noted that many rural women, in Jaudi in particular, tend not to take the issue of hygiene very seriously. An indication of this was the dirty plates lying around with flies having a feast on them during the FGDs. Thus, it can be inferred that although rural women want healthy, clean children, they are not meticulous in their actions towards attaining their desire.

Fathers generally claimed to contribute their own quota to the healthy upkeep of their children, particularly financially. Many fathers actually claimed to ‘shop’ (the tradition of the man going to the market instead of the woman is still very strong), especially for their children under two years. In particular, they claimed to pay more attention to the purchase of fruits, bread, eggs or fish, which they believe give protein and energy to the child. In addition, the fathers believed that frequent consumption of fruits will improve the child’s bowel movements, hence keeping constipation at bay.

Fathers in the rural areas claimed to sparingly buy fruits. They would have loved to do this on a regular basis but for the fact that fruits are usually sold in the urban areas (referred to as Yadi). Dutse is an arid town, so fruits are usually brought in from neighboring states. This perhaps could explain why more urban fathers can easily lay their hands on them. In most cases, fathers in the rural areas make do with such dried fruits as date palms (dabino) which are locally available for their children, although they tend to select the more juicy ones.

Even though most fathers claimed to always contribute their expected quota to their children’s upkeep, they were quick to point out that this ‘special treatment’ is usually stopped when the child is over two years due to the obvious economic hardship being experienced in the country at the moment.

Apart from financial contributions, a few literate urban fathers also claimed to contribute to the healthy growth of their children by offering physical care. For instance, they claimed to help bathe the children when they are dirty and their mothers are busy attending to other chores. Added to that, a few others claimed to occasionally spoon-feed their children when the mother is busy. Those who do not offer physical care seemed to be willing to but claimed not to do so for the simple reason that they believe...
bathing and feeding the child is the sole responsibility/duty of the mother, as tradition demands. Rather, what they do is give advisory and supervisory support. Fathers claim to advise their wives on the type of food the child should eat and to supervise the mother to ensure that their advice is carried out to the letter.

Notably, virtually all the fathers perceived breastmilk as being essential for good infant health. They therefore claimed to insist on breastmilk and deliberately refused to buy infant formula in order to discourage bottle feeding.

To emphasize their belief that a nursing mother needs to eat very well for her child to remain healthy, fathers claimed to make provisions for 'special' food and extra housekeeping money to the nursing mother. The 'special' foods usually stocked by the nursing mother include millet (gero), guinea corn (dawa), and corn flour to be used for preparing pap or what they call kunun kanwa or tsamiya (i.e. pap spiced with potash or tamarind). Other foods, especially those provided on a regular basis if affordable to the head of the household or until the child is of age, include: spices/hot pepper (kayan yaji/kauri), meat and condiments for preparing tuwo (solid foods).

The general belief held is that when the nursing mother takes the food provided on a regular basis, not only will it give back the blood that she lost in the labor room, it will also 'increase' the flow of her breastmilk. This increase in the milk they believe will contribute to the healthy growth of the child.

Conclusions:
- Children in this area are generally regarded as healthy.
- A healthy child is one who is clean, eats well, is very active, is growing well, and does not cry too often.
- Regular bowel movements are also an indication that the child is healthy.
- The concept of a healthy child that will be used for future educational strategies should emphasize messages on hygiene related to future educational plans and the current conception that cleanliness promotes good health.
- There appears to be some confusion or ignorance concerning basic hygiene since rural mothers believe in the importance of hygiene for their children's health but do not practice it. Hence, there is the need for future messages to be specific on the particular hygiene practices that are essential to promoting good health.
- Weight gain in infants is an indication of good health and thus highly valued. This point could also be emphasized as being appropriate for proper growth monitoring of infants by their mothers.

PARENTHOOD (PROBLEMS AND PLEASURES)

Virtually all the respondents interviewed attested to the fact that joy/happiness is the natural satisfaction derived from fatherhood/motherhood. Generally, respondents said they feel happy or proud to be parents, especially when they see their children obedient (doing what is expected of them).

However, in spite of the inner pride parents feel, nobody (as a matter of religious obligation) is expected to 'boast' openly about his/her children as they are generally viewed as being gifts from God. Open
boast of having children is usually perceived or interpreted to mean an open mockery of those who do not. Again, due to the gospel belief that ('God taketh and God giveth'), mothers in particular claimed not to openly express the pride they feel about their children. Rather, they allow their wards to mingle freely with other children and even to the extent of allowing other women to send their children on errands, albeit with prior permission from the mother of the child.

"I feel proud to be a father because anytime I remember that if I die today, I have somebody to bear my name then, I have this happy feeling in my mind. It is a thing of pride."

"I feel proud as a father because my children will no doubt add to the development of my country with the way I’m bringing them up."

_Illiterate Fathers, Limawa_

"It is not good to boast about your children to your rivals, especially if they don’t have so that you can live amicably with one another or they will think you are referring to them indirectly."

_Illiterate Mother, Jaudi_

When their children are sick, disobedient, not doing well in school, or doing ‘destructive’ or ‘stupid’ things, most parents become sad and worry. Feeling responsible for providing for the child’s needs in this hard economy is another source of worry for parents, especially in the rural areas, where parents desire to give their children the best things of life.

"I feel sad when my child is ill."

"When I see my child sick or has rashes I feel down and sad. In fact, I might not even be able to eat well."

"I feel bad when my son destroys any valuable thing in the house."

"When your son suddenly stops doing well in school, naturally as a father, you will feel bad or pains inside of you."

_Illiterate Fathers, Dutse_

In the same vein, some mothers claimed that their children sometimes make them feel ‘tired,’ especially when they are overactive. Coping with such active children, while attempting to keep up with house chores was said to be an ‘enormous’ task. However, the mothers who complained in this regard were quick to point out that it is their lot as mothers to go through such travails; hence they are grateful to God for providing the children and continually pray to Him to give them strength/wisdom to cope with them.

On the other hand, many mothers reiterated that keeping up with a growing child is often difficult as the child is naturally full of energy and therefore needs to be constantly watched, a requirement in itself said to be very tiring.

"My children make me feel tired. Sometimes I want to cook and the child will be crying and wailing for attention, and if I try to soothe him and he refuses; I just get fed up. Sometimes I spank him the more for being so naughty."

_Illiterate Mother, Jaudi_
Conclusions:

- All parents are happy to see their children healthy. It gives them satisfaction to see their children playing, being strong, active and obedient.

- Since healthy children are a source of great joy to parents, motivational materials should emphasize that well-fed children do not fall ill easily so that parents will be encouraged to feed their children better.

DREAMS/ASPIRATIONS FOR CHILDREN

Virtually all respondents have high aspirations for their children, even though they acknowledge the fact that the future looks bleak due to the current instability in the country. Nevertheless, they still harbor the belief that all hope is not lost, as sooner or later things will return to normal.

In particular, mothers and grandmothers want their children and grandchildren to do well in life so that they will not be the ‘black sheep’ of the family. They hope that their children will become role models for their peers to look up to. These aspirations can better be understood when viewed against the background that many of the mothers are uneducated. Mothers want their own daughters in particular to be better educated than they are so that they can have more self-confidence. Also, since polygamy is still waxing strong in this area, it appears to ‘trigger-off’ some kind of competition among rivals/mates. That is, each mother wants her child to be better than her rivals’ children and, subsequently, to have a better life than its parents.

Further analysis reveals that most aspirations that mothers have for their children are basically sentimental. They generally want their children to:

- have a good home (i.e. to be happily married) and

- when educated, to be nurses/doctors.

All these aspirations they believe can be achieved through schooling, hard work and parents’ commitment to achieving these goals.

Fathers’ aspirations for their children can be described as very ambitious. Many want their children to have fame, to be rich, or even to become president of the country. Men also tend to see their children as a form of ‘insurance’ for old age, that is, to take care of them when they are old. Hence, they need to take care of these children in their infancy so that they will not let their parents down later.

Apart from getting education, rural fathers also want their children to be farmers, in this case big-time farmers, i.e. mechanized farmers. Generally, they tend to nurture the belief that in the near future, considering the way the economy of the country is tilting, people will have to depend on agriculture. Thus, their children will always have some security.

On balance, no parent appears to want his/her child to pursue these careers in life unaided. Most would want to have a say in this major aspirational decision. In addition, virtually all the parents hope that their desires for their children will come to pass and also hope that their children will grow up faithful to their religious, cultural and moral values.
"When my child grows up, I will try as much as possible depending on my financial position then to give him the best education money can afford."

"I am a teacher and I love the teaching profession. Seriously, I don't mind if my child grows up to become a teacher too because education is a legacy that cannot be taken away."

"I want my child to be the president of Nigeria when he is old enough."

**Literate Fathers, Dutse**

"I want my daughter to become a doctor because if you look around in this village even in 'yadi' (referring to Dutse), you will discover that here (Jaudi in particular, we don’t have any female doctor and our wives are being referred to male doctors, which is against our religion. I really find this development very disturbing."

"I want my child to join the army because people respect army men a lot. I want him to be a 'big man' (governor) so that he can bring roads and water to this village."

**Illiterate Fathers, Jaudi**

"I want my daughter to grow up to be a lady so that she too can get married and be like me. I also want her to go to school up to degree level."

"I will like my son to grow up and be a good person, honest, educated, be an ardent follower of God. And also, I will like him to follow all my instructions."

**Illiterate Mothers, Limawa**

"I am a farmer and I want my child to also be a big time farmer (i.e. mechanized farmer)."

**Illiterate Father, Limawa**

Additionally, almost all parents stated that it is only ‘unruly behavior’ and a departure from the parents’ ‘moral’ or spiritual values that can prevent a child from achieving the parents’ goals. Interestingly, many parents said they are determined to achieve their goals for their children, since the present living condition in the country are nothing to write home about, and openly wondered what the future is going to be like. In fact, few believe that there will be no future at all, as a total break of the bond that tends to hold the society together appears imminent.

In the final analysis, a child rollicking in good health is a source of great joy for his/her parents. A child who plays very actively and is healthy/strong looking and gaining weight is indeed a source of greater satisfaction. In particular, an obedient child who will not depart from the ways of his/her parents and who is always willing to help parents run errands and help with the house chores usually makes the parents’ proud.
Conclusion:

- All parents desire that their children become ‘better’ people in life than even themselves. This positive aspirational desire for infants by their parents could be linked with the fact that for a child to be ‘somebody’ in life, he has to be healthy, well-fed and clean.

ROLES OF PARENTS IN CHILD CARE

Contrary to the old belief that the care of an infant is the sole ‘duty’ of the mother, respondents uniformly were of the opinion that both parents of a child have a joint role to play in caring for the child with regards to feeding, health and general welfare.

Bearing in mind the low level of education in this area and the common practice of polygamy, which makes it impossible for a father to be very close to one particular wife and her child, research shows an interesting increase in the number of fathers who claimed to now be fully involved in the actual care of their children. Apart from the traditional role of providing for the entire household economically, fathers now go the extra mile to ensure that their infants are well fed by providing certain ‘special’ foods. ‘Special’ foods in this case include bread, eggs, fruits, fish, and spaghetti.

Many fathers also claimed to advise to their wives on issues pertaining to health-care practices for the child which they learnt, possibly from the radio. Fathers’ degree of involvement is further revealed in their new determination to ensure that whatever advice they give to their wives concerning child-care is strictly adhered to. Not doing so will incur the fathers’ wrath.

Working mothers no longer feel comfortable in delegating their babies’ care to nannies or housemaids for fear of the child not being well-taken care of. Grandmothers or mothers-in-law are usually the last resort and are mainly entrusted to take total care of the baby in the mothers’ absence. Most mothers hold the traditional belief that a good grandmother will not harm her grandchild in anyway but would rather go the extra mile in ensuring that the child lacks nothing during the mothers’ absence.

Grandmothers are often involved in all aspects of care for the baby — feeding, bathing, and everything else that goes with it. All the grandmothers claimed to be happy with their present roles of caring for their grandchildren under two years old.

On balance, grandmothers highly value breastfeeding, and many of them claimed not to encourage the use of feeding bottles for their grandchildren. The majority claimed ignorance of how to administer a bottle to a child, because they never used one. Rather, they prefer to use cup and spoon in feeding the child, which, they admitted, requires a lot of patience and expertise on the part of the person spoon-feeding the child.

“I go out with the children to take breeze especially when my wife is busy or pregnant and weak.”

“I help my wife to take care of the children in my own little way by providing the light foods like bread, fruits and eggs that I know my child loves to eat.”
"I normally help my wife to keep the children fresh when I come back from work by bathing them. I also wash their clothes and sometimes I help to clean our environment by cutting the grasses, removing cobwebs so that the children can live in a healthy environment."

**Illiterate Fathers, Dutse**

"In my own case, my wife washes the children's clothes, but if there is any prescribed drug for the child, I ensure that she gives it to the child at the time specified by the doctor."

"Sometimes when my wife is tired I help her carry the child around the house to allow her time to rest."

"I usually keep special allowance for the child's food since he cannot eat the same food with us."

**Illiterate Fathers, Limawa**

"I always make sure that in my house I provide good food. I mean a balanced diet. I make sure that certain percentage of protein is taken in a day, vitamin is taken and carbohydrate is also included in a particular day's food."

"I drew up a time-table on the type of food to give to the child everyday to help him grow more healthy."

**Literate Fathers, Dutse**

"When my daughter goes to work in the morning I am the one who bathes and feeds her child for her until she comes back. I don't allow her to do anything because he is my first grandchild, and I'm happy to be alive to be doing this work for her."

**Grandmother, Dutse**

Conclusions:

- Fathers have recently assumed a much greater role in child-care.

- Fathers now see it as a thing of pride to help their wives. The traditional stigma hitherto attached to such practices is fast eroding. Since fathers tend to now be involved in child-care, there will be a need for them to be exposed to the same kind of education as mothers.

- Fathers current involvement in child-care is a source of great encouragement/motivation to mothers, as they now expect expanded paternal support.

- Grandmothers who stay with their daughters/daughters-in-law tend to have more influence with them, although the degree of grandmothers’ influence is not as strong as it used to be. Thus, grandmothers should be a secondary target group for education.
KNOWLEDGE OF CURRENT/PAST FEEDING PRACTICES

Generally, grandmothers believe that feeding of infants has changed since their own time. To their disdain, many of them said younger mothers (apparently due to work constraints and other cultural influences) now breastfeed for a shorter period and often substitute infant formula for breastmilk.

The current use of bottles in feeding the child is quite new to the grandmothers. During their own time, they used calabash (*kwarya*) and ladle (*Ludayi*) to feed their children. The use of cups and spoons then was also perceived as a 'luxury'.

Grandmothers themselves feel they have great influence, particularly those living very close to or with their daughters. Even though the younger mothers were accused by the grandmothers of not heeding their advice due to their perceived level of 'education' and 'exposure', grandmothers said they are not discouraged by this attitude as they will not relent in their efforts to ensure that their grandchildren are well-fed. For instance, one grandmother in Dutse claimed to always ensure that her daughter breastfeeds her baby by waking her up either in the night or in the early hours of the morning. Her daughter, being a first-time mother, otherwise tends to forget to breastfeed her child by oversleeping.

Although there was a general consensus amongst grandmothers that the new ways of caring for the babies are better than the old (which they said is evident in the current low infant mortality rate), some daughters or daughters-in-law were said to find it difficult to adhere to certain advice of their mothers. For instance, many grandmothers feel that a child must be breastfed for two years before complete weaning, but young mothers feel that this duration is rather too long and not fashionable.

*Conclusions:*

- Grandmothers do not encourage the use of feeding bottle as they are not used to them.
- Even though breastfeeding is still widely practiced, its duration is still not as long as advised by health workers. Thus, mothers need to be encouraged to breastfeed for a longer period of time. Grandmothers could support this practice.
- Young mothers still find it difficult to breastfeed for a longer period before complete weaning. They should be encouraged through campaign materials of the health benefits for the infant from breastfeeding for two years.

INFANT FEEDING PRACTICES

Generally, a pregnant woman is expected to 'eat well' because this is perceived as important to the newborn’s health in the sense that any food eaten by a pregnant woman is believed to be passed to the child through the placenta and thus be capable of sustaining the child from hunger before breastmilk is initiated.

As soon as a woman delivers, her child is introduced to breastmilk ‘immediately’. The idea of ‘immediately’ here is relative, however. In Dutse and Limawa ‘immediately’ means within one day of delivery (usually within the first five hours of life), while in Jaudi and Ruru, it generally means a day or two after delivery.

Generally, all the participants believe that it is necessary to give water to the child as soon as the child is delivered. Simply put, the first food a child is given is water. One health worker feels it is necessary to give water first after delivery due to the fact that Dutse by geography is very hot and the tendency is
for the child to be thirsty and thus need water. Moreover, they believe that the process of labor can make
the child particularly tired and thirsty. More often than not, breastfeeding usually follows, perhaps three
to five hours after birth, or in some cases, the following day, depending on the area. The first feed of
breastmilk is usually initiated after incessant crying by the child.

Educated mothers who attend ante-natal clinics claimed to give glucose with water as the child’s first
feed. In Jaudi, strong traditional practices are associated with the first thing given to the child after
delivery. Mothers believe the first thing a child takes by mouth is crucial because of the great danger
of the ‘evil’ ones attacking the child at that stage. To prevent this, date palms, drops of fresh honey, and
a pinch of lead are boiled together to form a concoction and given to the child as a ‘protective’ measure
before breastmilk flows, which could be the following day. The honey, which is added to thicken the
concoction, is mainly to prevent the child from getting hungry too soon.

The concoction is also expected to aid the child’s first exercise of his/her bowels to rid it of the first
‘black’ faeces said to be common to children. The concoction will not only help cleanse the child’s
stomach but is also expected to ‘teach’ the child the art of swallowing fluids properly. Fortunately, this
practice is fast becoming less common, as some rural women attend ante-natal clinics where health
workers tend to discourage it. However, the health workers themselves typically give the child either
glucose water or plain water using a feeding bottle and, subsequently, breastmilk before the woman takes
the child home.

Most mothers said that after delivery they are usually too weak to even give breastmilk to their children.
So perhaps the main reason why water is first given instead of breastmilk is to afford the mother enough
opportunity to ‘rest’. In the same vein, some mothers complained that soon after delivery, their nipples
are usually hard, so sucking at that stage by the infant is ‘painful’. It appears also that most mothers do
not believe that immediate introduction of the infant to sucking can facilitate milk flow.

In the Fulani settlement of Ruru, immediately after delivery, the baby is given fresh cow milk, madara.
This practice is influenced by parents’ belief that since they are mainly cattle rearers, it is necessary to
pass the tradition of cattle rearing to the child as soon as it is delivered, or else the child will grow up
to practice some other occupation.

Colostrum

The majority of women do not see colostrum as particularly beneficial or important to the child’s
well-being. Some even see it as being ‘harmful’ to the child. Most mothers say there is a marked
difference between the colostrum (referred to generally as ‘yellow milk’) and the white milk. Hence
colostrum is usually discarded at the insistence of the Ngozoma (TBA). Even though most women, in
the rural areas in particular, claimed to attend ante-natal clinics at least a time or two, the practice of
delivery at home with the help of the TBAs is still very common.

After delivery, the breast is washed and massaged with herb fluid (usually leaves of a fig tree boiled
and the juices extracted) which they believe helps to stimulate the milk glands. A local sponge is used to
scrub the nipples. In Limawa women frequently use the native black soap (sabulun sallo) in washing the
breast in the belief that it will rid the nipples of any hidden ‘germs’ before the child starts sucking.

Grandmothers too do not see the need for colostrum since they never use it on their children. Thus, they
also form part of the pressure group on the mothers to discard the ‘bad’ milk before giving the child the
‘good’ milk.

Urban mothers’ views on colostrum were clearly different. Apparently due to their regular interaction
with health workers, they have come to recognize colostrum as important, nutritive, containing
vitamins/antibodies, and essential for the infant. Hence, they never discard it. In fact, virtually all of them claimed to have given colostrum to their newborns as advised by the doctors. Besides, they do not have any other option as the child is introduced to the milk immediately through the help of the doctors who place the child near the mother to enable him/her to suck as soon they are cleaned (since most mothers were said to be too weak to do that themselves).

"I don't think it is wise for mother to give her child that 'yellow milk'. I don't know the side effects either, but our tradition forbids it, and the way we do it here is that we discard it because they said [referring to grandmothers and the TBAs] it is not good. I have seen many women do that before so I did it too."

Illiterate Mother, Limawa

Breastfeeding

Virtually all respondents believe that breastmilk should be the main food in a baby's diet, albeit with supplements of water as the mothers do not believe that breastmilk is a complete food on its own. Due to the hot weather conditions prevalent in Dutse, many feel that infants need water just like adults who were said to drink more fluid than usual due to the heat. They believe that milk and water are quite different and thus cannot substitute for one another. In terms of how the water is administered to the infant, most mothers claim to prefer using a 'beaker' (a small cup with a narrow mouth) or feeding bottle for reasons that center on convenience and the need to maintain proper hygiene.

Even the advice given by health workers that the child does not need water at that stage is usually not adhered to. In fact, some urban mothers claimed to be hearing for the first time that a breastfeeding child can do without additional water. This set of respondents (very few) expressed the view that they might consider following the advice only after re-confirming it with a doctor or a health professional.

The frequency of breastfeeding varies from mother to mother. However, it is usually done on demand. The average appears to be up to seven times a day, although most mothers could not count the frequency.

Most mothers complete weaning their children after one or one and half years. Those still breastfeeding expressed the intention to stop at about the same period. The practice of breastfeeding for up to two years is no longer common. Duration of breastfeeding for the two genders is the same. Likewise, the position of the child in the family (i.e. whether first or second child) does not affect the duration of feeding.

The most frequently mentioned reason for weaning this early is pregnancy. Most mothers claimed to usually get pregnant before that period, thus necessitating early weaning because they feel that coping with breastfeeding and a new pregnancy is not an easy task, and that breastfeeding could harm the developing foetus.

In terms of techniques of breastfeeding, most mothers appear to favor the practice of sitting on a flat stool or on the mat with their legs stretched forward, the child being placed on the lap for convenience and supported with the left arm. Although babies were said to feed on both breasts, it was discovered that most mothers favor the right breast than the left due to religious inclinations which states that 'anything taken from the right is good', so a true Muslim is expected to always keep to the right.

A mother is not expected to change her breastfeeding patterns under any circumstances. In fact, many grandmothers consider the excuses usually given by young mothers of work pressure/time constraints as 'flimsy' and 'unethical' and thus should not to be condoned or encouraged. A 'good' mother is expected
to program her time to be able to fulfill all her responsibilities, as breastfeeding is seen as a ‘duty’ that must be performed and not a matter of ‘choice’.

"My friend who is a doctor told me that breastmilk is the best, so even when my wife was disturbing me to buy her milk for the baby, I did not mind her."

"Of course, my wife breastfed my baby. That is the main source of food to a child. Besides, we don’t normally give the child any other food here unless after six months."

"The economic situation in the country is such that it is not easy for a man to maintain a full house [a large family]. There is no money to waste on artificial milk. In my own case, I don’t think artificial milk is a better alternative to breastmilk so I make it mandatory for my wife to breastfeed, and I can say that I am even fortunate because my child rejected Lactogen [a brand of infant formula] when he was given some."

Literate Fathers, Dutse

"I will feel happy when I see my wife breastfeeding my child because I feel that is the best way to care for a baby and that is what she is supposed to do."

Illiterate Father, Limawa

"Breastmilk is better than artificial milk because you don’t have to mix it and it is cheap. Artificial milk is too expensive and it is not even commonly available in this Dutse."

"To me breastmilk is very important. It makes the baby strong and they told me in the hospital during my ante-natal days that it contains special vitamins more than artificial milk."

"I feel happy when I give my daughter breastmilk, and she looks at me in the eyes and smile. I think that is when the knot between a mother and child is tied because that is when the child knows who his mother is."

Literate Mothers, Dutse

"You see this breast, God did not give it to us as decoration. So if any woman decides to give her child infant formula, I think she is mad. All these children of today that are so strong-headed, it is because their modern parents gave them infant formula. That is why they are all behaving like animals."

Grandmother, Ruru

"Breastmilk is very important to the baby. It contains fat and it can make a baby grow fat. If a child is sick and is given breastmilk constantly, the baby will not loose weight."
"Breastmilk is more satisfying to the baby. Even if the baby takes other foods, he would still need breastmilk because breastmilk gives him more health and energy to play around."

"A child who takes breastmilk will have a smoother skin compared to those who take Cerelac and Nan [brands of infant foods]."

Iliterate Mothers, Jaudi

"Nobody forced me to breastfeed my child. It is God’s will for us to breastfeed our children. That is why he created the breast."

Iliterate Mother, Limawa

From the above quotes, we can further deduce the high level of importance attached to breastfeeding in this area. In addition, some grandmothers consider any woman who refuses to breastfeed her child as a ‘flirt’, ‘prostitute’, or ‘irresponsible’. The tendency of a child fed on infant formula to behave like a cow or an animal was also opined by these respondents.

Expressing breastmilk for subsequent use in the mother’s absence is not common in this area. In fact, many claimed to be hearing about the concept for the first time in the groups. Perhaps due to a ‘carry-over’ effect of previous experience with infant formula, respondents were generally unfavorably disposed to the idea as they feel that breastmilk like infant formula can go sour or cold when preserved. Concerning this issue, respondents had this to say:

"I don’t think this idea [the idea of mother expressing her milk before going out for her child’s subsequent use in her absence] will add any advantage to the child. It is just another way of exposing a child to more infection or germs."

"I don’t think it will be hygienic for a mother to squeeze her milk and keep it for her child to take in her absence [i.e. if she is working] because the milk can go sour or cold before she comes back."

Literate Mothers, Dutse

Nevertheless, in the mothers’ absence, pap (koko) usually prepared with groundnut paste, is given to the child. This type of pap is generally believed to have high nutritional value due to the groundnuts used, which serve as their own traditional substitute for milk and/or sugar.

Working nursing mothers in Dutse claimed to seldom stay away from their infants for longer than four hours per day due to the flexible working hours usually permitted in their working places. Besides, the proximity of their homes to their offices was cited as being favorable. This affords a mother the opportunity to quickly ‘dash’ home to breastfeed her child without being queried about her absence from work.

Full breastfeeding, albeit with water, was also generally claimed to be practiced by most working mothers during their four months’ maternity leave at home. Some believe that this period of four months is long enough for a child to have benefitted fully from breastmilk, which makes the child able to withstand the mother’s absence for about three to four hours per day without being adversely affected.

Of the few mothers who claimed not to be living with their mothers/mothers-in-law, many prefer to take their infant with them to their offices rather than entrust the child’s care to a nanny. Interestingly, some working places (especially schools) were said to have improvised day-care centers. In that case, a mother goes to work with her nanny and still has the opportunity to breastfeed her child while working.
Alternatively, those whose homes are not too far away claim to ask their helpers to bring the infants to work for them to breastfeed during break time. This last does not appear to be a common practice, however.

"In my school we have one empty classroom we use as a nursery for teachers with babies. I normally take my child and my nanny with me to school. They stay in the nursery and during my free period, I go and check on them and make sure that they are okay."

"My house is not far from the women’s center where I work. So from time to time, I climb ‘Achaba’ (motor bike) and dash home to breastfeed my daughter. The transport is very expensive, but I don’t mind it. Besides, it is not as expensive as buying milk [infant formula]."

Literate Mothers, Dutse

Advantages of Breastfeeding

The advantages of breastfeeding appear to far outweigh its disadvantages. The following advantages were mentioned:

- Stopping post-partum hemorrhage (referred to in Hausa as Jinin Haila).

- Serving the dual purpose of nourishing the baby and serving as a contraceptive device. Notably, this advantage was mentioned by a few urban mothers who claimed to have been informed of this possibility by health workers (nurses).

- Very convenient to administer, i.e. no complicated instructions to adhere to as it is already presented at the right body temperature.

- Does not endanger child’s health nor does it place the child at any risk of infection due to its perceived natural cleanliness.

- Unlike infant formula, it does not expire.

- The likelihood of an infant getting infected through his/her mother’s breastmilk is minimal. Rather, it passes on the mother’s immunity to the child until the child is old enough to acquire his/her own immunity. This notion was only expressed by the literate urban mothers.

Food Supplements

Full (but not exclusive) breastfeeding is generally practiced in Dutse at least for the first three to four months until other food supplements are introduced. Although mothers do believe that an infant can be well nourished on breastmilk exclusively, they add water and other liquids in the first month, as previously mentioned. The timing of introduction of complementary (weaning) food varied from individual to individual. While some start early, at three months, others introduce it too late (after seven months), especially in the rural areas. No major reason emerged for such variations. Nevertheless, whatever timing a mother chooses to introduce supplements, it was noted that it is not usually before three months. The timing for the introduction is usually influenced by different variables, including:

- the need to go back to work after maternity leave,
the belief that at that stage (i.e. after three months), the child’s stomach needs more than milk to satisfy hunger,

- the physical developments of the child, e.g. the child now begins to sit alone, and

- the belief that their flow of milk is insufficient as indicated by the constant demand by the child for more milk.

Within the first six months of the child’s life, the food supplements usually introduced include pap (koko), moin-moin (alala - i.e. steamed beans pudding), cow milk (nono), rice, spaghetti and mashed beans or yam garnished with oil and/or little vegetables.

Subsequently, after six months, the child’s ability to crawl or child’s own interest in adult food, e.g. the child reaching out for food by way of stretching out his/her hands, suggest the need for more solid foods like tuwo (corn flour). These are usually mashed with soup and given to the child from a separate bowl due to the tendency for the child to be too ‘messy’ with the food. At this stage, the child is considered an adult, i.e. when he/she starts to eat with the other members of the house approximately twice daily.

Under certain circumstances, a child’s diet is supplemented prematurely because of:

- health reasons (i.e. the child is too ill to suck or the mother has a serious problem with her breast, e.g. abscesses),

- the demise of the child’s mother, or

- insufficient flow of milk, which most agree that they can now cope with it by eating more.

Interestingly, fathers in the rural areas do not believe that the demise of an infant’s mother should lead to the premature weaning of the child as they tend to favor another mother continuing breastfeeding a child who has lost his/her mother instead of the child depending on infant formula.

"The only condition that can make a women stop breastfeeding her child is when she is ill and that illness particularly affects her breast; then that is when she cannot breastfeed her child or even when she is dead or if she has taken in [i.e. she is pregnant] again."

Illiterate Father, Jaudi

"Even if the mother of the child dies, it should not be an excuse to stop breastfeeding that child. Who says that another woman cannot breastfeed that child? When there was no artificial milk that was what our parents of old used to do. I experienced it myself when my mother had to breastfeed my stepbrother when his own mother died."

Illiterate Father, Limawa

"I don’t believe that when a woman takes in [becomes pregnant] that she should continue breastfeeding the child … may be at early stage yes -- say between one month to three months, but after that it becomes risky because the child will be facing a lot of problems like he will be falling sick all the time."

"
"The only other possible reason why a woman cannot breastfeed the child is when the child refuses to accept the milk, and I don't think any child will reject his/her mothers' milk except the child is not healthy."

Literate Fathers, Dutse

Conclusions

- Full breastfeeding is widely practiced for at least three months. Mothers should be encouraged to reduce or eliminate water, increase breastfeeding frequency, and extend breastfeeding with no other foods until five to six months.

- Babies are introduced to breastmilk 'immediately' afterbirth. The idea of ‘immediate’ needs to be changed to same day, i.e. within the first two or three hours after birth, instead of the traditional practice of a day or two after.

- Colostrum is widely discarded. Mothers need to be convinced that it is good and not 'bad' milk.

- Mothers widely claim to first give water before breastmilk after delivery. This attitude needs to be discouraged so that fewer infants will be exposed to bacteria that can be acquired through giving of unclean water at birth.

- Working mothers are making conscious efforts now to ensure that their children are properly breastfed. For instance, they breastfeed fully during their three months’ maternity leave and now go the extra mile to improvise day-care centers in their working places.

Influences on Mothers

Opinions were divided concerning who has the highest degree of influence on the mother as it relates to the child’s welfare. While fathers feel that they have more influence on their wives based on the tradition of the obedient wife accepting the man’s decision, grandmothers feel that they also have unlimited influence on their daughters or daughters-in-law. General information gathered in this regard indicates that grandmothers who live with their daughters tend to have more influence than those who do not.

Fathers generally claim to advise their wives on their children’s welfare and usually ensure that such advice is adhered to, to the letter. Fathers do not believe that their advice should be limited to any specific area.

When the child is ill, however, virtually all the parents spoken with recognize the need to visit health personnel. Thus, in such situations, the advice of the medical personnel is paramount.

Interestingly, even though most fathers claimed that their wives are in purdah, open permission exists for a mother to take her child to the hospital in the fathers’ absence during a health crisis.

In the final analysis, even though fathers and grandmothers alike claimed to wield some degree of influence on the mother, it was discovered that when it comes to actually carrying out the instructions given to them, some mothers exercise substantial autonomy in doing what they like. For instance, a few mothers attested in the groups to using family planning devices without their husbands’ consent.
"I advise my wife on everything that concerns my child, from feeding, clothing and instructions on how best to take care of the child. I have to do that because my wife is not educated."

"The doctor is the one who decides the type of drug that the child should take before I buy it."

"I only advise my wife occasionally on how to feed the child well. All the other things she is supposed to do I believe they must have told her in the hospital during ante-natal and from the handouts they gave her, so I don't have to bother myself at all."

"I only remind my wife or assist her to read the instructions on medicine bottles. My mother stays with us so I believe that she can tell her better about women's affairs. I don't have to meddle into that."

"I concern myself with the child's education because even when I tell her to do anything for the child, she is too lazy at times to do it. So I read stories out for him and help him with his drawing lessons."

**Literate Fathers, Dutse**

I make sure that the special foods I buy for the youngest child is not taken by the older ones. And when I see my wife wasting food, I always advise her to be careful because times are rough.

"The welfare of the child and the child's survival is very important to both parents. So I feel there should be no restriction on the type of advice a man should give his wife concerning the child. There should be no limit at all because the well-being of my child is also important to me."

**Illiterate Fathers, Dutse**

"My child's welfare is my responsibility as a father. So my wife cannot limit the type of advice I should give her."

"The normal practice in this area is that the man takes all the decisions in the house. A child is part of the home, it is the man's business to ensure that everything is okay with the child."

**Illiterate Fathers, Limawa**

"I advise my daughter-in-law on her breastfeeding habits. I always tell her to breastfeed the child. But in most cases, it is only when I am physically around that she will pretend to be doing it, and as soon as I turn my back she will just leave the child to sometimes cry before she breastfeeds him or give him his medicine."

"I advise my daughter on everything that concerns the child, but she normally neglects my advice on breastfeeding because she sometimes complains that when the baby sucks, she finds it ticklish and when she is hungry herself, she will complain that there is nothing in her
stomach, so she cannot breastfeed until after she has eaten or else she will feel dizzy."

"My own daughter always forgets to give prescribed drugs to the child. Although I am not educated, I know the importance of giving prescribed drugs at the right time since the doctor is more learned. If he says give the child the drugs by 12 o'clock, I don't see any reason why it should not be so."

**Grandmothers, Ruru**

"My wife always ignores the bathing of the child. Sometimes I have to monitor her movement to ensure that she is doing what I want her to do."

"My wife is in purdah. The sickness has to be really an emergency like high fever or an accident before she can go out, but if it is just sickness like headache I always have Panadol in the house and she can wait until I come back."

"My brother lives with me. When I'm not around he can take the child to the hospital if he is sick. My wife doesn't have to go out."

"When it is necessary for the woman to go out, she is permitted; because they are in purdah does not mean that they do not go out at all. Like if the child is sick and I am not around, I expect her to take the child to the hospital without waiting for me. She has my permission to go out in such situations."

"I am the one who takes the major decision about our child's welfare in my house, but when I'm not around, I have given her permission to take the child to the hospital if he is sick because she doesn't have to wait for me since I don't believe in self-medication."

**Illiterate Fathers, Jaudi**

**PERCEPTIONS/IMAGES**

Respondents were exposed to various pictures of men, women and children cut out from magazines, and their images of who a good mother, father or neighbor and of a well-fed baby were sought. Findings in this regard follow.

**Image of a Good Mother**

First and foremost, a good mother must dress decently. Decent dressing in this case means covering of hair, not wearing elaborate make-up or jewelry, and tying of wrappers (head wraps).

According to the mothers, a woman who is likely to breastfeed her child must not be flat-chested as the size of the breast in this case was said to be of utmost importance. She must have a warm, friendly look and above all, cuddle her child in her hands. The idea of strapping a child on the mothers' back was generally said to be fast going out of fashion.
"The one holding her baby would be a good mother because she hugged her baby affectionately and the baby looks so healthy."

"This woman can take care of her family because she is laughing and playing with her children. She is well dressed [tied wrapper with head tie] and neat. She will really feed her baby properly."

*Literate Mothers, Dutse*

"This one is wearing too many expensive jewelries, which shows that, she is materialistic. That means, she will always be going out to look for money to buy more jewelries so that she can meet up with her standard of dressing and that way, she won’t have time to take care of her children."

"This woman cannot be a good mother because she permed her hair and the dress she is wearing is open (i.e. she is exposing her body). I am certain that she will only feed her baby with artificial milk."

*Illiterate Mothers, Jaudi*

**Image of a Good Father**

A good father is expected to be healthy looking himself (i.e. robust) and be able to give meaningful advice to his family. In addition, he is expected to look educated and must dress in the native attire (i.e. kaftan) which to the majority of respondents exhibits responsibility. Expression of warm love to a child by the father is not a common practice. Thus, a good father must not necessarily cuddle his baby.

A good father is expected to give firm advice to breastfeed and to discourage the use of a feeding bottle.

"A good father does not need to be close to his child to show love. The most important thing is that the man should look elderly and matured."

"The way this man open his eyes, the babanriga (gown) that he is wearing and his appearance is like that of a drunkard. This one will be more concerned about the things of this world than his children. I don’t even think that he is old enough to be a father."

*Illiterate Fathers, Dutse*

**Image of a Good Neighbor**

A good neighbor must look friendly and should preferably be in her middle age as she will then be considered experienced enough to give advice on child-care matters. Many mothers however, claimed that they do not trust their neighbors to give them advice on how to take care of their children. Rather, they depend on health personnel, their husbands and mothers for such advice. To most mothers, a good neighbor should be able to identify with their culture, particularly as it affects their dressing mode, e.g. covering of hair, which is regarded as very essential for every woman who wants to look responsible.

Interestingly, virtually no mother claimed they would advise their neighbors to discontinue breastfeeding their children under any circumstances, due to the high importance they tend to attach to breastmilk. In fact, some perceive breastmilk as being sacred. Thus, no woman in her right senses would advise against feeding breastmilk.
**Image of a Well-Fed Child**

A well-fed child is expected to look robust but not obese. An infant who is obese is generally perceived to be mainly fed on infant formula.

Many mothers feel that a child who was fed on 'sufficient' breastmilk will look robust in terms of having a good-looking skin and hair that grows well.

"This child looks malnourished. Look at the size of his head, his skinny body and face. I think the mother only concentrated on other foods instead of breastmilk. There is the need to still give breastmilk with additional food considering the age of the child."

"This child is healthy. Just look at his face, the child appears to be active and he looks happy. I'm sure the mother fed him on a combination of breastmilk and other protein-giving foods."

**Literate Fathers, Dutse**

"This child who is sitting on his mother's legs shows that he was breastfed. I am sure the mother must have really given him breastmilk because the baby looks so fresh and healthy without any sign of sickness."

"The baby sitting on the ground alone is not breastfed because his body doesn't look fresh."

**Illiterate Mothers, Limawa**

**Conclusions**

- The concept of being 'good' is generally associated with dressing mode. Therefore, models dressed in the native attire that is common to these communities should be used in future visual educational materials. In particular, a wrapper and headtie should be used for women while male models should wear a 'kaftan'.

- The issue of having a big bust needs to be addressed in subsequent visual educational materials as a woman who is flat-chested will likely not be perceived as a good mother.

**PHC GROWTH CARD**

Awareness of the primary health care card that was displayed to the mothers can be said to be very high, as virtually all the mothers claimed to have seen it before. In addition, a noticeable proportion of both urban and rural mothers claimed to have a personal copy of the card which they got from the hospital. This assertion could not be confirmed since we did not follow the women to their homes, nor were participants asked to bring the card to the groups. However, during the EDIs we were able to confirm that most mothers had the card at home.

In terms of the actual use, mothers gave diverse perceived uses. Some feel that the card is meant to be used as an outpatient call card, an idea deduced from the health workers themselves, as they were said to have started using the card for such a purpose when they ran out of their regular cards. On the other
hand, others rightly perceive the card as a growth chart card that could also be used to record the number of times the child was immunized.

The pictogram on the card of the mother breastfeeding was widely said not to be too clear. This fact was deduced from the various misinterpretations received. In fact, most mothers believe that the woman is encouraging bottle-feeding rather than breastfeeding as her breast was perceived as being too small. Apart from that, the action she is dramatizing was seen as not being clear enough.

**Conclusion:**

- Since mothers largely claimed to have PHC cards, they can be encouraged to use it to monitor the weight growth of their children.

**IMPORTANT ACTIVITIES FOR A CHILD**

When respondents were asked about the activities that are important for a child as soon as he/she is born, most mothers feel that the most important thing is the cleanliness of the baby. The baby needs to be washed thoroughly with soap to rid it of that after-birth smell. Subsequently, water is expected to be given first to the child before introducing breastmilk.

The inhabitants of Dutse are not very particular about ceremonies. Once the child is named after seven days in what is usually a very modest ceremony, there are no additional ceremonies, as in the southern part of the country.

As the child grows older, most mothers claimed to focus on the proper growth of the child, which requires good food and hygiene to achieve.

**Conclusions:**

- Ceremonies and merry-making as soon as a child is born are not considered as important as feeding and the baby’s hygiene.

- Parents are already aware of feeding and hygiene as being integral to a baby’s well-being, so any more education on this would be well-received.

- Islam does not permit extravagance, so not many ceremonies concerning a child are practiced in Dutse, where the majority are Muslims. Thus, people might be motivated to use the money they would have lavished on ceremonies and merry-making for feeding the child.

**BREASTFEEDING PROBLEMS**

Many respondents could not spontaneously associate any problem with breastfeeding. As a matter of fact, some fathers claimed never to have heard of such a thing. Upon prompting, most grandmothers and some mothers claimed to be aware of the following problems, all of which people have their own ways of overcoming:

- insufficient milk,
- 'bad milk’ resulting from abscess on the breast, and
- nipple inversion.
These problems are further discussed below.

**Insufficient Milk**

The problem of insufficient milk is not common in Dutse and its environs. The general conviction in this regard is that it is only a problem that can occur due to poor maternal nutrition (i.e. before and after delivery). Consumption of liquid-based foods to aid the flow of milk is quite common.

Mothers and grandmothers alike reported that once a woman has been certified pregnant either by a doctor or TBA, the usual practice is that she is allowed to eat 'lavishly' so that the problem of insufficient milk will not occur when she subsequently delivers. Even upon delivery, the mother is usually 'forced' to drink 'hot - peppery/spiced' gruel (*koko*) or 'hot soup', usually prepared from cow and/or goat leg/tail. The intake of such foods is believed to help the mother lactate well.

In fact, any food that she takes at that early stage of delivery, whether liquid, semi-solid or solid, is expected to be taken steaming hot because of the belief that apart from helping the mother lactate well this will help diffuse any clot of blood in her womb as a result of the pressure of delivery.

Fathers are also aware of the need for a nursing mother to eat 'extraordinarily' at that period. They said this belief emanated from actual/genuine concern for the child's health and the belief that breastmilk is the child's only food. Most fathers claimed to contribute in this regard by ensuring that they provided the required food for the nursing mother.

In rural areas, the issue of food supply at home does not appear to be a problem, as many fathers claimed to be farmers who can provide the food required for their nursing wives from their farms. It is likely, however, that such food cannot be as rich and varied as that provided by urban fathers.

The major cues that tend to indicate to a mother that she has insufficient milk are:

- when the baby cries persistently, even after being breastfed,

- when baby starts demanding more feeds than usual, or

- when a child can adequately 'empty' his mother's breast at one feed.

Interestingly, even when these signs are noticed, mothers interpret them to mean that either they are not eating well enough or that the child is growing older. Instead of visiting a doctor, they either increase their own food intake or, alternatively, start supplementing the baby's feed with other liquids such as pap.

In the same vein, mothers do not associate the case of insufficient milk with insufficient sucking by the child. They generally believe that it is only lack of food (even after prompting) that can cause the problem. Also, work pressures, family problems/demands, or personal worries on the part of the mother are not generally perceived as likely causes of insufficient milk.

The positioning of the child while breastfeeding is also very crucial in determining the milk flow. A few grandmothers hold the view that if a child is not properly positioned, especially in the sitting position, the child might not have enough milk to suck. The milk they believe is 'let down' from a particular channel and, to be able to obtain good results, the mother must sit in an erect position. Lying down while breastfeeding the child is frowned upon by these grandmothers, as they believe that the milk will only come from 'one side' and sooner or later will dry up. Therefore, the child will lack enough milk to suck. In other words, the posture/position a mother adopts during breastfeeding is believed to affect her mammary glands' production of milk.
**Bad Milk**

Some mothers believe that a nursing mother’s milk can go ‘bad’ when she has an abscess or her breast is swollen. ‘Bad milk’ is usually associated with signs of being ‘watery’, or having traces of ‘mucus’ in it. Although mothers said this could be a problem since they have seen such cases before, none of them claimed to have personally experienced this. In such situations, grandmothers believe that the milk is temporarily unfit for the child’s consumption, so breastfeeding will be restricted to only the breast that is not affected or discontinued temporarily. In rural areas, such cases of abscess are usually treated traditionally using local herbs, while in urban areas they are referred to hospitals.

Mothers who absent themselves from their child for more than four hours due to work also believe that their milk, after staying that long, can go bad and give the child diarrhea. Thus, they claimed to discard the first milk expressed before breastfeeding the child. The rigors at work and the heat of the sun, which sometimes affect the working mother, can also lead to the milk temporarily going 'sour' or 'bad'. Working mothers take such 'precautionary' steps to avoid unnecessary cases of diarrhea for their children.

Another cause of 'bad milk', especially stressed by the grandmothers, is early pregnancy (referred to locally as Kunika). Almost all grandmothers believe that young mothers nowadays are not patient enough and tend to have early sexual relationships with their husbands before their children are weaned. Hence, the milk of a pregnant, nursing mother is considered 'bad' due to the likelihood of it being contaminated with the sperm of the unborn foetus. Even though the grandmothers did not advocate discontinuation of breastfeeding by the mother, they believe that such a practice can lead to the manifestation of skin rashes on the child. Thus, their general advice in this regard is that young mothers should be more patient when it comes to having sexual relationships with their husbands while still breastfeeding. Ironically, a woman is not expected to deny her husband sex at any period of time as dictated by Islamic religion.

**Nipple Inversion**

This was another breastfeeding problem according to grandmothers in rural Ruru. This problem of inversion usually manifests itself in the lactating mother not having any nipple at all for the baby to suck on, so breastfeeding is suspended. Although, this problem was also said to occur infrequently, the grandmothers claimed to have a traditional way of managing it. The reel of a thread is placed on the affected nipple and a child of about three years whose set of teeth is almost complete is asked to keep sucking on the reel until the inverted nipple gives way by protruding out. Once the nipple is out, breastfeeding is resumed. The problem is usually solved as soon as it is noticed.

One urban woman also claimed to have known a neighbor who had this problem. In this case, an artificial 'teat' of a feeding bottle was placed over the inverted nipple to aid the child in sucking well. However, the respondent who reported the case said the teat did not help to pull out the nipple as was the case with the use of the local reel mentioned in the rural areas.

TBAs interviewed emphasized the efficacy of the traditional method to the extent that they openly boasted about their high expertise in the treatment of this problem. So far, the TBAs added, none of the patients they have treated on nipple inversion, which they consider to be a minor problem, had cause to come back to them due to failure of their prescription.

**Conclusions**

In the final analysis, breastfeeding problems can be generally said to be diagnosed locally save for abscess, which is usually referred to the doctor. Most women feel at home to treat such problems locally rather than go to the hospital, perhaps due to the instant result or lack of any complications they have experienced while treating such problems in the past.
Fathers appear to be unaware of any problem associated with breastfeeding, as they tend to look at it more as a women’s affair. Besides, even where such problems occur, they claimed not to know about them as their wives feel more at home discussing such issues with their mothers, mothers-in-law, TBAs, neighbors or friends.

Breastfeeding is generally seen as a ‘duty’ of the mother and not a matter of choice. Hence, when such problems as maternal weakness or dizziness manifest themselves (usually said to occur when the mother does not eat well), a good and responsible mother is expected to devise ways of coping on her own, without allowing them to interfere with properly breastfeeding her child.

The issue of breastfeeding being perceived as an inconvenience was also not seen as a problem per se. According to Islamic doctrine, a mother owes her child the duty to breastfeed, as quoted by some mothers who claimed to be well-versed in the holy Koran. Another in one of the urban groups paints the picture this way:

"What is my work, if I cannot breastfeed my child? In fact, no amount of work can stop me from breastfeeding my child -- how much are they going to pay me?"

Literate Mother, Dutse

Fathers and grandmothers alike confirmed that breastfeeding is a mother’s main duty. Perhaps this finding helps explain why a lot of mothers in Dutse and other sites visited are mainly full-time housewives. Only some literate mothers belong to the working class. Besides, the practice of purdah is still very prevalent, which limits many women to performing such functions as breastfeeding.

Even if one of the problems associated with breastfeeding were to occur, none of the fathers said they would encourage their wives to go bottle-feeding. This is a further confirmation of the high regard respondents appear to attach to breastmilk.

- Mothers need to be educated on the main cause of insufficient milk, which is lack of introducing the child early to breastmilk instead of their perception that it is due to lack of food.
- TBAs are in the habit of advising mothers to discard colostrum and therefore need to be educated that colostrum is not bad milk but essential to the child’s health.
- Fathers are happy that their wives breastfeed. This could be used as a motivation to the mother to encourage her to breastfeed for a longer period of time.
- More information on the right weaning supplement is required. For now, only pap (koko) is introduced with groundnut paste and little or no sugar, which is not nutritious enough for a child being weaned.

**PERCEIVED EFFECT OF BREASTFEEDING ON A WOMAN’S FIGURE**

A married woman is expected to expose her body to only to her husband. Even the mode of dressing in Dutse (mainly Hijab, a long flowing gown with a long veil, common in Islamic countries) and the practice of purdah tend to emphasize the need for a married woman in particular not to show off her figure. Thus, the issue of loosing her figure due to breastfeeding was not considered a problem at all. Besides, most fathers appear to be content with the figures of their wives, who are by nature very slim.
According to our respondents, breastfeeding has nothing to do with a nursing mother’s figure (i.e. it cannot affect her figure in anyway). Breastfeeding, no matter how excessive, is not believed to cause the breast to sag, which comes with age. Whether a woman breastfeeds or not, as she gets older, the breast naturally sags.

One urban father had this to say concerning the issue:

"My stepmother never had any child up till now, and she is about sixty years and her breast is as flat as a slippers. So will you tell me now that it is breastfeeding that cause that problem? In her own case, she never breastfed for once in her life, so why is her own breast not still standing up? My opinion is that, this is nature, nobody can be at nature."

Literate Father, Dutse

BREASTFEEDING IN PUBLIC

A married woman is expected to wear clothes that fully cover herself when she goes out. She is also not expected to expose any part of her body in public under any circumstances. Against this backdrop, it is therefore not surprising that when the issue of breastfeeding in public was raised, it was generally frowned at, even by the mothers themselves.

For instance, if a nursing mother were to visit the hospital due to her own or her child’s illness, and the child expressed the desire to breastfeed, even in the midst of fellow women, she is expected to do it modestly. Modesty in their understanding means moving to a corner and using her veil to cover her breast before breastfeeding the child. Some literate fathers even hold the view that breastfeeding a child in an hospital environment is not hygienic, as they feel that the risk of ‘germs’ lingering in such places is high. Thus, they feel it is not advisable for a woman to expose her child to such hazards.

So strong is this opinion that some of them do not even mind if their wives use the bottle instead of breastfeeding in such situations. Some would consider bottle-feeding as more hygienic, taking into consideration the fact that the mother is not going to stay in the hospital for the whole day. Again, any ‘responsible’ mother (as some fathers put it) should ensure that she properly breastfeeds her child before leaving home so that the child will not demand for breastmilk during her short stay in the hospital, when the pap or milk in the bottle is expected to sustain the child.

If a woman is in a public transport, either travelling to a neighboring town or going to the market place, and the need arises for her to breastfeed, she is expected to cover herself with her veil properly before breastfeeding or alternatively resort to using the bottle. So far, such situations emerged as the only period that bottle-feeding is generally encouraged just to safeguard the body of the nursing mother, although in this case, the use of the bottle should only be temporary and not a routine.

Furthermore, fathers opinion was sought based on the issue of a pedestrian nursing mother being pressed to breastfeed a ‘wailing’ child on her way to either a neighbor’s place or on her way to the hospital. In this case, the mother is still not expected to stop in the middle of the way to breastfeed her child. The majority of men feel that it will be wiser for the mother to soothe the child until she gets to a more ‘conducive’ place, as most of them claimed that they would be highly embarrassed to see their wives breastfeeding their children by the wayside. In fact, a few fathers claimed such an act could earn their wives instant divorce for daring to expose their bodies for all to see.
According to the fathers, an acceptable place is either a neighbor’s house or any house that appears to have children in it. People are not wary of such a practice in this part of the country, as a communal way of living is highly encouraged.

However, not too many fathers overtly supported this last idea for fear of their wives seizing the opportunity to go to such homes to commit adultery on that pretext. In a similar vein, even breastfeeding a child openly within her compound appears not to go down well with some fathers, especially of the Fulani tribe (mainly in Jaudi), who said they would be embarrassed to see such ‘exposures’. Breastfeeding in this community is expected to be restricted to the mother’s closet.

In a nutshell, this sort of problem most fathers feel cannot arise if a mother ‘times’ herself very well by way of ensuring that she breastfeeds the child sufficiently at home before going out to avoid such ‘embarrassing’ situations.

"If a woman breastfeeds her child in public then that means she has no shame or secrecy. She should breastfeed her child in her room, nobody is interested in seeing her body. In fact, breastfeeding openly can even introduce disease to the milk."

"I don’t mind my wife breastfeeding in my personal car but not in a commercial bus. I won’t take it kindly with her if I happen to see her because apart from exposing her body. It is not even hygienic for the child. In such a situation, I would advise her to use her feeding bottle instead."

Literate Fathers, Dutse

"The only situation where I can pardon my wife is if I see her breastfeeding in an open bus and if she covers herself with her ‘gele’ (veil)."

"In this part of the country, people are not so hostile to one another: we live amicably. My advice to women if they find themselves in that kind of situation, is to look for a house with married women or children and say Salamu Alaikun [peace be unto this house] and ask for permission to breastfeed her child. I think that is more decent and ideal."

Illiterate Fathers, Limawa

BREASTFEEDING AND CONTRACEPTION

Most respondents agree that a woman can get pregnant while breastfeeding since her menstrual cycle could resume earlier than expected. Each woman’s cycle was said to vary. However, some mothers and grandmothers hold the opinion that longer duration of breastfeeding can help prevent early pregnancy.

Sexual relations between husband and wife was said to usually resume three to five months after she has delivered, a period which observably still makes a woman vulnerable to getting pregnant. Even though some mothers, especially literate urban ones, dislike the idea of their husbands demanding sexual relations ‘immediately’ after delivery, there appears to be nothing they can do about this, as according to Islamic religion a woman is not expected to deny her husband sex save for serious ill-health. A woman’s denial of sex to her husband could lead to divorce. Besides, polygamy is still highly practiced, so sleeping with
the husband amongst wives in such homes is usually shared to encourage fair treatment. Thus, a woman whose turn it is to 'sleep' with her husband must comply or else she loses her turn.

Most respondents stressed that once a nursing mother becomes pregnant, she should discontinue breastfeeding. According to the grandmothers and some rural mothers, the ideal time after birth to get pregnant again is two years, although many mothers confessed that they become pregnant sooner than they desire. Most parents appreciate the importance of child spacing but do not necessarily do so well in practice.

Generally, a few mothers use modern contraceptives to prevent early pregnancy while nursing. Although many respondents could not openly admit to the use of contraceptive devices, especially in rural areas, a few respondents, especially in the urban groups, admitted using withdrawal, pills and, less often, condoms. A few even claimed to have initiated the use of I.U.D. without their husband's consent. Most mothers claimed to have learnt about family planning in ante-natal clinics.

Grandmothers are generally not aware of any modern contraceptive device and in fact do not support their use due to their belief that methods can reduce a mother’s fertility. They expressed awareness for the local methods such as rings and amulets, but they doubt their efficacy. They generally believe that because God gives children, so no matter what type of amulet used, the child will come when God wants him/her to come.

Worthy of mention is the fact that the research team saw empty sachets of Gold Circle condoms in most dustbins in the Jaudi area even after the fathers had earlier denied the use of such a device in the groups. Fathers claimed that the condoms were used by children as balloons.

Post-partum abstinence is also a common practice in Dutse, although for only three months after delivery. Traditionally, after a woman delivers, she is expected to go back home to her parents for 40 days' 'ritual' bath, after which she will come back to her husband's house and stay for another three months before she resumes sexual relations with her husband. Notably, some mothers even considered the three months break as too short.

"I also don't like the idea of my wife swallowing drugs in the name of family planning. Besides, Islam is against family planning. I and my wife we both understand ourselves so we time it so that we only meet when it is safe for her."

"Sometimes, I use condoms."

"A woman who is breastfeeding and at the same time observing her period can get pregnant. That is what we call 'kunika' in this place."

Literate Fathers, Dutse

"It is not right for a breastfeeding mother to get pregnant for the sake of her child. The best thing to do in such a situation is to see the doctor for advice on family planning before the problem even occurs."

"I don't support family planning but I am lucky to have two wives. There is no way the two of them can get pregnant at the same time. I try to plan it in such a natural way (using safe period), and I give two years gap between my children."

Illiterate Fathers, Dutse
"In my own case, my wife doesn’t have much problem because her period usually ceases for almost two years after she delivers, so it is safe for her."

**I!literate Father, Jaudi**

"It varies from woman to woman. You see, women are different. Some after delivery, they can stay up to ten months before they start their period, and God will help them to be pregnant, while some can get pregnant earlier, and the mistake they make is that they just wean their children because the Ngozoma told them that their children will have rashes from sucking the sperm of the new baby in their tummy. But since I started working in the hospital, I have heard that it is not wise to wean a child in such conditions because the child is not yet strong enough. If it happens to me walahi (I swear), I will keep it."

"I use natural family planning (safe period). My husband is very understanding so I don’t use loop (referring to I.U.D.) or take pills to prevent any pregnancy. I’m afraid of that loop, especially since one of my friends had a terrible experience with it when she fixed it and slept with her husband, the thing entered inside her womb and she started bleeding. They had to operate her to remove it."

**Literate Mothers, Dutse**

"When a woman discovers that she is pregnant while still breastfeeding, the best thing for her to do is to wean the child, even if the child is two months old, because her milk is now like poison, and the child will start falling ill any how and might even grow lean, have rashes or die. She can use infant formula instead if she has money or give soya beans milk to the old child. It is cheaper and even more nutritious."

"Breastfeeding for long cannot stop pregnancy. It is not even luck that can help the woman out. Pregnancy is from God and anytime He wants it, it will happen no matter what the woman does."

**Grandmothers, Dutse**

Conclusions:

- Some parents use modern family planning methods but are ashamed to admit this due to the stigma attached to their use and the belief that this will have adverse repercussions on the mother’s fertility. Emphasizing the advantages of the methods in future campaigns rather than their disadvantages could lead to better acceptance.

- Emphasis should also be placed on the health benefits of family planning in its promotion as preaching on family planning to limit the number of children might be rejected for religious reasons. Health and beauty benefits from child spacing on the part of the woman could be emphasized.

- Mothers need to be convinced that if they happen to get pregnant while still nursing a baby they should continue breastfeeding because it will not affect the child’s health in any way. In particular, the idea that a woman should discontinue breastfeeding as soon as she notices that she is pregnant needs to be dispelled."
BOTTLE-FEEDING

Bottle-feeding was practiced mainly by a few working mothers. Even when bottles are used, gruel (koko), water alone, or water with glucose is used rather than infant formula.

Many respondents claimed to have heard about a lot of problems associated with bottle-feeding, which also explains why they do not generally use this method. The major problems associated with bottle feeding include:

- high risk of food poisoning to the child due to lack of hygiene,
- high risk of its causing diarrhea, and
- risk of the child getting used to it and subsequently rejecting breastmilk.

The high cost of infant formula also contributes to its general low use. Many people (grandmothers in particular) actually believe that if you give your child infant formula, the child will have the tendency to behave like an animal.

“I use feeder (referring to feeding bottle) to give my son pap in the morning before taking him to the nanny’s place. I always tell my nanny to use spoon and cup in my absence because she cannot take care of the feeder as I would want her to. Her children can even play with it, or she can leave it for the flies to have a party on it. And even when you tell her to use salt and hot water to wash it, because she is not educated, she won’t do it, and that is quite risky for the baby. It can cause stooling and diarrhea. Anyway, it is only when I’m travelling or going for a naming ceremony that I also use the feeder.”

Literate Mother Dutse

INFORMATION CHANNELS

Information on child feeding, particularly as it affects the child’s health, is generally considered to be very important. Most mothers claimed to be eager for such advice, although they do not go out of their way to seek it. Rather, they depend on ‘incidental’ contact with the information via oral tradition or, less frequently, via mass media.

Respondents’ most frequent source of information on child nutrition is health personnel and, in rural areas, grandmothers. This finding is a further confirmation that the oral tradition in Nigeria remains very strong.

Most mothers said the best and most trustworthy channel for good information on child nutrition and breastfeeding is through health personnel, preferably during ante-natal clinics. However, fathers feel that the channels could be increased to include posters and radio. Some respondents suggested that the posters should be in the vernacular for wider reach. Radio listenership was said to be very high, and most homes were said to own radios in working order. This last claim was confirmed during the EDIs when most homes visited had music or news filtering in the background from radios during the interviews. Respondents’ favorite stations are Radio Kaduna, FM Kano and Radio Jigawa.
"You can educate women on breastfeeding in the form of adverts on radio like the one similar to that funny one of family planning that is always on air."

"Posters in these three languages: Hausa, Fulani and English, can also effectively do the job."

Literate Mothers, Dutse

"I would suggest you use radio because no matter how poor a man is, he can afford at least a small transistor radio for his wife. And from experience, I know that women like listening to radio a lot, especially here in Dutse."

"They can ask the information ministry to use public vans to educate the women, especially in the rural areas. The program should be so organized that it should be in drama form so that even women in the rural areas will understand it."

"I don't think organizing the lectures will be a good idea as most people won't allow their wives to attend it because they might interpret it to mean that it is a family planning promotional lecture under the guise of child feeding lectures."

Literate Fathers, Dutse

"You can use various women organizations/commissions like NCWS and especially the FOMWAN. They appear to be very strong in this Dutse. They can organize private lectures in their center. More women will benefit from such lectures than, say, in the general hospitals, since it is not everybody who attends hospital."

"The best way to tell women about breastfeeding and how they should take care of their children is for the hospital to organize weekly lectures, like say every Saturday, so that women can attend and benefit."

Illiterate Fathers, Limawa

Conclusions:

- Health personnel who come into contact with women should be well versed in child nutrition, and their efforts should also be re-enforced through the supply of such visual aids as posters and handbills.
- Radio campaigns will also be effective since respondents in purdah claimed to enjoy listening to radio as a pastime.
- Other methods can be introduced such as face-to-face contacts/lectures through women church leaders or FOMWAN, to cater for the women who do not come out of their homes due to purdah restrictions.
MOTHERS’ VIEWS

General Discussion of Children

Although occasionally grandmothers or older children help the mothers take care of their babies, virtually all the mothers spoken with claimed to take care of their children themselves. Most mothers are full-time housewives, and very few work outside the home, so they have enough opportunity and time to take care of their infants.

"I don’t have anybody helping me. I’m his mother so this is my sole responsibility."

"Nobody helps me. I don’t enjoy the luxury of a housemaid. Besides, who is going to help me here? Anyway, sometimes, his elder sisters or other children in the house carry him on their back to play with him or give him food, particularly when I’m so busy with house chores, but most of the time, I take care of him alone. I don’t even take him to my neighbor’s place to help me carry him. I prefer to look after my son, myself."

Mothers With Children 6 - 11 months, Jaudi

Having many children is a common practice in this area, as indicated by the fact that most of the women interviewed had between two and ten. Spacing of children at least one and half or two years apart appears to be practiced, because when respondents were asked to give the ages of their other children besides the young infants they are now nursing, it was observed that these age gaps between children were the norm.

In spite of the privacy of the one-on-one interviews, some mothers found it difficult to tell us their husbands’ names due to a traditional inhibition. A father’s name is generally considered as very ‘special’ and ‘sacred’ and therefore should never be mentioned. The practice of naming children after their parents also exists, thus making it more difficult for mothers to say their husbands’ name as in most cases they are the same as their fathers-in-law’s. Further compounding the problem, calling of the name ordinarily is perceived as a mark of disrespect. Even those who told us their husbands’ names first hesitated before doing so.

"His name is Mallam Adamu, short and simple. I know his father’s name. Tradition does not permit me to tell you his father’s name just like that."

"I’m sorry, we don’t usually mention our father-in-law’s name out of respect."

Mothers with Children 0 - 5 months, Limawa

Virtually all the families visited, especially in rural areas, are extended by nature. Not more than three nuclear family homes were visited in total. Interestingly, virtually all the mothers, especially in rural areas, have either their mothers-in-law or mothers living with them. This is considered to be beneficial to the child, as mothers-in-law tend to have a lot of influence on their grandchildren’s feeding practices.
Hausa remains the main language usually spoken in-home, even in Fulani homes. Most mothers can understand Hausa, but they widely claimed to be unable to read or write it. In the same vein, only very few claimed to understand, read, or write English.

Even though a noticeable proportion of the women are illiterates, virtually all of them claimed to have learnt one craft work or the other, especially knitting of native caps/sweater and less commonly, mat-knitting. Usually the craftwork is learnt at home from either parents, rivals or relations and not in vocational schools, due to the practice of purdah which tends to confine married women to their homes.

Mothers generally engage in craftwork to augment the household’s disposable income. Since they do not go out due to purdah restrictions, they claimed to depend on their husbands to help them sell their craftwork.

"No, during our own time, going to school or sending girls to school was not in vogue, except that of the Arabic school. In fact, in my days even going to Arabic school for girls was not quite common, so I did not even go to that one. However, I managed to go for Islamic lessons to learn the basic tenets of Islam. I mean the type organized by mallams in front of their homes."

Mother with Child 0 - 5 months, Jaudi

"I did not go to school but I know how to sew hats. I used to do that a lot and give them out to my husband to help me sell them when he is going to the town. But since I now do this petty trading, it is much better for me because I’m making more profit than the sewing of the hats, which is time consuming, and the profit compared to the one I make now is very small. I now see sewing of hats as very difficult."

Mother with Child 6 - 11 months, Limawa

"I learnt how to sew from my mate [rival]. She also taught me how to make hats."

"I didn’t learn how to knit hats from anybody. I learnt through observation and practice on my own."

Mothers with Children 6 - 11 months, Dutse

Infants’ Health Status

As in the groups, virtually all the mothers interviewed claimed that their children are healthy due to the fact that they eat well and rarely cry. Other signs of health mentioned are: noticeable physical growth, ability to play with the other children, and, less often, good bowel movements, especially in the mornings and/or in the evenings. Lack of these traits is usually interpreted to mean that the child is ill.

All the mothers felt that their children are growing well and that their nutritional status is above average. Indeed, close observation by the research team revealed that all the infants seen appeared healthy. No malnourished-looking child was seen in all the homes visited, although there were one or two sick children.

"Yes, she is healthy. I can say that but sometimes she is down with fever and high temperature, and whenever it starts, you will think she hasn’t got blood in her. She will look so pale, loses weight and look very different. I used to get scared."
"When she was bringing out her teeth, she was down with fever and diarrhea, and since that time she lost weight and never regained it again."

Mothers with Children 6 - 11 months, Dutse

Feeding Practices

Mothers were asked to do a 24-hour diet recall for their children. Virtually all the mothers claimed to still be breastfeeding their infants. Recall investigations indicated that mothers breastfeed their children as many as seven times a day. Notably, rural women had more difficulties in recounting the number of times they breastfed their children, but by and large, the number of times is not less than five.

In line with the findings of the FGDs, virtually all mothers claimed to breastfeed on demand, although they were quick to point out that they do not always wait until the child rejects the milk, especially when they have other household chores to attend to. However, on balance, some mothers, especially ones working outside the home, claimed to wait until the child rejects the milk since they do not have time to breastfeed as often as they would want to. Thus, any opportunity is usually exploited to achieve maximum benefits.

Since most infants sleep with their mothers on the same bed, night feeding also takes place, although not as often as during the day. For instance, when mothers were asked again to recall how many times they fed their children the night prior to the interview, most of them could only recount about two or three feeds before the break of dawn. Some mothers claimed to be unaware of the number of times their children suck since they are busy sleeping. Some children were said to be contented with their afternoon feeds and thus do not 'disturb' their mothers at night.

Virtually all the mothers interviewed breastfed their children on both breasts during the interviews. Only one or two mothers did not breastfeed in our presence due to the fact that their children were said to be sleeping. This finding further confirms that breastfeeding is widely practiced. It was also observed, however, that most mothers tended to favor the right breast. When probed, the habit appeared to be more of a religious inclination than a matter of convenience.

Perhaps due to their low literacy level, respondents could not reveal to us the length of each breastfeed in minutes, but our own close observation revealed that, on average, a child breastfeeds for between three to five minutes on each breast before being changed. Mothers claimed not to be aware of the length of feedings.

"She sucked up to three times before the break of dawn. Anytime she wakes up, she sucks, then goes back to sleep again. Like at night, the sucking does not bother her much, except in the afternoons; she is mainly more concerned with sleeping at night."

"I cannot count how many times she sucked the breast because that is what she loves doing most. You can see that since you came, she has been sucking the breast without leaving it. She can go on and on as she likes."

Mothers with Children 6 - 11 months, Dutse

"According to our tradition, they said, we should always give the right breast first to our children, and according to Islam also, that is the right thing to do."

Mother with Child 0 - 5 months, Dutse
The food supplement usually given to a child in addition to breastmilk is pap (koko). A small cup that is slightly less than 250 ml is usually given for each feed about three times a day.

Notably, only a few feeding bottles were seen in most of the homes visited. Those seen had leftover water or gruel (i.e. pap) in them and not infant formula.

Relatedly, no children were bottle-fed in our presence. Bottles are so rarely used mainly because of the fear of the child being infected/poisoned. Also, infant formula was said to be very expensive. The few mothers who claimed to use it paid as much as N300 for enough to last for four or five days with heavy use. Hence, many see it as a ‘luxury’ and a sheer waste of money. Less importantly, unavailability of infant formula was also said to discourage its rampant use.

In line with the claim that most mothers do not use infant formula, only three empty tins of SMA and one half empty tin of NAN were seen during the pantry check conducted in all the homes visited.

**Feeding during Illness**

Most children were said to usually refuse feeds when they are ill. In such cases, forced feeding is practiced in order for the child to be able to eat well and respond to treatment.

Mothers claimed to continue feeding when their children have diarrhea because they recognize the fact that during such a period, a child can become dehydrated and therefore needs more liquid-based foods. Interestingly, most mothers claimed to give their children more liquid-based foods, especially pap, and more fluid to prevent the child from getting dehydrated during cases of diarrhea.

Most mothers also claimed to know what to do during the manifestation of diarrhea. Virtually all claimed to give ORT (oral rehydration therapy) solution which they refer to as *Ruwan Gishiri da Sukztzi* (i.e. Salt Sugar Solution) in the local parlance. Their knowledge of it and its preparation was largely attributed to the wide and apparently successful campaigns carried out by UNICEF in conjunction with the Federal Ministry of Health in the area.

**Pregnancy Period**

The majority of mothers, especially in urban areas, claimed that health personnel (usually a doctor or a nurse) examined them when they were pregnant. They recognize the need to see the doctor because they are usually advised by their close friends or husbands to attend ante-natal clinics in order to assure that the child remains healthy. Morning sickness usually associated with early pregnancy is the main reason why some pregnant women go to the clinic. In addition, the fear of possible complications tends to encourage some pregnant mothers to visit the hospital.

The revelation during the FGDs of the sudden interest of fathers in the welfare of their nursing mothers and children was further confirmed, as most mothers interviewed claimed that their husbands persuaded them to go to the hospital during pregnancy. The frequency of their visits to the hospital is usually determined by the number of times the doctor asks them to come. Mothers claimed to visit the hospital at least up to eight times before they deliver.

Most rural mothers claimed not to have been examined by anybody throughout their entire pregnancy. The main reasons cited for lack of visits to the hospital centered on lack of a health-care facility in their immediate environs, cost constraints, distance and lack of good quality service from nearby dispensaries.

The shortage of doctors in the general hospital was another major complaint against this health service outlet. Nurses were said to attend to mothers in place of doctors except where there is a complicated
case, when a doctor will be called. Another complaint levelled against the public health sector is that nurses are very rude and discourteous. Some respondents claimed the nurses’ behavior influenced their non-use of a hospital.

"No, not at all, we don’t have any hospital here, we have to go to Dutse general hospital. And even the dispensary that we have here, most times when we go, the doctor is never around and we end up waiting in vain. The doctor never shows up and when he comes he sometimes will just sit down and be gossiping with the nurses, or he will just attend to very few patients and then say he is tired, and he will just leave us on the queue and go his way."

Mother with Child 11 - 24 months, Limawa

"We want to go to the hospitals but no money, and treatment (i.e. drugs) are expensive, and we now have to pay for them. The government is not doing anything for us again so it is hard for people like us to go to the hospitals."

Mother with Child 6 - 11 months, Limawa

During ante-natal clinics, most mothers claimed that the doctors advise them on the type of food they should feed their newborns. The major advice given is that they should breastfeed their children on a regular basis, and when water is given, they should ensure that it is clean water. The use of infant formula was generally said to be discouraged by health workers. Notably, most mothers claimed to adhere to the health personnel’s advice that any water administered to an infant should be boiled first.

Giving of fruits such as oranges and bananas and, less commonly, of glucose, to children was also said to be largely encouraged by health personnel. Mothers generally commended the health personnel for giving them good advice regarding the type of food they should feed to their infants and how they could go about it.

When mothers seek advice on child feeding, it is usually from health personnel. However, a few mothers, especially in rural areas, attested to the fact that they sometimes ask questions on child-care and infant feeding to their mothers-in-law/mothers, TBAs or other older women in their compounds, whom they believe have more expertise on child-care and infant feeding. The advice they claim to receive is usually in line with what the health personnel tell them in the hospitals.

This study further reveals that TBAs do not have as much influence on what mothers should feed their infants as many TBAs claimed. Instead, TBAs’ function appears to be limited to cleaning the child and cutting the umbilical cord.

"No we don’t usually do that here; it is not our culture. I didn’t ask anybody because I know that the only food to give a baby when the baby is born is breastmilk. They don’t have any other food apart from that. You have to keep giving them that until they are old enough to sit down on their own and request for another type of food."

"It is not part of the Ngozoma’s business to tell me what to give my child. Once she helps to wash up the child, she has no right to tell you what to give to the child; when she is done with her own work, she goes away and then you can take over and give your child
anything you want to give him, or when it is in the evening after bathing, you wash your breast and give your child to suck."

Mothers with Children 0 - 5 months, Limawa

Immediate Post-Partum Period

The majority of urban mothers claimed to have delivered their babies in the hospital with the assistance of doctors, midwives, or nurses. Most rural mothers claimed to have delivered alone in their rooms with no assistance, which is seen as a sign of bravery.

Mothers are usually ‘shy’ to cry out for help during delivery, especially in the Fulani settlement of Jaudi. Help usually comes after the woman has already delivered, and even then it is mainly limited to cleaning up the child and mother and helping the exhausted mother into a more comfortable position.

Most mothers are accompanied by their mothers-in-law or mothers for hospital deliveries. Occasionally, especially for urban nuclear families, a good neighbor accompanies a mother.

No mother who gave birth in the hospital claimed to have been admitted to the hospital after delivery. Most said they were discharged two hours after a successful delivery. In the hospital, infants are introduced immediately (i.e. within the first three hours of delivery) to breastmilk. Colostrum is not discarded in the hospitals.

The research crew could not ascertain whether the hospital in Dutse is a certified Baby Friendly Hospital; however, almost all mothers appear to be happy with the new practice of their children being introduced immediately to breastmilk instead of the traditional practice of waiting till the next day. Most mothers claimed to hate to hear their children cry, especially after delivery, and they believe that the early introduction of breastmilk helps to put that in check.

In rural areas, TBAs are by tradition expected to take the newborn to clean it up and then to decide what the child is given. Colostrum is generally discarded before the ‘good’ milk is introduced. Most times, the same water used to bathe the child is the first thing given to the child by the TBA, using her forefinger, to ‘welcome’ the child into the world. However, some more experienced mothers appear not to wait for the TBA to tell them what to feed their child.

On the other hand, in Limawa and to an extent in rural Jaudi, the traditional concoction of lead, palm dates and honey still remains the first thing given to newborns.

"God brought the delivery in an easy way. Most times when you have it easy like that you don’t have to bother other people. They will instead hear the cry of the baby and come to help you out. In my own case, after I delivered, I sent for my sister-in-law to bring me medicine for relieving birth pains (Kaka,nda) and to call the TBA."

"I have never delivered before with other people holding me or that sort of thing. Nobody has ever helped me out. God is always on my side. He is the only one who helps me to deliver safely. After that, they help me to call the Ngozoma [i.e. the TBA]. She is the one to cut the umbilical cord and to wash the baby, then hand him over to me. That’s all."

Mothers with Children 0 - 5 months, Jaudi
"In our tradition, we are usually shy of our in-laws so I cannot deliver in their presence. That was why I didn't call anybody, and I didn't call the children either because they might raise false alarm. Though giving birth is a joyous thing, at the same time, it is not everybody who you want to come and watch you."

"I squeezed out that slimy part of the milk that draws like okro before giving the milk to my child. That was what, the Ngozoma said."

"It is the Ngozoma who said that before giving the baby breastmilk, we should wash it first and remove the 'dirty' milk first and that we should never give the child breastmilk without washing it. So since this is not my first born, she has told me that before. I didn't wait for her to tell me again this time around, so I went ahead to wash the breast with the native black soap and squeeze it out myself."

Mothers with Children 6 - 11 months, Dutse

"I didn't bother to squeeze it out because my major concern then was to breastfeed the baby as soon as I gave the baby the breast. The baby started sucking and milk started flowing also."

"Because there was nothing in the breast, the breast refused to bring out milk. That is why we kept on giving him water until the milk started flowing."

Mothers with Children 6 - 11 months, Limawa

"Nothing, except the water that was used to bathe him -- a little was taken and given to him to drink by the Ngozoma. That's what they gave him first even before using the water to bathe him."

Mothers with Child 0 - 5 months, Limawa

Post-Birth Feeding Practices

As unearthed during the FGDs, most newborns especially those not born in hospitals, are not given anything except water within the first three hours after delivery. The water, either plain or mixed into a concoction of honey, lead and date palms, is usually given in very little quantities to the newborn, mainly at the insistence of the TBA.

The main reason given for this practice lies in the belief that a newborn is usually thirsty immediately after being delivered, which is why it starts crying. Another reason given lies in the common belief that a newborn upon delivery needs to 'learn' the act of swallowing first before he/she can properly accept breastmilk. This is why the water is first used to 'teach' the newborn how to swallow.

On the other hand, the administration of water was also said to be in line with the need to 'test' and ascertain whether the child’s organs, such as the throat and stomach, are functioning. Thus, acceptance of the water by the child without it going the wrong way or resulting into the child hiccupping is an indication that every organ of the child is in perfect order.

Subsequently, breastmilk is given, albeit in small amounts, until the child’s stomach is sufficiently 'enlarged' to accept larger quantities. Since mothers generally perceive giving breastmilk as the most natural thing to follow any successful delivery, some mothers claimed that health personnel unnecessarily recommended that they do this.
Children delivered in hospitals are generally considered to be privileged since they are usually introduced to breastmilk earlier than those not born in hospitals. Nevertheless, some health workers give newborns water before breastfeeding begins. Although no medical reason was given for this practice by the health workers interviewed, it appears that they indulge in this practice not because they want to but because even when they recommend giving breastmilk first, most mothers and their relations usually refuse to adhere to such instructions based on deep-rooted traditional beliefs. In giving the water or other liquids to the newborn, a feeding bottle or ‘beaker’ (a cup with a narrow mouth) is usually used.

Most mothers reported that their newborns became constipated, especially three days after delivery. In this case, the doctors usually recommend the use of gripe water, which is often administered orally using a teaspoon.

Research revealed that giving of infant formula and tea to a newborn is not a common practice, and even when practiced, it usually takes place after the first three days of delivery. No major reason was given for this behavior.

The removal of the ‘uvula’ of children after two or three days of delivery appears to be a common practice, especially in rural Jaudi. People believe that it is only when it is removed that a child can successfully swallow food. After the removal of the uvula, hot water is given to the child immediately, especially in the Hausa community, to aid the fast healing of the wound in the child’s throat. In Jaudi, a drop of honey or kolanut juice extract (normally chewed by the mother) is also given.

"What we do here is that after three days we remove the uvula from the baby’s throat. Then the mother of the baby is given kolanut to chew, and after chewing, the juice gathers in her mouth and she will spat it into the baby’s mouth so as to help the wound heal faster. It is usually after three days that the child is born that the tradition is performed."

Mother with Child 6 - 11, Dutse

**CHEWs’ AND TBAs’ VIEWS**

*Identification*

The health providers interviewed were either Community Health Extension Workers (modern health-care providers) or Traditional Birth Attendants (TBAs). While the CHEWS are attached to public hospitals, the TBAs (usually very old women aged sixty years and above) operate from their homes. The age of the TBA normally affects her prestige in the community: the older she is, the more she is considered to be an ‘expert’ in her chosen field. Both categories of providers interviewed claimed to have been working in the location chosen for this study for over two years. Hence, they were in a good position to talk about the members of their immediate environments who patronize their services.

The major responsibilities of TBAs and CHEWs are child delivery and giving advice on how to feed children, while TBAs also dress corpses and perform circumcisions. However, all TBAs and CHEWs interviewed prefer to deliver babies and give advice on child-care over other tasks. On average, each provider claimed to have delivered five to ten babies in the past month.

*Breastfeeding Practices*

Providers confirmed that water is the first thing usually given to infants in Dutse. TBAs largely claim to recommend the administration of water, while CHEWs claim not to recommend it. They pointed out
that most mothers do not adhere to their advice due to a deep-rooted belief in the fact that newborn babies are normally ‘thirsty’ after delivery. One of the CHEWs attested to favoring the administration of water, albeit with glucose, before breastfeeding is initiated because she believes also that a newborn can be thirsty at birth due to the hot weather prevalent in Dutse. Furthermore, she added that the struggling of the child during the delivery process can make the child tired and therefore in need of glucose to help replace the lost energy.

Interestingly, TBAs regard breastmilk as an integral part of a child’s diet just like the CHEWs, which is why they advise that breastfeeding should begin immediately. However, the concept of ‘immediately’ varied from one provider to the other. While CHEWs advise that breastfeeding start within first three hours of delivery, TBAs extend this period till the next day, mainly because colostrum has to be discarded before breastfeeding is initiated.

Mothers claimed to adhere to virtually all advice on child health care given to them by the CHEWs, indicating mothers’ high level of trust. TBAs do not have as much influence on mothers as the CHEWs. While the function of the TBAs is usually restricted to cleaning the child and mother, CHEWs extend their functions to advisory or confidant roles. Apart from advising mothers on what they should feed their children, they also claim that some mothers feel at home confiding in them, especially on issues that relate to family planning.

TBAs perceive colostrum as ‘bad’ milk that is even capable of killing a baby. Their advice to discard colostrum is usually adhered to, especially by the rural mothers. On the other hand, CHEWs perceive colostrum as the most important part of breastmilk since it is the first immunity a child acquires from his/her mother before he/she starts acquiring his own natural immunity with age. In addition, colostrum to them is nutritive and important to a child’s health, in spite of its ‘yellowish’ color, and thus should not be discarded. All the CHEWs interviewed stressed that they ensure total adherence to this advice by all mothers who deliver under their supervision. Mothers’ co-operation in this regard was generally commended by the CHEWs.

Providers across the board could not tell the frequency of breastfeeding in their community due to the fact that their interaction with mothers is usually too brief. CHEWs, who tend to have more interaction with mothers than the TBAs, due to the ante- and post-natal services rendered by the hospitals, opined that a breastfeeding frequency of four to six times per day is about right.

Mothers were generally said not to have problems in maintaining this frequency (i.e. of breastfeeding up to five times a day). Providers are certain that based on the fact that most of them are full-time housewives whose sole function is caring for their children, the frequency could even be higher.

For mothers who cannot feed as frequently as they like due to work away from home, providers confirm that infant formula and other food supplements like pap are usually given.

All the CHEWs interviewed oppose the use of infant formula as a substitute for breastfeeding. In fact, they claim to discourage mothers who come to their clinics from this practice, as they do not see it as being beneficial to the child in terms of nutritional value. Instead of infant formula, CHEWs would rather recommend pap or soya beans milk to working class mothers who cannot breastfeed all the time.

Upon prompting, TBAs confirmed that it is not their business to recommend to mothers what they should give their infants due to the traditional restriction of their services. Since they are not expected to offer any post-delivery service, they feel they cannot influence the behavior of mothers concerning child feeding practices.
Irrespective of their professional background, providers think that mothers sleep with their babies and breastfeed them during the night. They say this because they have not been receiving cases of malnourished children that would have resulted from lack of proper breastfeeding.

Exclusive breastfeeding to the providers means feeding an infant on breastmilk and water for at least three to four months before the introduction of other supplements. Mothers, according to the providers, usually supplement breastfeeding with gruel (koko or pap), water, and less frequently, infant formula.

These providers perceived full breastfeeding as good. In fact, they believe that a breastfed child will no doubt look stronger and healthier than a child fed on infant formula. Like the mothers, they also reiterated the importance of breastmilk and the need for it to form a major portion of an infants’ diet. The benefits of breastmilk to a child, they added, cannot be over-emphasized.

Generally, respondents, like their FGD counterparts, felt that an infant can live on breastmilk for up to three to four months before other supplements can be introduced. CHEWs and TBAs generally hold the view too that like adults, all babies need water (in addition to breastmilk) to avoid dehydration due to the hot weather prevalent in Dutse. Only one CHEW claimed that he would not recommend giving of water to infants at their early stage of life, mainly because he does not trust the cleanliness of the water supply in Dutse to be fit enough for infants’ consumption. There is the general lack of potable drinking water in all the communities visited. Water is usually sourced from wells, and mothers are not in the habit of boiling water before drinking. He feels that it is unsafe to administer such fluids to infants who are more vulnerable to infection due to their low immunity level at that stage. However, to his disdain, mothers resisted all his recommendations to give breastmilk only, without additional water, in the first three to four months of life. None of the mothers adhered to his advice because of their deep-rooted belief that breastmilk is quite different from water.

Like mothers and most CHEWs, TBAs do not believe that a child can survive exclusively on breastmilk. Thus, there is a need for presenting scientific evidence support the need on exclusive breastfeeding to further convince these respondents, especially the CHEWs.

None of the respondents claim to spontaneously know of any problems associated with breastfeeding. However upon prompting, TBAs confirmed that insufficient milk could be a problem (that could be solved by ensuring that the mother eats well). Besides, they were quick to point out that the problem of insufficient milk is not common in Dutse. Likewise, none of the CHEWs admitted attending to reported cases of insufficient milk, which further confirms that the problem does not really exist.

The providers, like mothers, said that breastfeeding is usually stopped when a child is between one to one and half years old. The reasons cited for stopping breastfeeding are mainly pregnancy and the child reaching an age when he or she no longer needs breastmilk.

Interestingly, all the TBAs interviewed claimed to have breastfed their infants for two years, as was the traditional practice.

**Infant Feeding**

The major condition that would prevent a baby from being breastfed, in the opinion of these respondents, is mother’s illness that has an adverse effect on her milk, rendering it unsafe for the baby’s consumption. The issue of early pregnancy by a nursing mother was not perceived as a problem since CHEWs favor continuation of breastfeeding for as long as the health of the mother can permit. However, the TBAs were not in agreement with this because, like the mothers, they feel that breastfeeding should be discontinued as soon as a mother recognizes that she is pregnant.
TBAs generally perceive infant formula as an extra 'luxury' and are in support of its use once the child’s father can afford it. In other words, they perceive infant formula as having some nutritional value that a child can benefit from. On the other hand, CHEWs do not perceive infant formula as having any kind of nutritional value or being beneficial to an infant and therefore do not encourage its use. The tendency of some mothers using infant formula as a complete substitute to breastmilk rather than as a supplement was a cause of worry to the CHEWs.

In the same vein, CHEWs also frown at the use of bottles for feeding infants less than four months old. Feeling that the feeding bottle puts the baby at high risk for diarrhoea, none of the respondents attested to ever recommending the use of bottles. In fact, CHEWs reported that they sometimes 'seize' them from mothers who bring them to the hospitals just to discourage further use. TBAs, however, were indifferent towards the use of feeding bottles.

TBAs claim not to be asked about child feeding, but CHEWs are asked occasional questions about weaning foods. Mothers were generally said to recognize the importance of breastmilk and to perceive it as the major part of an infants' diet. When CHEWs give advice on infant feeding, they claim to usually speak directly with the mothers. However, occasionally, they are asked to be accompanied by their husband.

Virtually all the CHEWs interviewed feel that mothers usually follow their advice, judging from the fact that once advice is given patients do not come back asking the same question again. Health workers do not feel that the mothers seek the advice of others before following their advice, as they are aware of the general confidence and trust that mothers tend to repose in them.

Regarding the issue of how to feed a sick child during diarrhoea or respiratory illness, virtually all the respondents in this category believe that the child should be fed more food than usual in order to hasten the child’s fast response to treatment.

Post-Natal Care

After delivery, a mother is expected to eat more food than normal to enable her to regain her lost blood and strength. Similarly, her fluid intake is also expected to increase.

Mothers do not generally ask health workers about family planning. Even efforts by the health workers to supply the information is usually resisted due to the people’s religious beliefs, which they feel discourage the use of family planning. However, the few who ask usually come after three months of delivery, which is in line with the finding during the groups that couples usually resume sexual relationships with their husbands after three or five months. Health workers claim to advise mothers to use I.U.D., pills or condoms.

Mothers who begin using family planning methods usually do so while they are still breastfeeding, although they do not feel that it is safe yet to resume sexual relations.

Providers confirmed that mothers complain to them about not seeing their periods after delivery. However, they claim to tell them that this is a normal process.

Role in Nutrition Advice

Virtually all respondents expressed excitement about being asked to counsel mothers on infant feeding in addition to their regular work. Indeed, some CHEWs claimed that they have already been doing this, although in a limited way due to constraints and lack of support from their supervisors. No respondent
expressed concern about any problem that might occur when they eventually start the job. In fact, they were generally optimistic that the task would be an easy one.

Generally, respondents claimed to spend at least 20 working hours per week on their current jobs. Respondents say they can spare at least five hours a week to counsel mothers on infant nutrition. In carrying out this new task, respondents requested the following things that would aid their proper dissemination of advice on nutrition:

- **intensive training,**
- **educational materials, e.g. visual aids, literature on infant nutrition, posters and calendars,** and
- **vehicles that will help them go into the hinterland to counsel rural mothers.**

**OPINION LEADERS' VIEWS**

Generally speaking, opinion leaders do not counsel mothers on pregnancy, child health or infant feeding, and they claimed not to be knowledgeable on such issues. In fact, only one of the opinion leaders, a woman, attested to sometimes counsel women within her local church on such issues.

Basically due to the practice of purdah, which restricts women’s movement and social interaction between men and women, most mothers find it more convenient to discuss issues that relate to their infants with fellow women. Thus they prefer to discuss such issues with the wives of the opinion leaders, who are usually elderly and perceived as learned. As a matter of fact, mothers during the interviews claimed to confide in male health workers only because they have no choice.

Due to the position of the opinion leaders, which is mainly political in nature, they appear to know what goes on within their communities because they command a lot of popularity and also interact a lot with members of their communities. Their opinions and recommendations on any issue are usually adhered to without reservations.

Opinion leaders reiterated the fact that newborns are usually given water before anything else as soon as they are delivered. A community leader in Jaudi also confirms that infants are given *Kauri*, i.e. lead, honey and palm dates juice extract, to 'protect' them from the evil ones, although he was quick to add that it is an old practice that is gradually becoming a thing of the past.

Virtually all the opinion leaders interviewed claim that their wives breastfed or are still breastfeeding their children under two years. According to the opinion leaders, the duration of breastfeeding should not be less than one and half years. Breastmilk is seen as being very important to the healthy growth of a child. They also perceived it as being nutritive and beneficial to the infants’ healthy development.

Opinion leaders, like the health workers, hold the view that a woman should start breastfeeding ‘immediately’ after delivery. However, the idea of ‘immediately’ varied from one opinion leader to the other. While males feel that it should be within the first six hours of birth or even the next day, women leaders rightly feel that it should be within the first three hours of delivery. On the whole, the emergent picture is that breastfeeding a newborn should be initiated immediately.

Opinion leaders also feel that breastfeeding is a matter of mother’s ‘duty’, not ‘choice’, so they do not believe that anybody needs to recommend it before it is initiated. In the light of this, they tended to believe that it should be the natural thing to do following delivery and that it should not need to be
recommended to mothers. In other words, none of them attested to ever advising any mother on her breastfeeding habits.

Regarding whether mothers give colostrum to their children, opinions varied. While the opinion leaders in rural Jaudi and Limawa feel that it should be discarded as tradition demands, the opinion leaders in Dutse, apparently due to their educational exposure, tend to perceive colostrum as 'good' milk fit for consumption by infants. Most opinion leaders claim not to discuss colostrum with women or with their wives, because like fathers they hold the opinion that it is not a man's business and therefore prefer that their wives or other mothers direct questions to elderly women or TBAs in the community.

Nevertheless, one female opinion leader in Dutse claimed to advise the women under her care about the importance of colostrum. Colostrum to her is 'good milk'. She attributed her knowledge on this issue to the various campaigns organized by UNICEF, which she claimed to have been part of.

Opinion leaders interviewed were unsure of the correct frequency of breastfeeding, but they guess that five to six times a day is about right. They do not feel that mothers would have problems feeding this many times, even if they worked. A 'responsible' mother is expected to organize her chores and other pressures to be able to create enough time to breastfeed her baby.

Opinion leaders further confirm that the majority of the women in Dutse are full-time housewives who have more than enough time to care for their infants. Thus, the use of infant formula as an alternative to breastmilk is not a common practice, since they do not have cause to be away from their babies for some hours.

The leaders do not support the use of infant formula in place of breastmilk. In fact, they condemned the idea as not being part of the African culture/tradition that a mother's priority is caring for her infant.

Mothers were generally said to sleep with their babies at night, thus making breastfeeding at night possible. In their opinion, this practice is good and should be encouraged as the women are actually doing what is expected of them.

Exclusive breastfeeding without other fluids was said not to be a common practice. Opinion leaders, like other groups, believe that infants fed with breastmilk should be given water in addition to breastmilk. Dutse was said to be a very hot town, so when babies sleep and wake up, their throats will be dry just like adults, and they need to take water via a feeding bottle.

Indeed, opinion leaders do not perceive the idea that a child can depend on breastmilk exclusively as being feasible. In fact, some of them claimed to be hearing about this idea for the first time from the research crew, and one of them even concluded that our advice is against any good intentions for newborns. One or two leaders said that they could advise their wives to try breastfeeding exclusively only if the advice were from a doctor attached to the general hospital.

Opinion leaders do not believe that there can be any problem(s) or complaint(s) associated with breastfeeding except when a mother wants to make excuses in order not to breastfeed. Added to that, they believe that there is no problem without a solution, so mothers can take care of any problem associated with breastfeeding either traditionally or by visiting the hospital.

When prompted on the problem of insufficient milk, virtually all the opinion leaders said they have never received such a complaint. Besides, they do not believe that such a problem could exist due to the fact that women within their community were said to 'eat' very well. Like other types of respondents, they also associated the problem of insufficient milk to lack of sufficient food.
The reasons opinion leaders said mothers stop breastfeeding included:

- the child teeth are growing and hurt the mothers' breast,
- pregnancy, or
- illness that affects the mothers' breast, e.g. wounds or abscesses that affect the milk.

Even these conditions, they stressed, should not stop mothers from breastfeeding. Rather, they should look for a way of solving the problem by visiting a health center.

Opinion leaders also perceived infant formula as a 'luxury' that a child can really do without. Hence only children whom parents want to pamper should be given infant formula. In fact, due to the current economic situation, some opinion leaders were quick to caution that a child should not be allowed to get used to infant formula now so that when it is not readily available it will not be a problem for the child. Interestingly, none of the opinion leaders spoken with claim to have ever encouraged the use of infant formula for their babies.

Besides breastmilk and water, the major food that emerged from this set of respondents as the main supplement to the child's first diet is pap (*koko*), usually made from millet or guinea corn spiced with tamarind or groundnut paste. This diet is normally introduced after the baby is three months old. The use of feeding bottles to give fluids other than infant formula to a young baby less than four months old was not perceived as wrong. Rather, use of feeding bottle to feed other fluids was seen as a status symbol or a prestigious act.

Opinion leaders hold the view that there should be changes in the diet of a child who is ill in order to facilitate the child's speedy response to any drugs that are administered. Thus, during illness more food than usual is given to the child and if the child refuses to take the food, forced feeding may be employed.

Opinion leaders do not feel it is alright for a husband and a nursing wife to resume sexual relations, as they believe that it is likely to cause rashes on the body of the breastfeeding child. Should a woman get pregnant while still breastfeeding, she should discontinue and introduce the child to pap or soya bean milk supplement in order to protect the child from having skin rashes. However, opinion leaders do not believe that a nursing child can suck the unfertilized sperm of an unborn foetus through the mothers' breast.

They believe that three months is ideal to resume relationships after delivery. On the other hand, they urged fathers to be more patient with their wives. Besides, since polygamy is still widely being practiced, opinion leaders do not perceive any problem in this regard, as the father can conveniently abstain from the nursing mother while with another wife.

Opinion leaders generally oppose any family planning method, perhaps due to their religious inclinations. They do not believe that anything should prevent pregnancy, which they perceive as God's gift.
SECTION III: IDEAS ON MESSAGE STRATEGY

Based on insights from the qualitative research, the following preliminary ideas for a message strategy to improve breastfeeding practices in Jigawa State are presented for consideration, discussion, and refinement.

Target group: Mothers

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<tbody>
<tr>
<td>Initiate breastfeeding within 1 hour of giving birth</td>
<td>This occurs in many hospital births but rarely if ever in rural births; people now claim that breastfeeding is initiated &quot;immediately&quot; after birth but they define this as &lt;5 hours (urban) and &gt;24 hours (rural), where they do not consider it possible to start until the milk comes in</td>
<td>Many people, especially TBAs and mothers but even some health workers, feel that mother and newborn need to rest after the birth trauma</td>
<td>Mothers as well as influencers needs to know multiple advantages of early initiation; colostrum needs new image (see below)</td>
</tr>
<tr>
<td>Give colostrum to newborns; do not feed water, glucose water, and especially kwalli</td>
<td>Almost all mothers give water first, even in hospitals (some health workers support); rural mothers also feed kwalli (with strong support from grandmothers and TBAs)</td>
<td>The main motivation is to satisfy the newborn’s great thirst due to birth trauma and to hot climate (the report describes mothers' &quot;deep-rooted belief that breastmilk is quite different from water&quot;); baby’s crying felt to indicate thirst; other reasons are: mothers need time to rest and feel their nipples are hard and sucking is painful right after birth, babies need to learn how to swallow, and people need to test that the child’s organs are working.</td>
<td>Colostrum needs a new image that includes both the scientific advantages (nutrition, immunity, benefits to mother) and the attributes of other first feeds (satisfies thirst, stops baby’s crying, etc.); if lead considered harmful, kwalli should be subject of negative message giving dangers and explaining lack of need.</td>
</tr>
<tr>
<td>Message for Mothers, TBAs, Grandmothers: Don’t remove baby’s uvula!</td>
<td>This is apparently common in rural areas; not clear who actually does this or how</td>
<td>People believe this helps child swallow food easier</td>
<td>Message should be that feeding colostrum eliminates need to remove uvula and avoids baby’s discomfort and danger of infection</td>
</tr>
<tr>
<td>Urban mothers: Give your baby breastmilk only for the first 5-6 months</td>
<td>Almost all rural and urban mothers breastfeed for approximately 18 months but water and sometimes kwalli is also given from the beginning and urban mothers begin pap and other foods at ~3 months</td>
<td>Breastmilk has a very positive image but is not considered to provide enough water or, after 2 months, to provide enough nutrition without supplements</td>
<td>The high water content of breastmilk should be a major theme as well as nutrient content and immunity. Already positive image of breastfed baby (robust, active, fresh, growing well) should be confirmed. Also fact that breastfeeding is an important hygienic practice.</td>
</tr>
<tr>
<td>Behavioral Objective</td>
<td>Current Situation</td>
<td>Constraints to Overcome</td>
<td>Message Content</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Working (mostly urban) mothers: Find ways to give breastmilk only for the first 5-6 months</td>
<td>Many already have found ways but some have resorted to infant formula and few appear to express milk</td>
<td>There is strong social pressure for all mothers to find a way to breastfeed; many mothers never even heard of expressing and others have strong fear of feeding expressed milk because of fear it will spoil and harm the baby</td>
<td>On radio might give testimonials of women describing their strategies for continued breastfeeding; give correct information on safe storage of expressed breastmilk</td>
</tr>
<tr>
<td>Rural mothers: Introduce thick pap and other soft foods beginning at 5-6 months</td>
<td>Many rural mothers waits until 7 months or later to introduce complementary foods (although feed complementary liquids from the beginning)</td>
<td>Study doesn’t really explain why</td>
<td>Messages should give correct age for introducing good complementary foods, described both in terms of months and of developmental signs that baby needs breastmilk plus</td>
</tr>
<tr>
<td>Give one or two extra breastfeeds each day and each time feed for at least 10 minutes (?) on each breast</td>
<td>Not really clear from study if this is a problem but there is some evidence</td>
<td>Many mothers cannot count or tell time; mothers and influencers are unaware of need for longer feeds or that the more sucking, the more milk produced</td>
<td>Use several respected authority figures, including doctor, grandmother and a father who wants to make sure his baby gets enough breastmilk and good hygiene to be off to a good start in school; major advantage that mother will produce more milk (the more the baby sucks, the more milk)</td>
</tr>
<tr>
<td>Mothers of babies 6-12 months old: continue breastfeeding on demand; then give thick, enriched pap; locally available, soft, nutritious foods such as...; mashed fruit and vegetables; feed at least 4 times a day; as babies get closer to their first birthday, gradually add family food</td>
<td>Little specific information in the study</td>
<td>Little specific information in the study; possible resistance to thick foods because so different from breastmilk</td>
<td>Messages must give specific information on enriching pap with oil, high-protein foods (cheap and available); might use testimonials to convince that babies can eat thicker foods; use same motivations of robust, active, do well in school, also idea of doing what’s needed to be good parents</td>
</tr>
<tr>
<td>Don’t stop breastfeeding if you become pregnant</td>
<td>Many women do become pregnant at around 6 months post-partum and most stop breastfeeding</td>
<td>Mothers (and grandmothers) fear breastmilk will harm the foetus as well as the nursing baby (especially rashes); some mothers feel coping with breast-feeding and pregnancy at the same time is too hard on them</td>
<td>Messages need to use respected authorities to explain lack of bad consequences of continuing to breastfeed and the important advantages for the nursing baby</td>
</tr>
</tbody>
</table>
The research indicates that there are several important influencers on the mothers’ child-feeding behavior. Fathers’ appear to have a lot of moral authority and feel a lot of pride in their children. Many fathers actively assist with child care, probably more for children over a year of age. Especially rural fathers do most of the food purchasing. But fathers are not involved in the details of first feeds or breastfeeding. Besides appearing in radio messages aimed at mothers and grandmothers, fathers should be the prime target of two messages:

♦ one encouraging their support of exclusive breastfeeding of their babies for 5/6 months; and
♦ one encouraging them to purchase healthy complementary foods for babies after 5/6 months and never to purchase formula (don’t be fooled into thinking it’s a prestige item – it’s dangerous!).

A combination of medical and religious authority may be effective in motivating fathers (and others).

Grandmothers appear to have a lot of influence in some homes, particularly if they live with the mother in rural homes. Helping care for babies appears to be an important and legitimizing role for them. They do this most actively in households where the mother works outside of the home. Unfortunately, they are some of the strongest supporters of some of the negative traditional beliefs and practices: that colostrum is bad milk and should be discarded, that children should be force-fed, etc. Grandmothers and mothers should be reached through the same channels (radio, home visits, counseling in health facilities) and basically receive the same messages. Grandmothers should be important characters in radio dialogues that address some of the resistances to improved practices.

TBAs appear to have a fair amount of influence, particularly in rural areas right after delivery. Much of what they advise is harmful so there is a strong need for some brief orientation of TBAs concerning such topics as:

♦ colostrum,
♦ feeding water,
♦ feeding kwalli,
♦ removal of the uvula,
♦ causes and solutions for insufficient milk, and
♦ dangers of infant formula and feeding bottles.

CHEWs and other formal health workers appear to need a review of some of the technical basis for optimal breastfeeding also (for example, giving water, when to supplement), but overall they appear to be a positive influence. Simple counseling and reference materials should be prepared to aid health workers give correct, clear, and helpful advice.
ANNEX I

RECRUITMENT GUIDE FOR FGDS
ANNEX I
RECRUITMENT GUIDE FOR FGDS

Community .................................................................

State ........................................................................

Head of Household’s Name ....................................

Address ....................................................................

How to locate the House ........................................

Name of child 0 - 23 months ..................................

Age ...........................................................................

Number of children in the family ..........................

Who has agreed to participate? (Note: Only one respondent per each compound)

   Name

Mother ........................................................................

Father ........................................................................

Grandmother ...........................................................

Number of hours/day mother usually spends outside the home without the youngest child ..

FGD Date ..................................................................

FGD Time ..................................................................

FGD Place ..................................................................

For Participants Only

Name ........................................................................

Has Agreed to Participate in a Discussion  Yes....................... No......................

Date .......................................................................... 

Time .......................................................................... 

On ............................................................................

Location .....................................................................
ANNEX II

FGD GUIDE -- MOTHERS OF CHILDREN UNDER 2 YEARS
# ANNEX II

**FGD GUIDE – MOTHERS OF CHILDREN UNDER 2 YEARS**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Discussion/Transitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>Facilitator's and Observer's names</td>
</tr>
<tr>
<td>Topic of Interview</td>
<td>We would like to talk to you today about your children, especially when they are young.</td>
</tr>
<tr>
<td>No right or wrong answers</td>
<td>There are no right or wrong answers to any of the questions — this is not a test.</td>
</tr>
<tr>
<td>Your opinions</td>
<td>We would just like to know about what you do normally and ask your opinions.</td>
</tr>
<tr>
<td>Child Health Project</td>
<td>We are working on a project about child health in Nigeria.</td>
</tr>
<tr>
<td>Help other people like them</td>
<td>We would like to know your experiences and thoughts to help other families. After we are finished, we will tell you more about the project.</td>
</tr>
<tr>
<td>Length of time of discussion</td>
<td>This discussion will take about an hour.</td>
</tr>
<tr>
<td>Talking to one another</td>
<td>As we will be discussing many things among ourselves, it will be important that we not all talk at once because we will want to hear each other so we can talk together.</td>
</tr>
<tr>
<td>Explain note-taking and tape recording</td>
<td>(Observer's name) will be writing down some of the things we talk about so we can remember them later. Also, we would like to use a tape recorder. Does anyone object?</td>
</tr>
<tr>
<td>Confidentially</td>
<td>We are the only ones who will know your name and your baby's name, and we will not use names in any reports.</td>
</tr>
<tr>
<td>Check understanding</td>
<td>Do you understand what I have said?</td>
</tr>
<tr>
<td>Clarification if needed.</td>
<td>Do you have any questions?</td>
</tr>
</tbody>
</table>
ANNEX III

MOTHERS' GUIDE
## ANNEX III
### MOTHERS’ GUIDE

<table>
<thead>
<tr>
<th>Topic</th>
<th>Discussion/Transitions</th>
<th>Probes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Women’s Introduction</strong></td>
<td>Please introduce yourselves -- and as you do, tell us how many children you have, the name and age of your youngest child.</td>
<td>-Observer should record this information for use during analysis.</td>
</tr>
<tr>
<td><strong>Motherhood (to Establish Emotional Pulls)</strong></td>
<td>As you all have young-children, can you say something about how your child makes you feel? As a mother, how do you feel when you breastfeed your child?</td>
<td>-Happy, why? -Proud, why? -Tired, why? -Link to future -Aspirations</td>
</tr>
<tr>
<td><strong>Good Mother (to Establish Tone)</strong></td>
<td>There are many things your children do that make you happy. Now I would like to shift to you, the mother. These are some pictures of women here in Nigeria (place photos so all can see). Which one of these women do you believe is a good mother?</td>
<td>-How can you tell? -What is it about her? -How would she care for her child? Why are others not good mothers?</td>
</tr>
<tr>
<td><strong>Necessities for Children of Different Ages (to Place Feeding among Other Needs)</strong></td>
<td>Among us we have mothers with children of many different ages. Think of your youngest child and tell us: What was important for your baby right after birth? What was important for your baby during the first month? What about in the next months up to six months?</td>
<td>-Ceremonies -Foods -Drinks/water -Why? -Ceremonies -Food, drinks -Ceremonies -Development -Food, drinks -Why started?</td>
</tr>
<tr>
<td><strong>Child Feeding Decisions</strong></td>
<td>Some of you mentioned breast milk as important for a baby (may have to rephrase) Who has breastfed their youngest child? why did you breastfeed/why did you prefer breastfeeding? Who has influenced your decision to breastfeed?</td>
<td>-Advantages of breastfeeding -Problems with giving other milks -People and reasons influenced - doctor, relatives, friends, husbands</td>
</tr>
<tr>
<td>Topic</td>
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<tr>
<td>Use of Other Milks</td>
<td>Earlier, some of you mentioned that young babies need milks other than breast milk. Who among you is giving other milk to your youngest child? Why did you decide to do this?</td>
<td>-People reasons influence, husbands? -Insufficient milk, what can be done, who knows? -It is prestigious, why? -Benefits of milk to child? -Which type of milk? Why? -Does cost limit use?</td>
</tr>
<tr>
<td>Pictures of Women</td>
<td>Many of you have received advice about how to feed your child. Please look at the photographs I showed you earlier. Which one of these women looks like she could have given you advice?</td>
<td>-Why? -From your neighborhood, health center, etc.? -Modern vs. traditional views? -Why not for those not chosen? -Who do you trust?</td>
</tr>
<tr>
<td>Attitude/Image of BF and Bottle-Feeding</td>
<td>Please look again at the photographs. Who do you think would have breastfed their child and not used a bottle? Who do you think would be using a bottle?</td>
<td>-Why? Why not others? -Preparations -What is your opinion? -Advantages/Disadvantages</td>
</tr>
<tr>
<td>PHC Growth Chart</td>
<td>Have you seen this card before? What do you understand by this (point to pictogram of mother breastfeeding)? Would you like to have a card?</td>
<td>-Breastfeeding to start at birth -Breastfeeding alone for baby? Number of times to breastfeed per day? -Why?</td>
</tr>
<tr>
<td>Breastfeeding and Contraception</td>
<td>If you do not want to get pregnant when you are breastfeeding what do you do?</td>
<td>-Abstinence go away from home, native contraception (rings) -Wean a child?</td>
</tr>
<tr>
<td>Topic</td>
<td>Discussion/Transitions</td>
<td>Probes</td>
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<tr>
<td>-----------------------------------</td>
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</tr>
<tr>
<td>Breastfeeding and Pregnancy</td>
<td>What would you do/ if you are breastfeeding and you become pregnant?</td>
<td>-Why? Whose advice is this?</td>
</tr>
<tr>
<td>Information</td>
<td>Where do you think you can get the best advice on child feeding?</td>
<td>-Who do you trust?</td>
</tr>
<tr>
<td>Neighborhood Woman</td>
<td>Which of these women could possibly live in your neighborhood? Let's say this woman who lives in your neighborhood had a child of one month. She had been breastfeeding her baby, but now came to you for advice on what to do next. What would you recommend?</td>
<td>-Why?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-How convenient?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Beginning other milks</td>
</tr>
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<td></td>
<td></td>
<td>-Depends on whether child is sick or healthy?</td>
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<tr>
<td></td>
<td></td>
<td>-Water feeds?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Pap?</td>
</tr>
<tr>
<td>Children's Picture</td>
<td>Now please look at these three children. How have they been fed?</td>
<td>-Why?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Fatness, strength, health?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Other things than milk?</td>
</tr>
<tr>
<td>BF/Bottle Problems</td>
<td>Finally, I would like to ask you if you have heard of any problems associated with breastfeeding?</td>
<td>-Maternal weakness</td>
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<tr>
<td></td>
<td></td>
<td>-Lack of milk</td>
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<td></td>
<td></td>
<td>-Nipples soreness</td>
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<td></td>
<td></td>
<td>-Ability to overcome?</td>
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<tr>
<td></td>
<td>What problems?</td>
<td>-Child illness</td>
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<td></td>
<td></td>
<td>-Nutrition</td>
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<tr>
<td></td>
<td></td>
<td>-Cost</td>
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<tr>
<td></td>
<td></td>
<td>-Cow's milk</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Ability to overcome?</td>
</tr>
<tr>
<td>Contraceptive Effects</td>
<td>Can you get pregnant while breastfeeding?</td>
<td>-Breastfeeding and menstruation?</td>
</tr>
<tr>
<td></td>
<td>How soon after the previous birth?</td>
<td>-Postpartum abstinence practiced? How long?</td>
</tr>
<tr>
<td></td>
<td>Is it good to become pregnant soon? If not, how can you avoid getting pregnant too soon?</td>
<td>-Importance of spacing?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Child's need for breast milk?</td>
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<tr>
<td></td>
<td></td>
<td>-Use of contraceptives?</td>
</tr>
<tr>
<td>Closure</td>
<td>Recap some points discussed.</td>
<td></td>
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<tr>
<td></td>
<td>Thank you for your time.</td>
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<tr>
<td></td>
<td>Now do you have any questions you would like to ask? I am not sure I will be able to answer them all, but I will try.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Record all questions. Do not lecture on child feeding).</td>
<td></td>
</tr>
</tbody>
</table>
ANNEX IV

FGD GUIDE -- FATHERS OF CHILDREN UNDER 2 YEARS
# ANNEX IV

## FGD GUIDE – FATHERS OF CHILDREN UNDER 2 YEARS

<table>
<thead>
<tr>
<th>Topic</th>
<th>Discussion/Transitions</th>
<th>Probes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fathers’ Introduction</td>
<td>Please introduce yourselves and as you do, please tell us a little about your children.</td>
<td>- Age of youngest</td>
</tr>
<tr>
<td>(Warm up)</td>
<td></td>
<td>- Occupation?</td>
</tr>
<tr>
<td>Child Health</td>
<td>What do you think about the health of your youngest child?</td>
<td>- Healthy, why?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Sickly, why?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- How do you try to keep your child healthy?</td>
</tr>
<tr>
<td>Fatherhood</td>
<td>All of you have a young child, can you say something about how this child makes you feel?</td>
<td>- Happy, why?</td>
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<tr>
<td></td>
<td></td>
<td>- Proud, why?</td>
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<tr>
<td></td>
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<td>- Worried, why?</td>
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<td></td>
<td></td>
<td>- Link to future?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Aspirations?</td>
</tr>
<tr>
<td>Role in Child-care</td>
<td>Are you involved in the care of the young children? What do you do?</td>
<td>- Actual care?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Providing income?</td>
</tr>
<tr>
<td></td>
<td>Are you involved in any activity related to feeding the child? What is your involvement?</td>
<td>- Instructing the mother?</td>
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<tr>
<td></td>
<td></td>
<td>- What if the child is ill?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Food purchasing?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- What foods?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Distribution?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Actual feeding?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Giving advice?</td>
</tr>
<tr>
<td>Influence on Mother</td>
<td>Some of you have mentioned giving advice to your wives on feeding the child. What is the effect of that advice?</td>
<td>- Does the wife follow advice?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- What happened?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Examples?</td>
</tr>
<tr>
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<td></td>
<td>- What topics can a man advise on child feeding?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Who else has influence?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- What if child is ill?</td>
</tr>
<tr>
<td>Pictures of Men</td>
<td>Please look at these pictures, and choose one that looks as if he would be a good father.</td>
<td>- Why?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- What is it about him?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- What would he do for the child? Why?</td>
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<tr>
<td></td>
<td></td>
<td>- What would he advise his wife to do? Why?</td>
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<tr>
<td></td>
<td></td>
<td>- What about feeding?</td>
</tr>
<tr>
<td></td>
<td>Which would not be so good?</td>
<td>- Why not? what would he do?</td>
</tr>
<tr>
<td>Topic</td>
<td>Discussion/Transitions</td>
<td>Probes</td>
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</tr>
<tr>
<td>Pictures of Women</td>
<td>From these pictures, who do you think would be a good mother?</td>
<td>-Why?</td>
</tr>
<tr>
<td></td>
<td>Which looks as though she will not be so good? Why?</td>
<td>-How would she care for the child? Why?</td>
</tr>
<tr>
<td></td>
<td>Which of these women would breastfeed?</td>
<td>-Feeding?</td>
</tr>
<tr>
<td></td>
<td>Which would give bottles?</td>
<td>-Why?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-What would she do?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Why?</td>
</tr>
<tr>
<td>Child Feeding Decisions</td>
<td>Did your wife breastfeed the youngest child?</td>
<td>-Why? What do you think about it?</td>
</tr>
<tr>
<td></td>
<td>Did she give bottles?</td>
<td>-Why?</td>
</tr>
<tr>
<td></td>
<td>Who makes these decisions?</td>
<td>-Who has influence?</td>
</tr>
<tr>
<td></td>
<td>How do you feel when you see your wife breastfeeding?</td>
<td>-Happy, why?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Embarrassed, why?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-No reaction, why?</td>
</tr>
<tr>
<td>Picture of Babies</td>
<td>Look at these pictures and describe how you think each child was fed.</td>
<td>-Why?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-What benefit or harm to the child?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Health, strength, fatness, light/heavy, etc.</td>
</tr>
<tr>
<td>Topic</td>
<td>Discussion/Transitions</td>
<td>Probes</td>
</tr>
<tr>
<td>------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>BF/Bottle Problems</td>
<td>I would like to ask if you have heard of any problems associated with breastfeeding?</td>
<td>-Lack of milk?</td>
</tr>
<tr>
<td></td>
<td>Some people say the wife cannot have relations with her husband while breastfeeding. What do you think?</td>
<td>-Losing her figure?</td>
</tr>
<tr>
<td></td>
<td>Any problems with bottle-feeding?</td>
<td>-Breastfeeding in public</td>
</tr>
<tr>
<td></td>
<td>You have told us many things about child feeding. Would you encourage your wife to breastfeed?</td>
<td>-Milk going bad?</td>
</tr>
<tr>
<td></td>
<td>Who would you go to for advice on feeding your baby? Where can you or your wife get good information?</td>
<td>-Anyway to overcome?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Why? Is it possible for her to get pregnant?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-What can be done?</td>
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<tr>
<td></td>
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<td>-Is that OK?</td>
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<td></td>
<td></td>
<td>-Child illness</td>
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<tr>
<td></td>
<td></td>
<td>-Nutrition</td>
</tr>
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<td></td>
<td></td>
<td>-Cost</td>
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<tr>
<td></td>
<td></td>
<td>-Any way to overcome?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Animal behavior</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Why or why not?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Exclusive or with bottles?</td>
</tr>
<tr>
<td>Closure</td>
<td>Recap some points from the discussion.</td>
<td>-Why?</td>
</tr>
<tr>
<td></td>
<td>Thank you for your time. Now do you have any questions you would like to ask? I am not sure I will be able to answer all of them but I will try.</td>
<td>-Interpersonal: who?</td>
</tr>
<tr>
<td></td>
<td>(Record all questions. Do not lecture of child feeding).</td>
<td>-Mass media: What?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Examples of any information received?</td>
</tr>
</tbody>
</table>
ANNEX V

GRANDMOTHERS' GUIDE
## ANNEX V

### GRANDMOTHERS' GUIDE

<table>
<thead>
<tr>
<th>Topic</th>
<th>Discussion/Transitions</th>
<th>Probes</th>
</tr>
</thead>
</table>
| **Women’s Introduction (Warm up)** | Please introduce yourselves and as you do, please tell us about your family and a little about your grandchildren. | -Number of grandchildren  
-Age of youngest grandchild |
| **Grandchild’s Health (Background against Which to Measure Results of Different Practices)** | You all have grandchildren who are close to you in the house. Can you tell us what you think about the health of your grandchildren or grandchild?  
Do you feel that feeding of the child affects health? Why? | -Health, why?  
-Sickly, why?  
-Comparison of grandchild with own children  
-Competence of daughter-in-law  
-Breastfeeding, pap, other foods: benefits/risks |
| **Grandmother’s Role In Caring for Grandchild (Active vs. Passive Involvement)** | You all have at least one grandchild in the house. Are you involved in the care of the child? What do you do? | -Are you happy with the role?  
-Role in feeding?  
-Left with a bottle?  
-Different feeding when mother absent? |
| **Knowledge of Current and Past Feeding Practices an Influences (Appeals to Be Made to Grandmothers)** | Some of you have mentioned that you help feed your grandchildren. Please think back to when you fed your own child. Let’s discuss how feeding has changed over time. | -General changes in breastfeeding?  
-Reasons?  
-Good or bad changes?  
-Who influenced you/who influences daughter-in-law? |
| **Motivations for Change** | Let’s begin with the period immediately following birth.  
What about during the first six months?  
And later? | -First foods  
-Use of colostrum  
-Breastfeeding  
-Breast milk  
-Other milks  
-Semi-solids/paps  
-Water  
-Paps/additives  
-Solid foods  
-Advice/influence?  
-Illness?  
-External factors/work?  
-Aspirations for child? |
<table>
<thead>
<tr>
<th>Topic</th>
<th>Discussion/Transitions</th>
<th>Probes</th>
</tr>
</thead>
</table>
| Influence on Daughter-in-laws | You have mentioned some difference between how you fed your children and how your daughter-in-law are feeding their children. Do you believe it is your place to advise them on how to feed your grandchildren? | -When is it most important to give advice?  
-What advice, why?  
-Degree of influence  
-Extent to which daughter-in-law follows advice?  
-Colostrum  
-Need to supplement breast milk  
-Need for water |
| Images/Attitudes BF/Bottle (Women’s Pictures) | Now I would like you to look at pictures of Nigerian mother-in-laws (show only 3, of older women). Let’s talk about how their grandchildren would be fed and the advice they would give to their daughters-in-law. | -Whose daughter-in-law would breastfeed, bottle-feed?  
-Why?  
-Advantages/disadvantages of breastfeeding/bottles.  
-Would these grandmothers agree/disagree?  
-Why? |
| (Children’s Pictures)     | Now I want to show you some pictures of Nigerian children. Please look at the pictures. Now let’s discuss how you believe each child is fed.                                                                                       | -How does the child seem to you?  
-Healthy, development, social class, cared for?  
-Breast, formula, other milk  
-Any advice for mother of child? |
| Problems                  | I would like to ask you if you have heard of any problems associated with breastfeeding? What about bottle feeding?                                                                                                   | -Maternal weakness  
-Lack of milk  
-Nipple soreness  
-Inconvenience  
-What can be done to overcome?  
-Child illness  
-Nutrition  
-Cost  
-Ability to overcome |
| Contraceptive Effect      | Do women get pregnant when they are breastfeeding? What do you think about this?                                                                                                                                       | -Postpartum abstinence?  
-Breastfeeding and fertility?  
-Importance of child spacing? |
<table>
<thead>
<tr>
<th>Topic</th>
<th>Discussion/Transitions</th>
<th>Probes</th>
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</thead>
<tbody>
<tr>
<td>Closure</td>
<td>Recap some points from discussion.</td>
<td>Thank you for your time. Now do you have any questions you would like to ask? I am not sure I will be able to answer all of them, but I will try. (Record all questions. Do not lecture on child feeding).</td>
</tr>
</tbody>
</table>
ANNEX VI

DEPTH INTERVIEW GUIDE FOR MOTHERS
WELLSTART QUALITATIVE RESEARCH ON BREASTFEEDING AND INFANT NUTRITION
RMS Job No. 1396

RESPONSE IDENTIFICATION NUMBER

DEPT INTERVIEW GUIDE FOR MOTHERS

Name of Interviewer: ...................................................... Place: ......................................................
Date of Interview: ...................................................... Facility: ......................................................
Time started: ...................................................... Time Finished: ......................................................

Introduction

I am working on a project which is mainly concerned with breastfeeding and infant nutrition in Jigawa. I thought you are the most resourceful person in this regard, because you have young children. I would appreciate it if you would talk with me. It won't take much of your time.

MOTHER'S IDENTIFICATION

1. Husband/Family Name: .................................................................

2. Name of Respondent: (Mother) .............................................
Ethnic Group: ...........................................................................
Literacy Level: ...........................................................................
Occupation: .............................................................................

3. Name of your youngest child ...........................................(Child's Name)

Please Use This Child's Name In Every Question Which Refers To The Child.

4. How old is he/she? ...................................................... (Verify With Recruitment Sheet)

5. Who takes care of (name of child) everyday?
   If Not Mother, Ask:
   Does anyone help you most of the time?

   Yes: .............................................. 1
   No: .............................................. 2

   If Yes: Who? .................................................................

6. How many other children do you have? .................................
7. What are their ages?
   1st. ..............................................................
   2nd. ..............................................................
   3rd. ..............................................................
   4th. ..............................................................
   5th. ..............................................................
   6th. ..............................................................
   7th. ..............................................................
   8th. ..............................................................
   9th. ..............................................................
  10th. ..............................................................

8. Who else lives with you in this household? ..............................................................

   Extended .................. 1
   Nuclear ..................... 2

   If Nuclear:

   Do you have relatives who live near by ?

   Yes ...................... 1
   No ....................... 2

9. To which ethnic group does your family belong? ..............................................................

10. What language do you speak at home? ..............................................................

<table>
<thead>
<tr>
<th>Language</th>
<th>Understand</th>
<th>Speak</th>
<th>Read</th>
<th>Write</th>
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11a. How many years of schooling/college did you complete? ..............................................................

   Probe For Literacy Level
   Degree .................. 1
   Secondary School ...... 2
   Primary School .......... 3
   Vocational Training.... 4
   No Formal School ....... 5
(d) Does child sleep with mother?

Yes.................. 1
No.................. 2

(e) Number of times during 24hrs. i.e. total times day and night

Day............................................................... 
Night............................................................

Quantity

(e) 1 or 2 breast for each breastfeed?

1 Breast.................. 1
2 Breasts.................. 2

(f) Length of each breastfeed in minutes?

....................................................................................................

(g) Does the baby drink other liquids?

Yes.................. 1
No.................. 2

If Yes, Ask: What and Why?

(h) No of times in 24hrs

What types of food do you currently give your baby apart from breast milk?

- Check for content
- Frequency of giving
- Amount usually given

<table>
<thead>
<tr>
<th>Weaning Foods</th>
<th>Types</th>
<th>Frequency</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>(Cup 250mls)</td>
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<td></td>
</tr>
<tr>
<td>Tablespoon</td>
<td></td>
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<tr>
<td>Teaspoon</td>
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FEEDING DURING ILLNESS

15a. Does child refuse feeds when ill?

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<td>Yes</td>
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<tr>
<td>No</td>
<td>2</td>
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15b. What do you do if he/she refuses?

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15c. Do you continue feeding if he/she has diarrhoea?

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<td>Yes</td>
<td>1</td>
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<td>No</td>
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15d. Do you give same food as when the child is well?

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<td>Yes</td>
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<td>No</td>
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Why?

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15e. If different, what do you give?

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PREGNANCY PERIOD

16. When you were pregnant, did anyone examine you?

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<tr>
<td>Yes</td>
<td>1</td>
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<tr>
<td>No</td>
<td>2</td>
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If Yes:

Whom did you see?

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Why?

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How often?

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IF NO:

Why?

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</table>
17a. Did he/she tell you anything about feeding your newborn?
   Yes............... 1
   No............... 2

17b. If Yes: What?

17c. Did he/she tell you about breastfeeding?
   Yes........... 1
   No........... 2

17d. If Yes, what did he/she say?

17e. Did you ask, anybody about child feeding?
   Yes........... 1
   No........... 2

17f. If Yes:
   Who?
   What advice?

   If No: Why?

18. Before (name of child) was born, did you decide how you would feed him/her?
   Yes........... 1
   No........... 2

   If Yes: What did you decide?

IMMEDIATE POSTPARTUM PERIOD

19. Where did you deliver your baby?
   Home........... 1
   Hospital........... 2

20. Who assisted you?

   ________________________________
   ________________________________
21. Who else was present? ..........................................................................................................................
..........................................................................................................................................................
..........................................................................................................................................................
..........................................................................................................................................................

22. If delivered in the hospital, for how long did you stay after delivery?
..........................................................................................................................................................
..........................................................................................................................................................
..........................................................................................................................................................
..........................................................................................................................................................

23a. Did you breastfeed - immediately?

   Yes.................. 1
   No.................. 2

23b. Within 1-3 hours

   Yes.................. 1
   No.................. 2

23c. Within the first day?

   Yes.................. 1
   No.................. 2

24. If No, When? ........................................................................................................................................

25. Did you or someone else give anything before breastfeeding?

   Yes.................. 1
   No.................. 2

26. If yes, what did you /other person give? ..........................................................................................
..........................................................................................................................................................
..........................................................................................................................................................
..........................................................................................................................................................

   Why? .........................................................................................................................................................
Now We Will Discuss How You Fed The Child In The First Few Ours After Child Birth

Would you please try to recall what was given in the first three days to the child? (Begin immediately after birth and probe by blocks of hours and days).

<table>
<thead>
<tr>
<th>What</th>
<th>When</th>
<th>Mode, i.e. B.F., Bottle etc</th>
<th>Quantity</th>
<th>Who Gave</th>
<th>Why</th>
<th>Recommended by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Amount</td>
<td>Frequency</td>
<td></td>
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<tr>
<td>First 3 hrs.</td>
<td></td>
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<td></td>
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<tr>
<td>3 hr - 1/2 Day</td>
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<tr>
<td>Last half - 1st Day</td>
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<tr>
<td>2nd Day 3rd Day</td>
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<td></td>
<td></td>
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<tr>
<td>3rd Day</td>
<td></td>
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</tbody>
</table>

In 24hrs. period - Probe 1) Breastfeeding frequency in day and nights, 2) gheti, 3) gripe water, 5) ghee, 6) aq; 7) honey, 9) tea; 9) animal milk; and 10) formula.

Note: About Mother's Milk, Ask For How Long Do You Breastfeed The Baby.
(Make Only Tally Mark (:) For Each Time The Child Was Fed During The Interview)

OBSERVATION

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HOUSEHOLD OBSERVATION SHEET
(To Be Filled Out AFTER The Interview)

During The Interview, Observe The Following:

FEEDING:

- Are their feeding bottles in the house?
  
  Yes................. 1
  No.................. 2

- Was the child bottle-fed?
  
  Yes................. 1
  No.................. 2

- Are there empty milk tins?
  
  Yes................. 1
  No.................. 2

- Is there a milk tin with milk?
  
  Yes................. 1
  No.................. 2

- Was the child breastfed?
  
  Yes................. 1
  No.................. 2

- If YES, which breast was used?
  
  Left................. 1
  Right............... 2
  Both.................. 3
ANNEX VII

INTERVIEW GUIDE FOR OPINION LEADERS
Interview Guide For Opinion Leaders:

Name of Interviewer: ........................................... Place: .................................

Name Of Respondent: .................................................................

Date of Interview: ................................................................. Place Of Interview: .................................................................

Time Started: ....................................................... Time Ended: .................................

Introduction

I am working on a project which is mainly concerned with Breastfeeding and infant nutrition in Jigawa State. I thought you are the most resourceful person in this regard, because you know about your community. I would appreciate it if you would talk with me. It won't take much of your time (about one hour).

IDENTIFICATION:

Q1. Name: ......................................................................................

Q2. Position: ......................................................................................

Q3. How long have you been in this position? .................................

Q4. What is the age of your youngest child? .................................

Q5. Please Tell Me About Your Responsibilities In This Position:

.................................................................................................
.................................................................................................
.................................................................................................

Q6. Do you counsel people on any of the following?

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnancy</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Child Health</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Infant Feeding</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
Now I Would Like To Talk To You About New Borns

Q7. What is the first thing newborns are given by mouth in this community?

Q8. Do you recommend it?

Yes................................. 1
No................................. 2

Q9. If No, what do you recommend?

Q10. Do the family/mother follow your recommendation?

Yes................................. 1
No................................. 2

11. Why?

Q12. Did you/your wife/wives breastfeed your own children?

Yes................................. 1
No................................. 2
Q13a. For how long for your youngest child? ........................................

Q13b. Why?

Let's Talk Generally About Breastfeeding Practices Of Women In This Community

Q14. How soon after delivery do (would) you advise that mothers begin breastfeeding?

Q15. Why?

Q16. Do they follow your advice?

Yes............................................. 1
No............................................... 2

17. Why or why not?
Q18. In your experience, do mothers give colostrum (explain: the type of breastmilk that comes first) to their children?

Yes............................................ 1
No............................................ 2

Q19. For how long and how much of it do they throw away?

Q20. What is your opinion of colostrum?

Q21. Do you discuss colostrum with women or with your wife/wives?

Yes............................................. 1
No............................................. 2

Q22. What do (would) you say?

Q23. Do they follow your advice about colostrum?

Yes............................................ 1
No............................................ 2
NOW I WOULD LIKE TO TALK TO YOU ABOUT THE BREASTFEEDING PRACTICES OF MOTHERS WITH BABIES IN THE FIRST 4 MONTHS OF LIFE.

Q24. How often per day do mothers usually put the infant to the breast?

Q25. In your opinion, is this frequency right?

Yes.......................... 1
No............................ 2

Q26. IF NO: Then, what should it be?

Q27. Do mothers have problems feeding this many times?

Yes.......................... 1
No............................ 2

Q28. What are the problems?
Q29. What do mothers do when they can't feed as frequently as they like, because they have to be away from the child for some hours? Why?

Q30. What do (would) you recommend?

Q31. Do the mothers here usually sleep with the baby and breastfeed during the night?

Yes................. 1
No................. 2

Q32. What is your opinion of this practice?

Q33. Do any mothers give only breastmilk to their young babies? (That is, no water, milk, pap, etc.).

Yes................. 1
No................. 2

Q34. What is your opinion about this practice (breastfeeding exclusively)?
Q35. How long do you believe a baby could receive only breast milk?

Q36. What is your opinion about water or other drinks for young babies less than 4 months old?

Q37. Do (would) you ever recommend giving water to new borns?

Yes............. 1
No............... 2

Q38. Do the mothers take your advice?

Yes............ 1
No............. 2

Q39. Do breastfeeding mothers have any problems or complaints about breastfeeding?

Yes............. 1
No............... 2
Q40. **If YES:** What are they, what do (would) you recommend?

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<thead>
<tr>
<th>Problem/Complaint</th>
<th>Recommendation</th>
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(IF THE LEADER DOES NOT MENTION INSUFFICIENT MILK AS A PROBLEM ASK:)

Q41. Do any mothers ever complain about not having enough milk for their baby?

Yes............. 1
No............... 2

Q42. **IF YES:** What do (would) you recommend?

Q43. How do the mothers react to this advice?

Q44. What is the usual age of infants when mothers stop breastfeeding?
Q50. Do (would) you ever recommend this?

Yes........... 1
No............. 2

Q51. IF YES, when, why and what is (would be) the reaction of the mother?

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<tr>
<th>WHEN</th>
<th>WHY</th>
<th>REACTION</th>
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Q52. What is your opinion about the use of bottles for feeding any fluid to the young baby less than 4 months old?

Q53. Do (would) you ever recommend bottles?

Yes............... 1
No............... 2

Q54. IF YES, when and why?

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<tr>
<th>WHEN?</th>
<th>WHY?</th>
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</table>

Q55. Does anybody ever come to you with questions about child feeding?

Yes............... 1
No............... 2
Q57. How often are you asked about child feeding?

Q58. When you give advice on infant feeding, do you usually speak directly to the mother or do you also speak to the father, mother-in-law, grandmother?

- Mother only .............................................. 1
- Also father .................................................. 2
- Also mother-in-law (father's mother) .......... 3
- Also grandmother (mother's mother) .......... 4
- Others (write in) ........................................ 5

Q59. Why?

Q60a. When you give advice to a mother, do you think she talks to other about it before following it?

- Yes .......................................................... 1
- No ....................................................... 2

Q60b. **If YES**, who and why?

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<tr>
<th>WHO?</th>
<th>WHY?</th>
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NOW WE WILL TALK ABOUT CHILDREN WHO ARE A LITTLE BIT OLDER.

Q61. Besides breastmilk and milk or formula, what are the foods usually added first to the child’s diet?

IF PAP, MENTION ASK:

Q62. Probe for ingredients, especially used for pap?

Q63. At what age do most mothers first give these foods?

Q64. Is this what you would recommend?

Yes............... 1
No............... 2

Q65. Why or why not?
Q66. After these first foods (pap or other semi-solids) what other foods do mothers add to the child's diet, when and why?

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<thead>
<tr>
<th>Food</th>
<th>Age When Started</th>
<th>Why?</th>
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Q67. Would you recommend anything different?

Yes............. 1
No.............. 2

Q68. What and Why?

Q69. We have been talking about feeding the normal baby. I would like to know if you think there should be any changes in feeding a baby who is ill?

Yes............. 1
No.............. 2

Q70. How should the baby be fed during diarrhea or respiratory illness?

<table>
<thead>
<tr>
<th>Food/Drink</th>
<th>Same As Usual</th>
<th>More Than Usual</th>
<th>Less Than Usual</th>
<th>Why?</th>
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<tbody>
<tr>
<td>Breastmilk</td>
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<td>Milk</td>
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<td>Water, Drinks</td>
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<td>Pap</td>
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</table>
Q71. When the mother is ill: What do you recommend about breastfeeding?

Q72. Why?

NOW I WOULD LIKE TO TALK TO YOU ABOUT A WOMAN'S DIET AFTER HAVING HAD A BABY. (i.e. DURING THE PERIOD THE MOTHER IS BREASTFEEDING, NOT JUST IMMEDIATELY AFTER DELIVERY)

Q73. How much do mothers usually eat after delivery?

    More than usual....... 1
    The same.............. 2
    Less than usual....... 3

Q74. Do you talk to women about their diet?

    Yes................. 1
    No.................. 2
Q75. What do (would) you say to them?

Q76. How much fluid do mothers usually drink, following the birth of their child? (Probe: While breastfeeding)

- More than usual.................. 1
- The same............................ 2
- Less than usual.................... 3

Q77. Do you talk to women about how much they should drink?

- Yes.................. 1
- No.................. 2

Q78. What do (would) you say to them?

Q79. Do husbands and wives feel it is okay to resume relations while the woman is still breastfeeding? Probe For Abstinence.

Q80. How soon after delivery should they resume relationship?
Q81. What do people here do to avoid pregnancy soon after delivery?
PROBES: Send wife to mother?
Use F/P methods?
Other methods?

Q82. If a woman gets pregnant while still breastfeeding what should she do?
PROBE: Stop breastfeeding?
Continue breastfeeding?

CLOSURE: THANK THE OPINION LEADER FOR HIS/HER TIME AND CO-OPERATION AND ASK IF HE/SHE HAS ANY QUESTIONS OR ADDITIONAL COMMENTS. YOU CAN NOTE ANY ADDITIONAL POINTS BELOW OR ON THE BACK.

TIME ENDED: -----------------------------
ANNEX VIII

INTERVIEW GUIDE FOR VHWs, TBAs, CBDs, AND CHEWs
Interview Guide for VHWs, TBAs, CBDs, and CHEWs

Name of Interviewer: __________________ Place: __________________

Date of Interview: ______________ Project: ______________

Time Started: ______________ Time Ended: ______________

Introduction

I am working on a project which is mainly concerned with infant health and nutrition in Nigeria. I thought you are the most resourceful person in this regard, because you see many young children and talk to their mothers. I would appreciate it if you would talk with me. It won’t take much of your time.

IDENTIFICATION:

Name: ________________________________

Type of worker: ________________________

How long have you been working here? ____________________________________________

Are you married? [ ] Yes [ ] No

If YES,

• How many children do you have? _____________________________________________

• What is the age of your youngest child? ______________________________________

Please tell me about your work in this program:

What are your main responsibilities in your work?

________________________________________________________________________

________________________________________________________________________

Which activities do you prefer? Why? ___________________________________________

________________________________________________________________________

________________________________________________________________________
Now I would like to talk to you about newborns.

Q1. Do you deliver babies? [ ] Yes [ ] No
   If NO, go to Q4

Q2. How many babies were delivered under your supervision in the past week?

Q3. For these newborns, what was their first food?

Did you recommend it? [ ] Yes [ ] No
   If NO, what did you recommend?

Did the family/mother follow your recommendation? [ ] Yes [ ] No
   Why?

Q4. Do you have many mothers who do not breastfeed their newborns? [ ] Yes [ ] No
   In your opinion, is this a right practice? [ ] Yes [ ] No
   If YES or NO, reason

Q5. If worker has children, did you breastfeed your children? [ ] Yes [ ] No

Q6. For mothers who breastfeed their newborn, when do you advise that they begin breastfeeding?

   Why?

   Do they follow your advice? [ ] Yes [ ] No
   Why? Why not?

Q7. In your experience, do mothers give colostrum to their children? [ ] Yes [ ] No
   If NO: Then for how long, and how much of it do they discard?

2
What is your opinion of colostrum?... 

Do you discuss colostrum with the women you see? [ ] Yes [ ] No

What do you say? 

Do you convince them about what to do? [ ] Yes [ ] No

Now I would like to talk to you about the breastfeeding practices of mothers with babies in the first 4 months of life.

Q8. How often per day do mothers usually put the infant to the breast? 

In your opinion, is this frequency right? [ ] Yes [ ] No

If NO: Then what should it be? 

Do mothers have problems feeding this many times? [ ] Yes [ ] No

What are the problems? 

Q9. What do mothers do when they can't feed as frequently as they like, because they have to be away from the child for some hours?

What do you recommend? 

Q10. Do the mothers here usually sleep with the baby and breastfeed during the night? [ ] Yes [ ] No

What is your opinion of this practice? 

Q11. Do you know any mothers who give only breast milk to their young babies? (that is, no water, milk, pap, etc.) [ ] Yes [ ] No

What is your opinion about this (giving only breast milk for 4 months)? 

If opinion is positive: How long do you believe a baby could receive only breast milk?
Q12. Do breastfeeding mothers have any complaints about breastfeeding?  
[ ] Yes  [ ] No

If YES, what are they, what do you recommend and what is the mother's reaction?

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<tr>
<th>Complaint</th>
<th>Recommendation</th>
<th>Reaction</th>
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If the worker does not mention insufficient milk, ask:

• Have any mothers ever complained about not having enough milk for their baby?  
  [ ] Yes  [ ] No

  If YES: What have you recommended? ____________________________

  What has the mother's reaction been? ____________________________

Q13. What is the usual age of infants when mothers stop breastfeeding?

  What are the mother's reasons for stopping breastfeeding?

Q14. In your opinion, what should be the right age to stop breastfeeding? Why?

  ________________________________________
Now I would like to talk to you about infant feeding that is not breastfeeding.

Q15. Are there conditions that would prevent a baby from breastfeeding or being fed?

[ ] Yes  [ ] No

• If YES, what are they?

(Probe: mother’s and child’s condition)

Q16. What is your opinion about formula or other milk for young babies less than 4 months old?

• Do you ever recommend this?  [ ] Yes  [ ] No

• If YES, when, why and what is the mother’s reaction?

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<th>When?</th>
<th>Why?</th>
<th>Reaction</th>
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Q17. What is your opinion about water or other drinks for young babies less than 4 months old?

• Do you (ever) recommend giving water?  [ ] Yes  [ ] No

• If YES, when, why and what is the mother’s reaction?

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<tr>
<th>When?</th>
<th>Why?</th>
<th>Reaction</th>
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Q18. What is your opinion about the use of bottles for feeding any fluid to the young baby less than 4 months old? ____________________________________________________________________________

- Do you recommend bottles? [ ] Yes [ ] No
- If YES, when, why and what is the reaction of the mother?

<table>
<thead>
<tr>
<th>When?</th>
<th>Why?</th>
<th>Reaction</th>
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Q19. Does anybody ever come to you with questions about child feeding? [ ] Yes [ ] No
- If YES, who and what do they ask?

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<thead>
<tr>
<th>Who?</th>
<th>Ask?</th>
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</table>

- How often are you asked about child feeding? _______________________________________________________________________

Q20. When you give advice on infant feeding, do you usually speak directly to the mother or do you ask to speak to the father or mother-in-law?
[ ] Mother only
[ ] also father
[ ] also mother-in-law
- Why? _______________________________________________________________________

____________________
Q21. When you give advice to a mother, do you think she talks to others about it before following it?  
[ ] Yes  [ ] No

If YES, who & why?

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<th>Who?</th>
<th>Why?</th>
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Now I would like to talk to you about a woman's diet after having had a baby.

Q24. How do mothers usually eat after delivery?

[ ] more than usual  [ ] the same  [ ] less than usual

What is your opinion about this?

Q25. Do you talk to women about their diet?  
[ ] Yes  [ ] No

If YES, what do you say?

Q26. What about fluids? Do mothers drink more, the same or less than usual following the birth of their child?

Q27. What is your opinion about what they should do about fluids?

Q28. Do you talk to women about what they should drink?  
[ ] Yes  [ ] No

If YES, what do you say?

Do mothers feel they can follow the advice?  
[ ] Yes  [ ] No

Why/ why not?
Do mothers ever ask you about family planning? [ ] Yes [ ] No
About how many months after delivery do they usually ask?

What would you advise them to do? ________________________________

Would you recommend any particular methods? [ ] Yes [ ] No
If YES: Which methods? ________________________________

Do mothers continue to breastfeed after starting to use family planning methods? [ ] Yes [ ] No
Why or why not? ________________________________

If yes, does that mean the mothers feel it is OK to resume normal
Do mothers complain or ask about not seeing their period after delivery? [ ] Yes [ ] No
What would you tell them about it? ________________________________
Q22. We have been talking about feeding the normal baby. I would like to know if you think there should be any changes in feeding a baby who is ill? [ ] Yes [ ] No

How should the baby be fed during diarrhea or respiratory illness?

<table>
<thead>
<tr>
<th>Food/Drink</th>
<th>Same as Usual</th>
<th>More than Usual</th>
<th>Less than Usual</th>
<th>Stop</th>
<th>Why?</th>
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<tbody>
<tr>
<td>Breastmilk</td>
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<td>Milk</td>
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<td>Water, drinks</td>
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<td>Pap</td>
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<td>Other foods</td>
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Q23. When the mother is ill: What do you recommend about breastfeeding?

Why? ____________________________________________________________

Now we will talk about children who are a little bit older.

Q24. Besides breastmilk and milk or formula, what are the foods usually added first to the child’s diet? ____________________________________________________________

If pap, probe for ingredients added ____________________________________________________________

At what age are foods first given? ____________________________________________________________

Is this what you would recommend? [ ] Yes [ ] No

Why or why not? ____________________________________________________________

Q25. What foods are added later when and why?

<table>
<thead>
<tr>
<th>Food</th>
<th>Age when started</th>
<th>Why?</th>
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Would you recommend anything different? [ ] Yes [ ] No

What and why? ____________________________________________________________
Finally, I want to ask you about your role in giving nutrition advice.

Q. 16 How would you feel about being asked to counsel mothers on infant feeding as part of your work? 

Q. 27 How many hours a week do you spend on your work? 

How many hours a week could you spend on counseling on infant nutrition? 

Q. 28 What would you need to help you be able to do this work?  
[Probe for training, educational materials, incentives.]

Q. 29 Do you foresee any problems in doing this work?  [ ] Yes   [ ] No

If yes, what problems? 

Can you suggest any ways to overcome these problems?

Closure:

Thank the worker for her time and cooperation and ask if she has any questions or additional comments. You can note any additional points below.
WELLSTART INTERNATIONAL

Wellstart International is a private, nonprofit organization dedicated to the promotion of healthy families through the global promotion of breastfeeding. With a tradition of building on existing resources, Wellstart works cooperatively with individuals, institutions, and governments to expand and support the expertise necessary for establishing and sustaining optimal infant feeding practices worldwide.

Wellstart has been involved in numerous global breastfeeding initiatives including the Innocenti Declaration, the World Summit for Children, and the Baby Friendly Hospital Initiative. Programs are carried out both internationally and within the United States.

International Programs
Wellstart's Lactation Management Education (LME) Program, funded through USAID/Office of Nutrition, provides comprehensive education, with ongoing material and field support services, to multidisciplinary teams of leading health professionals. With Wellstart's assistance, an extensive network of Associates from more than 40 countries is in turn providing training and support within their own institutions and regions, as well as developing appropriate in-country model teaching, service, and resource centers.

Wellstart's Expanded Promotion of Breastfeeding (EPB) Program, funded through USAID/Office of Health, broadens the scope of global breastfeeding promotion by working to overcome barriers to breastfeeding at all levels (policy, institutional, community, and individual). Efforts include assistance with national assessments, policy development, social marketing including the development and testing of communication strategies and materials, and community outreach including primary care training and support group development. Additionally, program-supported research expands biomedical, social, and programmatic knowledge about breastfeeding.

National Programs
Nineteen multidisciplinary teams from across the U.S. have participated in Wellstart’s lactation management education programs designed specifically for the needs of domestic participants. In collaboration with universities across the country, Wellstart has developed and field-tested a comprehensive guide for the integration of lactation management education into schools of medicine, nursing and nutrition. With funding through the MCH Bureau of the U.S. Department of Health and Human Services, the NIH, and other agencies, Wellstart also provides workshops, conferences and consultation on programmatic, policy and clinical issues for healthcare professionals from a variety of settings, e.g. Public Health, WIC, Native American. At the San Diego facility, activities also include clinical and educational services for local families.

Wellstart International is a designated World Health Organization Collaborating Center on Breastfeeding Promotion and Protection, with Particular Emphasis on Lactation Management Education.

For information on corporate matters, the LME or National Programs, contact:
Wellstart International Corporate Headquarters
4062 First Avenue tel: (619) 295-5192
San Diego, California 92103 USA fax: (619) 294-7787

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3333 K Street NW, Suite 101 tel: (202) 298-7979
Washington, DC 20007 USA fax: (202) 298-7988