# Contents

List of Table ........................................................................................................ iii
List of Figures ........................................................................................................ iii
ACKNOWLEDGEMENTS ....................................................................................... iv
ACRONYMS ........................................................................................................... v
EXECUTIVE SUMMARY ....................................................................................... vi

## BACKGROUND

1.0 Introduction ...................................................................................................... 1
1.2 Survey Justification ....................................................................................... 2
1.3 Objectives of the Survey ............................................................................... 3
1.4 Indicators to be assessed .............................................................................. 3

## METHODOLOGY

2.1 Survey Design and Sampling Frame ............................................................. 4
2.2 Quantitative Data .......................................................................................... 4

### 2.2.1 Sample Size Determination

2.2.2 Number of Households per Cluster and Number of Clusters ............... 5
2.2.3 Cluster and Household Selection ............................................................ 5

2.3 Qualitative Data ............................................................................................ 6

### 2.3.1 Key Informants Interviews:

2.3.2 Focus Group Discussions ........................................................................ 6

2.4 Data Collection Tools .................................................................................. 6

### 2.4.1 IYCF Questionnaire

2.4.2 Key Informant Interviews (KII) s and Focus Group Discussion Guides .... 7

2.5 Organization of the Survey ......................................................................... 7

### 2.5.1 Survey Teams and Data Collection ...................................................... 7

### 2.5.2 Training and Pilot-Testing ..................................................................... 7

### 2.5.3 Data Entry and Analysis ....................................................................... 7

## OPERATIONAL DEFINITIONS ........................................................................ 7

## RESULTS ........................................................................................................... 9

3.1 Response Rate .............................................................................................. 9

3.2 Demographic Characteristics ....................................................................... 9

### 3.2.1 Household Characteristics ................................................................... 9

### 3.2.2 Primary Caregivers Characteristics .................................................... 10
3.2.3 Children Demographic Characteristics ................................................................. 11
3.3 Breastfeeding Characteristics ...................................................................................... 12
  3.3.1 Timely Introduction to Breastfeeding ................................................................. 13
  3.3.2 Exclusive Breastfeeding ..................................................................................... 14
  3.3.3 Continued Breastfeeding ................................................................................... 15
  3.3.4 Bottle Feeding .................................................................................................... 15
  3.3.4 Other Breastfeeding Characteristics ................................................................. 16
  3.3.5 Facilitators to Optimal Breastfeeding Practices ................................................ 17
  3.3.6 Barriers to Optimal Breastfeeding Practices ..................................................... 19
3.4 Complementary Feeding Characteristics .................................................................... 23
  3.4.1 Introduction of Solid, Semi-Solid and Soft Foods ............................................... 23
  3.4.2 Minimum Meal Frequency .................................................................................. 24
  3.4.3 Minimum Dietary Diversity ................................................................................ 24
  3.4.4 Minimum Acceptable Diet .................................................................................. 25
  3.4.5 Consumption of Iron Fortified and Iron Rich Foods ......................................... 26
  3.4.6 Barriers to Optimal Feeding Practices ................................................................ 26
3.5 Child Health Characteristics ....................................................................................... 27
  3.5.1 Morbidity - 2 Weeks Recall Period .................................................................... 27
  3.5.2 Health Seeking Behavior .................................................................................... 28
  3.5.3 Vitamin A and De-Worming .............................................................................. 28
  3.6.3 Barriers to Proper Health Seeking Behavior ...................................................... 29
3.6 Maternal Health Characteristics .................................................................................. 30
  3.6.1 Antenatal Care ................................................................................................... 30
  3.6.2 Iron Folate Supplementation ............................................................................. 31
  3.6.3 Facility Delivery ............................................................................................... 32
  3.6.4 Barriers towards Optimal Maternal Health ....................................................... 33
3.7 Sanitation ....................................................................................................................... 34
  3.7.1 Latrine Coverage .............................................................................................. 34
  3.7.2 Hand Washing ................................................................................................... 34
CONCLUSION AND RECOMMENDATIONS ..................................................................... 36
4.1 Conclusion .................................................................................................................... 36
  4.1.1 Breastfeeding Characteristics ........................................................................... 36
  4.1.2 Complementary Feeding .................................................................................... 36
  4.1.3 Child Health ...................................................................................................... 37
List of Table
Table 1: Sample Size Calculation ................................................................. 4
Table 2: Response Rate .................................................................................. 9
Table 3: Demographic Characteristics .......................................................... 10
Table 4: Demographic Characteristics of Primary Caregivers ....................... 11
Table 5: Demographic Characteristics of Children ......................................... 12
Table 6: Continued Breastfeeding ................................................................. 15
Table 7: Continued Breastfeeding ................................................................. 17
Table 8: Minimum Meal Frequency .............................................................. 24
Table 9: Minimum Meal Frequency .............................................................. 25
Table 10: Health Seeking Behaviors ............................................................ 28
Table 11: Access to Sanitation Facilities ........................................................ 34
Table 12: Hand Washing at Critical Time ....................................................... 35

List of Figures
Figure 1: Timely Introduction to Breastfeeding .............................................. 13
Figure 2: Exclusive Breastfeeding ................................................................. 14
Figure 3: Drinks Introduced before Six Months ............................................ 15
Figure 4: Bottle Feeding ............................................................................... 16
Figure 5: Pre-Lacteals Given ...................................................................... 17
Figure 6: Introduction to Solid, Semi-Solid and Soft Foods ......................... 24
Figure 7: Minimum Acceptable Diet ............................................................. 25
Figure 8: Consumption of Iron Rich and Iron Fortified Foods ...................... 26
Figure 9: Morbidity – Two Weeks Recall Period ......................................... 28
Figure 10: Vitamin A and De-Worming ......................................................... 29
Figure 11: Antenatal Care .......................................................................... 31
Figure 12: Iron Folate Supplementation ....................................................... 32
Figure 13: Place of Delivery ....................................................................... 32

ANNEXES ......................................................................................................... 42
Annex 1: Survey Questionnaire .................................................................... 42
Annex 2: FGD Guides .................................................................................. 42
Annex 3: KII ................................................................................................. 42
Annex 4: Calendar of Local Events ................................................................. 42
Annex 5: Sampled Clusters ........................................................................ 43
Annex 6: Map of Kismayo .......................................................................... 44
Annex 7: Map of Kismayo IDPs .................................................................. 45
ACKNOWLEDGEMENTS

We would like to acknowledge all the individuals and agencies who contributed towards the successful implementation of the Kismayo IDPs IYCF KAP Survey. Special appreciation goes to:

- Somalia Humanitarian fund for funding this project
- The Assessment and Information Management Working Group (AIMWG) of the Somalia nutrition cluster for their technical review of the survey methodology and for their technical inputs throughout the process
- SAF-UK Staff for their facilitation and relentless support throughout the survey period, from the beginning of the survey process to the end.
- Ministry of Health and other ministries within the Jubaland administration for their presence, support and their inputs throughout the survey period
- All health and nutrition partners (ICRC, PAC, Himilo foundation, Somalia Aid and WRRLS) implementing nutrition programs in Kismayo for their support and feedback.
- Local community who facilitated activities either directly or through the community elders.
- We also acknowledge the survey participants (caregivers and also key informants) who provided the insightful information.
- Lastly, we thank the entire survey implementation team who included the survey supervisors, enumerators and the local guides.
<table>
<thead>
<tr>
<th>ACRONYMS</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAPI:</td>
<td>Computer Assisted Personal Interviewing</td>
</tr>
<tr>
<td>CF:</td>
<td>Complementary Feeding</td>
</tr>
<tr>
<td>CHV:</td>
<td>Community Health Volunteer</td>
</tr>
<tr>
<td>CMAM:</td>
<td>Community Management of Acute Malnutrition</td>
</tr>
<tr>
<td>CSPRo:</td>
<td>Census and Survey Program</td>
</tr>
<tr>
<td>EBF:</td>
<td>Exclusive Breastfeeding Rate</td>
</tr>
<tr>
<td>FGDs:</td>
<td>Focus Group Discussion</td>
</tr>
<tr>
<td>FSNAU:</td>
<td>Food Security and Analysis Unit</td>
</tr>
<tr>
<td>IDP:</td>
<td>Internally Displaced Persons</td>
</tr>
<tr>
<td>IYCF:</td>
<td>Infant and Young Children Feeding</td>
</tr>
<tr>
<td>KII:</td>
<td>Key Informant Interview</td>
</tr>
<tr>
<td>MAD:</td>
<td>Minimum Acceptable Diet</td>
</tr>
<tr>
<td>MDD:</td>
<td>Minimum Dietary Diversity</td>
</tr>
<tr>
<td>MMF:</td>
<td>Minimum Meal Frequency</td>
</tr>
<tr>
<td>MoH:</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>SAF-UK:</td>
<td>Skills Active Forward – United Kingdom</td>
</tr>
<tr>
<td>TBA:</td>
<td>Traditional Birth Attendants</td>
</tr>
<tr>
<td>UNICEF:</td>
<td>United Nation Children Fund</td>
</tr>
<tr>
<td>WASH:</td>
<td>Water, Sanitation and Hygiene</td>
</tr>
<tr>
<td>WHO:</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

Background and Methodology
Adequate nutrition during infancy and early childhood is essential to ensure the growth, health and development of children to their full potential. The World Health Organization (WHO) notes that malnutrition is a serious problem that has been linked to a substantial increase in the risk of mortality and morbidity. Malnutrition is considered as the single most important threat to the world health. The WHO documents that about 45% (3.1 million deaths annually) of all child deaths are linked to malnutrition, with children in sub-Saharan Africa being more than 14 times more likely to die before the age of 5 than children in developed region. Good enough, nutrition interventions have been documented as being among the most effective preventive actions for reducing mortality among children under the age of five years. Among these nutrition interventions is the infant and young children nutrition intervention which seeks to promote breastfeeding and complementary feeding characteristics. On this note, SAF-UK is currently implementing a one year Nutrition project in Kismayo District, Lower Juba region, Jubaland State, Somalia. The project is treating Severe Acute Malnourished children for the purpose of reducing morbidity and mortality related to malnutrition through integrated Community Management of Acute Malnutrition (CMAM). The aim is to achieve improved health and nutrition status of children 0-59 months old and Pregnant and Lactating Women through integrated CMAM, and Increased access to health and nutrition facilities and services through community mobilization and sensitization in Kismayo of Lower Juba, Somalia.

The main objective of this survey was to understand and document the knowledge, attitude and practices toward infant and young child feeding in Kismayo IDPs, and to document the facilitators and barriers to optimal Infant and young child feeding with the aim of improving current programming. This study intended to generate information that will aid in programing, policy development (especially in development of an IYCF strategy for Jubaland) and formulation of education strategies and curricula, for both education institutions and training in health and nutrition programs. The survey results have provided the current status of the IYCF indicators which acts as the baseline information for the specific indicators in the Kismayo IDP Camps. Additionally, the survey has identified and explored positive factors and barriers to optimal child feeding practices among Kismayo IDP. Finally, the survey results will help in recommending feasible interventions/strategies to complement the on-going efforts in promoting appropriate IYCF in the Kismayo.

The survey adopted a mixed-survey design, which included both quantitative and qualitative data collection methods. The quantitative data was collected through a detailed KAP questionnaire which had three four major module i.e. Background, Breastfeeding, Complementary Feeding and Sanitation. In total, the sample size for the quantitative data was 652 households with children aged between 0 and 23.9 months. On the other side, ten FGD guides were conducted with various members of the community while seventeen key informants’ interviews were conducted. The quantitative data collection was implemented by nine team while the qualitative data was collected by one team; hence in total the survey was implemented by ten teams. The survey teams were trained for three days i.e. 11th to 13th November, 2016; then the teams did a one day pilot survey on 14th November. The data collection was done from 15th November to 18th November, 2016. Data was collected using mobile phone technology through CAPI which works under the platform of CPro version 6.3.0.
## Results

<table>
<thead>
<tr>
<th>Indicator</th>
<th>KAP</th>
<th>Kismayo IDP-Camps</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breastfeeding Indicators</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timely Introduction to Breastfeeding</td>
<td>Knowledge 544</td>
<td>81.1%</td>
</tr>
<tr>
<td></td>
<td>Attitude 542</td>
<td>80.9%</td>
</tr>
<tr>
<td></td>
<td>Practice 374</td>
<td>55.7%</td>
</tr>
<tr>
<td>Exclusive Breastfeeding Rate</td>
<td>Knowledge 523</td>
<td>80.3%</td>
</tr>
<tr>
<td></td>
<td>Attitude 262</td>
<td>34.2%</td>
</tr>
<tr>
<td></td>
<td>Practice 28</td>
<td>15.7%</td>
</tr>
<tr>
<td>Children Ever Breastfed</td>
<td>Practice 670</td>
<td>99.9%</td>
</tr>
<tr>
<td>Pre-lacteals within first 3 days</td>
<td>Knowledge 309</td>
<td>46.1%</td>
</tr>
<tr>
<td></td>
<td>Practice 374</td>
<td>55.8%</td>
</tr>
<tr>
<td>Colostrum Feeding</td>
<td>Knowledge 543</td>
<td>80.9%</td>
</tr>
<tr>
<td></td>
<td>Attitude 521</td>
<td>77.6%</td>
</tr>
<tr>
<td></td>
<td>Practice 510</td>
<td>76.0%</td>
</tr>
<tr>
<td>Continued Breastfeeding at 1 Years</td>
<td>Practice 72</td>
<td>56.7%</td>
</tr>
<tr>
<td>Continued Breastfeeding</td>
<td>Knowledge 600</td>
<td>89.4%</td>
</tr>
<tr>
<td></td>
<td>Attitude 479</td>
<td>71.4%</td>
</tr>
<tr>
<td></td>
<td>Practice 14</td>
<td>29.8%</td>
</tr>
<tr>
<td><strong>Complementary Feeding</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bottle Feeding</td>
<td>Knowledge 389</td>
<td>43.1%</td>
</tr>
<tr>
<td></td>
<td>Practice 396</td>
<td>59.0%</td>
</tr>
<tr>
<td>Introduction to Soft, Semi-Solid and Solid Foods (6 – 8.9 Mo)</td>
<td>Knowledge 359</td>
<td>53.5%</td>
</tr>
<tr>
<td></td>
<td>Practice 61</td>
<td>49.2%</td>
</tr>
<tr>
<td>Minimum Meal Frequency (6-23.9 Mo)</td>
<td>Practice 157</td>
<td>31.8%</td>
</tr>
<tr>
<td>Minimum Dietary Diversity (6 – 23.9 Mo)</td>
<td>Practice 43</td>
<td>8.7%</td>
</tr>
<tr>
<td>Minimum Acceptable Diet (6 – 23.9 Mo)</td>
<td>Practice 16</td>
<td>3.3%</td>
</tr>
<tr>
<td>Consumption of Iron rich and/or Iron Fortified Foods (6 - 23.9 Mo)</td>
<td>Practice 103</td>
<td>20.9%</td>
</tr>
<tr>
<td><strong>Child Health</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevalence of Morbidity (2 Weeks Recall Period)</td>
<td>373</td>
<td>55.6%</td>
</tr>
<tr>
<td>Prevalence of Diarrhea</td>
<td>199</td>
<td>53.3%</td>
</tr>
<tr>
<td>Vitamin A Supplementation Coverage (6-23.9 Mo)</td>
<td>229</td>
<td>46.4%</td>
</tr>
<tr>
<td>Deworming Coverage (12 – 23.9 Mo)</td>
<td>116</td>
<td>40.1%</td>
</tr>
<tr>
<td><strong>Maternal Indicators</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antenatal Coverage (1st Visit)</td>
<td>Practice 459</td>
<td>68.4%</td>
</tr>
<tr>
<td>Antenatal Coverage (4+ Visits)</td>
<td>Practice 126</td>
<td>27.5%</td>
</tr>
<tr>
<td>Received Iron Folate Supplementation</td>
<td>314</td>
<td>68.4%</td>
</tr>
<tr>
<td>Adherence to IFAS for 90+ Days</td>
<td>Practice 32</td>
<td>10.2%</td>
</tr>
<tr>
<td>Facility Delivery</td>
<td>Practice 133</td>
<td>19.8%</td>
</tr>
<tr>
<td><strong>Water and Sanitation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to Toilet/Latrine Facilities</td>
<td>Practice 433</td>
<td>64.5%</td>
</tr>
<tr>
<td>Households with a Hand Washing Facility</td>
<td>556</td>
<td>82.9%</td>
</tr>
<tr>
<td>Hand Washing at 4 Critical Times</td>
<td>Knowledge 265</td>
<td>39.5%</td>
</tr>
<tr>
<td></td>
<td>Practice 242</td>
<td>36.1%</td>
</tr>
</tbody>
</table>
Conclusion
In conclusion, the infant and young children practices in Kismayo IDP were noted to be sub-optimal. The survey results show that the breastfeeding characteristics in Kismayo IDPs remain sub-optimal and quite below the international and national thresholds. In particular, the practices on timely introduction to breastfeeding, exclusive breastfeeding, continued breast feeding at one year and at two years; were all noted to be quite low. Additionally, the practice on colostrum feeding though was also wanting, while introduction to pre-lacteals was quite worrying. On knowledge, the survey concludes that there existed high knowledge in the community on timely introduction to breastfeeding as well as continued breastfeeding and colostrum feeding. Nevertheless, there was low knowledge in the community on exclusive breastfeeding and introduction of pre-lacteals. On exclusive breastfeeding, most of the primary caregivers explain that exclusive breastfeeding is feeding young children below six months on breast milk, in addition to other liquids such as water and animal milk; without giving semi-solid, solid or soft foods. Finally, on attitude, the survey found out that majority of the primary caregivers in Kismayo IDP camps had a positive attitude towards timely introduction to breastfeeding, and continued breastfeeding as well as colostrum feeding. However, the existent of several cultural practices prevent them from putting into practice. The survey however noted that there was low positive attitude on exclusive breastfeeding with most caregivers strongly arguing that a children less than six months can’t survive on breast milk alone; and hence justifying giving of other liquids and foods.

On complementary feeding, the survey concludes that sub-optimal practices that exist in the community on proper complementary feeding; which was quite worrying. According to the survey, among the children aged 6 to 23.9 months in Kismayo IDPs, only three out of ten children who meet the minimum meal frequency, which is quite low. Additionally, out of ten children aged 6 to 23.9 months, only one child who meets the minimum dietary diversity and this is also noted to be quite low. Overdependence on cereals was noted, while feeding of particularly food groups such as eggs, meat, vitamin A rich vegetables and fruits, and milk products was found to be quite low. The results found that only 3.3% of the children aged between 6 and 23.9 months who meet the minimum acceptable diet; while consumption of iron rich and iron fortified foods was also found to be relatively low. All these complementary feeding indicators points to sub-optimal feeding practices in the community which is considered worrying and could have a direct impact on both chronic and acute malnutrition. It was also noted that bottle feeding using bottles with nipples was quite high in the community and this could be probably attributed to high diarrhea prevalence in the community.

Recommendations
- Since mothers, older women and maternal grandmothers were identified as the primary sources of infant and young child feeding information; they should be mobilized so that they can take the lead in teaching their family members on best child feeding practices
  - Mobilize the older and the more experienced and respected mothers and traditional birth attendants in the community to mentor new mothers on best IYCF practices and techniques and to help reinforce the messages given by the community health workers.
  - Since men are usually the key decision makers in most homesteads and they were cited as potential barriers to best IYCF practices among women in Kismayo IDP camps, they should be involved and trained so that they can be good ambassadors and promoters of best IYCF practices
- Signing of International Code of Marketing Breast Milk Substitutes
  - Partners should work closely with Jubaland State government and MOH to ensure signing of the WHO International Code of Marketing of Breast-milk Substitutes. The code stipulates that there should be absolutely no promotion of breast milk substitutes, bottles and teats to the general public; and that neither health facilities nor health professionals should have a role in promoting breast milk substitutes; and that free samples should not be provided to pregnant women, new mothers or families
- Jubaland State Infant and Young Children Feeding Strategy
  - Partners should work with the Ministry of Health to develop an IYCF strategy and a costed plan for Jubaland state as soon as possible
• **Market Survey on Locally Available Food by Season**
  o Conduct a market survey around the markets surrounding the IDP camps in Kismayo with an aim to identifying the key foods that are available during each season that can be procured cheaply so as to help diversify child’s diet.

• **Facility and Community Level Health and Nutrition Education**
  o Intensify both facility and community level health and nutrition education and ensure that the IYCF component is part of the education module. In addition, breastfeeding modules such as breast milk expressing should also be explored as a module of community education. Key community and opinion leaders should also be involved such as religious leaders, clan elders, TBA and elderly influential women.
  o Design simple cards with short and straight forward key messages in Somali language on key IYCF best practices at every stage of the baby and provide these to the mothers of infants and young children to act as quick references guides and reminders of best IYCF practices.
  o Organize regular mass media campaigns on appropriate IYCF practices to run across all radio and TV stations in Kismayo and erect billboards on strategic points in town and in IDP camps.
  o Produce small brochures with messages on benefits of good IYCF practices and consequences of poor IYCF practices that can be distributed in the IDP camps and given to mothers during health and nutrition education at community and facility level.
  o Identify, train and deploy IYCF specialists who will work as champions and behaviour change agents for IYCF practices across all IDP camps in Kismayo and lower Juba.

• **Hospital Deliveries**
  o As a way of increasing hospital deliveries, mothers can be provided with gift packs when they deliver in hospitals and also some little money for any TBA who refers a mother to deliver in the hospital.
  o Empower and encourage community health workers to work closely with women of reproductive age in Kismayo IDP camps to start small saving groups in the camps that they will serve where they would collect little contributions from women that can used in case of emergency deliveries. That way they take care of their own health and can discuss IYCF issues during their group meetings and enhance sustainability.

• **Monitoring and Evaluation**
  o Strengthen the already existing SAF-UK Somalia monitoring & evaluation system and feedback loops to ensure that information is circulating fast enough from the community health workers to key decision makers in the project.
  o Plan for constant reviews and assessments (a least quarterly) with members of the community and the community teams to learn and identify areas of improvement and to celebrate successes.

• **HIV/AIDs**
  o A KII with one of the prominent TBA in Kismayo revealed that she has been testing cases which are HIV positive; due to this it is recommended the following:
    • The health implementing partners and MoH should sensitize the community on the importance of HIV/AIDs testing.
    • The health facilities within the IDP camps should be empowered to conduct screening of HIV/AIDs at the facilities and document the data; which could inform a detailed HIV/AIDs survey in the area to estimate the prevalence.
**BACKGROUND**

1.0 Introduction

Adequate nutrition during infancy and early childhood is essential to ensure the growth, health, and development of children to their full potential. The World Health Organization (WHO) notes that malnutrition is a serious problem that has been linked to a substantial increase in the risk of mortality and morbidity. Malnutrition is considered as the single most important threat to the world’s health. The WHO documents that about 45% (3.1 million deaths annually) of all child deaths are linked to malnutrition, with children in sub-Saharan Africa being more than 14 times more likely to die before the age of 5 than children in developed regions.

It has also been noted that malnutrition slows the economic growth and perpetuates poverty. Mortality and morbidity associated with malnutrition represent a direct loss in human capital and productivity for the economy. At a microeconomic level, it is calculated that one per cent loss in adult height as a result of childhood stunting equals to 1.4 per cent loss in productivity of the individual. In total, the economic cost of malnutrition is estimated to range from 2 to 3 percent of Gross Domestic Product, to as much as 16 percent in most affected countries. The effects of malnutrition are long-term and trap generations of individuals and communities in the vicious circle of poverty.

However, on an encouraging note, nutrition interventions have been documented as being among the most effective preventive actions for reducing mortality among children under the age of five years. Among these nutrition interventions is the infant and young children nutrition intervention which seeks to promote breastfeeding and complementary feeding characteristics. For instance, it has been documented that exclusive breastfeeding within the first six months has the potential to prevent 13 percent of all under five deaths. Review of studies from developing countries also shows that infants who are not breastfed are 6 to 10 times more likely to die in the first months of life than infants who are breastfed. Breastfeeding has also been associated with many other benefits which include: improved intelligence, reduced acute infections such as diarrhea and reduce obesity later in teenage. On complementary feeding, it has been documented that proper and timely complementary feeding becomes necessary to fill the energy and nutrient gap, which helps improve the nutrition status of the child. If complementary foods are not introduced properly or they are given inappropriately, then the infant’s growth may falter.

---

6. Ibidem
7. The Cost of Hunger in Ethiopia – The social and economic impact of child undernutrition in Ethiopia, 2013
Further, various researches have linked inadequate breastfeeding and complementary feeding to stunting. For instance, the World Health Organization (WHO) has documented that inadequate breastfeeding and complementary feeding are both direct causes of stunting\(^\text{13}\) (WHO 2013). Breast milk and complementary feeding encased as child feeding comprise the key domains for infant and young child health and development. Thus the principles that guide infant and child feeding as listed by \(^\text{14}\) WHO/UNICEF serve as benchmarks against which appropriate feeding knowledge and practices are gauged with attitude fitting in an explanatory capacity. Additionally, according to the WHO, water, sanitation and hygiene also contribute indirectly to malnutrition including stunting. The World Health Organization highlights water and sanitation among the contextual factors which affect malnutrition\(^\text{15}\).

SAF-UK is currently implementing a one year Nutrition project in Kismayo District, Lower Juba region, Jubaland State, Somalia. The project is treating Severe Acute Malnourished children for the purpose of reducing morbidity and mortality related to malnutrition through integrated Community Management of Acute Malnutrition (CMAM). The aim is to achieve improved health and nutrition status of children 0-59 months old and Pregnant and Lactating Women through integrated CMAM, and Increased access to health and nutrition facilities and services through community mobilization and sensitization in Kismayo of Lower Juba, Somalia.

Kismayo IDPs Camps are located in Kismayo District, Lower Juba Region. The camps host approximately 37,598 people which is approximately 17% of the total population in Kismayo district. The camps are composed of five major camps which include Farjano, Fanole, Canaley, Shaqaalaha and Gulwade; with Farjano hosting the highest population of approximately 22,140. The Kismayo IDPs population continue to face major challenges including food insecurity, poor water, sanitation and hygiene, poor health seeking behaviors among others. The current nutrition situation in the IDPs camps is considered serious with the estimated prevalence of global acute malnutrition being 14.5%, while the stunting level is estimated as 43.8% which is also the highest in Somalia\(^\text{16}\). In addition, the Post-Gu results also documents that the under-five death rate is considered serious.

1.2 Survey Justification

Survey results from FSNAU has consistently showed high stunting rates in Kismayo IDP Camps with the 2015/2016 post deyr estimating the prevalence of stunting as 43.8%, which was considered highest in the whole of Somalia (FSNAU, Post Deyr Report 2015/2016). As noted by WHO, the IYCF indicators are among the direct causes of stunting which is an indicator of chronic malnutrition (WHO Conceptual Framework of Malnutrition). However, little information is available concerning the current status of IYCF indicators in Kismayo IDP Camps. Partners working among Kismayo IDPs continue struggling in meeting various needs of IDPs due to lack of scientific evidence to guide their programming, especially under the IYCF interventions, thus very little impact is felt. Additionally, partners have scanty contextual information particularly knowledge, attitude and practice on some important IYCF indicators including breastfeeding (Initiation, exclusive and continued), appropriate complementary feeding, and perception on initiatives new to the culture, like expressing of breast milk, feeding when the mother is sick and breastfeeding when a mother is pregnant. IYCF in emergency components are also not being

---

\(^{13}\) Childhood Stunting: Context, Causes and Consequences: WHO Conceptual Framework, September 2013

\(^{14}\) Indicators for assessing infant and young child feeding practices. 2007. WHO/UNICEF.


\(^{16}\) Food Security and Nutrition Analysis (FSNAU) Technical Report, Post Gu, October 2016
implemented fully in Somalia, and so most partners only concentrate on education, counseling and peer support, which over the years have contributed little in reduction of malnutrition.

This study intended to generate information that will aid in programming, policy development (especially in development of an IYCF strategy for Jubaland) and formulation of education strategies and curricula, for both education institutions and training in health and nutrition programs. The survey results has provided the current status of the IYCF indicators which acts as the baseline information for the specific indicators in the Kismayo IDP Camps. Additionally, the survey has identified and explored positive factors and barriers to optimal child feeding practices in Kismayo IDP Camps. Finally, the survey results will help in recommending feasible interventions/strategies to complement the on-going efforts in promoting appropriate IYCF in the Kismayo

1.3 Objectives of the Survey
The main objective of this survey was to understand and document the knowledge, attitude and practices toward infant and young child feeding in Kismayo IDPs and to document the facilitators and barriers to optimal Infant and young child feeding with the aim of improving current programming. The following were the specific objectives which guided the survey:
   i. To assess the level of knowledge, attitude and practices on infant and young child feeding among the primary caregivers in Kismayo
   ii. To determine key barriers and facilitators to appropriate IYCF practices in Kismayo IDP Camps
   iii. To determine the health seeking behaviours among the primary caregivers of children aged 0 to 23.9 months in Kismayo IDPs

1.4 Indicators to be assessed
The following indicators were assessed during the survey:
   1. Early initiation of breastfeeding
   2. Exclusive breastfeeding rate
   3. Continued breastfeeding rate at 1 year
   4. Introduction of solid, semi-solid or soft foods
   5. Minimum dietary diversity
   6. Minimum meal frequency
   7. Minimum acceptable diet
   8. Consumption of iron-rich or iron fortified foods
   9. Children ever breastfed
   10. Continued breastfeeding at 2 years
   11. Bottle feeding
   12. Prevalence of morbidity 2 weeks prior to data collection
   13. Health seeking behavior
   14. Vitamin A and de-worming coverage
   15. Latrine coverage
   16. Hand washing at critical times
   17. Demographic characteristics
      a. Education background
      b. Occupation
      c. Main source of income
      d. Marital status
METHODOLOGY

2.1 Survey Design and Sampling Frame

The survey adopted a mixed-survey design, which included both quantitative and qualitative data collection methods. The quantitative method helped in generating the quantitative measures of the project indicators while the qualitative method helped in gathering information to explain the quantitative indicators. This sampling design was intended to provide reliable estimates for the baseline survey.

2.2 Quantitative Data

For the quantitative method, the survey adopted a two stage cluster sampling survey design. The first stage sampling involved the selection of clusters which were included in the survey while the second stage sampling was the selection of households which were included in the survey from the sampled clusters.

2.2.1 Sample Size Determination

The sample size calculation was based on the IYCF Survey calculator proposed by the step-by-step guide (Care 2010)\(^\text{17}\). Based on the guide, the sample size for the seven indicators which have a wide age group was computed and is presented in the table below:

Note:

1. The step-by-step guide by Care recommends a precision of between 5% and 10%; in this survey, a precision of 9% was used based on the prevalence of the specific indicators in which they had high estimates.
2. A design effect of 1.2 was used for the seven indicators. This was based on the assumption that there was little heterogeneity in the IYCF practices in the IDP camps since the population has almost homogeneous socio-economic, cultural and religious practices.
3. A 95% Confidence Interval was also used.
4. The sample size was estimated based on the percent of mothers practicing each of the seven IYCF behaviors (current prevalence) based on Somalia National IYCF KAP Survey 2016.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Estimate(^\text{18})</th>
<th>Precision(^\text{19})</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Timely Initiation of Breastfeeding (0 – 23.9 Months)</td>
<td>89.7%</td>
<td>9.0</td>
<td>57</td>
</tr>
<tr>
<td>2. Exclusive Breastfeeding (0 – 5.9 Months)</td>
<td>37.5%</td>
<td>9.0</td>
<td>145</td>
</tr>
<tr>
<td>3. Minimum Dietary Diversity (6 – 23.9 Months)</td>
<td>35.2%</td>
<td>9.0</td>
<td>141</td>
</tr>
<tr>
<td>4. Minimum Meal Frequency (6 – 23.9 Months)</td>
<td>50.0%</td>
<td>9.0</td>
<td>155</td>
</tr>
<tr>
<td>5. Minimum Acceptable Diet (6 – 23.9 Months)</td>
<td>9.1%</td>
<td>5.5</td>
<td>137</td>
</tr>
<tr>
<td>6. Consumption of Iron Rich or Iron Fortified Foods (6 – 23.9 Months)</td>
<td>31.8%</td>
<td>9.0</td>
<td>134</td>
</tr>
</tbody>
</table>

\(^{17}\) Infant and Young Child Feeding Practices: Collecting and Using Data: A Step-by-Step Guide. Cooperative and Relief Everywhere, Inc. (Care). 2010

\(^{18}\) The estimates used are from the Somalia National IYCF Survey 2015/6; for IDP Populations

\(^{19}\) The step-by-step guide by Care recommends a precision of between 5% and 10%; in this survey, a precision of 9% was used; in addition, a design effect of 1.2 was used for the seven indicators. This is because, little heterogeneity is expected in the IDPs. Finally, a 95% Confidence Interval was used.
Based on the parameters above, the maximum sample size (among the seven indicators) was 155, which when multiplied by 4\(^20\) yielded a total sample size of 620 children aged between 0 and 23 months. The total sample size was then adjusted upward by a non-response rate of 5\% which yielded the final sample size as 652 children aged between 0 and 23 months.

In this survey, a **household** was considered eligible if it had a child aged between 0 and 23.9 months. This implied that in total, 652 households with children aged between 0 and 23.9 months were sampled. The **index child** was the last born child aged between 0 and 23.9 months in the sampled household. Additionally, the **respondent** was the primary caregiver of the index child.

### 2.2.2 Number of Households per Cluster and Number of Clusters

The number of households visited per cluster was based on the time the teams were expected to spend in the field excluding transportation, other procedures like household sampling and break times. The details below were used to make this calculation based on a one day per cluster, household listing and conducting interviewing:

1. Departure from the base at 7 am and return at 6pm: 11 hours (660 minutes)
2. Travel time to reach the cluster and return at the base: 1.5 hours (90 minutes)
3. Duration for initial introduction in the cluster and any other administrative duties while within the cluster: 1 hour (60 minutes)
4. Time spent to move from one household to the next: 4 minutes
5. Average time in each household\(^{21}\): 20 minutes
6. Breaks: 2 breaks of 15 minutes each: Total (30 minutes)

\[
(1) 660 \text{ min} - (2) 90 \text{ min} - (3) 60 \text{ min} - (6) 30 \text{ min}
\]
\[
(4) 4 \text{ min} + (5) 20 \text{ min}
\]
\[
480 \text{ min} / 24(\text{min}) = 20 \text{ HH/cluster} \quad (20 \text{ HH per cluster})
\]

This implied that every team was sampling **20 Households** per day. Further, since the sample size was **652**, then it implied that the total number of clusters for this survey was 33, however, for logistical planning, **36**\(^{22}\) clusters were sampled.

### 2.2.3 Cluster and Household Selection

In stage 1, the clusters to be included in the survey were selected using the probability proportional to population size, and this was done using ENA for SMART (9\(^{th}\) July, 2016) Version.

At stage 2, the survey adopted the simple random sampling to select the eligible households\(^{23}\) which were included in the survey from the sampled clusters. The sampling frame for the 2\(^{nd}\)

---

\(^{20}\) As recommended by the step-by-step guide by Care (2010); the sample size is multiplied by 4 since there are 4 age categories for children 0-23 months (0 – 5, 6 – 11, 12 – 17 and 18 – 23.9); and among the seven indicators considered above, EBF has the smallest age range i.e. 6 months hence dividing the 24 months by 6 yields 4 categories hence the multiplication

\(^{21}\) This is based on previous experiences in other survey areas such as Mandera, Wajir and Kajiado Counties where the same tool have been used

\(^{22}\) Nine teams of two members will be used for data collection, hence the need to increase the cluster to 36

\(^{23}\) Eligible Households will be the households with children between 0 and 23.9 Months, hence the sampling frame for the 2\(^{nd}\) Stage will be all households with children 0 – 23.9 in the sampled cluster

---
stage sampling was all households with children aged between 0 and 23.9 months, and this list was developed prior to data collection and this was done with help of the local guides. This enabled smooth management of the second stage sampling using the simple random sampling which works with the basic assumption that an updated list of households is available. With the updated list of all eligible households, the enumerators used the table of random numbers to randomly select 20 households before beginning data collection in each cluster.

2.3 Qualitative Data
Qualitative data on behaviors, practices, barriers and social norms which were perceived to have either a positive or negative impact on IYCF practices was collected through various approaches. This helped get optimal information about socio-cultural norms, factors influencing particular behaviors, as well as knowledge level, attitudes, practices, and beliefs. The qualitative study comprised Focus Group Discussions (FGDs), Observations, and Key Informants Interviews (KIIs).

2.3.1 Key Informants Interviews:
Key informants interviews were conducted with various key members of the communities. This helped solicit information on critical ideas, facilitators and barriers towards IYCF behaviors. The following were targeted for the Key Informants Interviews:
- Community and religious leaders
- Ministry of Health Staffs
- Implementing partners staffs, specifically those working directly with projects treating MAM, complicated and uncomplicated SAM and health cluster partners
- Community Health Volunteers/Workers, Traditional Birth Attendants, Traditional healers and Elderly Women/Grandmothers

2.3.2 Focus Group Discussions
Focus Group Discussions (FGDs) targeting fathers and mothers of children 0-<24 months were done separately to establish the community’s perceptions on IYCF practices as well as the cultural, socio-economic, and other factors influencing these practices. Each FGD had an average of nine participants per session as conventional, with a range of six to twelve. In total, twelve FGDs were conducted in twelve clusters which was one-third of the clusters sampled. The twelve clusters where the FGDs were implemented were sampled randomly from the list of thirty six clusters sampled for the quantitative survey.

Data from FGDs was transcribed in the language of the interview (Somali) and then translated into English for analysis. Content and thematic analysis was used for sorting the transcribed information, looking for patterns, similarities, differences or contradictions. Focus group discussions were used in generation of qualitative data on the following themes:
- Early initiation of breast feeding
- Exclusive Breast Feeding
- Bottle feeding
- Complementary feeding (timing, frequency, quantity and variety)

2.4 Data Collection Tools
The survey used a comprehensive, mixed-methods survey design relying on both qualitative and quantitative methods. Overall, the following data collection tools were used:

2.4.1 IYCF Questionnaire
An interviewer administered IYCF Questionnaire formed the basis of the quantitative approach (Annex 1). The tool was developed based on the survey indicators which are highlighted in
section 1.3. The survey questionnaire was divided into four major modules which included: demographic characteristics, breastfeeding, complementary feeding and WASH. The tool was translated and administered into the Somali language.

2.4.2 Key Informant Interviews (KII) and Focus Group Discussion Guides
Semi-structured interview guides were used to facilitate the Key Informants Interviews and Focus Group Discussions. The guides were developed based on the survey objectives. Several semi-structured guides were developed depending on the target respondents. The tools were also translated into the Somali language.

2.5 Organization of the Survey

2.5.1 Survey Teams and Data Collection
The quantitative data was collected by nine teams, and each team had two enumerators, while the FGDs were conducted by one team which was purely trained on conducting FGDs. Supervision of data collection was implemented by the Survey Consultant, SAF-UK Staffs, MoH and other Implementing Partners. Additionally, every team was guided at the community level by one local guide who was a resident of the sampled cluster whose main purpose was to guide the enumerators from one sampled household to another. Data collection was done in four days from 22nd to 25th October, 2016.

2.5.2 Training and Pilot-testing
A three days training of enumerators was conducted in Kismayo Town from 18th to 20th October, 2016 while a one day pilot exercise took place on 21st October, 2016. The training had the following modules: Introduction, Methodology, Data Collection Tools, Field Logistics and Pilot Survey. The piloting was done in order to ensure that the survey team was conversant with all the field procedures as well as the data collection tools. The training was facilitated by the Survey Consultant and was done through various tools such as PowerPoint Projections, Role Plays, Recaps, and Question and Answer.

2.5.3 Data Entry and Analysis
The data collection was done using mobile phones through CAPI (Computer Assisted Personal Interviewing) which works under the platform of CSPro version 6.3 and android. This helped get real time data and also helped improve the quality of the data. Quantitative Data analysis was done using Stata version 12. The analyzed data is presented in both tabular and graphical format. On the other side, the qualitative data analysis was done based on the interpretative approach that involves eliciting meanings from the collected information. The data quality control measures will included: through training, through supervision, daily debriefing sessions with the survey teams and review of survey data by the consultant on daily basis.

OPERATIONAL DEFINITIONS

Prelacteal Feeds: This is feeding children other substances excluding the breast milk within the first three days after birth

Colostrum feeding: This is the first milk which comes from the breast within the first three days after birth and it’s considered very nutritious and vital for the new born child

Exclusive Breastfeeding: Exclusive breastfeeding is the act of giving a child less than six month old breast milk only without giving anything else, not even water or animal milk
Complementary Feeding: This is giving a young child aged six months and below twenty four months on nutritious foods and liquids including water.

Bottle Feeding: This is feeding young children liquids with bottles which have nipples or teats.
RESULTS

3.1 Response Rate
The targeted households for this survey were 652 households with children aged between 0 and 23.9 which also included a 5% non-response rate. However, for planning and logistical purposes, 720 households were sampled, which implies that the sample size was greater than the planned by 10%.

In total, 720 households were selected for this survey, and of these, 673 were present and 47 were absent at the time of data collection. Of the 673 households present, 671 were successfully interviewed while 2 declined to participate in the survey. Thus the response rate for this survey was 93.2%. The table below presents the response rate:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculated Sample Size</td>
<td>652</td>
</tr>
<tr>
<td>Sampled Households</td>
<td>720</td>
</tr>
<tr>
<td>Households Present during Data Collection</td>
<td>673</td>
</tr>
<tr>
<td>Households Absent during Data Collection</td>
<td>47</td>
</tr>
<tr>
<td>Households Successfully Interviewed</td>
<td>671</td>
</tr>
<tr>
<td>Households which Declined to be Interviewed</td>
<td>2</td>
</tr>
<tr>
<td>Response Rate</td>
<td>93.2%</td>
</tr>
<tr>
<td>Total Children Sampled</td>
<td>671</td>
</tr>
</tbody>
</table>

On qualitative data, a total of 10 FGDs were conducted with mothers, fathers, grandmothers and one with religious leaders. The average number of participants per FGD was 7 (5-11). A total of 17 KIIs were conducted with various key members of the community including, community leaders, religious leaders, implementing partners, traditional birth attendants, traditional healers, community health workers and IDPs in-charge.

3.2 Demographic Characteristics
The demographic characteristics are presented below in two major sub-sections which include: the household characteristics and the primary caregivers’ characteristics. The purpose is to understand both the characteristics at the household level and also the primary caregivers’ levels.

3.2.1 Household Characteristics
The characteristics of a household determine the socioeconomic and health status of its members. The household is where decisions about health, education and general welfare are made and acted upon. Various studies have shown positive correlation between various household characteristics with the nutrition outcome of children, and the vulnerable members of the households. For instance, studies have documented that socio-economic status, parents’ education, household size and marital status play an important role on the infant and young child feeding practices, which in the long run influences the nutrition outcome of the children. As a result, this section presents the socio-demographic and economic characteristics of the population living in Kismayo IDP.

---

24 Thirty six clusters were sampled, with twenty households being selected in each cluster. Ideally, 33 cluster were required for this survey, but they were increased by 3 cluster so that data could be collected in four days by nine teams.
Camps. These include: sex distribution, household size, age distribution and average household size.

The results of the assessment showed that 52.4% of the population in the surveyed area were females while 47.6% were males. The results indicate that females were slightly more compared to their male counterparts. On age distribution, about 34.8% of the household members were children aged below five years, and this would be attributed to the fact that the survey targeted only household with children below two years and hence the proportion of children is expected to be slightly high. As a result, these results should only be used to describe the characteristics of the households which has children below two years. On the head of the household, 76.6% were males while 23.8% of the households were female headed. Finally, the average household size in the survey population was 8.9 with a standard deviation of 2.1; this is indicative of huge families which could be attributed to a number of factors such as low penetration of family planning methods as noted during the qualitative information.

Table 3: Demographic Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex Distribution</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2837</td>
<td>47.6</td>
</tr>
<tr>
<td>Female</td>
<td>3129</td>
<td>52.4</td>
</tr>
<tr>
<td>Age Distribution</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5 Years</td>
<td>2074</td>
<td>34.8</td>
</tr>
<tr>
<td>5 – 17 Years</td>
<td>1885</td>
<td>31.6</td>
</tr>
<tr>
<td>18 – 35 Years</td>
<td>1404</td>
<td>23.6</td>
</tr>
<tr>
<td>36 – 55 Years</td>
<td>456</td>
<td>7.6</td>
</tr>
<tr>
<td>&gt;55 Years</td>
<td>138</td>
<td>2.3</td>
</tr>
<tr>
<td>Household Head</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>511</td>
<td>76.2</td>
</tr>
<tr>
<td>Female</td>
<td>160</td>
<td>23.8</td>
</tr>
<tr>
<td>Average Household Size</td>
<td></td>
<td>8.9 (SD: 2.1)</td>
</tr>
</tbody>
</table>

3.2.2 Primary Caregivers Characteristics

In addition to the impact of the household characteristics on the infant and young children feeding practices; studies have also shown that the primary caregivers’ characteristics are also associated with the infant and young children feeding practices. In particular, several studied have highlighted that primary caregivers with low literacy skills, who deliver their children at home, and who lack formal education are particularly at risk of poor child feeding and represent a group that may benefit from enhanced interventions that address their particular vulnerabilities. This section presents the demographic characteristics of the primary caregivers which include: level of education, marital status, and religion and age distribution.

The results showed that overall, 63.0% of the women interviewed were lactating while 22.5% were pregnant; and only 14.2% of the women were neither pregnant nor lactating. The high proportion of lactating women again would be attributed to the fact that the target population for

---

27 In this survey, a household was defined as a person or group of persons, related or unrelated, who usually live together, who acknowledge one adult member as the head of the household, and who have common cooking arrangements

28 [http://jn.nutrition.org/content/early/2015/09/16/jn.115.214346.full.pdf](http://jn.nutrition.org/content/early/2015/09/16/jn.115.214346.full.pdf)
this survey was households with children aged below two years which in reality should be lactating.

On marital status, 89.4% of the women in the county were married; and of those who were married, 29.7% were in polygamous union. In terms of education levels, the survey showed that only 12.9% of the women survey had ever attended school. Among those who had ever been to school, the results showed that majority (66.3%) had gone up to the less than primary education, while the rest had gone up to primary level and secondary level. This clearly indicates low level of education among the primary caregivers in the IDP Camps. Finally, the survey results showed that the main occupation for the women surveyed was casual labor (55.7%), followed by housewives (29.4%), and the business (6.6%). During the qualitative data collection through FGDs, KIIs and observations, it was noted that majority of the women work in the port of Kismayo as casuals which would explain the high proportion of primary caregivers reporting that their main economic activity is casual labor.

Table 4: Demographic Characteristics of Primary Caregivers

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physiological Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pregnant</td>
<td>151</td>
<td>22.5</td>
</tr>
<tr>
<td>Lactating</td>
<td>423</td>
<td>63.0</td>
</tr>
<tr>
<td>Pregnant &amp; Lactating</td>
<td>2</td>
<td>0.3</td>
</tr>
<tr>
<td>Non Pregnant / Not Lactating</td>
<td>95</td>
<td>14.2</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>600</td>
<td>89.4</td>
</tr>
<tr>
<td>Separated/divorced</td>
<td>45</td>
<td>6.7</td>
</tr>
<tr>
<td>Widowed</td>
<td>23</td>
<td>3.4</td>
</tr>
<tr>
<td>Single/ Never Married</td>
<td>3</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Ever Been to School</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>83</td>
<td>12.4</td>
</tr>
<tr>
<td>No</td>
<td>588</td>
<td>87.6</td>
</tr>
<tr>
<td><strong>Education Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than Primary School</td>
<td>55</td>
<td>66.3</td>
</tr>
<tr>
<td>Primary School</td>
<td>26</td>
<td>31.3</td>
</tr>
<tr>
<td>Secondary School</td>
<td>2</td>
<td>2.4</td>
</tr>
<tr>
<td><strong>Occupation / Source of Livelihood</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formal employment</td>
<td>7</td>
<td>1.0</td>
</tr>
<tr>
<td>Informal Employment</td>
<td>24</td>
<td>3.6</td>
</tr>
<tr>
<td>Casual Labor</td>
<td>374</td>
<td>55.7</td>
</tr>
<tr>
<td>Own business</td>
<td>44</td>
<td>6.6</td>
</tr>
<tr>
<td>Petty Trade/Hawking</td>
<td>7</td>
<td>1.0</td>
</tr>
<tr>
<td>Farming</td>
<td>8</td>
<td>1.2</td>
</tr>
<tr>
<td>Fishing</td>
<td>3</td>
<td>0.4</td>
</tr>
<tr>
<td>Dependent</td>
<td>5</td>
<td>0.7</td>
</tr>
<tr>
<td>Housewife</td>
<td>197</td>
<td>29.4</td>
</tr>
<tr>
<td>Others</td>
<td>2</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>Religion</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>Muslim</td>
<td>670</td>
<td>99.9</td>
</tr>
</tbody>
</table>

3.2.3 Children Demographic Characteristics
The two major demographic characteristics of children i.e. age and sex have been noted to have significant impact on the infant and young children feeding practices. Several researchers have shown that different communities particularly in third world countries have various feeding
preferences for either gender, and at different ages. This sub-section highlights the sex and gender distribution of the sampled children.

The age between 0 and 23.9 months are classified into four age sets namely 0 – 5.9, 6 – 11.9, 12 – 17.9 and 18 – 24.9 months, which are the major age groups for classifications according to the World Health Organization. The results show that the age group 0 to 5.9 was perfectly represented; though the age groups 6 to 11.9 was slightly over-represented while the age group 18 to 23.9 was slightly under-represented in the sample. However, the overall age ratio i.e. 0 – 11.9 and 12 to 23.9 is 0.8 which is close to the expected value of 0.85.

The results of the survey indicate that 50.5% of the sampled children were female while 49.5% were males; however, this is as expected since the sex ratio is 0.98 which is within the recommended sex ratio of between 0.8 and 1.2 and hence the sample was unbiased for gender.

Table 5: Demographic Characteristics of Children

<table>
<thead>
<tr>
<th>Age and Sex Distribution</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 – 5.9</td>
<td>178</td>
<td>26.5</td>
</tr>
<tr>
<td>6 – 11.9</td>
<td>203</td>
<td>30.3</td>
</tr>
<tr>
<td>12 – 17.9</td>
<td>186</td>
<td>27.7</td>
</tr>
<tr>
<td>18 – 23.9</td>
<td>104</td>
<td>15.5</td>
</tr>
<tr>
<td>Age Verified by</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Card</td>
<td>63</td>
<td>9.4</td>
</tr>
<tr>
<td>Events Calendar</td>
<td>608</td>
<td>90.6</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>332</td>
<td>49.5</td>
</tr>
<tr>
<td>Female</td>
<td>339</td>
<td>50.5</td>
</tr>
<tr>
<td>Sex Ratio</td>
<td></td>
<td>0.98</td>
</tr>
</tbody>
</table>

3.3 Breastfeeding Characteristics

Breastfeeding practices play a critical role in child development. According to the World Health Organization, breastfeeding is one of the most effective ways to ensure child health and survival\(^{29}\). It is documented that if every child was breastfed within an hour of birth, given only breast milk for the first six months of life, and continued breastfeeding up to the age of two years, then about 800,000 child lives would be saved every year (prevent about 13 per cent of all under deaths annually)\(^{30}\). Studies have shown that breastfed children have at least six times greater chance of survival in the early months than non-breastfed children\(^{31}\) among other benefits.

The section presents the current status of knowledge, attitude and practices around the breastfeeding characteristics among the caregivers of children 0 to 23 months who resides in Kismayo IDP Camps. The section also documents the various barriers and facilities towards optimal breastfeeding practices in the community. The indicators which were assessed includes: timely introduction to breastfeeding, exclusive breastfeeding, continued breastfeeding at 1 year and 2 years, bottle feeding and ever breast feed.

\(^{29}\)http://www.who.int/features/factfiles/breastfeeding/en/


3.3.1 Timely Introduction to Breastfeeding

Timely initiation of breastfeeding is defined as putting the newborn to the breast within one hour of birth. WHO recommends that infants should be introduced to breastfeeding within the first one hour after birth\[^{32}\], which is also recommended by the United Nations Children Fund (UNICEF). Additionally, the Somalia IYCF Strategy\[^{33}\] recommends that breastfeeding should be initiated within 30 minutes or up to an hour after birth. This allows the infant to start taking colostrum, the “first milk”.

UNICEF notes that timely breastfeeding also contributes to maternal health immediately after the delivery because it helps reduce the risk of post-partum hemorrhage\[^{34}\]. Timely initiation of breastfeeding is not only the easiest, cost effective and most successful intervention; it also tops the table of life-saving interventions for health of the newborn\[^{35} \ 36 \ 37\]. Studies have also shown that 22 per cent of neo-natal deaths could be prevented, if all infants are put to the breast within the first one hour of birth.

The results showed that 81.1% of the mothers had knowledge that breastfeeding should be initiated within the 1st hour after birth; which also correlates highly with attitude which the assessment noted that 80.9% of the women reported that they are quite positive on introduction their children breastfeeding within the first hour after birth. However, on a worrying note, only 55.7% of the primary caregivers reported that they introduced their children to breastfeeding within the first one hours. The practice on timely introduction to breastfeeding is classified as below the international threshold of 80%. Among the major reasons for the low practice of timely introduction of breastfeeding includes cultural beliefs, influence from older women and traditional birth attendant, and little knowledge on the benefits of timely introduction to breastfeeding.

**Figure 1: Timely Introduction to Breastfeeding**

\[^{32}\]http://www.who.int/features/factfiles/breastfeeding/facts/en/
\[^{34}\]http://www.unicef.org/nutrition/index_24824.html
\[^{35}\]Edmond KM, Zandoh C, Quigley MA: Delayed breastfeeding initiation increases risk of neonatal mortality.
\[^{36}\]Du Plessis D: Breastfeeding: Mothers and health practitioners, in the context of private medical care in Gauteng.
3.3.2 Exclusive Breastfeeding

Exclusive breastfeeding is the act of giving a child less than six month old breast milk only without giving anything else, not even water or animal milk. According to WHO, this has immense impact on the child in achieving optimal growth, development and health. Systematic reviews of various studies have shown that exclusive breastfeeding of infant with only breast milk, and no other foods or liquids, for the six months has several advantages which include: lower risk of gastrointestinal infection for the baby, more rapid maternal weight loss after birth, and delayed return of menstrual periods. The Somalia government recommends that infant under-six months should be given breast milk only, without any other liquid or foods apart from medicines prescribed by doctors.

Findings of the survey indicate that only 52.3% of the mothers surveyed knew that children between 0 and 5.9 months should be feed on breast milk only. Most mothers were reporting that exclusive breastfeeding is giving children between the age of 0 to 5.9 months breast milk, water and other light liquids like animal milk; and that exclusive breast feeding entails not giving children solid, semi-solid or soft foods. In addition, only 34.2% of the caregivers who reported that they would be comfortable with practicing exclusive breastfeeding. And from the FDGs, it was quite clear that the primary caregivers were not comfortable with practicing exclusive breastfeeding since there was a clear belief among them that breast milk only cannot sustain a child. Finally, on the practice, only 15.7% of caregivers reported that they practice exclusive breast feeding which is quite low and below the international threshold of 80%. The major reasons for the low exclusive breastfeeding rates are highlighted in details in section 3.3.6

Figure 2: Exclusive Breastfeeding

![Exclusive Breastfeeding Chart](image)

The survey results also showed that the major food items which children are fed before the age of 6 months include plain water (84.2%), animal milk (63.1%), and juice drinks (16.3%). Other drinks include infant formula (10.7%) and clear broth (6.2%). The table below presents the major food items which children are given before the age of 6 months. These are presented in the figure below:

---

3.3.3 Continued Breastfeeding

The world health organization recommends that a child should be breastfed up to 2 years of age or beyond\textsuperscript{39}, which is also recommended by the Somalia Government\textsuperscript{40}. Science has documented that some immune factors in breast milk that protect the baby against infection are present in greater amounts in the second year of life than in the first. This is, of course as it should be, since children older than a year are generally exposed to more infections than young babies. Further, it has been observed that breast milk still contains special growth factors that help the immune system to mature and which help the brain, gut and other organs to develop and mature\textsuperscript{41}.

The results of the survey showed that 56.7\% of the children were breastfed at one year. In addition the results showed that only 29.8\% of the respondents who reported that they breastfed at two years which is considered low. On knowledge on continued breastfeeding, the results showed that over 89.4\% of the primary caregivers knew that they ought to breastfed even at years, while 71.4\% of them reported that they have a positive attitude towards continued breastfeeding. Among the major reasons noted for low continued breastfeeding in Kismayo IDPs was short child spacing attributed to low penetration of family planning, mother refusing to breastfeed since they thought that the child is big enough to stop breastfeeding, baby refused to suckle and competing activities.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>KAP</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continued Breastfeeding at 1 Year</td>
<td>Practice</td>
<td>72</td>
<td>56.7%</td>
</tr>
<tr>
<td>Continued Breastfeeding at 2 Years</td>
<td>Knowledge</td>
<td>600</td>
<td>89.4%</td>
</tr>
<tr>
<td></td>
<td>Attitude</td>
<td>479</td>
<td>71.4%</td>
</tr>
<tr>
<td></td>
<td>Practice</td>
<td>14</td>
<td>29.8%</td>
</tr>
</tbody>
</table>

3.3.4 Bottle Feeding

Information on bottle feeding is useful because of the potential interference of bottle feeding with optimal breastfeeding practices and the association between bottle feeding and increased diarrheal

\textsuperscript{39}http://www.who.int/nutrition/topics/infantfeeding/en/

\textsuperscript{40}IYCF Strategy and Action Plan for South Central Somalia (2013-2017)

\textsuperscript{41}http://www.breastfeedinginc.ca/content.php?pagename=doc-BT
disease morbidity and mortality. Bottles with a nipple are particularly prone to contamination. As a result, mothers are discouraged from using bottles with nipples or teats to feed their infant, but rather, they should use open containers.

Among the primary caregivers interviewed, only 43.1% of them who have knowledge that bottle feeding is not right and especially bottles with nipples. On practice, 59.0% of the primary caregivers used bottle with nipples to feed their children drinks the previous day preceding the survey. This implies that about sin in ten women are using a negative method to feed their children drinks.

**Figure 4: Bottle Feeding**

![Bar chart showing knowledge and practice of bottle feeding](image)

### 3.3.4 Other Breastfeeding Characteristics

Other breast feeding characteristics which were considered in this survey includes: children ever breastfed, colostrum feeding and introduction to pre-lacteal. Colostrum is the first milk which comes from the breast within the first three days after birth and it’s considered very nutritious and vital for the new born child. On the other side, pre-lacteal feeding is feeding children other substances within the first three days after birth which is strongly discouraged since the digestive system of the child hasn’t developed to the level of accepting other kind of feeds besides breast milk.

The results of the survey show that there was near universal practice on breastfeeding at birth since 99.9% of all the children sampled had been breastfed which is quite encouraging. On colostrum feeding, 80.9% of the primary caregivers reported that they knew that colostrum feeding should be done, while 77.6% of them reported that their attitude on colostrum feeding was positive which is encouraging. In addition, the results of the survey show that 76.0% of the sampled children were fed on colostrum feeding which is also encouraging, though about 25% of the children were not fed on colostrum. This was mainly attributed to negative perception toward colostrum where some mothers considered colostrum as dirty while others said that it causes illnesses such as diarrhea.

On pre-lacteal feeding, 46.1% of the primary caregivers reported that they were aware that it should not be practiced indicative of low knowledge on pre-lacteal feeding at the community.

---

42 Indicators for assessing infant and young child feeding practices, WHO 2007
This also translated to practice where 55.8% of the sampled children were reported to have been given other supplemental foods and drinks during the first three after birth.

### Table 7: Continued Breastfeeding

<table>
<thead>
<tr>
<th>Indicator</th>
<th>KAP</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children Ever Breastfed</td>
<td>Practice</td>
<td>670</td>
<td>99.9%</td>
</tr>
<tr>
<td>Colostrum Feeding</td>
<td>Knowledge</td>
<td>543</td>
<td>80.9%</td>
</tr>
<tr>
<td></td>
<td>Attitude</td>
<td>521</td>
<td>77.6%</td>
</tr>
<tr>
<td></td>
<td>Practice</td>
<td>510</td>
<td>76.0%</td>
</tr>
<tr>
<td>Pre-lacteal Feeding</td>
<td>Knowledge</td>
<td>309</td>
<td>46.1%</td>
</tr>
<tr>
<td></td>
<td>Practice</td>
<td>374</td>
<td>55.8%</td>
</tr>
</tbody>
</table>

On the specific pre-lacteals given to the children within the first three days after birth include: plain water (85.0%), milk (63.1%), glucose/sugar water (31.0%). Other pre-lacteals given included gripe water, infant formula, sugar/salt solution, honey and local herbs. Among the major reasons mentioned for introducing pre-lacteals included: mother feeling that the breast milk is not sufficient, baby crying too much hence the mother believing that the child could be hungry, weather being too hot and hence need to give other drinks believing that it would cool the child’s system and believe that the first milk (colostrum) is not good for the child.

### Figure 5: Pre-Lacteals Given

3.3.5 Facilitators to Optimal Breastfeeding Practices

1. **Existence of a Strong Cultural Beliefs that Support for Breastfeeding**

   Belief and practice: Breast milk prevents up to twelve diseases; there’s a strong support for general breastfeeding.

   Generally, most Somali women living in IDP camps in Kismayo have very strong cultural beliefs support for breastfeeding in general. They believe that breastfeeding is very important for the baby and that breast milk is Allah’s gift to the mother for the newborn and that breastfeeding will make the baby grow healthy, become intelligent and prevent diseases.

   “This is Allah gift to humanity….breast milk can prevent up to twelve diseases.” - A traditional healer, KII
“Breast milk will make your baby have good health and become intelligent”. - A grandmother FGD

2. Existence of a Strong Religious Practices that Support for Breastfeeding

a. Quran and Breastfeeding

Belief and Practice: Quran recommends breastfeeding for two complete years

There was a general consensus that religion supports breastfeeding. When asked about the religious beliefs of the community towards breastfeeding, the religious leaders quickly pointed out that there are specific instructions in the Holy Quran with regard to breastfeeding, that prophet Mohamed recommended that all mothers should breastfeed their babies for two whole years.

‘The Quran in clear, for two years, the child must breastfeed’ -A religious leader, KII

But despite the Quran having a strong admonition for breastfeeding for up to two years, the general and most common practice among the Somali women in Kismayo IDP camps is breastfeeding for less than one year. When asked why some mothers do not adhere to teachings of the holy Quran, the religious leaders argued that the two years was just a recommendation and not a command and if a mother does not breastfeed for the two years, it's not considered as sin.

“It was not a command, it is a recommendation.........but for those who want to be more close to Allah, they do it as recommended. Women in the older days used to breastfeed for two complete years”. – A religious leader, KII

They also pointed out that if a mother is not able to breastfeed her baby, the Quran advises that such mothers can look for a foster mother and pay them to breastfeed on their behalf.

‘That is allowed but it does not happen here....it’s not common....I have never seen anybody doing it. – A religious leader, FGD

b. Breastfeeding during Ramadhan

Belief and Practice: Breastfeeding mothers should not fast, can compensate at a later date, however, you can fast and supplement the baby.

The common practice among breastfeeding women in Kismayo IDP camps during Ramadan (the fasting period in the Islamic calendar) is that; breastfeeding mothers postpone their fasting until at a time when they are not breastfeeding.

When the religious leaders were asked about the religious believes around breastfeeding during Ramadhan, they said that the Quran is very clear that if a mother is breastfeeding, she’s not expected to fast. That it is even wrong to ignore the humble act of breastfeeding by going on a fast when you have permission not to do so.

“You are allowed not to fast during Ramadhan if you are breastfeeding”- A religious leader

When the mothers were probed on what exactly they do during this fasting period, some of the mothers said that they would delay fasting, while others observe the fast and supplement breastfeeding with other foods.
3.3.6 Barriers to Optimal Breastfeeding Practices

1. Colostrum and Early Initiation of Breastfeeding

Belief and Practice: Colostrum is unhealthy, nutritionally useless and can make the baby sick. Some women get rid of the first milk from the breast so that the baby doesn’t get sick.

Most Somali women in Kismayo IDP camps belief that colostrum ‘danbaar’ is unhealthy, nutritionally useless and has no value since it has been in the breast for too long before the baby was born and it’s not considered as milk.

“The first milk is bad… it can make the baby get stomach upset, vomit, get fever or start to diarrhea” – A mother, FGD

“Some women here tell us that medically, you tell us to breastfeed immediately but there’s no milk ….they believe that colostrum is not milk, others that the colostrum is too little…even us medical professionals when our wives deliver, we are in problems” - Local Partner, KII

The common practice is to get rid of the first and give the baby the second milk. The older relatives and friends usually recommend to the new mother to wait before breastfeeding and get rid of the first milk from the breast so that the baby doesn’t get sick.

One particular woman believed that the milk coming out her breasts was ‘malaax’ (pus) and not milk and she has therefore never breastfed her children.

“I have had 14 kids and I have never breastfeed any…..my breast they produce pus and it can harm the baby”. - A mother, FGD

2. Belief that Breast Milk is Insufficient

Belief and Practice: Breast milk supply and quality is inadequate and should be supplemented.

One of the major challenges identified as a barrier to optimal breastfeeding practices among women in Kismayo IDP camps is the belief that breast milk supply and quality is inadequate and should therefore be supplemented.

“the women have no enough milk….the baby continues to cry even after breastfeeding….we tell them to give them water or milk”. - A TBA, KII

This belief could be stemming from the inability to see the amount of breast milk coming from the breast leading to anxiety and fears that the baby is not getting enough milk. Some of these fears were usually raised because the baby would in most times continue to cry even after breastfeeding or because the mother was no longer having the breast engorgement that is usually common the a first few weeks after delivery.

Some women, especially the young mothers feel like because the breasts are small, they don’t have enough milk.

“My breasts are small….my baby was crying all the time….my husband told me to give him soft porridge”. - A mother, FGD

When a mother doubts the adequacy of her breast milk, the most common practice is to supplement with other things like water, milk, honey, biscuits, porridge.

3. Low Milk Production is Hereditary

Belief and Practice: Low milk production runs in our family, we must supplement with other foods.
Some of the women who were worried about the quality and quantity of their breast milk and difficulties in breastfeeding believed that this was a trait that they inherited from their mothers and maternal grandmothers. These women believed that they could not produce enough milk to sustain the baby because this was a problem in their family.

“In my family, we produce milk that is very thin and watery, even my mother and my sisters”. – A mother, FGD

4. The Girl Child Suckles More

Belief and Practice: A baby girl suckles more is more hurtful to the nipples than a baby boy and the breast milk should therefore be supplemented.

Although there are no difference between feeding a boy or a girl, most Somali women in Kismayo IDP camps believe that a baby girl breastfeeds more than a baby boy and is more painful to the nipples, disturbs more and the mother has a hard time breastfeeding a girl child. The breast milk must therefore be supplemented.

“The girl child suckles seriously and is hurtful....but we feed the boy and the girl the same”. - A mother, FGD

5. Short Birth Spacing and Poor Family Planning Uptake

a. Belief and Practice: When you get pregnant, you stop breastfeeding and start feeding the baby on other foods.

Conception during lactation is common among the Somali women in Kismayo IDP camps. When a mother becomes pregnant while nursing, they immediately stop breastfeeding and start feeding the baby on other foods.

“From our dummy research, we could see that there are many girls here who are also mothers, 15 years onwards who are also always pregnant....like in quarter two we found that almost half of the mothers in our site were pregnant....and one of the main reasons as to why they are not breastfeeding is pregnancy among others ......they get pregnant, they stop breastfeeding”.

-Project Coordinator, SAF-UK

When a grandmother was asked under what circumstances mothers stop breastfeeding their infants, she quickly replied:

“When they get pregnant.....they stop breastfeeding.....they get pregnant very soon”– A TBA, KII

They believed that feeding the baby while you were still nursing would cause harm to the fetus, harm the nursing baby and also the mother and it’s therefore unacceptable.

“Breastfeeding when you are pregnant can harm the baby who is in the stomach....a baby should not suckle from a pregnant mother...it is not good”. –Young mother who is also a TBA, KII

The prevailing cultural practice is to wean immediately after conception because they fear that the pregnancy will spoil the mother’s milk and that can cause harm to the nursing baby and at the same time it would deprive nutrients for the growing fetus and cause mental retardation to the unborn baby.

“Some belief that if you do that (breast feeding during pregnancy) you might give birth to a baby who is mentally retarded”. A TBA, KII
b. **Belief and Practice: Family planning is haram; use natural methods. The mother gets pregnant too soon and stops breastfeeding.**

Poor family planning practices also stood out as a significant barrier to the use of appropriate infant and young child-feeding practices. It is very common for women in Kismayo to get pregnant a few months after giving birth.

“I know a mother who has given birth every year for the last three years”. – A father, FGD

When asked why they don’t use family planning, they said the community believes that family planning is haram (culturally and religiously unacceptable).

“They believe that family planning is haram….children are a blessing from God…the many you have the better”. – A grandmother, FGD

Peer pressure to have large families as a sign of prestige, coupled with unacceptability of family planning makes it difficult for a mother space her children, leading to poor infant feeding and child care.

“I had 35 children, but 14 of them have died….i feel very sad...” – A Section leader, KII

“My own father had 16 children….some of them are in Kenya...I wanted to have many but there is a lot of poverty here in Kismayo.....people here especially relatives expect you to have many kids like them.” – A male TBA, KII

c. **Practice: After afartanka barh, the woman approaches the man desiring to have sexual intercourse.**

One of the cultural practices is where the mother is expected to stay indoors at home for a period of forty days after giving birth (afartanka barh). During this time, the mother’s only responsibility is to take care of the baby. She’s not permitted to do other things and cannot engage in sexual intercourse. The family and friends are supposed to take care of the mother and the baby, this is the period where family and friends visit and offer advice on bringing up the child and provide some financial, emotional and material support. Immediately after the forty days, the woman approaches the man desiring to have sexual intercourse which can lead to pregnancy. When asked why their women get pregnant so soon after birth of a previous child, the men said.

“the problem is not with us, it’s the woman...Immediately after the 40 days, they come to us... they are the ones who want it (referring to wanting sex).....they fear that you will get another wife....and you see, for us here, we do not use family planning...so they just get pregnant” –A father, KII

6. **Left Breast Theory**

**Belief and Practice: In our culture, we do not breastfeed the left breast, the child might get sick. Only breastfeed the right breast.**

Specific Somali communities (Ajuran and the Ormaale) living in Kismayo IDP camps do not feed the baby from the left breast, they only breastfeed the right breast. They believe that if you feed the child from the left breast, the child will get sick, become dumb or deaf or even die.

“Some do not give the baby the left breast...the baby will get sick and can become deaf or dumb or they might even die”. – A Somali Bantu male TBA, KII
“You will see a mother who deliver a baby and she will tell you that in our culture, we don’t give the baby the left breast……we only give the right breast……if you give the left, the baby will die or will become fool…they will become disabled”. – Local Partner, KII

7. Over-Dependency on Older Women as Source of Information

Belief and Practice: The woman’s mother and the maternal grandmother and older relatives are the main source of child feeding information. Women, especially the young ones, should go back to their mothers to learn how to feed the child.

Cultural practices resulting from the influence of respected members of the community or family members also stood out as a significant barrier to the use of appropriate infant and young child-feeding practices.

Most Somali women in Kismayo IDP camps reported that they receive advice on infant and young child nutrition mostly from older relatives who have more experience on parenting. The woman’s mother and maternal grandmother stood out as the main source of child feeding information.

“A woman should follow the footsteps of her mother and grandmother, if your grandmother was not breastfeeding the left breast, you should also not breast feed the left breast”- A grandmother, FGD

8. Readily Available Infant Milk Formulas and Breast Milk Substitutes

Practice: Promotion and selling of infant milk formulas and breast milk substitutes is very common

Promotion and selling of infant milk formulas and breast milk substitutes is very common in Kismayo in general. These products are available everywhere in the street kiosks (by observation) and even the TBAs and professional midwifes have these products in their homes to sell to mothers who have just delivered or who are breastfeeding.

“Some of the private delivery places owned by professional midwives are selling bottle milk……these are people who have been trained on delivery, they open their own places and they start selling bottle formula milk for infants.” – A local partner, KII

This greatly encourages late initiation of breastfeeding and early complementary feeding practices among mothers in Kismayo IDP camps.

“In every shop even in hospitals there are bottles of infant formula milk…. ” - Project coordinator- SAF-UK

9. Traditional Beliefs around Honey Feeding

Belief and practice: Honey can treat everything except death; feeding honey to infants and children is common despite the risk of botulism. In addition, infants as early as less than six months are fed with honey

Most mothers are not aware that honey is not appropriate to feed infants and its risk of botulism. The practice of feeding honey to the baby was common among the Somali women in Kismayo IDP camps. They believed that honey, especially when mixed with milk or a special type of oil called habbaa sawda (the black oil) is good for the baby in preventing diseases. This practice stems from the religious believe that prophet Mohamed used to treat himself with that special oil mixed with honey.

“Honey can treat everything except death”- A grandmother, FGD
10. Lack of Knowledge on Optimal Breastfeeding Practices
In general and from most of the interviews with mothers, the knowledge of appropriate
breastfeeding practices is low among women in Kismayo IDP camps. Most of the
inappropriate practices are mostly as a result of lack of knowledge.

“I usually have no milk immediately after birth……I give my baby water with sugar until
the milk starts coming out. I cannot watch when the baby is suffering and I don’t have
milk…..It has worked well for all my children”. – A mother, FGD

Most women agreed that even if other foods are not given to the baby at least water
should be given. Other foods included camel milk, goat milk and porridge

11. Other Reasons
Other women believed that if I breastfeed for six months, they would become very
week, and look/appear very old and thus their husbands might look for another wife.

3.4 Complementary Feeding Characteristics
The transition from exclusive breastfeeding to family foods, referred to as complementary
feeding, typically covers the period from 6 to 18-24 months of age, and is a very vulnerable
period. It is the time when malnutrition starts in many infants, contributing significantly to the
high prevalence of malnutrition in children under five years of age world-wide, including
stunting, which WHO estimates that 2 out of 5 children are stunted in low-income countries.

This section presents the finding of the various complementary feeding indicators which were
assessed in this survey. These include: timely introduction to solid, semi-solid and soft foods,
minimum meal frequency, minimum dietary diversity, minimum acceptable diet and consumption
of iron rich and iron fortified foods among the children aged 6 to 23 months.

3.4.1 Introduction of Solid, Semi-Solid and Soft Foods
Complementary feeding should be timely, and the recommendation from WHO is that infants
should be introduced to complementary feeding at the age of six months. During this period, the
infant should be introduced to soft foods, semi-solid and solid foods, in addition to the breast
milk. Research has shown that infants aged six months and above have increased nutrient demand
and hence breast milk alone is not sufficient for optimal growth of the child, hence the need for
complementary feeding. As a result, infants are particularly vulnerable during the transition
period when complementary feeding begins. Thus to ensure their nutritional needs are met, then
the complementary foods should be timely, adequate, safe and properly feed. This indicator
presents the proportion of children aged between 6 and 8.9 months who received solid, semi-solid
or soft foods.

The findings of the survey show that 53.5% of the primary caregivers interviewed had knowledge
that solid, semi-solid and soft foods should be introduced at six months which is considered low
knowledge on the indicator. In addition, according to the results 49.2% of the sampled children
were introduced to solid, semi-solid and soft foods appropriately which is quite low and below
the 80% threshold. The low practice on this indicator would be attributed to early weaning among
the children which was noted to be even as early as within the first month of birth.

43 http://www.who.int/nutrition/topics/complementary_feeding/en/
44 Global Strategy on IYCF
3.4.2 Minimum Meal Frequency
As previously mentioned, infants above the age of 6 months have more nutrient demand compared with those who are less than six months. As a result, complementary feeding is introduced to complement the breast milk which the child is taking. The complementary feeding should be adequate both in terms of diet intake and also frequency. The WHO recommends that infants between 6 and 8.9 months who are breastfeeding should be fed at least two meals in a day, infants aged between 9 and 23.9 months and are breastfed should be fed at least three times in a day while, infant aged between 6 and 23.9 months who are not breastfed should be fed complementary foods for a minimum of four times in a day.

The minimum meal frequency was computed based on the specific age group and if breastfed or not breast fed. According to the results, 52.1% of the children aged 6 to 8.9 months and were breast fed met the minimum meal frequency of at least two meals per day. In addition, 63.6% of the children aged 9 and 23.9 months and were breast fed were met the minimum meal frequency of three meals per day; while, 8.5% of the children aged 6 and 23.9 months and were not breastfed met the minimum meal frequency of at least four meals per day. Overall, the results of the survey showed that only 31.8% of the children sampled met their minimum meal frequency.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Age Group</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Meal Frequency</td>
<td>6.0 – 8.9 Months - Breastfed</td>
<td>53</td>
<td>52.1</td>
</tr>
<tr>
<td></td>
<td>9.0 – 23.9 Months – Breastfed</td>
<td>88</td>
<td>63.6</td>
</tr>
<tr>
<td></td>
<td>6.0 – 23.9 Months – Non Breastfed</td>
<td>16</td>
<td>8.5</td>
</tr>
<tr>
<td>Combined – Minimum Meal Frequency</td>
<td>(6.0 – 23.9 Months)</td>
<td>157</td>
<td>31.8</td>
</tr>
</tbody>
</table>

3.4.3 Minimum Dietary Diversity
All people, including infants need a variety of foods to meet requirement for essential nutrients, and the value of a diverse diet has long been recognized. Diversified diet is important for the infants and young children since they need energy and nutrient-dense foods to grow and develop both physically and mentally and to live a healthy life. Low dietary diversity has been associated with stunting. It is recommended that infants and young children should consume foods from at least four different food groups in addition to breast milk. Dietary diversity is used as a proxy for adequate micronutrient-density foods.
The survey results showed that 8.7% of the children had met the minimum dietary diversity which is considered quite low. On the specific food groups which were consumed by children aged 6 to 23.9 months within the twenty four hours prior to the survey included grains, roots and tubers (81.3%), vitamin A rich fruits and vegetables (18.1%), milk products (14.4%), meat products (13.3%) and legumes and nuts (12.8%). The results show that majority of children depend on grains, roots and tubers; while there was low consumption of all the other food groups.

**Table 9: Minimum Meal Frequency**

<table>
<thead>
<tr>
<th>Dietary Diversity</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Dietary Diversity</td>
<td>43</td>
<td>8.7%</td>
</tr>
<tr>
<td><strong>Food Groups Consumed</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grain, Roots and Tuber</td>
<td>401</td>
<td>81.3%</td>
</tr>
<tr>
<td>Vitamin A Rich Fruits and Vegetables</td>
<td>89</td>
<td>18.1%</td>
</tr>
<tr>
<td>Milk Products</td>
<td>71</td>
<td>14.4%</td>
</tr>
<tr>
<td>Meat Products</td>
<td>65</td>
<td>13.3%</td>
</tr>
<tr>
<td>Legumes and Nuts</td>
<td>63</td>
<td>12.8%</td>
</tr>
<tr>
<td>Other Fruits and Vegetables</td>
<td>37</td>
<td>7.5%</td>
</tr>
<tr>
<td>Eggs</td>
<td>31</td>
<td>6.3%</td>
</tr>
</tbody>
</table>

**3.4.4 Minimum Acceptable Diet**

Appropriate feeding of children 6 to 23.9 months is considered multidimensional; hence, the minimum acceptable diet is a composite indicator that tracks the extent to which multiple dimensions of adequate child feeding are being met. The minimum acceptable diet combines standards of dietary diversity and feeding frequency by breastfeeding status. Thus the indicator provides a useful way to track progress at simultaneously improving the key quality and quantity dimensions of children’s diet.

The minimum acceptable diet was found to be quite low at only 3.3% among all the children sampled aged 6 to 23.9 months. This implies that only 3.3% of the children who met the minimum meal frequency and the minimum dietary diversity simultaneously. This is considered very low and quite worrying.

**Figure 7: Minimum Acceptable Diet**
3.4.5 Consumption of Iron Fortified and Iron Rich Foods
Iron is a key part of hemoglobin and myoglobin; proteins that carry oxygen in the blood and help deliver it to various parts of the body. In addition, iron is essential for the release of energy in the body and for a health immune system. Iron is obtained from iron rich foods and from the breakdown of red blood cells in our body. When our diet lacks iron, the body uses its stored iron to meet needs. When these reserves get depleted, hemoglobin levels decrease and over time a person develops iron deficiency anemia (IDA). The major sources of iron include red meat, poultry, seafood, beans and legumes, dark green leafy vegetables, such as spinach, dried fruits and iron fortified food.

The results of the assessment show that 20.9% of the children had consumed food items rich in iron or fortified with iron within the twenty four hours prior to the data collection. Among the food items rich in iron which had been consumed included meat products and the micro-nutrient powder and products.

**Figure 8: Consumption of Iron Rich and Iron Fortified Foods**

![Pie chart showing consumption of iron rich and fortified foods]

3.4.6 Barriers to Optimal Feeding Practices
1. Poverty

Poverty was also cited as a key deterrent to optimal complementary feeding practices. Majority of the women associated their poor infant and young child feeding practices to poverty.

“The mother has no money to buy nutritious food for their baby and for themselves”. - A community leader, KII

2. Poor Male Involvement in Child Feeding

*Belief and Practice: Men should not be concerned with small matters like child feeding*

Male involvement in infant and child feeding in Kismayo IDP camps is very low. It is generally accepted that the main role of the man of the house should be to provide financial support to the family and not be concerned with simple matters like child feeding practices.

When probed further on what exactly is the role of the man in child feeding, men were in agreement that they have no much control over that and that the wife’s mother and the maternal grandmother are the ones who advice the wife on how to feed the child.
“Thy get information from her own mother and grandmother from her side…..especially if a woman is giving birth for the first time (Uguub- the 1st pregnancy) she has to travel back to her mother’s home when she’s about eight months so that she can deliver in her mother’s house…..we have many young men here with us who’s wife’s are now in Garissa Kenya to give birth” – A father, FGD

3. Competing Activities

From the interviews and from our own observation; many women around Kismayo IDP camps are also involved in hard labor activities like construction and working in the port. They are therefore out of their homes most of the day and would therefore start complementary feeding earlier; and also lack time to optimally feed their children

4. Low Knowledge on Optimal Feeding Practices

Some of the participants argued that they don’t feed their children as expected because they don’t have the necessary health and nutrition education.

“We don’t know much of these. We do what we found our mothers doing….I would like to learn about child feeding and taking care of the baby to prevent diseases…..like I try to be very clean in my house…..If I learn, I can even teach other mothers”. - A mother and also TBA, KII

5. Cultural Briefs around Certain Foods

Some of the women believed that if a child is given eggs and liver, they will be slow to learn how to speak or it can cause deafness.

3.5 Child Health Characteristics

This section presents the status of health for the children aged between 0 and 23.9 months in Kismayo IDP Camps. Among the key areas presented below include: morbidity within the 2 weeks recall period prior to data collection, health seeking behavior and vitamin A and de-worming coverage.

3.5.1 Morbidity - 2 Weeks Recall Period

According to the results, 55.6% of the sampled children had fallen sick within the two weeks recall period which is slightly high since it was above 50%. In addition, the major reported ailments within the recall period among the children was diarrhea at 53.3% which is quite high since almost one in every two children who was sick was reported to have suffered from diarrhea. The prevalence of fever within the recall period was 47.2% while the prevalence of ARI during the same period was 19.5%.
3.5.2 Health Seeking Behavior

In terms of the health seeking behaviour of the caregivers who had sick children within the recall period of 2 weeks before the survey, a majority of caregivers had sought medical assistance with NGO clinic at 40.3%. It was followed by Private clinic at 25.3% where caregivers sought medical help. Though the health seeking behaviour is encouraging, it is worth to note that during the FGDs and KIIIs, it was revealed that the pathways to health seeking was worrying since the health facilities were always the last option.

Table 10: Health Seeking Behaviors

<table>
<thead>
<tr>
<th>Health Service Delivery Point</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGO Clinic</td>
<td>151</td>
<td>40.3%</td>
</tr>
<tr>
<td>Private Clinic</td>
<td>95</td>
<td>25.3%</td>
</tr>
<tr>
<td>Community health volunteer</td>
<td>54</td>
<td>14.4%</td>
</tr>
<tr>
<td>No Assistance Sought</td>
<td>34</td>
<td>9.1%</td>
</tr>
<tr>
<td>Traditional Healer</td>
<td>29</td>
<td>7.7%</td>
</tr>
<tr>
<td>Shop</td>
<td>11</td>
<td>2.9%</td>
</tr>
<tr>
<td>Others</td>
<td>1</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

3.5.3 Vitamin A and De-Worming

Vitamin A deficiency is a major contributor to the mortality of children under five. In Somalia it is estimated that 33.3% of children aged between 6 and 59 months suffer from Vitamin Deficiency, with the South Central recording the highest deficiency of 40.7%. Improving the vitamin A status of deficient children through supplementation enhances their resistance to disease and can reduce mortality from all causes by approximately 23 per cent. Guaranteeing high supplementation coverage is therefore critical, not only to eliminating vitamin A deficiency as a public-health problem, but also as a central element of the child survival agenda. Additionally, periodic deworming for organisms like helminthes and schistosomiasis (bilharzia) can improve children’s micronutrient status. The nutritional impairment caused by schistosome and soil-transmitted helminth infections during childhood has been shown to have a significant impact on growth and development of children.


http://www.who.int/elena/titles/deworming/en/
months should be supplemented with Vitamin A once, while children 12 to 59.9 months should be supplemented twice every year.

The overall Vitamin A Supplementation was found to be 46.4% which is considered below the 80% international thresholds; and out of this, only 9.5% was confirmed through cards. In addition, the results showed that the deworming coverage was 40.1% which is also considered low with 10.85 being confirmed through health card.

**Figure 10: Vitamin A and De-Worming**

<table>
<thead>
<tr>
<th>Vitamin A Supplementation (6 - 23.9 Mo)</th>
<th>De-worming (12 - 23.9 Mo)</th>
</tr>
</thead>
<tbody>
<tr>
<td>36.9%</td>
<td>29.3%</td>
</tr>
<tr>
<td>9.5%</td>
<td>10.8%</td>
</tr>
</tbody>
</table>

3.6.3 Barriers to Proper Health Seeking Behavior

Seeking treatment from hospitals when a baby or even an adult is sick is not popular among the residents of Kismayo in general, and it is even lower among those living in IDP camps. When various key informants were asked about where most people run for help when a baby is sick, most of the responses seemed to follow a specific path of: Prayer, reciting the Quran, looking for traditional home remedies, visiting a traditional healer, buying medicine from local drug shops and when everything does not work they visit a health facility. Most children are therefore take to hospital when they are already too sick.

Generally, traditional healers and use of herbal medicine plays a major role in the in the process of seeking treatment among communities living in Kismayo IDP camps. “Traditional healers are highly respected in this community.” Local Partner, KII.

There is even a very famous and highly respected traditional healer who only specializes in children under-five years of age. “There is a woman here called...(Name withheld for confidentiality purposes)....she treats only the under-fives...most people take their child there, I took my baby there, even other people working here with partners, even ministers they take their children there”. -Community mobilizer, SAF-UK.

Do you help your wife with treatment here? We asked the husband of one the professional most famous traditional healers in Kismayo. “I used to be a track driver in Mombasa, but now I’m not....I have allowed her to do her work........this place is always full in the mornings........this is waiting area, this is where they register and they take their medicine from there (while pointing to the various sections in the homestead of the professional traditional healer)..... even very powerful people bring their children here”

One of the most common traditional practices in the treatment process is daad, meaning burning of the various parts of the body when a baby presents to a traditional healer. “They put a stick
from a specific type of tree in hot charcoal and use it to burn specific places where there’s
disease….the head, stomach, chest like that.” – A man, KII

When we inquired why most people prefer seeing traditional healers rather than going to hospital,
it was evident that most people trust the traditional healers more than they trust the medical
professionals. “…even when a sick child has gone to hospital, they are still taken to a traditional
healer….that is a must” – Community health worker, KII

Issues of cost and poverty also came out as major deterrents to seeking help from the hospital.
“I deal with children under five years….this place is always full, they don’t want to go to hospital
because they don’t have money and for me I don’t charge them…they give me what they feel is
rightful for me in their hearts….I’m doing God’s work…….they cried a lot when I was in Mecca
and some people were spreading rumors that I had died in the tragedy”. - A professional
traditional healer, KII

3.6 Maternal Health Characteristics
The maternal health refers to the health of women during pregnancy, childbirth and the
postpartum period. The WHO notes that, while motherhoods is often a positive and full-filling
experience, for too many women it is associated with suffering, ill-health and mortality
particularly in the developing world. Additional, during this period, a mother is expected to
receive quality health from qualified staffs which helps in reducing the associated risks such as
mortality. Additionally, quality health care during this period is also critical for optimal health of
the baby, while in the womb and also after birth; including reduced health related issues later in
life such as stunting. This section presents the results of the maternal indicators which were
assessed during the survey. These includes: antenatal visits, iron folate supplementation and
facility delivery

3.6.1 Antenatal Care
Antenatal Care (ANC) is periodic and regular supervision including examination of mothers
during pregnancy. It constitutes screening for health and socio-economic conditions likely to
increase the possibility of specific adverse pregnancy outcomes, providing therapeutic
interventions known to be effective; and educating pregnant women about planning for safe birth,
emergencies during pregnancy and how to deal with them. ANC has been shown to play a role in
prevention of maternal deaths and still births given that most occur during the last twelve weeks
of pregnancy

The findings of the survey showed that 68.4% of the mothers had attended antenatal care clinic,
while only 27.5% of the women who reported to have attended the ANC for the recommended
period. Among the major reasons noted for not attendance of ANC included lack of awareness of
the importance of ANC, health facility workers poor attitude, cultural barriers where women are
not required to visit clinics but rather visit traditional birth attendants.
3.6.2 Iron Folate Supplementation

It is estimated that more than 40%\(^47\) of pregnant women worldwide are anaemic, while in Somalia, it is estimated that 49.1%\(^48\) of pregnant women are anaemic, with South Central Zone recording a prevalence of 53.8% which is the highest in Somalia. At least half of this anaemia burden is assumed to be due to iron deficiency, which is estimated as 41.5% in Somalia and 43.9% in the South Central Zone\(^49\). Pregnant women require additional iron and folic acid to meet their own nutritional needs as well as those of the developing fetus. Deficiencies in iron and folic acid during pregnancy can potentially negatively impact the health of the mother, her pregnancy, as well as fetal development. Evidence has shown that the use of iron and folic acid supplements is associated with a reduced risk of iron deficiency and anemia in pregnant women. Daily oral iron and folic acid supplementation is recommended as part of the antenatal care to reduce the risk of low birth weight, maternal anaemia and iron deficiency.

Among the women who had attended the antenatal clinic, the results of the survey showed that 68.4% of them had been given iron at the facility. However, on adherence, the results indicated that only 10.2% of the women who had taken iron supplements for the recommended 90 days and above. Among the major reasons for the poor adherence as noted during the qualitative data collection included: forgetting to take iron, side effects, the mothers reported that they felt better and hence did not think they needed the iron anyway and some said that they didn’t know the benefits of taking iron.

\(^{47}\) http://www.who.int/elena/titles/daily_iron_pregnancy/en/
\(^{48}\) National Micronutrient and Anthropometric Nutrition Survey, FSNAU, Somalia 2009
\(^{49}\) National Micronutrient and Anthropometric Nutrition Survey, FSNAU, Somalia 2009
3.6.3 Facility Delivery

High-quality obstetric delivery in a health facility reduces maternal and perinatal morbidity and mortality\(^5\). A significant proportion of mothers in developing countries still deliver at home unattended by skilled health worker. In Somalia, 42.1% of live births are delivered in health facilities as noted the 2016 National IYCF Survey, with the South Central Zone recording the least proportion of 26.5%. Facilities delivery help in reducing both maternal mortality associated with child birth, and also, neo-natal mortality rate.

The results showed that only 19.8% of the deliveries took place at health facilities; while the rest (80.2%) occurred at home with the assistance of traditional birth attendants. From the results of the survey, it clear that majority of the births are done through the assistance of the traditional birth attendant and it was noted during the qualitative data collection that the community has put much trust and confidence on the traditional birth attendants more than they have on the health workers. In addition, it was noted that some caregivers prefer following the advice from their mothers and/or grandmothers and that following the traditional trends seemed to thrive.

3.6.4 Barriers towards Optimal Maternal Health

1. Over-Confidence with TBAs
   Majority of the mother’s seem to have too much confidence when delivering through the assistance of Traditional Birth Attendant than when doing the same through medical practitioners.

2. Fear for C-Section
   Belief and practice: When you go to hospital for delivery, a C-section must be done urgently. C-section will make you disabled. Most women prefer to give birth at home.

   Interviews with mothers, TBAs and local partners revealed that most women prefer to give birth at home. “Most mothers believe that once they go to hospital, there will be a caesarian section urgently....they don’t prefer C-section.......they believe that if a mother undergoes a C-section they will become disabled...”- Local partner, KII

   There are many risks associated with home deliveries in Kismayo IDP camps that hinder best IYCF practices especially the early initiation of breastfeeding. Some of the women said that the immediate situation immediately after a home delivery cannot make it possible for the mother to give the baby breast milk immediately after delivery.

   “When I was giving birth to my first born, I gave birth at 2pm and up-to to midnight, I was still bleeding....i was very weak...it’s not possible to suckle the baby when you have a lot of pain....the pain and the situation and lack of energy makes it impossible”. – A mother, FGD

3. Fear that Going to Hospital for Deliveries would led them in Contracting Illnesses
   Some of the women believed that if they went to hospital when they are pregnant, they would contract illnesses.

   Another challenge that has started to be seen and is on a rising trend is that of HIV/AIDS among delivering mothers. An interview with one of the professional birth attendant who conducts deliveries from a private clinic in her house in Kismayo revealed that HIV is on the rise especially because of the returnees from the recently closed Daadab refugee camp by the Kenya government.

   “I have been doing this work since the collapse of the Somali government, like 26 years ago......One of the problems I’m seeing these days in delivering mothers is HIV......I test for HIV though currently I don’t have the test kits.......Like there’s one woman recently who tested positive....she has five children and has been married six times......and the baby is also positive......I have not disclosed to her yet....I get like one or two (HIV positive mothers) in about thirty to forty deliveries.” - A Professional TBA, KII

4. Poverty
   When responding to the question of why most women avoid hospital deliveries. A professional traditional birth attendant said.

   “Because of economics (referring to lack of money) ...all mothers do the best they can.....have done this work for 26 year......I don’t charge them...they give me what they feel is right....most of them at a later time....I end up using a lot of money to help them”. – A professional TBA, KII

   “There is a lot of poverty in this community... people don’t have money to do what is right”- A community leader, KII
“A hospital delivery will cost around 40 dollar and IDP persons don’t have this kind of money……they will wait until the last minute of delivery and call a TBA”. – International partner, KII

Similar views were given by one of the famous and highly respected traditional healer who only treats children less than five years. “I deal with children under five years…this place is always full, they don’t want to go to hospitals because they don’t have money and for me I don’t charge them…they give me what they feel is rightful for me in their hearts….I’m doing God’s work……they cried a lot when I was in Mecca and some people were spreading rumors that I had died in the tragedy”. - A professional traditional healer, KII

3.7 Sanitation
Basic sanitation is described as having access to facilities for the safe disposal of human waste (feces and urine), as well as having the ability to maintain hygienic conditions among others. Sanitation is critical to health, survival, and development of the human population, and particularly the most risk population of under-fives. This survey aimed at establishing the household’s access to sanitation facilities i.e. toilets/latrines, and hand washing practices for the caregivers.

3.7.1 Latrine Coverage
The World Health Organization estimates that globally 2.5 billion people do not have access to basic sanitation: they lack safe means of disposal of excreta and waste water. Despite continued efforts to promote sanitation, about 35% of the world's population is still without basic sanitation, while in Somalia about 5 million individuals don’t have access to basic sanitation. This remains a huge health risk, particularly due to the increased risk of diarrhea cases among the under-fives.

Of the households surveyed, 64.5% had access to toilet and/latrine facilities with the majority, 98.9% having access to traditional pit latrine; while 1.2% reported that they use a bucket type of toilet.

<table>
<thead>
<tr>
<th>Table 11: Access to Sanitation Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indicator</strong></td>
</tr>
<tr>
<td>Access to Toilet/Latrine Facilities</td>
</tr>
<tr>
<td><strong>Type of Toilet</strong></td>
</tr>
<tr>
<td>Traditional Pit Latrine</td>
</tr>
<tr>
<td>Bucket</td>
</tr>
</tbody>
</table>

3.7.2 Hand Washing
Hand washing with soap is among the most effective and inexpensive ways to prevent diarrheal diseases and pneumonia, which together are responsible for the majority of child deaths. This behavior is projected to become a significant contribution to meeting the SDGs of reducing deaths among children under the age of five. The WHO advocates for hand-washing with soap at four critical times: after defecation, after cleaning a child, before feeding a child and before

preparing food. Studies have linked the under-5 diarrhea prevalence with poor hand washing practices among the caregivers, which is also attributed to both acute and chronic malnutrition.

On hand washing, the results showed that only 39.5% of all the primary caregivers who knew all the four critical times in which they ought to wash their hands, while 36.1% of the primary caregiver practiced proper hand washing using soap and/or ash and/or sand. Additionally, of the sampled households, 82.9% of them had functional hand washing facility which is encouraging despite the low practice of proper hand washing. Finally, among the critical times for hand washing, the results showed that majority of the respondents rated after visiting toilet as the highest at 91.8%.

<table>
<thead>
<tr>
<th>Table 12: Hand Washing at Critical Time</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indicator</strong></td>
</tr>
<tr>
<td>Hand Washing at ALL 4 Critical Times(^{52}) - Knowledge</td>
</tr>
<tr>
<td>Hand Washing at ALL 4 Critical Times – Practice</td>
</tr>
<tr>
<td>Households with Hand Washing Facilities</td>
</tr>
<tr>
<td><strong>Time of Hand Washing (Practice)</strong></td>
</tr>
<tr>
<td>After Visiting Toilet</td>
</tr>
<tr>
<td>Before Handling Food</td>
</tr>
<tr>
<td>After Cleaning Child's Bottom</td>
</tr>
<tr>
<td>Before Feeding the Child</td>
</tr>
<tr>
<td>Before Eating</td>
</tr>
</tbody>
</table>


\(^{53}\) After Visiting Toilet, Before Handling Food, After Cleaning Child's Bottom, Before Feeding the Child
CONCLUSION AND RECOMMENDATIONS

4.1 Conclusion
This section presents the conclusion drawn from the findings of the survey. The conclusions are made based on the major modules under consideration in this survey and they include: breastfeeding characteristics, complementary feeding, child health, maternal health and sanitation

4.1.1 Breastfeeding Characteristics
The survey results show that the breastfeeding characteristics in Kismayo IDPs remain sub-optimal and quite below the international and national thresholds. In particular, the practice on timely introduction to breastfeeding, exclusive breastfeeding, continued breast feeding at one year and at two years; were all noted to be quite low. Additionally, the practice on colostrum feeding though was also wanting, while introduction to pre-lacteals was quite worrying. However, it is important to notice that there was near universal practice on breastfeeding where almost all children were reported to have ever been breastfed.

On knowledge, the survey concludes that there existed high knowledge in the community on timely introduction to breastfeeding as well as continued breastfeeding and colostrum feeding. Nevertheless, there was low knowledge in the community on exclusive breastfeeding and introduction of pre-lacteals. On exclusive breastfeeding, most of the primary caregivers explain the that exclusive breastfeeding is feeding young children below six months on breast milk, in addition to other liquids such as water and animal milk; without giving semi-solid, solid or soft foods.

Finally, on attitude, the survey found out that majority of the primary caregivers in Kismayo IDP camps had a positive attitude towards timely introduction to breastfeeding, and continued breastfeeding as well as colostrum feeding. However, the existent of several cultural practices prevent them from putting into practice. The survey however noted that there was low positive attitude on exclusive breastfeeding with most caregivers strongly arguing that children less than six months can’t survive on breast milk alone; and hence justifying giving of other liquids and foods.

4.1.2 Complementary Feeding
On complementary feeding, the survey concludes that there exists sub-optimal practices in the community on proper complementary feeding which was quite worrying. According to the survey, among the children aged 6 to 23.9 months in Kismayo IDPs, only three out of ten children meet the minimum meal frequency which is quite low. Additionally, out of ten children aged 6 to 23.9 months, only one child who meets the minimum dietary diversity and this is also noted to be quite low. Overdependence on cereals was noted, while feeding of particularly food groups such as eggs, meat, vitamin A rich vegetables and fruits, and milk products was found to be quite low. The results found that only 3.3% of the children aged between 6 and 23.9 months who meet the minimum acceptable diet; while consumption of iron rich and iron fortified foods was also found to be relatively low. All these complementary feeding indicators points to sub-optimal feeding practices in the community which is considered worrying and could have a direct impact on both chronic and acute malnutrition. It was also noted that bottle feeding using bottles with nipples was quite high in the community and high diarrhea prevalence in the community could be probably attributed to use wide usage of these bottles.
4.1.3 Child Health
The prevalence of morbidity among the children aged 0 to 23.9 months in the community was quite high, where almost three in every five children were noted to have been sick two weeks prior to the survey. The most prevalent diseases in the community during the same period was diarrhea where the results showed that in every two children who were reported sick, one of them was suffering from diarrhea. On vitamin A supplementation, the results of the survey showed that approximately one in every two children aged 6 to 23.9 months had been supplemented within the past six months preceding the survey; which is still considered low. Finally, only two out of every five children aged 12 to 23.9 months who were reported to have been dewormed within the recall period; and this is still considered poor.

4.1.4 Maternal Health
The Antenatal care attendance in the 1st visit was quite encouraging at 68.4%; though, the coverage at the recommended four times was quite low at 27.5%. The low ANC coverage for the recommended four times would probably be attributed to the late presentation for ANC where almost four out five mothers who presented for ANC for the first time doing so on the second or third trimester. On iron folate supplementation, the results indicate that about seven of every ten women who present for ANC were given the supplements which is encouraging. However, adherence to iron was found to be quite low with only one in ten women who have received iron reporting that they took the supplements for the recommended 90 days and above. The major reasons behind the low uptake of iron were low awareness on importance of iron, forgetfulness and side effects. Finally, the results showed very low facility delivery with only two out of five deliveries taking place at health facilities; with the rest taking place at home with assistance of TBAs.

4.1.5 Sanitation
The coverage of latrine facilities in Kismayo IDP camps was moderate with three out of five households reporting that they have sanitation facilities which are in use. Additionally, it was observed during the survey that about four out of every five households had a functional hand washing facility. Finally, hand washing at critical times was noted to be low with only two out of every five primary caregivers reporting that they practice proper hand washing at critical time.
### 4.2 Recommendation

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Agency Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maximizing on TBAs, Elderly Women and Maternal Grand Mothers; and Fathers as Key Decision Makers</strong></td>
<td>Implementing Partners in Kismayo and MoH</td>
</tr>
<tr>
<td>- Since mothers, older women and maternal grandmothers were identified as the primary sources of infant and young child feeding information; they should be mobilized so that they can take the lead in teaching their family members on best child feeding practices.</td>
<td></td>
</tr>
<tr>
<td>- Mobilize the older and the more experienced and respected mothers and traditional birth attendants in the community to mentor new mothers on best IYCF practices and techniques and to help reinforce the messages given by the community health workers.</td>
<td></td>
</tr>
<tr>
<td>- Since men are usually the key decision makers in most homesteads and they were cited as potential barriers to best IYCF practices among women in Kismayo IDP camps, they should be involved and trained so that they can be good ambassadors and promoters of best IYCF practices.</td>
<td></td>
</tr>
<tr>
<td>- It is recommended that the implementing partners working in Kismayo IDP camps, especially in the area of health and nutrition should map out all existing traditional birth attendants in the area. This should be followed by offering training to them and designing an approach in which they could be used as agent of information sharing with the mothers in the community.</td>
<td></td>
</tr>
<tr>
<td><strong>Signing of International Code of Marketing Breast Milk Substitutes</strong></td>
<td>Nutrition cluster partners and Other Implementing Partners in Kismayo and MoH</td>
</tr>
<tr>
<td>- Implementing partners should work closely with Jubaland State government and MOH to ensure signing of the WHO International Code of Marketing of Breast-milk Substitutes. The code stipulates that there should be absolutely no promotion of breastmilk substitutes, bottles and teats to the general public; and that neither health facilities nor health professionals should have a role in promoting breastmilk substitutes; and that free samples should not be provided to pregnant women, new mothers or families.</td>
<td></td>
</tr>
<tr>
<td><strong>Jubaland State Infant and Young Children Feeding Strategy</strong></td>
<td>Nutrition cluster partners and Other Implementing Partners in Kismayo and MoH</td>
</tr>
<tr>
<td>- Nutrition cluster partners and other implementing partners should work with the Ministry of Health to develop an IYCF strategy and a costed plan for Jubaland state as soon as possible.</td>
<td></td>
</tr>
<tr>
<td>- The recommended IYCF strategy should also include an IYCF communication strategy.</td>
<td></td>
</tr>
<tr>
<td><strong>Facility and Community Level Health and Nutrition Education; and care group model</strong></td>
<td></td>
</tr>
<tr>
<td>- Intensify both facility and community level health and nutrition education and ensure that the IYCF component is part of the education module. In addition, breastfeeding modules such as breast milk expressing should also be explored as a module of community education. Key community and opinion</td>
<td></td>
</tr>
</tbody>
</table>
leaders should also be involved such as religious leaders, clan elders, TBA and elderly influential women
- Design simple cards with short and straightforward key messages in Somali language on key IYCF best practices at every stage of the baby and provide these to the mothers of infants and young children to act as quick reference guides and reminders of best IYCF practices
- Organize regular mass media campaigns on appropriate IYCF practices to run across all radio and TV stations in Kismayo and erect billboards on strategic points in town and in IDP camps
- Produce small brochures with messages on benefits of good IYCF practices and consequences of poor IYCF practices that can be distributed in the IDP camps and given to mothers during health and nutrition education at community and facility level
- Identify, train and deploy an IYCF specialist who will work as champion and behavior change agents for IYCF practices across all IDP camps in Kismayo
- The partners working in Kismayo should also standardize their messages to the community to avoid provision of contradictory information to the community
- It is also recommended that the care group model should be initiated and implemented in Kismayo IDP camps, and if possible even within the Kismayo urban areas
- There is need to include an enhanced capacity building plan for implementation of IYCF, especially capacity in counselling and behavior change communication

**Food Security**
- Due to the poor complementary feeding practices in the IDPs; it is recommended that there is need for food security interventions in the IDPs mostly targeting the under-five children which should help in improving the dietary intake and the feeding frequency.
- In addition, there is an urgent need to sensitize the community about food diversification and its importance. This could be reached through sensitizing the key community members, who in turn would be expected to sensitize the community. Other forums to promote food diversification would be through mass media, religious and community forum and through the traditional birth attendants.
- Conduct a market survey around the markets surrounding the IDP camps in Kismayo with an aim to identifying the key foods that are available during each season that can be procured cheaply so as to help diversify child’s diet.

**Morbidity and WASH**
- Due to the high prevalence of diarrhea in the community, coupled with a good health seeking behavior; hence it recommended that the facilities should be stocked adequately with the zinc supplements and the ORS packets
There is need for a campaign on Vitamin A and deworming to be conducted in the IDP camps. This will help improve the coverage of the two which is quite low. The campaigns should target all the children who are eligible, and can work as a short term strategy.

In the long term, due to the low Vitamin A Supplementation and Deworming Coverage, it is important for the MoH with support from the implementing partners to develop a strategy of expanding the EPI Program so that it can maximize the chances of reaching the majority of children who are not vaccinated. This could be through integrated outreach services.

The MoH with technical assistance from the implementing partners should strengthen the documentation of vaccinations. A significant proportion of the children did not have health cards and vaccination status was based on recall. Documentation of vaccination on cards is important to prevent unnecessary re-vaccination and monitoring of coverage. All vaccinations given during campaigns should be documented. Lost cards should be replaced as soon as possible.

The partners working on WASH should strengthen the on-going WASH program in the camps in-order to reinforce water, hygiene and sanitation practices to minimize the prevalence of diarrheal diseases including health education to educate the community on domestic treatment of drinking water.

Maternal and New-Born Child Program

- The health partners working in the IDPs should explore the possibility of initiating a maternal and new-born child program in the IDPs with an aim of addressing various gaps noted such as: low uptake of family planning, low ANC uptake, low facility and skilled deliveries e.t.c.
- As a way of increasing hospital deliveries, mothers can be provided with gift packs when they deliver in hospitals and also some little money for any TBA who refers a mother to deliver in the hospital.
- To reduce the fear by women on hospital delivery; it is recommended that the health partners could plan to have “Delivery Champions i.e. women who deliver successfully and safely through facilities”. The “Delivery Champions” could be used to help propel and also acts as agents of safe delivery to the community.
- The health partners are also recommended to initiate the “safe motherhood model” where the TBAs are used to promote maternal health. Through the model, the TBAs could be trained on basic maternal health packages and recruited to work with as health community workers (safe motherhood promoters) with a monthly stipend.
- It is also recommended that the health partners could work with the key gate keepers in the IDP camps including the religious leaders in sensitizing the men on maternal health.
- Empower and encourage community health workers to work closely with women of reproductive age in Kismayo IDP camps to start small saving groups in the camps that they will serve where they would

Implementing Partners in Kismayo and MoH

Health and nutrition Partners in Kismayo and MoH
collect little contributions from women that can used in case of emergency deliveries. That way they take care of their own health and can discuss IYCF issues during their group meetings and enhance sustainability

- To improve the low uptake of iron-folate supplementation; it is recommended that the health partners and MoH should initiate a process in the community of sensitizing the pregnant mothers on the importance of the supplements. In addition, the facilities should at all times be stocked with the supplements.

**HIV/AIDs**
- A KII with one of the prominent TBA in Kismayo revealed that she has been testing cases which are HIV positive; due to this it is recommended the following:
  - The health implementing partners and MoH should sensitize the community on the importance of HIV/AIDs testing
  - The health facilities within the IDP camps should be empowered to conduct screening of HIV/AIDs at the facilities and document the data; which could inform a detailed HIV/AIDs survey in the area to estimate the prevalence

**Monitoring and Evaluation**
- Strengthen the already existing Partners Somalia monitoring & evaluation system and feedback loops to ensure that information is circulating fast enough from the community health workers to key decision makers in the project
- Plan for constant reviews and assessments (at least quarterly) with members of the community and the community teams to learn and identify areas of improvement and to celebrate successes
- There is need for a Link Nutrition Causal Analysis (NCA) to be conducted in the IDP camps. This will help unearth the root causes of malnutrition in the area

**Project Sustainability Plan**
- Consolidate all the sustainability plans and develop a clear and written sustainability plan and exit strategy for the project

| **Health partners in Kismayo and MoH** |
| **SAF UK and other implementing partners.** |
ANNEXES

Annex 1: Survey Questionnaire

ICA

Questionnaire.xls

Annex 2: FGD Guides

FGD Guides.zip

Annex 3: KIIs

KII Guides.zip

Annex 4: Calendar of Local Events

<table>
<thead>
<tr>
<th>Month</th>
<th>2014</th>
<th>Event</th>
<th>Age</th>
<th>2015</th>
<th>Event</th>
<th>Age</th>
<th>2016</th>
<th>Event</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td></td>
<td>BILOW SANADKA</td>
<td>21</td>
<td></td>
<td>BILOW SANADKA</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>February</td>
<td></td>
<td>JILAL</td>
<td>20</td>
<td></td>
<td>JILAL</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>March</td>
<td></td>
<td>MALINTA HAWENKA</td>
<td>19</td>
<td></td>
<td>MALINTA HAWENKA</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>April</td>
<td></td>
<td>GU , RAINY</td>
<td>18</td>
<td></td>
<td>GUU, RAINY</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May</td>
<td></td>
<td>MALINTA DHALAYARADHA</td>
<td>17</td>
<td></td>
<td>MALINTA DHALINYARADHA</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>June</td>
<td></td>
<td>SOM, FASTING</td>
<td>16</td>
<td></td>
<td>SOM, FASTING</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>July</td>
<td></td>
<td>EDUL-FITR</td>
<td>15</td>
<td></td>
<td>EDUL-FITR</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>August</td>
<td></td>
<td>WAQTIGA LAGOSTO BERTA (harvesting period)</td>
<td>14</td>
<td></td>
<td>WAQTIGA LAGOSTO BEERTA (harvesting period)</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>September</td>
<td></td>
<td>EDUL-ADHA</td>
<td>13</td>
<td></td>
<td>EDUL-ADHA</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>October</td>
<td></td>
<td>MUHARAM, HAAJ,ASHURA</td>
<td>12</td>
<td></td>
<td>MUHARAM, HAAJ,ASHURA</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>November</td>
<td>DEYR (rainy season)</td>
<td>23</td>
<td></td>
<td>DEYR (rainy season)</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>December</td>
<td>MOULID</td>
<td>22</td>
<td></td>
<td>MOULID</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Annex 5: Sampled Clusters

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Cluster Number</th>
<th>IDP Camp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Halgan</td>
<td>1</td>
<td>Farjano Camp (Dalxiska)</td>
</tr>
<tr>
<td>Tawakal 3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Aruriyo</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Tawakal 2</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Hamdi 3</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Hamdi 2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Wardheer</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Tawakal 1</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Najax</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Hilaac</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Xaaji bolo</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Barawe 1</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Waamo 1</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Waamo 2</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Hamdi 1</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Nageeye</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Baad</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Borow</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Farhan</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Towfiiq</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Sagal</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Burashadley</td>
<td>22</td>
<td>Fanoole Camp</td>
</tr>
<tr>
<td>Marino 1</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Galley</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Marino 2</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Mudul</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>Jabarti 1</td>
<td>27</td>
<td>Alanley</td>
</tr>
<tr>
<td>Jabarti 3</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Galbeed</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>Nasib</td>
<td>30</td>
<td>Shaqalaha</td>
</tr>
<tr>
<td>Hilaac 1</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>Sakuye</td>
<td>32</td>
<td>Gulwade</td>
</tr>
<tr>
<td>Camp A</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Camp B</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>Camp C</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>Camp Galleyr</td>
<td>36</td>
<td></td>
</tr>
</tbody>
</table>
Annex 6: Map of Kismayo
Annex 7: Map of Kismayo IDPs