

SOMALI KNOWLEDGE ATTITUDE & PRACTICES STUDY (KAPS)

INFANT AND YOUNG CHILD FEEDING
AND
HEALTH SEEKING PRACTICES

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To you all we say **“Mahad Sanid”**



Consultancy Team:

Wambui Kogi-Makau - wkogimakau@bjkogi.com

Rose Opiyo - roseopiyo04@yahoo.co.uk

United Nations Food and Agricultural Organisation/ Food Security Analysis Unit, PO Box 1230, Village Market, Nairobi, Kenya

<http://www.fsasomali.org>

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Abbreviations and Acronyms

ARI	Acute Respiratory Infection
CIC	Council of Islamic Courts
CHWs	Community Health Workers
CNWs	Community Nutrition Workers
EBF	Exclusive Breast Feeding
FGD	Focus Group Discussions
FSAU	Food Security Analysis Unit
GAM	Global Acute Malnutrition
GHC	Gedo Health Consortium
H/F	Health Facility
KABP	Knowledge Attitude Behaviour and Practices
KAPS	Knowledge Attitude and Practices Study
IGAs	Income generating activities
IGAD	Inter-governmental Authority on Development
INGO	International non-governmental organizations
IPC	Integrated Food Security and Humanitarian Phase Classification
IYCF	Infant and Young Child Feeding
MCH	Maternal Child Health
NEZ	North East Zone
NWZ	North West Zone
OFDA	Office of Foreign Disaster Assistance (USAID)
ORS	Oral Rehydration Solutions
SAM	Severe Acute Malnutrition
SCZ	South and Central Zone
STI	Sexually Transmitted Infections
TBA	Traditional birth attendants
TFG	Transitional Government
TIPs	Trials of Improved Practices
TNG	A transitional National Government
TOT	Trainers of Trainers
U5MRs	Under Five Mortality Rates
UNDP	United Nations Development Programme
UNICEF	United Nations Children Fund
USAID	United States Agency of International Development
WAWA	We are Women Activists Network

EXECUTIVE SUMMARY

Since June 2000, the USAID Office of Foreign Disaster Assistance (OFDA) has supported the Nutrition Surveillance component of the FSAU to provide comprehensive understanding of the impact of the food security situation on nutritional status of the population of the country. FSAU has been conducting nutrition assessments in Somalia for the last seven years. During this time consistently high levels of acute malnutrition and under 5 mortality rates (U5MR) have been reported in many parts of South and Central Somalia. These rates remain high even in years of improved food production (both agriculture and livestock), which implies an overall improvement of food security at household level. In addition, access to health care is limited and humanitarian agencies' efforts to increase access are further hampered by re-current insecurity situation in the country. Available data on care practices of young children also indicate alarming practices in breastfeeding, complementary feeding and treatment of childhood illness.

The purpose of the knowledge attitude and practices study was therefore to enhance an understanding of the contribution of poor child care practices to malnutrition (both acute and chronic) and subsequently provide key recommendations for simple and effective responses. Specifically, the study aimed at determining:

- 1) Knowledge attitude and practices on infant and young child feeding
- 2) Knowledge attitude and practices on health seeking and treatment during illness
- 3) Obstacles faced in implementing preferred care practices in both feeding and health seeking activities.
- 4) Potential impact of conflict on care practices and identify if knowledge, attitude and practices behaviours of caregivers have changed from the pre conflict period
- 5) Key simple and achievable recommendations to address identified issues

Data was collected from all the three zones: North West (NWZ), North East (NEZ) and Southern Central Zone (SCZ). Sample selection of the study participants was based on livelihood zones and wealth groups. Five key livelihoods (pastoralists, agro-pastoralists, riverine, urban and coastal communities), were represented by respondents of elderly women and women of child bearing age, men, service providers (traditional birth attendants, traditional healers, community health workers and health facility staff), community and religious leaders, representatives of women's groups as well as of international and local non-governmental organizations. Case studies were also conducted of pregnant women and malnourished children.

Data collection methods involved a review of available literature, use of various qualitative data collection techniques including focus group discussions (FGD), rapid profiling, proportional piling, key-informant interviews, case studies, observations and strategic conversations. Overall, 56 FGD were conducted, 41 rapid profiles compiled, 17 key informant interviews and eight case studies conducted. The information was analysed in a triangulated context. Efforts were made to ensure quality as data were gathered with the assistance of trained enumerators aided with supportive supervision and using pre-tested data tools.

Summary Findings

Pre-and post-natal Care,

There is no consensus on special diets for pregnant women and food reduction to control the size of the baby was practised in the 3rd trimester by some women. Some food prohibitions occur in negligible levels, particularly among the pastoral, agro-pastoral and riverine communities affecting specifically honey, lamb meat and ghee. Overall, women do not effectively access nutrition knowledge from health facilities due to their low attendance at the MCH. Traditional nutrition knowledge from their traditional social network including traditional healers and sheikhs form the basis of knowledge in child feeding and health seeking behaviours.

The traditional post-natal care of 40-days after delivery (*Umol Bah*) encouraged mothers to eat and breastfeed well in the 1st month after delivery. This tradition is however diminishing due to war, disintegration of families and lack of resources to take care of lactating mothers at home.

Breast Feeding

The study found that knowledge; attitude and practices on breastfeeding are mainly controlled by culture through maternal grandmothers and other elderly women in the community, and are generally unsatisfactory. Most children are put on breast 2-3 days after delivery and the colostrums is not fed to children by majority of mothers as it is considered heavy, thick, course, dirty, toxic, and harmful to children's health. Breastfeeding is however acceptable to all mothers and their networks and almost all children breastfeed on demand.

Exclusive breastfeeding (EBF) does not exist in most parts of South Central Zone (SCZ). To majority of the caregivers and their social support network, EBF means feeding children on breast milk and water with some sugar alone without any soft or solid foods. Breastfeeding continues alongside complementary foods because breast milk alone is believed to be inadequate for the child. The agreed and acceptable total duration of breastfeeding is 24 months, which is based on the Koran verse 2:233 surah al-BAQARAH –T.J. Irving: *“Mothers should breastfeed their children two full years, provided they want to complete the nursing”*

Lack of knowledge, inappropriate beliefs and very close birth spacing before the child reaches two (2) years are the major obstacles to successful breastfeeding. Annual celebrations of World Breastfeeding Week had some impact on change on belief and behaviours on breastfeeding in parts of urban livelihood zones where these celebrations have taken place.

Complementary Feeding

Overall, the study found that there was inappropriate or lack of knowledge on proper feeding practices in all livelihood zones. Early introduction of complementary foods was reported from all livelihood zones, where, from birth to three (3) months, children are mainly fed on cow or goat milk in addition to breastfeeding. Soft food in form of potatoes and biscuits (in agro-pastoral, urban and riverine livelihood zones) or porridge (in all livelihood zones) are introduced to most children after the 3rd month of life. In households where have difficulties accessing milk, the milk is often replaced with tea or porridge after the third month.

For all regions and livelihoods, milk was found to be a fundamental constituent of complementary diets. However, poor accessibility at the household level among agro-pastoralists, riverine and urban poor populations is a major challenge and stumbling-block to offering it as part of desired complementary meals. Lack of variety in complementary diets was also noted. Most children in the riverine and agro-pastoral zones mainly feed on cereal-based, less nutritious

diets with no fruits or vegetables. Meat consumption among children was reportedly minimal except for pastoralists' and urban children whose family diet frequently had some meat.

There was no special dietary attention or snacks for children after 24 months of age. All children were reportedly expected to feed like adults during normal adult mealtimes. Most children also fed on tea before the main meal. This not only reduces the children's stomach capacity to eat more food, but also interferes with their appetite for solid foods. Tea also interferes with absorption of iron from iron-rich foods, hence may aggravate the anaemia situation in children where malaria and intestinal worm infestations already exist. It was encouraging to note that most caregivers practise responsive feeding to overcome refusals to feed. Some of the responsive feeding actions such as leaving the child alone when he refuses to feed could however lead to reduced food intake in children.

Reports on food prohibition for children was not commonly reported except for breast milk alone, liver and kidney meat due to the belief that such practices may cause deadness (*Dhagol*) in children. During illness, efforts are made by caregivers to ensure that children get special diets for quick recovery, and foods which are believed to aggravate the illnesses, particularly protein foods are often withheld. There were no reports of with-holding breastfeeding during illness. Certain foods are also used for non-dietary purposes in traditional treatment of childhood illnesses. For example, vitamin A rich foods of goat milk and liver are traditionally used to treat measles. Goat milk is used to keep the oesophagus open, or for washing the child with measles while liver or blood is smeared on the child's body during measles infection.

Water and Sanitation

Access to safe water for domestic use was noted as of major concern among most communities in South and Central Zone and North East Zone. Most households were found to rely on water from unprotected sources, yet water treatment at home does not take place for majority.

Health Seeking Behaviours

Diarrhoea and ARI are the most widespread childhood illnesses in the three zones and across all livelihoods affecting children of all age groups. Other illnesses found were tonsillitis, intestinal parasitic infestations, otitis-media, and skin and eye infections. Measles and whooping cough are common immunizable diseases among children as well as malaria; the latter common in the SCZ but somewhat localised in specific areas in NEZ and NWZ. These constitute the top-ten childhood illnesses. Overall, SCZ had more health problems compared to NEZ and NWZ. Stomach-ache among infants in the first 3 days of life is associated with the water and sugar that children are fed on soon after birth.

Poor hygiene and sanitation, contaminated water and mosquitoes are the three reported causes of illnesses in all livelihood zones. In the riverine, flooding and poor sanitation during rainy season were noted as the main causes of poor health in children. All illnesses which are not well understood, including strong malaria, are believed to be caused by the evil eye (*Wal koraad*).

Most health seeking responses are based on the traditional knowledge, beliefs and the perceived causes of the specific illnesses. Across all livelihood zones, these responses tend to follow a generalized pattern of: Prayer → Traditional home health practice → Traditional healer → Buy medicine → Get Sheikh to pray → Health facility. The first step in health seeking response for most caregivers is prayer or reading the Koran.

Across livelihoods in the three zones, management of pneumonia involve burning with a hot metal in tandem with a massage around the chest area. Treatment of diarrhoea often involves increased intake of fluids in which urban communities tend to administer purchased ORS while the rest may offer food based juices, water with sugar, if available and sour-fatless milk (*garoor*).

Safety of the water used by the majority of caregivers in making the mixers is questionable. Camel milk is consumed as a cure for whooping cough. In Southern and Central Somalia, a drop of donkey milk is used in parts of Hiran, Bakool and Bay to treat whooping cough.

Traditional healing and use of herbal medicine plays a major role in the management of illnesses among most communities in all livelihood zones. Some of the traditional practices such as burning parts of the chest, and lopping of uvula (with no infection prevention) are also harmful. Use of modern medicine is considered as a last option after prayer and traditional treatments have failed for majority of caregivers who live farther away from urban areas and health facilities. Modern medicine is mainly accessed through purchase from local chemists and shops in urban areas.

Recommendations

The study recommends the need to conduct a participatory dissemination workshop for KAPS findings to achieve buying in and hence ownership of its findings and active involvement of key community influence/change agents (religious, traditional and other local community leaders, NGOs, TBA and CHWs), caregivers and their critical networks, in generating solutions for the challenges KAPS has documented. Specific recommendations on breastfeeding, complementary feeding and health seeking behaviours are however outlined below:

Breast Feeding

- There is need for agencies to train, encourage and support Community Nutrition Workers (CNWs) and TBA in all zones and regions to promote positive breastfeed practices through Trials of Improved Practices (TIPS) techniques that involve counselling on recommended breastfeeding practices and follow-up visits to assess the progress made and confirm the outcome of the trials.
- The agencies should also build capacities of Sheikhs, TBA and other traditional leaders to promote appropriate knowledge and practices on breastfeeding.
- Maternal grandmothers, elderly women, TBA, men and other social support networks for mothers should be targeted with specific breastfeeding messages through radio broadcasting and posters.
- Annual celebration coverage for the World Breastfeeding Week should be encouraged, supported and expanded to include most rural areas in all zones rather than focussing in urban areas only as has been the case in the past.

Complementary Feeding

- There is need for agencies to train, encourage and support CNW in all zones and regions to promote positive complementary feeding practices through Trials of Improved Practices (TIP) by age which involves counselling and follow-up visits with mothers on recommended complementary feeding practices. The TIP activities should also include recipe trials using nutritious local foods including fruits and vegetables.
- Radio messages, TIP sessions and posters should be widely used by health and nutrition agencies in all regions and zones as channels of communicating messages on nutritional needs of all children below the age of 5 years and the need to continue feeding children well and frequently even after 24 months of age with nutritious snacks in between the main meals. The messages passed should also include the dangers of feeding children on tea frequently. Use of nutritious snacks to replace tea before the main meals should be promoted through these messages.

Health Seeking Recommendations

- There is need for agencies implementing water and sanitation activities to intensify promotion of good hygiene and sanitation to control most of the reported childhood illness. Promotion of safe drinking water through simple, acceptable, affordable and effective domestic water treatment methods at household level is also important.
- There is need to build capacities of caregivers on home-based care and management of common illnesses, especially in pastoral livelihood zones where health facilities are inadequate.
- There is need to build capacities of the caregiver's first contacts (Sheikhs, traditional healers and local chemists) during children's illnesses on recognition and role of referral of common childhood illnesses to health facilities. These first contacts should be encouraged to refer children to the nearest health facility immediately they receive them for treatment.
- Conduct public campaigns for increased utilization of health facilities with collaboration and integration of traditional healers and TBA.
- Use of communication techniques such as peer education, drama, songs, posters, games and demonstrations should be encouraged among children in primary schools to enhance community sensitization on health and nutrition issues through Child-to-Child or Child-to-Community approaches. The Child-to-Child approach is currently implemented in most parts of Somalia by UNICEF through schools and youth groups. It is hoped that this would counteract negative cultural programming in children.
- There is need for further sensitization on polio in parts of SCZ where polio is mainly treated using traditional methods.

Long Term Recommendations

- It is important to incorporate religious leaders and traditional healers into modern health care systems.
- There is need for research on the "Role of traditional healing and herbal medicine to health situation in all Somalia"
- It is important to consider a more permanent solution to control the floods in the riverine that originates from the Ethiopia through construction of dykes and dams. This will reduce seasonal displacement of families due to floods, as well as improving the overall hygiene and sanitation in the affected areas and food security situation.
- There is also need to expand on the existing health facilities in terms of supplies and adequate staffing and to train more health staff to be based at the health posts and MCH.
- Health agencies should try and establish effective ways to discourage harmful practices such as burning, cutting off haemorrhoids '*babasiri*' and lopping of uvula with no infection prevention measures.
- Health agencies should consider providing a wider coverage of pre- and post-natal care to reduce morbidity and mortality in mothers and children.
- There is need to create a general improved nutrition and health environment by pushing for establishment of nutrition policy that will be vibrant in influencing nutrition interventions

CHAPTER 1: INTRODUCTION

1.1 Background to Study and Justification

Nutrition interventions have been acknowledged as being among the most effective preventive actions for reducing mortality among children under the age of five years. Of these actions, exclusive breastfeeding ranks first; being estimated as having the potential to prevent 13% of all deaths in this age group while complementary feeding, water, sanitation and hygiene would reduce 6% and 3% respectively (Lutter, 2003).

Breastfeeding

Breastmilk is undoubtedly the best for a baby and should be given on demand and exclusive of any other fluids or foods for the first six months of a baby's life. For successful breastmilk production, besides assisting in establishing a bond between baby and mother, it is important to start suckling the baby within the first hour of birth. Suckling should then continue, on demand, to enhance the efficiency of let-down and for optimised breastmilk production. Integral to this is the production and consumption of colostrum.

Complementary Feeding

Complementary feeding has been defined as the period during which foods or liquids are provided along with continued breastfeeding and hence it is the term used to describe any nutrient-containing foods or liquids other than breastmilk that are given to young children during the dietary transitional period marked by the from period of complementary feeding (Allen and Gillespie, 2001).

Inappropriate feeding practices have been acknowledged as major causes of the onset of malnutrition in young children. This is the same period when repeated infections that play havoc with child's appetite while raising nutrient needs are experienced. From the age of six months, when breastmilk alone is no longer sufficient to meet child's nutritional requirements, infants enter a particularly vulnerable period during which they make gradual transition to consumption of family diet. In tandem, the incidence of malnutrition rises sharply between the ages 6-18 months. Late introduction of complementary feeding, complementary foods of low nutritional quality given in insufficient amounts all play apart in the aetiology of malnutrition among young children. Also, a child's gastric capacity plays a role in that it limits the amount of food that a young child can consume at each meal thus children require frequent feeding. According to SCN (2003) children in age group 6-8, 9-11 and 12-25 months, in addition to breastfeeding, require to be fed 2-4, 3-4 and 3-4 times a day respectively, with 1-2 snacks.

Breast 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 Lutter (2003) serve as benchmarks against which appropriate feeding knowledge and practices are gauged with attitude fitting in an explanatory capacity.

Best practices in infant and young child feeding are perceptualised as:

1. Having a written breastfeeding policy
2. Training staff in care of mothers in skills necessary to implement the policy
3. Supporting mothers to initiate breastfeeding
4. Encouraging exclusive and continued breastfeeding

5. Providing welcoming atmosphere for breastfeeding families
6. Promoting cooperation between health care staff, breastfeeding support groups and the local community
7. Inform all pregnant women about benefits and management of breastfeeding.

1.2 Study Rationale Purpose and Objectives

KAPS rationale – check font size

Since June 2000, the USAID Office of Foreign Disaster Assistance (OFDA) has supported the Nutrition Surveillance component of the FSAU to provide comprehensive understanding of the impact of the food security situation on nutritional status of the population of the country. The FSAU recognizes that nutrition is influenced by other factors beside food security (i.e. the public health, the social care environment for women and children) and thus retains slight autonomy of the unit.

General recommendations

1. Create awareness, knowledge and skills in breast and complementary feeding and health seeking among caregivers and their networks
2. Increase access and confidence in modern health care particularly in public health systems
3. Dilute belief in traditional healing and culture
4. Address issue of too-soon-too-close pregnancy syndrome
5. Increase access to water and make it safe
6. Address sanitation and hygiene practices with the aim of improving them
7. Reduce maternal workload and responsibilities that take up childcare time.
8. Formulate a comprehensive nutrition policy to give nutrition a voice, ensure it is given the attention it deserves while improving visibility of nutrition within the Ministry of Health policies.

General but relevant to IYCF and health seeking

Find and implement innovative strategies for empowerment of women for poverty reduction and economic enhancement through probably establishment and development of income generating activities. Also on of broader political alliances based on more institutionalised systems and less violence has nonetheless seen establishment of Somaliland in the Northwest and since 1998 of Puntland in the Northeast. Both have public administrations that fulfil some basic governmental

functions

Box 1: Snapshot of Political Landscape

The political landscape of Somalia is summed in the following quotation:

“Since the overthrow of the Siad Barre government in 1991, the resultant collapse of the government structures and destruction of infrastructures, the ensuing civil war has brought about widespread displacement and severe loss of life. Parts of Somalia remain beset by conflict and division, prone to drought and vulnerable to flood. It has some of the worst child and maternal survival indicators in the world. Somalia has little or no authoritative government, high levels of criminality, sporadic armed conflict, an absence of economic recovery, endemic humanitarian needs, minimal health care and education and population displacement” UNICEF (2004, p.2).

A transitional National Government (TNG) was set up in 2000 that is still to make real impact in consolidating the country into a cohesive whole. Nonetheless, the northern areas of the country enjoy safety and security with the Northwest Somaliland having made remarkable progress towards providing law and order hence securing tenuous peace (UNICEF, 2004). Parts of central and southern Somalia are developing levels of governance, security and economic activity that reflect a more stable environment. The clan continue to provide essential level of physical and social security to many Somali households, despite its being a powerful force in contributing to unstable alliances, diffusion of power and communal conflict over scarce resources. At grass-root level, elders and other community leaders wield some political power and fill the vacuum in governance structures at that level (UNICEF, 2004 p.3).

Gender discrimination is deeply rooted and remains a formidable barrier to women’s participation in decision making processes including access to, and control of resources (UNICEF, 2004 p.3).

1.4 Methodology

Recruitment and training of field assistants

The generic field greater team comprised a minimum of six people and a maximum nine who were then put into sub-teams comprising three people of whom one served as a moderator, recorder/team leader and the third person assisted and served as a content control person to ensure that all critical pieces of information were collected.

The team members were identified and selected by the FSAU staff on the ground with assistance of staff from partner organizations. To confirm their eligibility, the consultant gave them written and oral assessments. Those found to be inadequate were replaced by others who went through the similar assessments. For the oral part, they were gauged during the session on self introduction, expression of expectations and formulation of the rules that guided the team during the whole exercise. For the written part, each did a short write-up on a selected topic that was relevant to the study (e.g., brief write-up in English on the impact of conflict on breastfeeding in the region (the region was specified; their own home regions). This made it possible to gauge their capacities and subsequently was used to allocate them positions in the team.

The training of the field assistants took one and half days apart from Baidoa where it took 2.5 days. The extra day was used on pretesting and reviewing of the KAP tools as this was the first location assessed.

Facilitation Techniques

A number of facilitation techniques were used to optimise on learning, they included:

- Lecturette-inform of structured and orderly presentation by a facilitator (consultants) that aimed at imparting knowledge. It allowed for exchange between the learners (field assistants) and the facilitators, integrated suggestions, questions and responses.
- Discussion across peers (field assistants)
- Role play that was used to give the field assistants an assimilated hands-on experience with the tools.
- The pretest process was used to give further hands-on experience at Bay while at Buale, Belet-Weyne, Gedo and Bakool a similar process was used but not for pretesting.
- Brainstorming was used in generating ideas and examples as needed in the training process.

Climate Setting

Ground rules set by data collection teams to optimise efficiency in training and data collection included: punctuality, responsibility, and respect for leadership, completion of expected activities, switching off mobile phones during training and data collection and commitment to the whole exercise to ensure quality work.

Picture 1: Training KAPS enumerators
[Picture by Halima Nasra]



Content of the Training

The training aimed at ensuring good understanding and instilling skills for effective and efficient administration of the KAP tools. Its contents included the background and objectives of the study, techniques in collecting data; use of a checklist in FGD, Key Informant interviews and profiling with small groups as well as use of proportional piling technique in collecting information on proportions or percentages. It also addressed the issue of leading and managing group discussions (application of group dynamic techniques in management of dominating and the inhibited group participants) and ethics in research that emphasised the rights of respondents (right to participate of their own free will, to withdraw from participating at anytime they desire, to respond to the questions that they wish to, the issue of confidentiality).

The data that was collected and hence formed the contents of the KAP tools is implied in the following broad topic areas and covered in greater details in the question guidelines attached to this

report include pre-natal and post-post natal care for women, breastfeeding, complementary, psychosocial care, intra-household food distribution, health seeking behaviour, alternative Caregivers, water and sanitation, obstacles to child feeding and health seeking, impact of conflict and recommendations.

Picture 2: Profiling and detailed discussion session [Picture by Halima Nasra]



Information gathering techniques and respondents

A number of data collection techniques were applied with focus group discussions and rapid profiling being the main methods. The seven qualitative data collection techniques that were applied in the context of triangulation were, focus group discussion, rapid profiling, proportion piling, key informants, case studies, informal observations, and strategic conversations

In addition a self administered non pre-tested quantitative questionnaire (in English) was completed by members of staff located in country and working for local and international NGOs. Although useful data was obtained the completion of the questionnaire was somewhat unsatisfactory for any meaningful quantitative analysis.

Respondents for the KAPS

The respondents were selected with the aim of giving a voice to different categories of population considered to have an interest or influence on childcare and health seeking and hence were stratified into the groups as listed below, for purposes of ensuring an environment that enabled optimal participation: elderly women alone (better off wealth group), elderly women (poor and middle wealth groups), women of child-bearing age (better off wealth group), women of child-bearing age (poor and middle wealth groups), men, health service providers, traditional birth attendants (TBA), community health workers (CHW), health facility personnel, tradition healers, local leaders (local authority, community and religious leaders), women group representatives, local and international NGO employees, case studies (pregnant woman with children, woman in her first pregnancy, woman not pregnant but with children and kind of elderly and woman with a malnourished child).

Selection of sites and implementation of the study

Following successful transfer of skills through the training the enumerators were then involved in the planning of field schedules and in generating ideas for efficiency in information gathering. Thus in each region, a time schedule was developed with the participation of all the field team members. Data collection was structured to achieve a minimum of seven FGD per region and stratified to ensure representation of the five livelihoods; namely, pastoral, agro-pastoral, riverine, urban and coastal. In tandem, data was collected from small profile groups, key informants and

cases that were used to fill-in gaps obtain more details and confirm or capture diversity (triangulation).

The number of days for implementation of KAP was pre-determined by FSAU but flight changes affected Puntland (reducing the set period by two days) and Hiran by (one day). The period for each region was as follows- 3rd-25th, 26th -30th September and 1-7th October 2007 for Central and South, Puntland and Somaliland, respectively. The process of recruitment and training has been previously described. Informing the partners of FSAU on the ground had been previously done through their offices in Nairobi but the consultants, called on some of the partners. UNICEF, World Vision, Health (Gedo) and World Food Programme allocated some of their staff members to participate in on-site KAP implementation. In addition, UNICEF in both Puntland and Somaliland provided two vehicles and s. UNICEF and World Vision also provided photocopying facilities and access to internet.

For each region, a data collection schedule that indicated both the specific community groups from whom information was to be obtained and the data collection techniques to be applied was done and given to the enumerators. A team leader was selected to provide leadership and coordination between the field teams, FSAU staff and the consultants. The teams whenever possible operated from one central place, going out in the morning and returning at the end of the day or stayed nights out whenever it was necessary to optimise on the available time on the basis of distances to be covered.

In Gedo and Bakool the total KAPS data collection responsibilities were borne by the FSAU and GHC (Gedo Health consortium) focal point staff.

In a participatory context region specific FSAU staff and enumerators, different sites per the livelihood they represent were appraised. Considering representation of livelihoods and accessibility both in terms of distance and security selection of sub-regions and sites was thus purposively done. The specific sites from which information was obtained are reflected in Table 1.1 (Appendix 1) that shows their distribution by region and livelihood. Table 1.2 (Appendix 1) is a representation of data collection achievements distributed by livelihoods for each of the three key regions that the study covered. A total of 56 FGD, 39 rapid profiling, 17 key informant interviews and eight case studies were conducted and the data that was yielded was enhanced with informal observations and targeted conversations.

Data quality assurance

In effort to attain quality data, the following strategies were applied (1) the consultants ensured that the data collection teams were well trained (2), pre-testing of KAPS tools preceded their application (3) the tool was reviewed by FSAU and partners (4) supportive supervision was provided all through data collection (considering imposed security-based travel restrictions, mobile phone technology was used as part of the supervision tool. It enabled sustained two-way communication between the consultants and the teams, between the teams and even intra team) (5)gaps information were addressed through subsequent targeted key informant interviews and strategic conversations.

Each team had three members, one of whom was a supervisor to ensure quality work. The consultants also visited teams in the villages at random to observe how they were conducting the discussions/interviews. At the end of the day or whenever possible (when teams had a night out) the consultants reviewed the data collected to identify gaps in the data collected and to ensure teams collected quality data. For maximum comprehensiveness of collected data, the third

member of each data collection team monitored each data collection session and pointed out what was omitted or needed clarification.

Challenges in Data Collection

In the process of data collection, KAPS experienced a few challenges that included the following, time of data collection (*Ramadhan period*) when the population was fasting and hence basically inactive during the day meant that some respondents were not able to sit through a full interview session (a challenge that was surmounted by use of phased data collection format, i.e., interviewing different but matching groups to complete question guide, in some areas it was difficult to get female respondents due to commitment to *Ramadhan* related activities; such as preparations for “*Futur*”, data collection days were less than initially planned in most regions due change in flight schedules and the fact that working hours were affected by *Ramadhan*., (in some areas data collection period was further shortened by delay in getting security clearance for vehicles), due to the rapid nature of the KAP study that was further complicated by the current insecurity situation in the country recruitment of respondents was done on the spot in some of the areas, the 48-hour UN security clearance requirement limited areas that the consultants and UN counterparts could visit while requirement of movement in pairs limited their movement, the level of English language skills was low among some of the enumerators but it was ensured that the moderator and recorder in each team had adequate language skills, poor road systems were a factor in the selection of data collection sites. Due to this challenge, inclusion of communities living in very remote areas was limited.

Information analysis

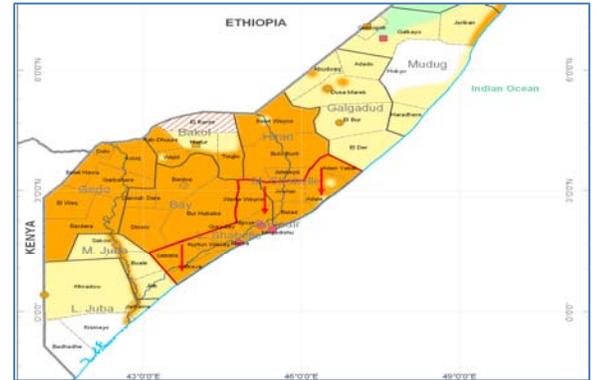
Considering that almost all the information gathered was qualitative in nature, componential and taxonomic analysis were mainly performed; which involved transformation of information into thematic components and then written-up descriptive prose. The data obtained from rapid profiling was coded and presented in quantitative formats while proportion piling allowed for presentation of respondents’ quantitative visual perception for varied indicators. The indicators are listed in Box 2 (Appendix 1).

CHAPTER 2: SOUTH AND CENTRAL ZONE

2.1 SITUATIONAL ANALYSIS

2.1.1 Socio-Political Situation

There are 10 regions in South and Central Zone namely: Middle Shabelle, Lower Shabelle, Middle Juba, Lower Juba, Gedo, Bay, Bakool, Hiran, Galgadud and Mudug. The region borders Ethiopia to the west, Kenya to the south and Indian Ocean to the east.



Map 1: South and Central Zone and Regions.

The main livelihood groups in the zone are the nomadic (pastoral) clans known as Somali Gilerh and the agro-pastoralist Bantu community known as Somali Garer. The nomadic pastoralists mainly rely on livestock (cattle, camel, and shoats) while the agro-pastoralists rely on both livestock and farming. The riverine population, found along River Juba and River Shabelle, practice crop cultivation and lead a more settled life compared to the pure pastoralists or agro-pastoralists. Since the civil war in 1988-1991 when General Mohamed Siad Barre who was then the President of Somalia was ousted various militias and clans have fought against each other, vying for control of the country.

In 2004, the Transitional Federation Government (TFG) was established in Somalia through International Peace initiatives led by IGAD. However since 2005 the region has again been ravaged with fighting between the Council of Islamic Courts (CIC), warlords, clan militias and the Ethiopian soldiers and their allies in the TFG.

There has been no effective central government in South and Central Somalia, and the infrastructure has crumbled. Large populations have been both internally and externally displaced. Most parts of the region are therefore characterized by poor and dilapidated infrastructural facilities. Essential infrastructures such as security, schools, health facilities and local governance do not exist, and where they do, are not adequate to meet the populations' basic needs. The few facilities found in the rural areas are temporary structures built and managed by communities through the assistance of international and local NGO's working in the areas. Humanitarian efforts to access the vulnerable population in many parts of the country have also been adversely affected by the recurrent conflict situation in the country.

2.1.2 Health and Nutrition Situation of Children in SCZ

The rates of child mortality have been among the highest in the world¹. Whereas the baseline under-5 mortality rate (U5MR) for sub-Saharan Africa is about 1.03 deaths/10,000 U5s/day², in Southern and Central Somalia zones, the U5MR has remained above 2 deaths/10,000 U5s/day, particularly in the southern parts (Gedo and Juba regions)³ of the zone. These mortality rates are unacceptably high as per Sphere Standards where U5MRs should be maintained at below 2.0/10,000 U5s/day.⁴

Analysis of trends in nutritional status in the past three years also indicate that Global Acute Malnutrition (GAM) rates have been above 15% in all livelihood zones of South and Central Somalia throughout the years.⁵ These rates are unacceptably high and indicate a serious situation according to both WHO and RNIS benchmarks.

The observed deterioration in health and nutrition situation of children over the years in South and Central Somalia zones has been mainly attributed to the complex socio-political and natural environment of frequent conflicts, causing population displacements and loss of assets; poor knowledge in health and feeding practices; inappropriate traditional beliefs and poor hygiene and sanitation with inadequate safe water supply. The recurrent drought and floods in the recent past have further led to reduced food production and poor animal health conditions. According to seasonal food security assessment reports by FSAU⁶, significant proportion of the populations in rural Southern Somalia, particularly Gedo, Juba and parts of Bay, Bakool and Hiran have been within the Humanitarian Emergency and Acute Food and Livelihood Crisis phases of the Integrated Food Security and Humanitarian Phase Classification (IPC), and in need of humanitarian assistance and livelihood support over the course of recent years.

The most commonly reported childhood illnesses in South and Central Somalia are diarrhoea, acute respiratory infections (ARI), skin infections, intestinal worms, malnutrition, malaria, measles, whooping cough, tonsillitis, eye infection and anaemia, with the major ones being diarrhoea, ARI, malaria and measles.

Source: FSAU Nutrition Data Base, 2007.

Both modern and traditional medicines are widely used in the management of illnesses in the region. Most illnesses are traditionally associated with spirits and “Evil Eyes”. Modalities used to treat illnesses normally include fire-burning, herbal remedies, casting and prayer. Illnesses like headache, fever, dizziness and weakness are believed to be caused by spirits. Treatment therefore involves reading the Koran, eating special food and burning incense (*myrrh*).⁷

Immunization coverage for all the vaccines is notably low, except for polio. The polio immunization coverage is generally high due to the national immunization days as well as door-to-door campaigns which are regularly conducted in all places.

¹ UNDP. 2006. Millennium Development Goals (MDG) Report. UNP.

² The Sphere Project. 2004. Humanitarian Charter for Minimum Standards in Disaster Response.

³ FSAU Technical Series Reports No Volumes 9-13

⁴ The Sphere Project. 2004. Humanitarian Charter for Minimum Standards in Disaster Response.

⁵ FSAU Nutrition Data Base 2007.

⁶ FSAU Technical Series Reports on Seasonal Food Security Assessments.

⁷ Toby Lewis (1996) Somali Cultural Profile http://ethnomed.org/ethnomed/cultures/somali/somali_cp.html

2.2 Study Findings from South and Central Zone

2.2.1 Infant and Young Child Feeding (IYCF)

Pre-And Post-Natal Nutritional Care

Knowledge and Beliefs on Pre-and Post-natal Nutritional Care

Across all livelihood zones in South and Central Regions, majority of mothers have minimal access to nutrition education from health workers. This was attributed to poor attendance of Maternal Child Health (MCH) clinics during pregnancy and after delivery. Discussions with MCH facilities staff indicated that although they conduct bi-weekly or monthly health and nutrition education sessions, the attendance is often very low. The nutrition education messages communicated during these sessions include: importance of proper feeding during pregnancy, breastfeeding and preparation of “*nutritious diets*” for children. The “*nutritious diet*” consists of beans, rice, maize, sorghum, sesame and wheat, mixed and ground to make porridge flour.

Information obtained from most discussions in all livelihood zones during the survey indicated that pregnant and lactating mothers mainly rely on the traditional knowledge received from grandmothers, relatives, TBA, traditional healers, religious leaders and other elderly women on what to eat during pregnancy and after delivery as well as breastfeeding. Based on the information they receive from their social network support groups in the community women believe that they should avoid eating certain foods during pregnancy to avoid complications during delivery. After delivery, most mothers know that they should increase consumption of nutritious foods, but are constrained due to lack of resources.

Radio broadcasting was also reported as a source nutrition education for mothers in Hiran Region.

Dietary Practices during Pregnancy

The diet of a woman during pregnancy and after delivery depends on her family’s ability to provide for her. A pregnant woman’s diet was however noted to be traditionally restrictive.

Among the pastoralists, a pregnant woman is mainly allowed to drink sour milk, take rice and sorghum. She is only allowed to eat meat and drink fresh milk in moderation. She is not allowed to eat vegetables, fruits or meat, liver, camel’s hump of and mutton. Consumption of these foods is believed to make the baby grow too big, leading to difficult labour and other birth complications.

The agro-pastoral diet for pregnant women varies from region to region, but the overall aim is to ensure the diet does not make the baby grow too big in the womb. Consumption of vegetables, fruits, meat, sour milk, and more drinking water are encouraged during pregnancy. She is however not allowed to drink fresh milk, particularly from camel, and eat eggs and liver. Honey, camel hump and fat and meat from sheep and liver are also not encouraged as they are believed to cause abortion or bleeding. Cold water/ice is believed to stop the child’s heart beat, hence not encouraged too. In Gedo agro-pastoralists, pregnant women are not allowed to eat meat, eggs or take cow’s milk for fear that the foetus might grow too big leading to birth complications. These foods are also believed to cause pregnancy health complications of oedema, eclampsia and fits.

In the riverine community, consumption of beans, meat, vegetables and eggs are encouraged to help build blood and prevent anaemia during pregnancy. Consumption of fat (ghee) and mutton as well as honey during the first 2-3 months of pregnancy is however discouraged because the foods are believed to cause abortion. Fats/ghee, particularly from sheep, potatoes, and fresh cow milk should be avoided as they are believed to make the baby to grow too big, hence difficult delivery. According to some women in Hiran, consumption of too much salt and hot pepper is also not advisable due to their low nutritional value and the belief that they cause anaemia in pregnant women.

In the urban livelihood zones of South and Central Somalia, chicken, eggs, milk powder, vegetables and meat are considered healthy foods for a pregnant mother as seen in Table 1. Women should however eat these foods in moderation to avoid having big babies during delivery.

Table 1: Foods Consumed and Prohibited during Pregnancy by Livelihood Zones

Livelihood Zone	Food Items Allowed for Consumption	Food Items Prohibited
Pastoral	Sour Milk, rice, Sorghum. Meat and fresh milk are only allowed in moderation	Fresh milk, vegetables, fruits, mutton, liver, meat from camel's hump or plenty of meat to avoid birth complications due to big babies.
Agro-pastoral	Sour milk, meat, fruits, vegetables, <i>soor</i> , sour milk	Fresh camel's milk, eggs, liver. Honey, camel hump and fat and mutton and are believed to cause abortion or bleeding.
Riverine	Meat, Eggs, Beans, Vegetables	Fat (ghee) and meat from ram and honey during the first 2-3 months of pregnancy. These foods are believed to cause abortion
Urban	Chicken, meat, vegetables and milk	Although protein foods of chicken, meat and milk are encouraged, they should be eaten in moderation.

Post-natal Dietary Practices

Among the pastoralists, a mother traditionally received post-natal care from her mother for a period of 40 days after delivery. During the 40 days period, traditionally known as *Umol Bah*, a goat or sheep was slaughtered and the meat dried and kept for her to eat. Her mother also prepared and encouraged her to drink porridge enriched with milk, a lot of tea with milk, and eat honey, liver and kidney, head of goat, nutritious soup and sesame oil. The special diet was expected to help replace the blood lost during delivery and aid in quick recovery for the mother. Due to war and disintegration of the traditional family networks, the *Umol Bah* period has reduced to 7-10 days and lactating mothers are encouraged to feed on whatever food is prepared for the rest of the family.

The agro-pastoralists encourage women, after delivery, to eat food from family pot but with extra meat, porridge and soup. Among the riverine community, after delivery, a woman is encouraged to drink enriched porridge with oil, milks, butter, and mutton for nourishment. Consumption of fish during the 1st month after delivery is discouraged in the riverine as it is associated with poor maternal health.

In urban areas, after delivery, the woman's mother or any close relative was traditionally expected to stay with her for one month or 40 days (*Umol Bah*) to ensure that she feeds well and

also assist her with household chores. She was expected to feed on porridge enriched with milk and sugar, tea with milk, mutton or goat meat, liver and honey. Currently, however, the *Umol Bah* tradition has changed, and lactating mothers can only be nursed for about 7 days or less, if they are lucky to have someone to care of them.

KNOWLEDGE ON BREASTFEEDING

Initiation and Colostrum:

Generally, the study found that there was insignificant knowledge on initiation of breastfeeding within the first hour after delivery in all livelihood zones, particularly among the pastoral and agro-pastoralists.

According to majority of people from pastoral and agro-pastoral livelihood zones, most mothers, except for a few, have learnt from their mothers & grandmothers that in the first 3 days of life, there is no milk in the breast; hence there is no need to put the child on the breast. They also believe that colostrums milk is bad for a child's health as it is heavy, toxic and makes the child sick.

Among the riverine and urban population, most mothers have learnt from their mothers and grandmothers that there is no milk in the breast in the first three days after birth and so breast feeding should start three days after birth. However, with further knowledge from TBA, CHW and breastfeeding awareness promotions, they are aware that breastfeeding should start immediately after birth. They however still believe that there is no milk in the first three days. They also seemed to be aware that colostrums milk is good and should be given to all the infants.

Exclusive Breastfeeding (EBF)

Exclusive breastfeeding is not well articulated. Reports from most discussions showed that exclusive breastfeeding (EBF) means giving a child breast milk and water or together with any other form of milk without any form of food.

For majority of pastoral mothers, EBF means breast milk & water plus sugar alone for 3-6 months. Data from agro-pastoral community indicated that EBF means feeding the infant on breast milk and water only. Among the riverine community, EBF revealed that mothers are aware that exclusive breastfeeding is important as it protects the child against diseases. To most riverine mothers, EBF means giving the child breast milk and water only for 3-6 months. For majority of the urbanite, EBF means feeding the infant on breast milk and water only during the first 3 days of life to quench thirst and after the third day, other forms of milk can be given to the infant.

Continued Breast feeding with Complementary Food

Majority of women in all livelihoods know that even after introducing other forms of milk, porridge or food, breastfeeding must continue alongside these feeds until the child is stopped from breastfeeding when the child is 2 years old or the mother gets pregnant.

Total Duration of Breastfeeding: The total duration of breastfeeding is well known across all livelihoods to be at least 2 years from the teachings of Koran.

ATTITUDES AND BELIEFS ON BREASTFEEDING

The study found a common belief among more than 50% of the women in all livelihood zones in South and Central Zone that there is no milk produced in the breast until the 3rd day after delivery. Another common belief in all livelihood zones related to lack of breast milk was that nipples are blocked and cannot produce milk during the first 3 days after delivery. Everyone in all livelihood zones also believes that breast feeding should not stop until the child is two (2) years old. To almost all women in South Central Somalia, exclusive breastfeeding does not exist.

Initiation of Breastfeeding

Among the pastoralists, initiation of breastfeeding does not take place in the 1st three days after delivery due to the belief that the baby needs water to remove air and mucus that was swallowed in the womb and during the birth process. Majority of the pastoralists also believe that breastfeeding during the first three days cause diarrhoea in children and the pain experienced by mothers as they try to breastfeed could result in maternal death after delivery. It was also found that women avoid breastfeeding during the first three days of delivery due to the belief that breastfeeding soon after birth increases the size of breasts, and their men detest big breasts.

More than 70% of agro-pastoral mothers also believe that there is no milk in the breast in the first three days and that the nipples are still blocked and unable to produce milk. In the riverine community, over 70% of women also believe that there is no milk until the third day after delivery. Similar beliefs of lack of milk in the breast in the first three days after delivery and that the nipples are not yet open are also found among over 50% of the urban population who do not believe in initiating breastfeeding immediately after delivery.

Colostrum Milk

The pastoralists believe that colostrum is heavy, thick and coarse, hence babies cannot swallow. The colostrums is also believed to be dirty and toxic, with no health benefits and can cause illness in children. believe it is heavy, thick and not good for the child. In Gedo, it is believed that colostrums is not good for the baby as it causes stomach pain and diarrhoea, hence should be 'rinsed out'. About 10% mothers in agro-pastoral livelihood however believe that colostrums protects children against illnesses, but that it does not come until the third day after delivery. In the riverine, it was reported that maternal grandmothers believe that colostrums is heavy, thick and unhealthy for children. These grandmothers tend to have a strong influence on their daughters and other women of reproductive age group not to feed children on colostrums.

In urban communities, the common belief that colostrums is poisonous and causes diarrhoea in children also exists. However, the urban women, both elderly and child bearing age, who have attended the World Breastfeeding Week Celebrations, hold a different opinion on colostrums. About 10-15% of them believe that colostrum is good and makes baby healthy, strong and active. "*A breastfed baby is always healthy*".

Use of Water and other Liquids alongside Breastfeeding

Majority of people in all livelihood zones believe that a child cannot survive without water, and that breast milk alone is not enough for the baby. Water and animal milk must therefore be given alongside breastfeeding right from birth. The pastoralists believe that water must also be given whenever a child cries because of the belief that should the child cry and die, the child will report the mother to God. The agro-pastoralists also believe that a child cannot survive without water. Majority of women in the riverine also believe that a child who is exclusively breastfed becomes deaf (*Dhagol*). Water and other forms of milk must therefore be given alongside breastfeeding to avoid development of deafness in the child.

Other Beliefs on Breastfeeding

Women stop breastfeeding as soon as they notice that they are pregnant with another baby. A pregnant woman's milk is believed to be strong, red and poisonous for the breastfeeding child. If a pregnant woman breastfeeds, the child gets diarrhoea, vomits and becomes weak; the baby in womb also gets weak.

Some urban men also influence breastfeeding by their negative attitudes towards breastfeeding. In parts of Buale, it was reported men tend to discourage women from breast feeding because they believe that breast milk makes the women dirty and smelly as it flows on her clothes and body.

BREASTFEEDING PRACTICES

Initiation:

Initiation of breastfeeding among communities in all livelihoods in South and Central Somalia takes place 2-3 days after birth. Discussions with the health staff in MCH in Belet Weyne confirmed that most mothers are reluctant to initiate breastfeeding soon after birth, and insist on doing so after the 3rd day. Among the pastoralists in Gedo, however, it was noted that about 10-30% of mothers initiate breastfeeding within the first hour.

Colostrum:

Traditionally, colostrums was expressed out and discarded as it was considered toxic and heavy for the child to swallow, and bad for health. A number of mothers are also not willing to give babies colostrums despite being enlightened on the importance of colostrums. Most mothers in all livelihoods still hold the same belief and express and throw away the colostrums. Most mothers are not willing to give babies colostrums despite being enlightened on the importance of colostrums by health workers and nutrition and health agencies. The proportion of mothers who normally give the colostrums was reported as about 30% among the pastoralists, 20%-40% among urban communities, 10%-15% in riverine and less than 5% among agro-pastoral communities. These mothers believe that colostrums is nutritious and makes babies strong and protected against illnesses.

In Hiran region, it was noted that the urbanite and riverine population who give children colostrums had been influenced by the messages from the World Breastfeeding Week celebrations or by health workers and their grandmothers that colostrum is good. It was noted that most grandmothers who are aware of the importance of colostrums encourage their daughters to give it to their children as seen in the case study in Box 2.

Box 2: The Story of Amina (Belet Weyne)

Amina has 5 grandchildren from one of her daughters. Three of these 5 children did not breastfeed soon after birth, because as a grandmother, Amina made sure her daughter did not breastfeed her child immediately after birth. After attending UNICEF workshops on breastfeeding, Amina encouraged her daughter to breastfeed her babies immediately after delivery. Amina's last 2 grandchildren were given breastmilk immediately after birth. No water or sugar solution. She also encourages her daughter to ensure the infants are fed on Danbar (colostrums). She encourages other women in the community with grandchildren to let their daughters give Danbar to the infants.

Exclusive Breastfeeding (EBF): Reports and discussions from all livelihood zones indicate that exclusive breastfeeding is widely known to most mothers to mean giving a child breast milk and water (plus sugar) only for the first few months of children's lives. In the riverine community,

EBF means feeding children on breast milk and water and sugar for 3-6 months without giving solid foods. Among the agro-pastoralists, it was reported that a few mothers exclusively breastfeed for 1-4 months although animal milk and water are introduced at birth as well. This therefore implies that among the agro-pastoralists, EBF means giving infants breast milk, animal milk and water only without soft or solid foods. In urban areas a few mothers, (15-20% from Hiran), reportedly exclusively breastfeed for 4-6 months. This was attributed to the breastfeeding awareness during the World Breastfeeding Week celebrations which changed women's attitude towards EBF.

Frequency: In all livelihood zones, reports indicate that children breast feed on demand, so long as the mother is available and the child can access the breast. Maternal workload and situations where mothers have to be away from home for long hours in the farms or market were reported as the major obstacle to frequency of breastfeeding. In the riverine, and agro-pastoral communities it was reported that when mothers are often busy in the farms or in the market, children are breastfed less times compared to when the mother is at or near home.

Continued Breastfeeding with Complementary food:

Breastfeeding continues alongside complementary feeding until the time the child is completely removed from the breast when the mother gets pregnant or when the child is about 2 years old. Breast milk alone is believed to be inadequate for the child, hence, even before the soft or solid foods are introduced; cow/goat milk, water and porridge are fed to the children alongside breastfeeding.

Total Duration of Breastfeeding:

The study found that the total duration of breast feeding for children range from 1 year to 3 years among the pastoralists and agro-pastoralists. Among the riverine and urban communities, however, the duration of breastfeeding is shorter, about 1-2 years. In all livelihood zones, it was also noted that the proportion of children breastfeeding declines drastically after 12 months even though the children are still expected to be on the breast. Among the pastoral and agro-pastoral communities, more than 80% of mothers stop breastfeeding after 2 years, while a few mothers breastfeed for up to 3 years. In Gedo, breastfeeding continues up to 3 years, unless the mother is pregnant

COMPLEMENTARY FEEDING

Age of Introduction

The study found that only a few mothers are aware that complementary food should be introduced to children after 6 months. Majority of mothers from all livelihood zones are not aware that complementary foods should be introduced when the child is six months old. Reports from all livelihood zones therefore show that soft and semi-solid foods are introduced from the 3rd month while animal milk or powdered milk is introduced as early as one month or before. Breast milk alone is not considered adequate for the child to get satisfied.

Choice and Types of Complementary Foods

The types of food consumed by children vary by child's age, socio-economic status and availability of the food items. Porridge, family food, (cereal-based 'soor' with sauce of tomato/onion; boiled maize/sorghum grains with oil & sugar) and tea are consumed daily by children from all livelihood zones. Fruits and vegetables are rare in the children's diet as they were hardly mentioned by respondents from any of the livelihood zones during the data collection process. Rice, pasta, *Canjero* and meat were reported to be consumed once a week or

occasionally because they are expensive. The meat is however very rare for children in the riverine and agro-pastoral communities. It was also noted that children from pastoralist communities have more access to milk in their diet on a daily basis compared to children from other livelihood zones.

Breastmilk, pre-lacteal feeds and cow and goat milk are the main feeds up to three months for children from pastoral, agro-pastoral and riverine communities. In urban areas, caregivers prefer use of powdered milk to animal for feeding children in addition to breast milk and water before children reach three months of age.

From three months, tea and other soft food are introduced to children in all livelihood zones in addition to breast milk and animal milk. The soft food is in form of porridge, potatoes, biscuits or a bit of the family food that the child can eat. Tea or porridge made from sorghum flour or maize is used to feed children when milk is not accessible to households.

From 6 months, children from all livelihood zones continue breast feeding, but the main food is cow or goat milk, porridge and a bit of family diet. Children also frequently take tea when milk is not adequate or accessible.

From 12 – 24 months, most children are considered old enough to feed on the family food. Breastfeeding may continue if the mother is not yet pregnant. However, by this time the mother is either pregnant with another child, or has already given birth to a younger child. Very few children are on breast milk by this time. It was however found that more pastoralists breastfeed after 24 months than in the agro-pastoral, riverine or Urban communities. This is due to the fact that men migrate with their livestock in search of water and pasture one year at a time. Cow or goat milk, porridge and tea also feature prominently in children's diet from all livelihood zones. The porridge is made of sorghum flour and may have milk, ghee and sugar. In the riverine, the porridge may also be enriched with sesame paste, if available. Only about 25 % of the community in the riverine were reported to have access to sesame paste for adding in the children's porridge. Among the mothers who attend MCH regularly, particularly those from urban areas, the child's porridge is made from a mixture of beans, rice, maize, sorghum, and sesame and wheat flour. This knowledge on mixing several ingredients in the porridge flour is learnt from nutrition education sessions at the MCH facilities. It is important to note that cooking time for beans is not the same as for the grains, hence the porridge need to be cooked longer. Mothers reported that the porridge is cooked for 10-15 minutes.

After 24 months, the child eats from the family pot, 3 times a day. In between the main meal, the children may be given a cup of milk or tea to drink if available as snacks. Breast feeding, consumption of animal milk and tea continue beyond the 24 months of age for pastoralists children unlike for children in other livelihood zones. For majority of the children from all livelihood zones, however, they do not get any snacks after 24 months of age, except for the tea or milk.

A summary of types of children's food by age in most parts of South and Central Somalia is as shown on Table 2. and appendix 2.

Table 2: Summary of Types of Food by Age in South and Central Somalia

Child's Age	Type of Food
0-6 Months	B/Milk, pre-lacteal feeds, Fluid-based diet, mainly milk & water; Soft Foods - porridge, potatoes, biscuits.
6-12 Months	B/Milk, Milk, Soft food continues, Integration of child into family diet, solid snacks (<i>Canjero</i>) or soft drinks bought
12-24 Months	Breast milk (if mother not pregnant) Milk, family diet, (cereal-based 'soor' or rice/pasta with sauce; boiled maize/sorghum grains with oil & sugar). Meat consumption is rare for children
After 24 Months	Children eat from the family pot, 3 times a day and breastfeeding. In between the main meal, the children may be given a cup of milk, porridge or tea to drink. Breast feeding has stopped for most children in all livelihood zones except for the pastoralists who breastfeed longer than 24 months. There are no snacks in between the main meals because children are considered grown-up.

Foods Prohibited for Children:

Among the pastoralists of Gedo and Bakool, it was found that animal organs (liver, kidney, and heart) are not consumed by children. It is believed that children are unable to digest these foods, causing a delay in the development of verbal or speech skills in children. This is then likely to lead to deafness (*Dhagol*) in children if they are fed on these foods. The same belief for consumption of organ meat by children is also held by the urban communities in most parts of Southern Somalia.

The agro-pastoralists of Gedo believe that consumption of sorghum, cow's milk and mutton cause diarrhoea during hot season, hence children are not allowed to eat them during such periods. In the riverine, children are not allowed to eat boiled maize or sorghum until they are three years old. It is believed that their digestive system is not yet ready for these foods.

Water, Sanitation and Hygiene Practices

The study found that water for domestic use and for animals is obtained from various sources among which are: wells (*Muqsid*), earth dams, *berkards*, bore holes, shallow unprotected wells, rivers Shabelle and Juba, earth pans and ponds. Although water from wells, bore holes and *berkards* is often treated at the source by chlorination, the water safety still remains a major concern to most communities in all livelihood zones. Study findings also revealed that most households do not treat the water for drinking at home even if it is collected from the unprotected sources or river. The riverine communities, for instance get much of their water from the rivers Shabelle and Juba as well as unprotected wells, yet most respondents in this study reported that people hardly think of treating water for domestic use. A few households from urban areas were however reported to be treating their drinking water at home. Use of bottled water for feeding infants was also reported among some urban women in attempts to avoid feeding children with contaminated water.

Safe disposal of human faecal matter was reportedly poor in almost all livelihood zones. Among the pastoral and agro-pastoral communities, about 50% of the households do not have pit latrines. The children's faecal matter is disposed off in the bush or open space. According to respondents in the study, during rainy season, much of the water sources get contaminated, causing diarrhoea, dysentery and intestinal worms. The respondents further confirmed that unprotected water

sources and lack of pit latrines are the main hygiene and sanitation problems causing diarrhoea and intestinal parasites in children in pastoral and agro-pastoral communities.

Among the riverine population, environmental sanitation is of great concern during rainy seasons as both the solid waste and human excreta are washed into the rivers whose water is widely used for cooking and drinking. In urban areas, although most households use toilet facilities for faecal matter disposal, majority use shallow communal latrines which get filled up quickly. Inadequate latrine facilities, contaminated water and poor garbage disposal in urban areas were reported as the main sanitation and hygiene problems affecting children’s health in Belet Weyne (Hiran) Baidoa (Bay), and Buale (Juba).

Good hand-washing practices were reported from all livelihood zones, with most children (more than 70%) reportedly washing their hands before eating. It was also reported that most caregivers, particularly mothers (more than 75%) from all livelihood zones also wash their hands before handling food. However, among the pastoralists, it is not a guarantee that children and caregivers will always wash their hands when there is no water. It was also not clear whether soap is always used by children and caregivers for washing hands.

Responsive Feeding

Generally, mothers in all livelihood zones were found to be keen to ensure that their children eat to satisfaction. In most households, children are served with food before adults. When children eat from a common plate, remnants of food on a plate are always an indicator that the children have eaten to satisfaction. When children are not satisfied they cry, shout, look unhappy or even ask for more food. Responsive feeding is often practised to overcome refusals to feed: Positive responsive actions among pastoral mothers include songs, praises, and promises to buy sweets or sugar, following the child with food or moving the child from disruptive sites. Negative responsive actions which tend to lead to reduced food intake in children were also reported. These included threats, punishment or leaving the child alone without bothering with food.

Children are often given tea or milk as they wait for the meal to be served. This, however, reduces the child’s stomach capacity for food, hence children may end up eating less food at a seating.

Feeding by Gender

No major differences were reported in feeding the male and female child across all livelihood zones. All children were reportedly treated and fed equally during meal time.

Feeding During Illness

During illness, attempts are made by caregivers across all livelihood zones to ensure that the child gets special diet to aid in quick recovery from the illness as seen in Table 3. There were no reports of withholding breastfeeding during illness. Fresh milk is however not consumed by children for fear that it may lead to dehydration.

Illness	Special Diet
Diarrhoea	Water melon Juice, plenty of fluid (ORS), Sour milk without fat (<i>Garoor</i>), Rice water; Fresh milk withheld.
Pneumonia	Fresh oil/ghee from goat milk, blood from goat
Intestinal Worms	Sheep fat, Freshly prepared popcorns (<i>to entice to move up the gut with their mouths open in readiness for medicine</i>)

Measles	Goat milk (<i>to keep oesophagus open</i>), Special nutritious soup, Dik-dik meat (pastoral)
Colds	Plenty of fluid, Lemon/Water melon Juice
Cough	Honey, sheep fat, eggs, Soup (goat meat) and camel milk (Pastoral)
Malnutrition	Nutritious food including milk, meat, butter, slaughter a goat for the child to eat meat (<i>Hararsin</i>)

Obstacles to Infant and Young Child Feeding Practices

Obstacle to successful breastfeeding includes wrong information by fellow women, wrong beliefs that the breast does not have adequate milk, pressure from grandmothers, ignorance, lack of knowledge on breastfeeding and lack of a breastfeeding policy. Maternal workload and deficient knowledge of social support networks (grandmothers, TBA, elderly women nearby and some CHWs) who discourage use of colostrums and feeding on nutritious food are also major obstacle to breastfeeding in the region. In Bakool and Juba, some men discourage their wives to breastfeed because they want them to remain clean. They believe that breastfeeding makes a woman dirty and smelly when milk flows on her clothes while breastfeeding. They therefore encourage their wives to bottle feed

The following obstacles were noted to hinder appropriate feeding practices:

- Inappropriate or lack of knowledge on the right types of food as well as food preparation
- Lack of variety in the diet- no fruits, no vegetables mainly cereal based & milk
- Close birth spacing - Too close/too soon pregnancies in less than two years
- No special dietary attention after 24 months – children are considered old enough to eat the family food and are therefore expected to feed like adults.
- Inflation affecting access to food

Key limiting factor to food access were found to be conflicts, drought, floods, unemployment, inflation and inappropriate farming methods. These factors are also found in the appendices.

Alternative Caregivers

In the rural areas among the pastoralists, agro-pastoralists, and riverine, the alternative child care givers are grandmothers, older siblings, aunts and fathers. In urban communities, however, older siblings and aunts or employed house-helps are the main alternative caregivers.

2.2.2 Health Seeking Behaviours in South and Central Zone

A): Knowledge

Overview

More than half of community members in all livelihood zones know the diseases by names, signs & symptoms, different types of medicine and types of locally available community management resources for the illnesses. The locally available resources that were identified for management of childhood illness by respondents included: Religious leaders, traditional medicine, traditional healers, TBA, CHW, modern health posts, and modern medicine.

The signs and symptoms of measles disease is however easily confused with other illnesses, leading to a lot of community misdiagnosis of the measles disease in all the livelihood zones for children below 6 months old.

Diarrhoea is recognized as loose and water stool, white or green in colour and comes out 5-7 times in a day. Three types of diarrhoea are known to exist: the common one (“*Shuban*”), dysentery and the one associated with teething.

Knowledge on perceived (immediate and long-term) effects of diarrhoea was however scanty or missing among some of the population in almost all livelihood zones. The consequences of diarrhoea are normally recognized as dehydration (short-term) and malnutrition and death (long term).

In the urban areas, treatment of dehydration is known to be use of ORS or a mixture of sugar and salt in water, followed by taking child to health facility if recovery delays. In the rest of the livelihood zones, treatment of dehydration is also known to be use of ORS, prayer, traditional home therapy in form of fluids, traditional herbs and lastly use of health facility.

Common Types of Childhood Illnesses in South and Central Somalia:

The most common illnesses reported to be affecting children across all livelihood zones were: Diarrhoea, Acute respiratory infections (ARI), Malaria, Skin infections, Intestinal worms, Malnutrition, Measles, Whooping Cough, Tonsillitis, Eye Infection, convulsions stomach-ache and anaemia. The convulsions manifest in condition accompanied by fever. The distribution of common childhood illnesses is as shown in Table 4.

Illness	Pastoral	Agro-Pastoral	Riverine	Urban
Diarrhoea	✓	✓	✓	✓
ARI	✓	✓	✓	✓
Skin infections	✓	✓	✓	✓
Intestinal worms	✓	✓	✓	✓
Malnutrition	✓	✓	✓	✓
Malaria	✓	✓	✓	✓
Measles	✓	✓	✓	✓
Whooping Cough	✓	✓	✓	✓
Tonsillitis	✓	✓	✓	✓
Eye Infection	✓	✓	✓	✓
Stomach-ache	✓	✓	✓	✓
Anaemia	✓	-	✓	-
Convulsions	✓	-	✓	-

Diarrhoea, ARI (mainly pneumonia) and malaria were reported to be affecting children of all age groups in all livelihood zones. Data from all livelihood zones indicated that diarrhoea is believed to be a dangerous and serious disease which, if not treated urgently, can kill the child very fast.

Stomach-ache was also noted as a major concern of ill health in infants during the first 3 days of life in all livelihood zones and was associated with the safety of water and sugar that children are fed on soon after birth as well as ignorance on infant feeding.

Data from all livelihood zones also indicated that measles, intestinal parasites and skin infections, common cold and malnutrition were also reported to be common among children from six months of age. Whooping cough was also reported in some parts of Southern Somalia.

Reported Causes of Diseases in South Central Somalia

Poor hygiene and sanitation, contaminated water and mosquitoes were the three major causes of diseases in South Central Somalia as reported by participants in this study.

Frequent episodes of diarrhoea, intestinal worms and skin infections were attributed to poor hygiene and sanitation, indiscriminate disposal of faecal matter, flooding as well as use of contaminated water and food. Mosquito bites and stagnant water which encouraged mosquito breeding were reported to be the main cause of malaria, particularly during and following the rainy seasons. The major reported causes of diseases in different livelihood zones in SCZ are as shown on Table 5.

Table 5: Reported Causes of diseases by livelihood zone in SCZ

Reported Cause of Diseases	Proportions (%) of Reported causes of Diseases by Livelihood Zones		
	Pastoral (n*=51)	Agro-pastoral (n=46)	Riverine (n=37)
Poor Hygiene & Sanitation	31	41	16
Weather Condition	8	17	5
Inadequate Food	2	4	8
Air Born/Virus	8	7	14
Contaminated Water & Food	15	7	10
Mosquitoes	20	17	24
Others (Cow milk, lack of breastfeeding Common Cold)	4	-	11
Unknown Cause	8	7	3

**n =is the total number of times all causes of disease across all age-groups within a particular livelihood zone were mentioned by respondents.*

Among the pastoralists, the cause of diarrhoea during hot seasons, for example, in Gedo Region, is believed to be consumption of sorghum, cow's milk and mutton; hence children are prohibited from consuming these foods in hot seasons.

Data from all livelihood zones indicated that all types of illnesses which are not well understood, including strong malaria, are believed to be caused by the evil eye (*Wal koraad*).

According to respondents from the pastoral communities, stomach ache experienced by children during the first 3 days of life was believed to be caused by the water and sugar mixture that children are fed on soon after birth. Mothers therefore tend to withdraw use of water and sugar feeds as soon as they notice that the child might be suffering from stomach ache. In urban areas,

mothers buy the bottled water with the aim of minimising chances of infants developing stomach ache after feeding on the water.

B): ATTITUDES AND BELIEFS ON HEALTH

The study found that there is a general belief concerning health seeking behaviour that whatever action is taken, if it is God's will, the child will still die. Most pastoralists also do not report childhood illness to health facilities due to lack of adequate and accessible facilities and the belief that some illnesses that are due to evil eyes, can only respond to prayer and traditional cure. All forms of diseases that are not well understood are associated with evil eye. It is believed that some people have evil eyes, and if such people look at a child, the child suffers fits similar to epilepsy with spots on the skin. It is further believed that this syndrome is common and few children survive it. Strong malaria that is accompanied by convulsions is believed to be caused by the evil eye (*Wal koraad*). Malaria without convulsions is however believed to be caused by mosquito bites. Measles is believed to affect the oesophagus; hence goat milk is given, about four times a day to keep the throat agape.

Findings from the survey also indicate that most people across all livelihoods in South and Central Somalia do not believe in taking children for immunization because of the belief that all vaccines cause illnesses and some of them are not effective, particularly measles. Too frequent polio dosages are also associated with family planning.

C): PRACTICES

1. Decision Making in Seeking Health Care

Decision making on seeking health care by caregivers Fathers are the main decision makers concerning management of most illnesses in children among the pastoralists. Caregivers' decisions to take specific actions in health care therefore depend on access to the child's father at the time the child falls sick and availability of resources for modern health care. For some traditional cures, for instance removal of tooth in case of diarrhoea associated with teething, women make decisions without consulting their husbands.

Unlike the pastoral communities where fathers are the main decision makers on health care issues, among the agro-pastoralists and riverine communities, mothers are the main decision makers. Men however also make decisions if they are present at home at the time the child falls sick and whether the man is also the financial decision maker in case of modern health care.

In Urban areas, both parents are involved in decision making on health seeking behaviours. However, in Bakool Region, the father was reported as the main decision maker on when and where to take the child for treatment when the child falls sick. In Hiran Region, both parents make decisions on treatment of a sick child.

2. Management of Childhood Illnesses

Management of most simple childhood illnesses is based on the traditional knowledge and beliefs about these illnesses and the associated causes. The first line of health-seeking actions for most illnesses are characterized by prayer, self-medication or/and home/traditional remedies. Taking children to health facilities for treatment is often considered a last option after all the other options fail to cure. Furthermore the facilities are either inaccessible or not available. Generally the health facilities were reportedly inadequate as seen in appendix 5. For the pastoralists, the

health facilities were reported to be inaccessible due to distance, or inadequate and poorly equipped. The health services in the rural areas include MCH, TBA and a hospital.

The management of illnesses in the urban areas tends to lean more on use of modern medicine from private health facilities, health posts and MCH than traditional and herbal medicine. In Juba and Bakool regions, for example, 60-75% of the population was reported to be using modern medicine to treat childhood illnesses. Prayers also play significant roles (25-40% of the population) in the management of illness in urban areas. Certain illnesses which require only prayer, such as convulsions, or those that can only be treated through traditional medicine, such as the *Evil Eye* and dysentery are only referred to health facilities when all home therapies, herbal and traditional treatments have failed to cure the disease.

Diarrhoea: Several actions may be taken by caregivers in the management of diarrhoea, and children often recover from diarrhoea when the first action of treatment is taken. The management of normal diarrhoea (*Shuban*) is similar in almost all livelihood zones. In most communities the treatment for the disease starts with giving the child ORS to drink, followed by reciting the Koran or prayer. If the child does not get well, he is given diluted lemon juice with no sugar added as the sugar is believed to aggravate the diarrhoea. The lemon is believed to kill any disease organisms that may be causing the diarrhoea. Once the child has shown signs of improvement, the child is given plenty of other fluids (sugar water and salt, lean meat, rice water or sour milk without fat). Feeding a child with diarrhoea on unripe, boiled bananas was also reported from urban areas in Juba. In most livelihood zones, sugar is only given after the diarrhoea has stopped to boost the energy level because it is believed to aggravate the diarrhoea and cause dehydration. Feeding the child a child who has diarrhoea with milk is normally temporarily stopped. The child is instead given sour milk without fat or rice water. If the simple home health cures fail to treat the diarrhoea, the child is taken to the nearest health facility or traditional herbs may be used. Prayers, followed by use of herbal medicine and lastly going to the doctor are another option which a caregiver may choose in case of diarrhoea in a child.

Reports from urban areas indicated that the use of ORS and modern medicine from private facilities or any nearest health facility in the most common way of managing diarrhoea.

All forms of diarrhoea which are associated with teething are only curable by traditional healers who must perform the removal of the “*fox teeth/red worm*”, a practice known as “*Iligow*”. It is believed that the “*red worm*” is responsible for constant irritation in the mouth that results in diarrhoea. However, when the worm is extracted, the child gets cured. Husbands are often not aware or even consulted when the child is taken for *Iligow*. The procedure is done without any infection prevention measures.

Dysentery: Dysentery is recognized as diarrhoea with blood and mucus in the stool, and is more common during hot seasons (“*Jilaal*”) from January to March. The treatment of the disease in pastoral, agro-pastoral and riverine zones involves use of ghee/fat from sheep and special/nutritious soup. Sheep fat or soups are administered first before seeking any other treatments. It is believed that the sheep is a strong animal that will not die quickly even when bitten by a snake unlike the goat or cow; hence its fat is preferred. The child is only referred to a health facility if this traditional treatment fails.

Among the urban population, dysentery treatment of dysentery involves the following in addition to the sheep fat, with the health facility as the last option:

- 1) **Water Melon Juice:** Drinking water-melon juice, three times per day for seven days For small children, the water-melon juice is given in a cup or feeding bottle.

- 2) **Garoor/ciiri:** If water melon does not work, fermented milk (*garoor/ciiri*) is given continuously, three times a day until the child recovers.
- 3) **Herbal Roots:** If *garoor/ciiri* does not help the child to recover from dysentery, roots from a certain herbal tree are boiled and given to the sick child for at least three days.
- 4) **Health Facility:** If the first three actions are not successful in treating the dysentery, then it is concluded the disease has been misdiagnosed as dysentery yet it is not. At this point, the child is referred to a health facility to find out what the real problem could be.

Malaria: This is traditionally treated with herbal treatment from *Neem* tree extracts or *Dacaar* herb and camel milk among the pastoralists, riverine and agro-pastoralists. The camel milk is given as laxative to clean stomach. Malarial drugs may also be purchased from the local shops or chemists. Taking sick children to health facilities for treatment of malaria is however often a last option, particularly for the pastoralists.

Among the urban population, malaria is mainly treated by use of modern drugs, often purchased from the local shops or chemists. Majority of the respondents from urban areas also reported that children are taken for blood tests to confirm presence of malaria parasites in the body. Use of traditional herbs of *neem* tree or *dacaar* to treat malaria was also reported to be commonly practised by many people in urban areas.

Pneumonia: Traditionally, pneumonia is treated by burning of points in the chest as first aid before taking the child to a health facility. This form of treatment for pneumonia was common in all livelihood zones. Discussions with health staff at health facilities also confirmed that children suffering from pneumonia who have been burnt of the chests and ribs are often received at the health facilities in critical health conditions.

Cough: The first step is to buy cough syrup or tablets for the cough, and if the cough does not disappear, the child is taken to the nearest health facility. Traditionally, cough is treated by reciting the Koran and using goat soup or eggs as a home-health remedy. This practice of treating cough was found to be common in almost all livelihood zones.

Jaundice: Jaundice was mainly reported by the agro-pastoralists. The symptoms for jaundice were recognized as yellow eyes and general malaise. Treatment involves washing the sick child with blood from a goat.

Vomiting: Rice water from boiled rice is given to a child who is vomiting

Intestinal Parasites/Worms: The most common intestinal parasites or worms affecting children were reported as ascaris, tapeworm and girdia. Both traditional and modern medicine is used in treating intestinal worms. De-worming is best done early in the morning when there is no food in the child's stomach or just before any meal. The de-worming tablets are purchased from shops/pharmacies and used to treat the parasites. Traditionally, popcorn maize, *hildid* gum or sheep oil /wool are used in the treatment of worms in most livelihood zones.

Freshly prepared pop-corn is placed on the child's nose (pop-corns have a strong smell that is apparently liked by the worms). It is believed that when the worms smell the pop-corns, "*they open their mounds and at this point the sheep oil/ghee is given. The oil goes straight into the open mouths of the worms and they just come out.*" This treatment does not require a traditional healer. Alternatives to pop-corn are: maize, beans, peanuts and water-melon seeds.

The gum of *Hildid* tree is mixed with water and given to the child three times a day, about 30-60 minutes before meals for three months. The *Hildid* gum is believed to have a bad odour which makes the worms faint or die before coming out. The herbal mixture is given before meals to find the worms hungry and waiting with their mouths open to drink.

Sheep oil (one teaspoon per day for seven days) or wool is also commonly used in the traditional treatment of intestinal worms. It is believed that the fat or wool from sheep is poisonous to the parasites and facilitates their expulsion from the stomach; hence all worms are believed to get out of the stomach by the 7th day of treatment.

In urban areas, the following additional methods are also used in treating worms:

- 1) **Use of pumpkin seeds as de-wormers:** The pumpkin seeds are ground and cooked with maize and small amount of sesame oil. Once the child has eaten this mixture, the worms just roll out.
- 2) **De-worming with cooked green maize and *hildid* :** The green maize is cooked in a small amount of sesame oil and *hildid*. As the maize is chewed by the child, its smell makes the worms come up the oesophagus to the mouth. The worms then faint and die.

If the caregiver notices that the above methods have failed in treating the intestinal worms and the child is badly dehydrated it is taken to the hospital/ health facility.

Measles:

The study found that most people in almost all livelihood zones, including those in the urban areas, believe that there is no modern treatment for measles. Measles is therefore managed with:

- 1) Smearing the blood from liver on the child's body. The child is then washed in goat soup and put in a cool place. The child may be covered with a goat's skin to keep warm. Because of the skin rash that accompanies the measles, children are instructed to avoid rubbing the eyes lest they become blind. For younger children and those who cannot control rubbing their eyes, the hands are tied to prevent them from rubbing the eyes. The goat milk is given to the child to drink four times a day to keep the throat agape.
- 1) Giving the sick child meat and soup of did-dik (*sagaroo*) animal
- 2) In parts of Lower Juba children with measles are fed on faecal matter of the dik-dik (*sagaroo*) mixed with water until the child recovers. There are usually no side effects experienced with this method of treating measles.
- 3) Feeding the child on honey, *sagaroo* meat and soup. The *sagaros* are often bought from the hunters. The honey is given one teaspoon per day.
- 4) Bathing the child in goat-milk every morning for three days.

Acute Malnutrition (*nafaqodaro*)

Acute malnutrition, locally known as *nafaqodoro*, is associated with poor food and sanitation. The two combine to cause malnutrition and treatment involves giving the child more food. No food is withheld during treatment of malnutrition. Medicine is used to treat accompanying diseases. In case of kwashiorkor, the swollen limbs, stomach and face are burnt to remove the fluid.

Polio: Treatment of polio involves reading the Koran as a first step, followed massaging a small amount of sesame oil and water on the scalp, after which some ground leaves are boiled and placed on the head and washed off after about 1.5 hours. This practice is done once a day for at least three days. A piece of needle and copper wire together with a piece of *hildid* are then placed together in a small pocket and hang round the child's neck. *Malmal* with a little *hildid* mixed with

water is also massaged into the skin to chase away the “devils”. The child is then fed on porcupine meat.

Evil Eye: Treatment of the evil eye involves use of the following ingredients: faeces of elephant, hooves of donkey, hyena’s skin, garlic and *Ubuore* leaves. These ingredients are burnt and the child is steamed with the smoke. In the process, the child sweats, sneezes with a lot of liquid coming out through the nose as a sign that the evil is being emitted from the head. During process, it is believed that the child’s brain clears; the child becomes calm and recovers from the evil eye.

Table 6 summarises the management of various illnesses using both modern and traditional medicine.

Table 6: Illnesses and Type of Treatment

Illness	Modern Treatment	Traditional Treatment
Diarrhoea (Normal)	ORS or Ringer’s Lactate → Health Facility → Prayer	Lemon Juice (no sugar as it aggravates diarrhoea) Herbal Treatment → Sour milk without fat,
Diarrhoea associated with teething	None exists	Removal of teeth (<i>Iligow</i>)
Cough	Buy cough syrup	Goat soup → Eggs → Traditional healer → Recite Koran → Health facility
Dysentery	Ringer’s Lactate	Sheep fat or soup.
Intestinal Parasites	De-worming medicine	<i>Hildid</i> ; Sheep fat/oil/wool
Tonsillitis	Modern drugs	Cutting of uvula
Measles	Vaccination (Not popular)	Smear child with Blood or liver & cover child with goats skin to keep warm → Goat milk drink
Pneumonia	Antibiotics	Burning of points in the chest as first aid
Malaria	Modern Drugs	Camel milk as laxative to clean stomach Neem Herb; Dacaar herb
Malnutrition	Modern drugs to treat illnesses	Give More food, burning of swollen sites (if kwashiorkor with oedema)
Fever	Buy Tablets → Health Facility	Fevers that are not understood are cured by traditional healers
Skin Infection	Buy Medicine → Pray	Read Koran/pray → Buy Medicine

2.2.3 Impact of Conflict on Care Practices

- Unemployment leading to poor access to food and private modern health care services
- Women’s roles in the livelihoods have changed, reducing their time for childcare. More women are now involved in casual labour, vending *miraa* and water as well as other forms of small scale for income to feed the family.
- Collapse of infrastructure due to collapsed government, hence poor infrastructure including health facilities, roads, markets, schools.
- Lack of job opportunities, hence men are more idle with very little or no income to support their families, particularly the non-pastoralists, urban communities.
- Inadequate health care services.

- Frequent population displacements have led to disintegration of the traditional social support network.
- Loss of assets due to war has led to deteriorations in livelihood systems. This implied reduced access to milk and quality food for children.
- The psychological impact of war on mothers and children interferes with the psychosocial care and development of the children.
- Both women and children living in fear of armed conflicts. This also interferes with a mother's ability to produce enough milk while breastfeeding.
- At the household level, conflicts among household members have also directly impacted on care for children, particularly where parents have divorced and separated, and the traditional social network is also weak or non-existence.

CHAPTER 3: NORTH EAST ZONE

3.1 Situation Analysis

3.1.1 Socio-political Situation

North East Zone, also known as Puntland (a name that means land of sweet smells and probably derived from its production of frankincense). The borders of NEZ incorporate Bari and Nugal regions. It is bordered by the Gulf of Aden in the North, North West Zone in the West, South and Central Zone in the South and Indian Ocean in the East.

Map 2: Regions in North East Zone



3.1.2 Health and Nutrition Situation of Children in NEZ

Overview

The rates of child mortality in Somalia have been among the highest in the world⁸. Whereas the baseline under-5 mortality rate (U5MR) for sub-Saharan Africa is about 1.03 deaths/10,000 U5s/day⁹, in North East Zone, the U5MR is about 1-2 deaths/10,000 U5s/day. The risk of U5 mortality is higher in Gagaab and Karkaar livelihood zones of Bari Region.¹⁰ According to Sphere Standards U5MRs should be maintained at below 2.0/10,000 U5s/day.¹¹ Prevalence of acute malnutrition especially among protracted IDPs has remained unacceptably high (above 10%) over the last six years.

3.2 Findings from NEZ

The information that was collected in NEZ covers four different livelihoods, namely pastoralists-cum-agro-pastoralists (pastoralists who are turning into crop farmers as well), urban and coastal. It was collated from community groups, case studies, community leaders, such as, local and women's group leaders, and development agencies working in NEZ. The children were also given a voice through representation in Kalabeyr.

⁸ UNDP. 2006. Millennium Development Goals (MDG) Report. UNP.

⁹ The Sphere Project. 2004. Humanitarian Charter for Minimum Standards in Disaster Response.

¹⁰ FSAU Technical Series Reports No Volumes 9-13

¹¹ The Sphere Project. 2004. Humanitarian Charter for Minimum Standards in Disaster Response.

3.2.1 Infant and Young Child Feeding

IYCF Pastoral-cum- Agro-Pastoralists Communities in NEZ

Initiation of breastfeeding: The proportion of mothers that breastfeed within one hour of birth as estimated by participants from various FGDs ranged from 10-66%. The reasons given for not initiating breastfeeding within one hour of delivery are listed in Table 3.1 (Appendix 3) among them inappropriate beliefs and lack of knowledge and experience. A group of leaders reported that older women believe that breastfeeding within an hour of birth is not good and due to the influence they have on younger mothers the end result is delayed initiation of suckling. An FGD session with children showed that children know that newborn babies are breastfed after two days but their view was that they should be breastfed immediately. Their observation of practices of mothers in their community brought in the inter-generational dimension in which practices are likely to pass from one to the next.

Attitude: (belief) A majority (55%) of pastoralists believe that water with sugar should comprise the first feed for a newborn and 40% indicated that the belief has its base in the Koran; however, it was explained by other respondents that the Koran does not address the issue of giving water to a newborn, rather water is given for other reasons, e.g., stopping a baby from crying; the belief being that should such a baby die, it would report the caregiver to God. A consequence of breastfeeding a child in the first hour of birth would be that the child gets sick. The participants consider that this would be the view of 5% of mothers.

Practices: The practice of not initiating breastfeeding within one hour of birth is widespread. The reasons for this include lack of knowledge, illness and weakness of the mother as a result of delivery experience and also the fact that it is a tradition. Initiation of breastfeeding occurs between two and seven days with most starting within 2-3 days. At least 90% of the mothers were estimated to initiate breastfeeding within the first three days and thereafter breastfeeding is done on demand. The reasons for delaying initiation are presented in Table 3.1.

Colostrum: The respondents, using proportional piling estimated that between 66-90% of mothers allow babies to consume colostrum. The indications thus being that 33% of the children do not consume colostrum and the reasons for the practice are stated in Table 3.1).

Prelacteal: When a baby cannot be nourished from the breast from the onset pre-lacteal feeds are given as an alternative. The feeds that are given in the first 2-3 days, as establishment of breastmilk flow is awaited include: water with sugar, goat-milk, milk (not specified and hence could be from any livestock), reconstituted powder milk.

Exclusive breastfeeding, total duration and introduction of complementary feeding: Some caregivers know that the ideal period of exclusive breastfeeding is six months but practise ranges from zero to six months. When asked for their understanding of the term exclusive breastfeeding, the response was that to caregivers, it means nurturing a child on breastmilk only. The duration ranges between one and two years or until a mother realises she is pregnant.

Psychosocial care (responsive feeding)

Refusal to eat and monitoring feeding: It was estimated that about 85-95% of caregivers do monitor and supervise children during feeding. When a child rejects food prior the caregiver's perception that it has eaten adequate amounts, the following strategies are applied to help children overcome refusal coaxing child to eat through praises and more praises, hugs and kisses, with promises (that certain rewards/goodies will be given) or forcing to eat by often instilling fear.

Other identified attributes of responsive feeding (satiety, frequency and types of food): In the event that food is not adequate for all household members, priority feeding of under-fives is practised; isolating an adequate portion for the children, serving them first, that is ensuring they eat enough before food is distributed to others. Nonetheless, some just distribute available food equitably. Considering the issue of portion sizes and satiety in general, it was reported that often the portion sizes are dependent on family size, that is number of people; and often, it was claimed, the larger the household size the smaller the portion. It was reported that the pastoralist children between the age of 0-1, 1-3 and 3-5 years are fed, respectively, 5, 5 and 3 times per day, excluding breastfeeding. The common types of foods given to children were reported to be, milk, rice, bread and (sorghum) porridge.

Sources of food

According to what was reported, households with livestock purchase 80% of the food which makes it the main source while livestock yields the remaining 20%. Inability to purchase food was stated as the key limiting factor to access to desired food for 85% of the households.

IYCF Urban communities in North East Zone

Ante/postnatal care

Diet during pregnancy: The diets of pregnant women are considered to be special due to whenever feasible, increased consumption of meat, milk and porridge. Food avoidance or restrictions during pregnancy are not a significant issue.

Social networks: The mother of the pregnant woman, her grandmother and TBAs bear most influence on a pregnant woman.

The main activities of the urban women apart from those whose other responsibility is income generation are in the domain of domestic chores that include childcare, cooking, washing clothes and any other chore that needs to be performed at the household level.

Initiating breastfeeding: It was estimated that initiating breastfeeding within an hour of birth is practised by only about 4% of the mothers unlike among pastoralists and agro-pastoralists (10-66%). Immediate breastfeeding is associated with pains in the uterus and breasts and these were cited as a reason for delaying initiation. The belief that the breasts, at this point, have no milk is another reason that was given.

Colostrum: Less than a third (30%) of babies is allowed to consume colostrum. Part of the reasons for refusing to offer colostrum is that babies reject it.

Exclusive and total duration breastfeeding:

Exclusive breastfeeding was reported as lasting between three and six months but during the period preceding initiation of breastfeeding, babies are sustained on milk, water with glucose and biscuits. It was claimed that complementary feeds are introduced between the age of three and six months. The total duration of breastfeeding ranges between 20 and 24 months and it can be as short as six months.

Psychosocial care

Responsive feeding: It was approximated that 80% of mothers monitor their children while they are feeding and do encourage them to eat. When a child rejects food prior to caregiver's

perception that it has eaten adequate amounts it can be forced to eat, offered a preferred type of food or is enticed through, songs and story telling.

Types of foods: fed to under-five year old children breastmilk, milk, cereal based porridge, bananas, potatoes and any other foods in the family diet. In selecting food it was reported that mothers aim to give a diet that is rich in proteins and vitamins.

Water hygiene and sanitation

Wells are the main sources of water and tanks serve as storage. Treatment of water with chlorine and limestone prior to use was reported as being common. Children are encouraged to wash their hands before eating or handling food while it was estimated that 30% of the mothers wash their hands before handling food. Children's waste is disposed into latrines and is considered one of the causes of health problem. Diarrhoea and eye infections were associated with sanitation and unhygienic environments.

IYCF Coastal communities in NEZ

Prenatal and Postnatal Care

The coastal expectant mothers modify their diets during both pregnancy and lactation. If food affects the expectant mother in anyway it is avoided (examples included foods that cause heartburn or food poisoning). Based on the belief that somehow the baby will be affected, pregnant mothers avoid eating meat of a sheep that are cut in certain a way. Generally there are no special diets during the lactation phase but mothers are encouraged to eat foods (rice, pasta, dates, fruits (banana, mangoes, oranges) and juices that are considered to enhance production of breastmilk.

Pregnant women continue performing their usual household duties, such as childcare, cooking, washing and cleaning, going to the market to purchasing and if employed or engaged in business that continues during pregnancy because they need to sustain income generation.

The networks of mothers are based in the communities and include TBAs, CHW, mother, mother-in-law, MCH, relatives of the mother and even elders. The type of support varies according to the different groups.

Breastfeeding initiation colostrum EBF and complimentary Foods

The FGD respondents estimated that between 95-98 % of newborns are fed within the first hour of birth and explained that the 2% that does not probably comprises new mothers who do not have experience in breastfeeding. The reasons for delay in initiation are listed in Table 1. The proportions of those who give colostrum correspond to those who initiate early breastfeeding that is 92-98% (this is an estimate based on respondent's view based on proportional piling). The following were cited as reasons for not allowing babies to suckle colostrum, pain due to contraction of the uterus, cultural based reasons, lack of knowledge and the belief that breastfeeding makes a mother unable to work. Nonetheless, the use of colostrum is associated with awareness of its qualities, such as boosting immunity (against, TB, malaria, diarrhoea, and skin infections).

Given early initiation and the practice of breastfeeding on demand by almost all the women, it follows that the proportion (98%) of those who initiated breastfeeding within the first three days was also high. The reasons for further delay in breastfeeding 2-3 days as opposed to one hour include, the fear that they mothers will feel tired after breastfeeding, others feel it is inappropriate to breastfeed and other delay for cosmetic concerns; because they do not want the breast to

become soft and sag/drop. To expound on this, KAP established from other respondents (among NEZ respondents) believe that if a newly delivered mother avoids breastfeeding for the first three days the breast will not sag. During the period breastmilk is withheld, babies are given milk and water with sugar. Some of the mothers have learnt advantages of early initiating breastfeeding early from the MCH and are applying that knowledge.

The respondents reported that caregivers understand exclusive breastfeeding to be the period when a child is fed on breastmilk only without even water. Exclusive breastfeeding is especially practised up to the age of three months. The communities were reported as being positive to exclusive breastfeeding as they do encourage mothers to practise. The young mothers are seen as not being keen on breastfeeding and therefore need to be trained and motivated. It was reported that a few babies are not breastfed; such are fed milk and water.

Additional fluids are introduced into the child's diet at the age of either 2-3 months or 3-6 months. This is the period when mothers start trying to get their infants to take liquids and solid foods.

Total duration of breastfeeding: The duration of breastfeeding can last up to 2.5 years but can be as short as one month but the age of six and one year were picked as benchmarks. The total duration basically depends on individual mothers.

Intra-household food distribution: although there are variations in the order of serving, the general practice is to serve children under the age of five years first. The Ufayn community, however, reported that the tendency for some is to serve the father/men first (as is required by their culture), then the children and finally the mother/women. If there are guests they are likely to be served first. The culture requires that in all ways, men be show respect hence have to be served first.

The portion sizes are based on age of the child with acknowledgement that younger children consume less food than older ones. Younger children (< 5 years) are served together while older ones (e.g., 5-10) are served together. The size of the plate is used in determining portion size. As a coping strategy, that is when food is insufficient, children are given water or tea. The number of meals is reduced (to one full meal) and children are encouraged to sleep earlier/longer. Some modify meal content (foods). Assistance from relatives in the Diaspora was affirmed as a way of coping and enhancing livelihoods.

IYCF: Perspectives Collated from INGO in NEZ

This section presents views of persons working with INGOs.

In response to the question whether mothers have adequate knowledge on breastfeeding, one of the respondents was categorical that they do not have while the other was of the opinion that some have while others do not. Their view on mothers' knowledge is reported by specific dimension of breastfeeding. On initiation of breastfeeding in the first hour, they reported that mothers know that breastmilk decreases risk of illnesses and hence needs to be initiated early, on colostrum- its importance is not known but some may know that it is important for immunity. According to them, mothers also believe that breastmilk is inadequate and this explains why exclusive breastfeeding is not practised. Some know that a child should be exclusively breastfed for 4-6 months. Commenting on the attitude of caregivers in general on adequacy of breastmilk alone for the first four months of life, the view was that mothers believe breastmilk is inadequate. It was claimed that all mothers know that a child should be breastfed up to the age of two years as this is what the Koran recommends.

The two key informants working with INGOs affirmed the reasons cited by the community respondents. They also noted that a mother's attitude towards breastfeeding may be the same or may differ from that of her social network members. The belief that the breast has no milk is a key factor in delayed initiation of breastfeeding. They attributed the origin of the belief and hence the consequential practice to culture and lack of knowledge. The practice of delaying initiating breastfeeding is sustained by continued belief that the breast has not milk, lack of appropriately competent TBAs and also lack of health education.

Since the two differed in their view on whether the practice existed before the conflict with one affirming that it did while the other claimed it did not, the conclusion is that it probably existed but has become more widespread during the conflict era.

The two respondents were requested to suggest practical ways that can be effectively applied to make mothers breastfeed immediately. They both proposed training and building capacities of TBAs and caregivers and creation of awareness on breastfeeding to the community in general.

Although a mother decides on the appropriate age to introduce complementary feeding, other caregivers influence the decision making process. The age of the child and knowledge are major influencing factors on when to start while nutritional quality of foods, availability and affordability of foods influence what is given as complementary.

Mothers stop breastfeeding when they become pregnant due to the belief that the milk of a pregnant mother causes diarrhoea to the one being breastfed. The other reason is illness, when such a mother becomes sick or feels weak (anaemic) it is attributed to breastfeeding while pregnant.

The networks that mould breastfeeding include, fathers (husbands) who are seen as people who assert pressure on mothers. This can be direct or indirect, e.g., when a mother is apprehensive of breastfeeding for fear that the breast will sag and result in reduced or loss of her husband's interest in her. They can either encourage or discourage a mother. Other key persons are grandparents of the child. The others, relatives and neighbours among others are less influential.

In response to the question whether there are specific community members who need to be convinced first for change in child feeding practices to occur, the answer was in the affirmative and both listed husbands/fathers of the children and service providers (TBAs, midwives and other health workers) change agents.

Two nutritional strengths of Somali complementary diets are that it is considered to be nutritious (in which availability of powder milk was accredited) and the practice of continued breastfeeding. On the flip side, offering of water with sugar and tea and the general inappropriate complementary feeding were cited as weaknesses. It was noted that some caregivers do not observe hygienic practices and feeding of unboiled milk was cited as one example.

In expounding further the issue of inappropriate complementary feeding, food availability, lack of knowledge on balanced diets and health and lack safe water for domestic use, including drinking were cited as key factors that influence the quality of children's diet between the age of four and 59 months. The key players in determining the quality are mothers and fathers and other caregivers in general.

Obstacles to successful breastfeeding include wrong information by fellow women, wrong beliefs (that the breast has no/inadequate milk, pressure from grandmothers, ignorance, lack of knowledge and lack of a breastfeeding policy).

The two key informants view is that caregivers do not have adequate knowledge on complementary feeding who then affirmed that, obstacles to successful complementary feeding are poor understanding in general and of feeding/diets during illness in particular; this was attributed to both illiteracy among caregivers and poorly supervised inadequately skilled personnel. Other obstacles are inappropriate practices such as use of feeding bottles and emergencies, e.g., drought.

Being in conflict is viewed as having had an impact on breastfeeding because many women have become the breadwinners of households has taken time away from childcare and thus breastfeeding. It has also contributed to lack of knowledge and motivation. This was mainly attributed to collapse of government systems.

The networks that mould breastfeeding include, fathers (husbands) who are seen as people who assert pressure on mothers. This can be direct or indirect, e.g., when a mother is apprehensive of breastfeeding for fear that the breast will sag and result in reduced or loss of her husband's in her. They can either encourage or discourage a mother. Other key persons are grandparents of the child among others.

Positive deviant: NEZ is probably nutritionally better-off when compared with south and Central Somalia and it was suggested that it could be due to higher milk consumption. Challenges such as lack of capacity to preserve milk were mentioned. The children living in the mountain areas in the north east are considered to be at a higher risk compared with those from lower areas and this was attributed principally to lack of dietary diversity.

It was clarified that although frankincense is produced in this region, the producers make very little money as merchants (the middle men) are the main beneficiaries. The population in the south was considered to have better climate.

Coping strategies: It appears that options for coping are limited to intra dependency of families (families depend on each other), they provide money to each other. The argument that children are subjected to skipping meals so that they learn how to deal with hunger were dispelled.

The views of both the general respondents and those of the NGO staff concur. Taking the given estimates (98%).it can be argued that almost all babies (98%) are breastfed and on demand, that the desired total duration of breastfeeding is two years but pregnancy is most likely to be an obstacle to its achievement. The fact that all children (probably with only a few special exceptions) are breastfed and it is done on demand, continued breastfeeding with complementary feeding, practice of responsive feeding, feeding children first when food is insufficient and that milk has a core place in complementary feeding are best practices that must be recognised and protected. Poor feeding practices include delay in initiating breastfeeding, withholding consumption of colostrum, very low performance in exclusive breastfeeding, feeding water with sugar to babies hence undermining exclusive breastfeeding and nutritionally deficient complementary diets (basically lacking in fruits and vegetables).

3.2.2. Health Seeking in NEZ

Health seeking among Pastoral-cum- Agropastoral in Puntland

The most commonly reported illnesses among pastoral communities are diarrhoea, malaria, respiratory tract infections, such as colds and cough, intestinal worms, malnutrition, skin infections and convulsions. It should be noted that convulsions normally manifest in conditions in which fever is symptomatic.

Diarrhoea is basically managed through administration of ORS and if the child does not recover it is taken to a health facility for better management. Some of the cases are treated using rice water or herbal cures.

The parents of the child make the decision on where a sick child is to be managed or treated while the condition (state of illness) is applied in deciding when to seek help. Nonetheless there are some cases where it is only the father who can make such decisions.

Social networks: If a mother has to be away with a sick child, she may take all the young children with her or leave them with a neighbour.

Knowledge, Attitude and Practices

The childhood illnesses among the agro-pastoral population are malaria, diarrhoea, respiratory tract infections (coughs and bronchitis), eye infections, intestinal parasites and measles. However diarrhoea and malaria are the most common illnesses among young children. The types of common intestinal parasites among children are giardia, amoeba, ascaris and thread worms. Giardia and amoeba are the most common; affecting 56% and 48% respectively of children under the age of five years. Overall prevalence of infestation with intestinal worms among children was estimated to be 80%.

Diarrhoea: Poor sanitation, in which lack of use of latrines was mentioned as an indicator is considered to be the main cause of diarrhoea. It was reported that many households do not have and therefore do not use latrines. Instead they use bushes. It was explained that when it rains, the water carries the faecal matter with it and contaminates the water sources for domestic water.

Malaria: It was reported that rain water forms pools that then become breeding sites for mosquitoes.

People have the alternative of seeking treatment from traditional healers or modern health facilities or buying medicines. Diseases that are commonly treated by traditional healers include diarrhoea, measles, stomach ulcers (gastritis) and teeth problems. Gonorrhoeal was also mentioned but clarified that this is common among adults.

The current view is that the number of patients seeking the services of traditional healers is decreasing, indeed it was estimated that while 89% of the cases will be managed at a health facility or have drugs bought only 11% will be managed under traditional healers. This is the estimated proportion of people who believe that traditional cures are more effective than modern treatment. It was further explained that, having grown-up at a time when traditional healers were solely responsible for treating and managing people's health, about 67% of the aged people do not believe in modern health services and hence are still dependent on traditional cures.

Decision making in seeking health care

Decisions on where to take a child for treatment is taken by either the father or the mother. Nonetheless, the type of illness and both the availability and accessibility (financial) are key in the choice of the type of service that is finally used. Some illnesses are believed to be more or only responsive to traditional cure and hence are more likely to be managed as such. Three childhood illnesses that were identified under this category were teething diarrhoea '*iligow*' (80% of cases treated are treated by a traditional healer), headache and stomach pain (in which 'burning' of specific body sites with a heated piece of metal is applied as a treatment). '*Iligow*' happens only once in a lifetime and it can only be cured through traditional healing.

The fact that modern health care services in the region are only available at Bossasso town was recognised as a hurdle in the use of modern medicine and hence the continued use of inappropriate traditional management. In terms of knowledge, the detection that a child is having teething diarrhoea rather than other types of diarrhoea include, continuous rubbing of the hand against the mouth and biting of lips, stool is different in colour from other diarrhoeas (it is too yellow), presence of symptoms of anaemia (symptoms of '*iligow*' related anaemia are- pale eyes), constipation and oedema.

Belief: It is believed that intestinal parasites only infest once in a lifetime and hence one needs only to be treated once in a life time. To affirm this belief, the respondents claimed that they have never heard of a child who had a re-infestation. The traditional treatment involves the use of '*hildid*' gum.

Practice: The respondents reported that traditional healers are involved patient management through the invitation of caregivers who also pay for the services. When a caregiver observes and makes a decision that a child is sick, they take the child to the traditional healer or he is requested to come to the patient. In households that have older people who have, through time, been exposed to management of some of the illnesses, household based case management is done.

Social support networks for child care: Mothers were identified as the key caregivers and husbands, daughters and other close members of the family, in that order, are important social networks in health seeking for children. The role of neighbours was also acknowledged.

Immunization knowledge and practices:

It was reported that communities are well aware of the existence of vaccines for six childhood diseases for which vaccination against polio is done through outreach services and sometimes measles vaccine is given simultaneously. The view on proportion of children who get immunized indicates that all children (100%) get polio vaccines, 86% and 40% get measles and other vaccines respectively. The high coverage for polio was attributed to the outreach mode of vaccine delivery the higher level of achievement in measles vaccination is attributed to tagging it to the polio campaigns. The low rates of other vaccine coverage were attributed to limited accessibility as children have to be taken to Bossasso town in which distance and cost are considered to be insurmountable challenges.

Obstacles to health seeking

The obstacles to better health seeking for the agro-pastoral population can be summarised into three domains (i) inadequate health systems, that are unable to provide accessible (distance and financial) and quality services (ii) dependence on traditional cures especially for the conditions in which cure is perceived only in the realm of traditional healers (iii) and poverty which should be seen as a cross cutting challenge. The section on overall recommendations further expands on this.

Conflict and Malnutrition

Community's view is that malnutrition is not as high in Puntland as other regions in the South and Central Zone. The reasons advanced for this positive state hinge on the recognition that absence of conflict enables people to do what others in conflict areas are unable to do or to sustain and key to this is sustained production of livelihoods; for them it is represented by crop farming and livestock rearing. Others mentioned include; having shelter, whose lack was associated with higher exposure to malnutrition, diseases, rain and too much sun. Conflict is associated with general destruction which stagnates, development with negative mental and psychological consequences. Conflict was also associated with undermining feeding as it denies households opportunity and time to prepare good meals.

Community Perception of Potential Interventions

Considering that participation of communities is integral to the success and sustainability of interventions, the community members were requested to share their views on types of interventions that would have an impact and give explanations why they have not taken action. They proposed getting rid of pools of water as one intervention. Then it was explained that they have not been effectively able to act on the problems because they lack resource capacity; such as, tractors (to use in filling holes and depressions with stones, sand etc), wheel burrows, folks-jumbles (for harrowing), lorries or funds to hire and even the knowledge on exactly what to do.

The following section provides an overall view of Puntland from perception of development agencies working in Puntland and helps in painting a more comprehensive picture of the situation.

Health Seeking Urban NEZ

The common illnesses among children under five years of age are diarrhoea, eye infections, colds and cough. The others are intestinal worm infestation, malnutrition, skin infections and convulsions.

Practice: In the urban setting, the first option in seeking treatment is to take the sick child to the MCH (representing health facility).. For example, when a child has diarrhoea they are taken to a health facility (MCH) where treatment is then taken over by the facility staff and ORS was reported as the main treatment. Parents take decisions on where the illness is to be treated. The nature of illness influences the decision on how and where it is to be managed. It was observed that some of the urban communities have better access to health services than others.

Social Support Networks

Social support available to caregivers comes in form of clothing, money and food. The source of such support includes relatives and good neighbours and awareness creation was stated another stated form of their contribution. Fathers were listed as other caregivers whose role is to provide livelihoods and are integral in health care and creating awareness. One of the roles of neighbours is care-giving to children when their mothers have to be away.

Health Seeking: Perspectives Collated from INGO Personnel in NEZ

Table 3.2 (Appendix 2) depicts types of childhood illness by season and indicates the signs that are used to identify them. Diarrhoea, tonsillitis and intestinal parasites are all seasonal illnesses. Malaria was only reported among pastoralists and agro-pastoralists and was reported as only being common during *Gu* and *Deyr*. NEZ is viewed as having lower levels of malnutrition because it has better food security while recognising that diarrhoea is a risk factor in aetiology of malnutrition, has very few neonatal deaths though poor documentation may mask extent and that cholera outbreaks result in many deaths among under-five year old children. Matrix 3.1 depicts

factors that INGO personnel associate with low or lack of utilization of modern medicine matched with what they consider to be practical interventions. Table 7 presents judgemental views on the behaviours of the caregivers in response to illness.

Table 7: Delay in appropriate health seeking and proposed interventions (Puntland)	
Reasons for delay/failure to take sick children to a health facility	Practical interventions
<ul style="list-style-type: none"> • Unavailability of facilities • Low understanding • Economic limitations • Beliefs (e.g., Child will recover) • Belief in traditional cures (e.g., burning) • Modern cures are expensive 	<ul style="list-style-type: none"> ➔ Improve access to health facilities ➔ Educate to raise awareness ➔ Raise income through IGAs ➔ Change to take action immediately – recommended -take to a health professional ➔ Help appreciate traditional cures are not effective ➔ Reduce treatment fees at health facilities

Decision making: In response the parents of the child were stated as the decision makers on type of treatment. If the key decision makers are away others caregivers can take-on that role. Indications are that it would not be an issue were the alternative caregiver to make the wrong decision, but if wrong decision was taken, the issue would be discussed.

Conflict and changes health seeking

It is acknowledged that some changes have occurred. The positive ones being that some new health facilities (health posts and MCH clinics) have been established and are operating. The negative changes include shortage of human resources and lack of quality control. Lack of appropriate health services was described as so deficient that sometimes mothers die in labour.

Diarrhoea, pneumonia and malnutrition are diseases identified as having been most influenced by the conflict. The reason for this are that the mothers do not have time and are not as available to provide care, lack of food, lack of clean water, and overcrowding. The mothers are now bread winners while husbands are jobless. A high proportion of the population comprises internally displaced persons whose the level of poverty was described as very high. With such poverty it is not possible to obtain desired treatment.

Best practices in health seeking include the capacity to recognise that the child is not well and action is taken; although it may not always be the appropriate response, having children immunized, offering children water, juices or ORS during diarrhoea, seeking treatment at modern health facilities and paying more attention to the sick child. The poor practices include delay in taking action when a child is suspected to be ill, having teeth extracted as a treatment for diarrhoea and what makes it worse is that it is done without infection protection and not complete dosage as prescribed. Additional best and poor practices as stated by NGO staff are presented in Table 3.3 (Appendix 3).

Recommendations from Groups of Respondents

On the premise that recommendations on improved feeding and health seeking practices for young children must be acceptable and feasible to community members, households, caregivers in particular and the pertinent development partners, suggestions for solutions to challenges that confront caretakers were solicited across the groups of respondents and are presented in Table 3.4 (Appendix 3).

CHAPTER 4: NORTH WEST ZONE

4.1 Situational Analysis

4.1.1 Socio-Political Situation

The North West Zone (NWZ), also known as Somaliland, declared itself independent in May 1991 and whose borders follow those of the former British Somaliland Protectorate. However, the declaration of independence is not recognised in other parts of Somalia or internationally. The NWZ has nonetheless managed to avoid the protracted conflict and violence that has afflicted much of southern Somalia (UNDP, 2001).

NWZ as shown in the Map 3, is made up of Awdal, Galbeed and Togdheer regions while placement of Sool and Sanag is characterised by sporadic disputes between NWZ and NEZ. NWZ is bordered by Djibouti in the Northwest tip, Gulf of Aden in the north, NEZ in the east and Ethiopia in the south. Hargeisa, the capital of NWZ is the largest urban setting.



Map 2: North West Zone

Due to general stability, peace and better socioeconomic prospects, the town has, since the early 1990s, hosted large number of IDPs and returnees from south and central Somalia and Ethiopia. Currently, Hargeisa has a total of seven IDP settlements with an estimated population of 83,200 persons. The IDP population is highly susceptible to socioeconomic, health and nutritional risks due to their lack of stable livelihood.

4.1.2 Nutrition and Health Situation of Children in NWZ

In North West Zone, the U5MR is below one death/10,000 U5s/day (FSAU, 2007). Past assessments have identified poor health, sanitation, shelter conditions, food insecurity and high malnutrition levels, as the major problems that affect IDP and returnees. Nutrition assessments done in Hargeisa show that the prevalence of acute malnutrition dropped from 27% in 2001 to 9% in 2006. Severe levels of acute malnutrition also dropped between 2001 (3.3%) and 2006 (1.1%). The most prevalent illnesses are diarrhoea and acute respiratory tract infections.

4.2 Findings from North West Zone

4.2.1 Infant Child and Young Feeding

Pastoralists

Pre-Postnatal Care

Diet: It was reported that the diets of women in the pre-postnatal period are modified and considered to be special. Deliberate effort is made to include meat, soup, porridge (*kimis*), millet and tea. Some areas in the northwest consider rice and milk to be special foods that should be consumed by pregnant and lactating women.

Food Restrictions: Among pastoral groups in different locations, there was no consensus on whether or not there are foods whose consumption traditions prohibit or restrict. Information obtained from some parts of Galbeed and Sinaro region suggest that food prohibitions exist while others indicate that they do not exist. Triangulation of information, however, implies that though prohibitions exist they are uncommon.

Social networks: The mother, husband and TBAs are the persons who most influence women during the pre-postnatal phases while traditional healers do so at a lower degree. The type of support availed during these phases include advice, psychological, financial and logistical support (e.g., collecting food rations). In general, the women were reported to be recipients of nutrition advice from elderly women (who include their mothers), TBAs and CHWs. Nonetheless, findings from Sanag imply that no nutrition advice is given. The support networks have both positive and negative implications on breastfeeding as some encourage while others undermine it. Availability of funds and rations has the capacity to facilitate buying of alternatives to breastmilk and hence are considered as factors that undermine good breastfeeding practices.

Breastfeeding

Initiation: Few mothers (estimated to be about 5%) offer the breast to a newborn within the first hour of birth. The reasons for not initiating breastfeeding soon after birth are listed in Table 4.1 (Appendix 4). The proportion of babies who are breastfed within the first three days of birth and those who consume colostrum were estimated to be 80% and 8-10% respectively. It was reported that mothers squeeze out and discard colostrum which explains the lower proportion of those who consume colostrum. The following were stated as reasons for not allowing babies to consume colostrum, lack of knowledge or about colostrum, belief that breast has no milk so babies are not put to the breast and belief that colostrum can make babies sick; it can cause diarrhoea. The reasons for not breastfeeding in the first 2-3 three days include belief that breasts do not have milk, breastmilk can cause stomach upset and can make a baby thirsty (*haraad*).

Breastfeeding: During the period establishment of milk flow is awaited, babies are fed water with sugar. It was noted that some of the pastoral respondents could not articulate the concept of exclusive breastfeeding but some identified it as the period babies are nurtured solely on mother's milk without even water and also knew that it should go on until the baby is six months old. The respondents knew that babies should be exclusively breastfed for 4-6 months but when asked how long they are exclusively breastfed the response was any duration between birth and six months. Principally, breastfeeding is done on demand.

Total duration of breastfeeding: It is an accepted religious instruction; sanctioned in the Koran, that babies be breastfed for a minimum of two years. Nonetheless, it was reported that some mothers stop breastfeeding when infants are as young as three months old. The estimates of proportion of children who stop breastfeeding in ages between six and 24 months varied with the different respondent categories but none stated that breastfeeding goes beyond the age of 24 months. Groups of elderly women of lower economic status estimated that 20-30% of children stop at ages between three and six months, about 35-40% at age of 12 months and 7-22% between age of one to two years with only 3% being breastfed up to two years of age. The elderly women from better economic status estimated that 30%, 43% and 27% stop breastfeeding by ages 12, 18 and 21-24. TBAs and CHWs displayed a more optimistic view; 45% of children breastfed for 12-18 months and 55% to the age of 18-24 months.

Complementary feeding

Food diversity: The types of food fed to young children include, milk, '*anjera*', rice, pasta/spaghetti, maize-meal dishes and tea. Milk, rice '*anjera*' and tea are foods that are mostly consumed on a daily basis. Meat was estimated to be eaten on a frequency of 1-2 times a week (it is not affordable) while spaghetti is likely to be served in 2-3 days a week. A dish made of whole maize and beans '*garrow*' was identified as being inappropriate for younger under five year old children because dry maize though cooked is too hard and difficult for them to chew. On the issue of food diversity where caregivers were asked to state how they decide that the variety offered is adequate, they were unable to articulate. This is taken by KAPS to imply that food diversity is an unfamiliar concept. Nonetheless, some reported that adequacy of diet is gauged by the status of child's growth (child is growing, gaining weight, becoming fat).

Daily feeding frequency: The under-five year old children, in exclusion to breastfeeding, are fed more frequently than older children; up to the age on 12 months children are fed about three times a day and thereafter 2 times a day. Nonetheless, some groups reported that under-fives in general are fed three times a day.

Hygiene practices: In meal handling there are three levels at which hand-washing is encouraged, before starting to prepare, prior to serving and feeding. At any of these points, it was estimated that 91-96% of the women wash their hands. However, the highest proportion of those who do not wash hands was indicated to be at meal preparation point where it was approximated that only 15-40% wash preceding food handling. Majority (65%) however wash hands before serving. All respondent groups reported that children are encouraged to wash hands before an after meals (eating) and estimated that it is done by 75% of the children.

Sources of food: The respondent groups reported that own production and purchasing make the two main sources of food for pastoralists. The groups however differed in their estimation of the proportion of food derived from the two sources; some being of the view that, 9% and 91%, 30% and 50%, 5% and 95% respectively produce and buy. It was also indicated that gifts comprise as much as 10%.

Psychosocial care

Responsive Feeding:

Assisting children to feed and avoid refusal: It was estimated that between 80 and 95% of caregivers monitor children as they feed. Orally and in actions, they encourage them to eat through songs (singing their praises, talking to them; promises of goodies to come, pleading and begging them to eat as they affirming that food is good for them). In action, they move around with the child changing feeding locations in pursuit of the child or carrying the child from one site to another and some punish the children. However, if a child completely refuses to eat, the

caregiver tries to feed at a later time, punishes the child, instils fear (e.g., threatens to/reports the child to the dad or older sibling (usually a brother), or forces the child to eat. Other strategies to encourage a child to eat include making child's food appealing by sweetening and flavouring.

Interruptions during meals: These include child being playful, too much talking during feeding; directed at the child or otherwise, and sometimes a child's temperament (anger). Economic challenges and separation of parents were also cited as disruptive to nutritional provisions. The impact of these disruptions are that a child is likely to discontinue eating (nutritional impact) and may become unhappy (a psychological impact) and start crying. Caregivers have varied strategies for dealing with interruptions that include moving to an alternative feeding location, requesting others (husband) to hold their demands for attention at meal time.

Food prohibitions and avoidance: When children are sick some foods, such as fat and meat (believed to cause diarrhoea) may be withheld. Due to age, children under the age of six months are not given solid foods

Coping strategies in food and meal based food deficits

In sharing food to household members, children under the age of five years are served first and there are no gender differences in feeding of children. When food is not adequate caregivers offer young children an adequate portion then share what is available to other members. In more severe situations the older members forego some meals. Strategic responses such as borrowing money to buy more food are applied. The caregiver knows that a child has had enough if there are leftovers on the plate, by feeling the child's stomach for a feeling of fullness and using cues from monitoring the child as it feeds. When children are served on the same plate the listed are indicators that the food was enough, children do not complain that they have not had enough, do not cry, do not ask for more food, do not shout or scream or express anger. If food served at a specific meal is inadequate (gauged by request for more food by children after finishing the portion they are served), the caregivers orally reassure the child by promising to give more food later. If there is leftover food it is shared-out while some are given tea or some other fluid with sugar.

Agro-pastoralists

Complementary feeding

Food diversity: Milk, rice, anjera and pasta form the main complementary foods. Apart from these foods that are eaten regularly others such as meat are occasionally eaten, may be eaten once a week. This reflects a diet lacking in vegetables and fruits.

Food prohibitions: Children below the age of six months should not eat certain foods, e.g., soaked dehusked or non dehusked sorghum '*garowga and ama hadhuudhka*'. The reason for this is it is believed the food cause stomach-ache or diarrhoea.

Frequency of feeding: The infants below the age of one year are fed four times a day and from age of one year three times a day. In intra-household food distribution the usual pattern is to serve children first but sometimes mother is served first.

Hygiene practices: Care givers who wash their hands before preparing meal were estimated to be about four out of ten but a slightly higher ratio, of six to ten, wash before serving food.

Sources of food: It was estimated that 60% of the food is purchased and 40% is from own production.

Psychosocial care Responsive feeding

The caregivers are considered to know when a child has had enough food as they are aware of the average intake of a child. They have some way of telling that a child has had enough. In trying to help children overcome refusal to eat, caregivers plead as they affirm to a child that food is good for them. If a child completely refuses to eat then it is forced. Other strategies employed by caregivers include putting effort to make food tasty by adding flavours. It was noted that interruptions during feeding sometimes are due to a child's temperament (anger) or lack to lack of appetite.

Interruptions during feeding: Lack of appetite and anger were stated a reasons for children's refusal to feed. Serious levels of refusal to eat were seen as potential causes loss of weight.

Sources of food: Only two sources of food were mentioned; purchase (60%) and production (40%) the percentages reflect the estimated proportion of foods from each source.

Urban Pre-post natal phases

Diet: During the pre-postnatal period some mothers modify diets by adding foods such as liver and milk others do not. It was indicated that some modify to prevent anaemia.

Food restrictions: While general indications are that there are no food prohibitions, goat meat and rice were mentioned as foods that are avoided.

Social networks: TBAs, traditional healers, medical staff, MCH midwives and religious leaders are groups of people that are considered to have most influence on pregnant women. The view was that pregnant women do receive nutrition education (on nutrition, breastfeeding, where to seek help and advice during illness). Support services that are available to the women include health facilities, husbands and relatives, medical staff and religious leaders. The support services encourage initiation and continuation of breastfeeding and good complementary feeding

Breastfeeding

Initiation of breastfeeding: The view of the respondents is that 5-10% of mothers initiate breastfeeding within the first hour of birth, some start four hours after and others 3-4 days after. The reasons for not starting immediately, within one hour, are listed in Table 4.1 (Appendix 4). Breastfeeding is usually done on demand except in the absence of the mother and it continues with complementary feeding. The children who are not breastfed in 2-3 days of birth are mostly bottle-fed with water that has sugar comprising the main feed (see Table 4.1) for reasons for not breastfeeding in the first 2-3 days; in addition those stated under colostrum are also pertinent.

Colostrum: Some mothers (estimated at 26%) allow their children to consume colostrum while others do not. The reasons given for denying colostrum to babies are presented in Table 4.1.

Exclusive breastfeeding: In explaining the meaning of exclusive breastfeeding, the respondent groups are aware that exclusive breastfeeding means giving babies breastmilk only without other liquids. Although some babies were said to be exclusively breastfed to the age of 1-6 months, the common view was that fluids other than breastmilk are introduced right after birth and that really exclusive breastfeeding is not practised.

Total duration of breastfeeding: Duration can be as short as three months or as long as 24 months. It was estimated that up to 30% of the children only breastfeed for only three months, the majority stop by age of six months and only about 4-25%, that is maximum of one out of four, is likely to be fed for 24 months.

Complementary feeding

Food diversity: Meals that are commonly offered to children mainly consist of milk, rice, pasta, meat, anjero and tea. The foods are usually served with a sauce (cooked tomato sauce). Vegetables and fruits were not mentioned.

Food prohibitions: In response to the question whether there are foods that children are prohibited to eat, the response was that there are none except that children under the age of six months (due to their age) are not given solid food. There is no gender differentiation in child feeding.

Daily feeding frequency: Excluding breastfeeding, number of meals offered to children ranged between three and four times. To the age of four months children are fed at the rate of four times. Apart from one group whose view was that children, between six to 12 months are fed four times, the rest reported that children are, from the age of six months fed three times a day.

Hygiene practices during meal preparation: Almost all (90-98%) of caregivers wash their hands before preparing and serving the food to children.

Sources of food: Despite being urbanized households, it was estimated that 60-70% of the foods consumed are from own production and 30-100% is purchased. This is a reflection that there are households probably in certain urban locations that primarily produce their food while others (about 30%) depend solely on purchased food.

Psychosocial care

Responsive feeding

Assisting children to feed and to avoid refusal: The strategies in assisting children to consume adequate amount of foods include monitoring of the child during feeding. This is principally done by the child's mother but alternative caregivers such as fathers and house-help were estimated to assist in, respectively, 80% and 60% of the cases. The respondents estimated that only 40-60% of the mothers are fully involved in monitoring especially due to employment and engagement in IGAs. The view is that caregivers have their own way of gauging whether a child has eaten an adequate amount of food and have ways (examples listed in Table 4.1) of assisting or convincing them to eat. The common causes of refusal to eat as identified by the respondents are, illness, loss of appetite, dislike for the food that is offered, anger and the child having eaten elsewhere, e.g., at a neighbours. To help children overcome refusal to eat, caregivers do any of the following:

Coping with food deficits

When food is inadequate which is characterised by the caregiver's awareness that the child has not had enough or by the children asking for more food, the child is given 'other' foods if available or caregiver requests for donation from close-by relatives but if this is not feasible no additional food is offered.

Obstacles to IYCF and Health Seeking

The obstacles to IYCF and health seeking for three main livelihoods are depicted in Chart 4.1 in which d-conflict refers to conflict within domestic units, war includes general conflicts and

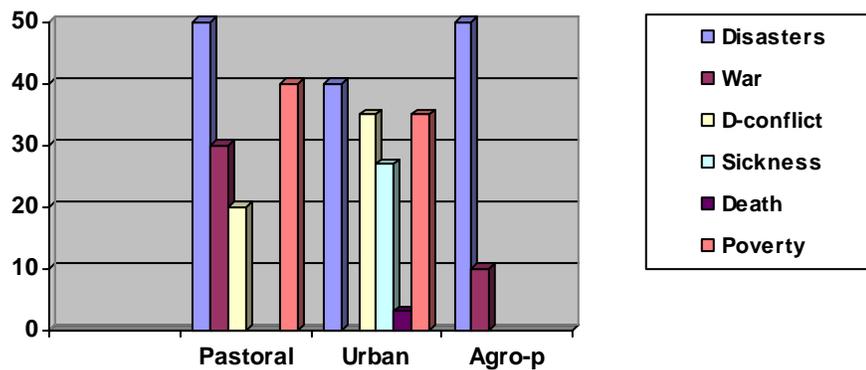
disasters include droughts and floods while death is confined to breadwinners. The percentages are estimates of contribution of each.

Pastoralists: For them, additional factors were low cost of livestock (30%), delay in importation (10%) and inflation (25%). Lack of jobs or money are presented under poverty. Poor accessibility to food was singled out as core in failure to feed children as desired. It was highlighted that poor access to food has a negative impact on the nutritional status of a child; it causes malnutrition, can lead to poor health and even death.

Agro-pastoralists: For this group only conflict and natural disaster (drought and floods) were stated) as factors that influence food accessibility.

Urban: The estimated contribution of factors that were associated with poor access to food; natural disasters are shown in Figure 1, of which poverty, domestic conflict and poverty are key. Others were maternal sickness, general conflict and war and death of parents or breadwinners.

Figure 1: Obstacles to IYCF and health seeking (percentage)



Water for Domestic Use and Sanitation

Pastoralists: depend on *berkeds* and unprotected wells. Indications are that while a few treat, most household use untreated water for drinking. The two types of faecal disposal means are traditional latrines '*suuli*' and bushes. All groups are of the opinion that children's faeces can be harmful to health. Poor sanitation, hygiene and contaminated water were associated with incidence of diarrhoea (especially diarrhoea with blood), skin infections, worm infestation and other common illnesses. Among the pastoralists the belief that unhygienic practices, poor sanitation and contaminated water affect children's health is well entrenched. Diarrhoea, intestinal parasites, skin infections and pneumonia were considered to be associated with such practices. Some specified that they are the cause bloody-diarrhoea while others claimed they are associated with all common illnesses.

Urban: depend mainly on piped-tap water but some use *berkeds* and water from the sea for domestic use. The various groups of respondents indicated that some treat drinking water with chlorine. Local leaders, however, was the only group whose opinion was that drinking water is not treated.

The groups were unanimous that faeces of children can cause health problems. Challenges in sanitation and hygiene that were identified included inadequate garbage collection systems, poor

personal hygiene, poor food hygiene, lack/inadequate public latrines and sporadic lack of water. These inadequacies were associated with frequent outbreaks of the diarrhoeal diseases.

Reflections on IYCF collated from L/INGOs Personnel in North West Region

Breastfeeding

Delayed breastfeeding arises from the belief that the newly delivered mother has no milk and that the baby needs water. The practice, which existed even before the conflict, is seen to have its origins in lack of knowledge. The practice has been sustained on the basis of continued belief that the breast has no milk, ignorance and the fact that it is seen as part of the people's culture. The collapse and sustained lack of effective government systems contributes to this as it is responsible for the lack of health education systems.

Commenting on mothers' knowledge and view on breastfeeding within an hour of birth, colostrum, exclusive breastfeeding for 4-6 months and total duration of breastfeeding and considering the belief that within the hour, the breastfeed has no milk the mothers belief the child needs water. Existence of limited awareness that colostrum enhances immunity, that breastmilk plays a protective role against diseases, that exclusive breastfeeding should be for 4-6 months and the total duration should be 24 months, for the latter as recommended by Islam, was acknowledged. As estimated by one INGO, exclusive breastfeeding is practised by 7% of the mothers and 35% initiate breastfeeding within one hour of birth; a estimate that is higher than that given by other respondents (7-10%). The belief that breastmilk alone is not adequate to sustain a child up to six months of age is a core obstacle to exclusive breastfeeding.

Lack of knowledge, heavy workload, inappropriate beliefs (i.e., breast has no/inadequate milk), misinformation particularly from social other women and fear that the breasts will sag were identified as obstacles to successful breastfeeding. Response to the question whether fathers of the children undermine breastfeeding exonerated them. Rather they were seen as supportive part of social network by leaving decision making to mothers, encouraging them to breastfeed and by supporting the idea of breastfeeding for duration of two years.

Conflict in NWZ is considered to have started in 1988 and not 1990 as is the case in NER, and SCZ. It was associated with lack of knowledge, motivation and reduction in time for childcare as it has played a role in converting mothers into breadwinners and is considered to be the cause for collapse of the health system that has resulted in increased morbidity and inadequate health related awareness.

To ensure mothers start breastfeeding within hours of birth, there is need to increase awareness in breastfeeding and awareness campaigns that also use mass media (radio) were suggested as effective strategies. Sheikhs, TBAs, midwives were listed as the community members who could effectively influence and hence lead to behaviour change. The community members who would need to be convinced to expedite adoption of new behaviours are fathers/husbands, maternal grandmothers, TBAs and midwives.

Maternal grandmothers are the shapers of breastfeeding experience as they are charged with the responsibility of orientating their daughters to breastfeeding and motherhood in general.

Complementary Feeding

As long as milk, including powder milk, is part of complementary feeding, it is considered to be a good diet. Inclusion of water with sugar, tea with milk and giving children fluids were seen both as strengths and weaknesses while lack of breastfeeding was listed as outright weakness. It was

acknowledge that fluids are introduced soon after birth while others wait until a baby is six months.

The respondents view was that the nutritional quality of complementary diets is positively influenced by continued breastfeeding and inclusion of nutritious foods in which food availability and maternal knowledge on balanced diets are underlying factors. The persons behind the quality of the diet include mothers and other caregivers. Safety of complementary feeding depends on hygiene practices of mothers and other caregivers. Although safety quality of complementary foods is considered, the respondents claimed that it is generally poor.

The factors considered to be most important in influencing complementary diets are family setting (broken homes that have converted mothers into breadwinners), lack of knowledge, poor feeding practices and pregnancies that are too close. The general view is that mothers and caregivers do not have adequate knowledge on complementary feeding because they are illiterate or have little education or do not have appropriate care-giving knowledge.

Decision on complementary feeding

Although mothers are the main decision makers in determining the foods to form complementary diets, the key influencing factors on when to start are, signals by the baby (when a child cries after breastfeeding) while what to give is determined by availability of foods and knowledge. Economic viability rather than nutritional quality and the age of the child form the base for the quality of complementary diets. Mothers stop breastfeeding completely when they realise they are pregnant because it is believed that the milk in the breast belongs to the baby in the womb, or that it can make the child or the mother ill. Pregnancy is thus the main reason why breastfeeding ceases while others are maternal illness and age of the child.

The fact that all children (probably with only a few special exceptions) are breastfed and it is done on demand, continued breastfeeding with complementary feeding, practice of responsive feeding, that milk has a core place in complementary feeding are best practices. Poor feeding practices include delay in initiating breastfeeding, withholding consumption of colostrum, very low performance in exclusive breastfeeding, feeding water with sugar to babies hence undermining exclusive breastfeeding and nutritionally deficient complementary diets (basically lacking in fruits and vegetables).

4.2.2 Health Seeking in North West Region

General

The proportional perception of community members is important in gauging the seriousness with which an illness is considered. This information was obtained from community groups as well from health facilities set within highly IDP populated areas as well as established private health facilities in Hargeisa town.

Availability of services is one of the factors that impede appropriate health care seeking. As reported by a key informant, urban people prefer seeking services at private facilities, for one, public facilities do not offer services in the afternoons. Most pastoral and especially nomadic communities do not have access to health facilities and thus services.

Despite maternity services being available in urban areas, most deliveries, estimated at 80%, take place at the household and despite heavy reliance on community based TBAs, use of traditional healers was not considered a big issue in NWZ. In this context, urban communities are better

informed and hence have had a higher and faster rate of abandoning traditional healing as an option in managing their health. Infections (such as pneumonia, asphyxia) are considered to be the main causes of death among 0-1 month old babies

Pastoralists

Illness Management

Response to illnesses: for diarrhoea, sugar-salt water solution is administered and child is taken to a health facility. For respiratory tract infections (pneumonia, and coughs): some children are treated by traditional healers who can be given 7-10 days before an alternative cure is sought. The next step or direct first action on seeking treatment may be buying non prescription drugs that can be used for up to 10 days before the next alternative is taken; finally child is taken to a health facility/hospital. Other options of treatment that were reported include starting with prayers and sprinkling the sick child holy water by a Sheikh followed by an observation of lasting between three and five days before the next alternative management is applied.

Agro-pastoralists

According to KAPS respondents, common childhood illnesses among agro-pastoralists children are diarrhoea, respiratory tract infections (bronchitis, colds) and fever with occasional cases of measles.

The coverage of immunization as shown in the facility records is very high (98%). It was also explained that 2% of the children do not get immunized as a result of 'bad rumours' about immunization; that it is being done for the purpose of future fertility control.

Illness Management

Diarrhoea: The action taken is dependent on the type of diarrhoea it is perceived to be. If it is considered to be 'a normal' diarrhoea (watery more frequent stools), the likely first action for those with access to drug-shops is to buy ORS. However, if it is considered to be in the category of '*ilka dawaco*' translated as 'fox teeth diarrhoea', extraction of the child's canine teeth by a traditional healer is the remedy. The signs of this condition are frequent episodes of diarrhoea accompanied by delayed developmental achievement, such as gauged by the child ability to walk by a certain age. Age of a child is estimated using the past cycles of the moon in which one sighting is equivalent to a month.

Respiratory tract infections (pneumonia, whooping cough,): Some treat this group of conditions with purchased non prescription drugs in which the retailer determines the appropriate one or the caregiver identifies, usually based on its success as per a previous experience. If, however, a cough is persistent, it is often assumed that the uvula is most likely to be irritating by rubbing against the throat surface hence it is too long and needs to be trimmed. The uvula is then snipped by a traditional healer without any consideration for infection prevention.

Measles: Due to the belief that the disease has no cure, the response is to keep the child warm and apply aloe-vera, feed the child on camel milk or white rice. Some are taken to a health facility for treatment.

Malaria: The sick child can be taken for further management to a health facility after having been on camel milk for about four days or can be directly taken there without first applying the camel milk remedy. It was reported that although population of mosquitoes is considered to be high, malaria incidence is low.

Chicken pox: The child is smeared with sheep blood and it is left to dry for a while and then washed-off; this can be done for a number of days, even up to ten. The services of a traditional healer can also be used or the child can be taken to a health facility for management.

Eye infections: the usual response is to wash the eye with salty water for about two days while observing the child's response and if it is not satisfactory the child is then taken to a health facility.

Every village has one trained TBA and it was reported that they are called upon at the time of delivery. Every village has also one trained CHW, but the rural communities '*badiya*' prefer traditional healers.

Obstacles to appropriate health care seeking

Delay in seeking services from a health facility were attributed to caregivers preference for treatment using purchased drugs instead of seeking help straight-away from a health facility. One key informant explained that caregivers prefer buying medicines because the health facility end-up asking them to go and buy drugs from drug-shops/pharmacies. She therefore wonders why she should first pass-by the health facility. Some illnesses types have to be treated using traditional healing, these include constant coughing, diarrhoea (specifically teething and fox teeth types).

Although immunization coverage is high, reluctance to have children immunized that is being associated with the frequency with which polio vaccine is being administered is emerging. Belief that frequent administration (that is five times between January and September 2007) of the vaccine targets fertility control is being seen as a core reason for the manifesting disinterest in taking children for immunization. In Dilla, an urban facility that services agro-pastoral communities reported that almost all (99%) of the pregnant women who seek for antenatal care deliver at home.

Urban

According to the KAPS respondents, the most common childhood illnesses among the young children as reported are shown and in brackets are proportional estimates (ranges) of affected children); diarrhoeal diseases (30-40% common diarrhoea and 2% dysentery), ARI (cough 40%, pneumonia 4-10%), whooping cough (1-2%), malnutrition (22%), skin infections (5-20%), TB (10%), hepatitis (7%), eye infections (6-7%), chicken pox (5%), measles (4-5%), malaria (1-3%), otitis-media (3%), giardiasis (2%). It was clarified that malaria is uncommon in urban Hargeisa and that the few cases that are diagnosed usually originate elsewhere. Intestinal worms are also uncommon but comparatively amoeba, which was attributed to poor hygiene practices, is the most common. Measles is also uncommon except when outbreaks occur.

Diabetes was reported as being on the rise even among children and although its causes are not yet well understood it is being associated with consumption of foods that are too refined. Seasonality of availability of fruits was mentioned as a contributory factor. Another problem that was mentioned as being on the rise but not well articulated was child abuse with the suggestions that the matter be further investigated.

The view of the facility staff is that cases of pneumonia are brought to the health facility but most caregivers often administer 'burning' with a hot metal in the chest area as a first-aid before taking the child to a health facility. In such, first-aid cases, traditional healers are not involved.

Otitis-media is treated both in modern and traditional manner; using goat milk. Drops of milk are dropped into the ears.

Diarrhoea is treated using water, sugar and salt solution. If this is perceived not be yielding the desired impact the child is taken to a 'lower' healthy facility, and if it is not cured it is taken for management to a higher level facility - hospital.

Malaria -a child could be straight away be taken to a health facility, treated with camel milk (for three days), then taken to a health facility and if not cured taken to a religious leader for prayers and other rites.

Whooping cough -a child is taken to a health facility and then to a religious leader for prayers and rites. The caregivers can also opt to buy drugs, if the child does not recover it is then take for treatment at a basic health facility and then to a higher level facility -hospital. Donkey milk is also given to a child as a cure. It was acknowledged that whooping is a preventable childhood disease that is common among children although on the decrease currently.

Malnutrition – a child is fed nutrient rich foods for one month and this can also be done in collaboration with a health facility.

Skin infections- management includes bathing the child and observation of better personal hygiene, treatment with purchased drug or it is treated at a health facility.

Decision making: In health seeking decisions are made by the child's parents jointly or separately. The economic factors and advice given by a TBA are central in determining the type of action to be taken. The decision making process is influenced by the number of under fives in a household.

Availability of health services: Being urban settings, availability of services was not an issue. The available services include health facilities, health education, affordable medicine and availability of services that are in operation for many hours (this was seen in relation to public health services provision that is limited to part of the day; mornings).

Immunization: Communities are aware of services and that polio, measles, and tetanus are the preventable diseases. DPT and BCG were also mentioned as part of the immunization package. Despite being aware of the availability of immunization services, lack of belief in its performance especially by the fathers (men) undermines its use. Part of the community has a positive attitude as they view immunization as being important in childcare. Nevertheless, caregivers do not see their children through the complete immunization schedule. This is primarily attributed to lack of understanding of short term side effects of vaccines as caregivers do not know that they are expected. For example, the fever children experience after vaccination is interpreted as an illness because caregivers are not aware that it originates from the vaccination. As a result of these negative experiences, caregivers have little confidence and trust in immunization. Therefore low immunization coverage exists despite the health facilities having the vaccines and appropriate delivery infrastructure for vaccination.

Utilization of health services: As expressed by facility based service providers, clients go to health facilities principally for curative or delivery services, specifically those with complications otherwise they are delivered by urban TBAs. The service providers desire to see clients with a holistic interest in health services that includes preventive services and hence more utilization of immunization and growth monitoring.

Social support networks: Besides the mother, men (about 40%) participate in direct child care, they are the providers hence are financially depended upon. During illness mothers are supported by husband/father of the child and relatives. Types of support include contacting the doctor or helping in taking the child for treatment and giving child care at home; meaning they give care to the other children.

Seasonal Illnesses and Health Seeking: Reflections Collated from LNGO and INGO Staff in NWZ

As implied Table 4.2 (Appendix 4), incidence of suspected malaria seems to be concentrated during the rainy seasons while diarrhoea, tonsillitis and infestation with worms are evident through all the seasons.

As can be discerned from Table 4.3 (Appendix 4), it appears that the caregivers tend to think of the traditional healer as the first line of treatment sometimes after trials of home cure. This confirms the reporting from health facilities that often children get to the health facility when condition is quite severe. Table 8 provides reasoning behind delayed health seeking at health facilities

Table 8: Delay in appropriate health seeking and proposed intervention (NWZ)	
Reasons for delay/failure to take sick children to a health facility	Practical interventions
<ul style="list-style-type: none"> • Lack of knowledge • Belief in traditional healing • Difficult access to/limited health facilities • In affordability 	<ul style="list-style-type: none"> ➔ Give health and nutrition education ➔ Establish facilities in rural areas ➔ Provision of health services for the poor, establish IGAs

Decision making in health seeking

Parents make the decision of type of health care and also grandparents and other close relatives such as siblings were identified as others who take health seeking related decisions.

Obstacles to desired health care: The following were reported, lack of buying in on policies by institutions is an obstacle to their implementation, general lack of knowledge, laxity by health decision makers and lack of nutrition/child feeding policy.

Conflict impact on IYCF and health seeking

Changes due to the conflict are recognised and the following were reported:

- Negative traditional cures (e.g., use of burning and herbs have diminished)
- Health seeking behaviours have improved
- Immigration of people to urban areas is associated with improved knowledge on child health
- Breastfeeding has decreased both in the urban and rural communities
- Poor feeding practices such as bottle feeding have increased among the rural communities
- Many people have become homeless and have lost parents this created an environment is not conducive to optimal feeding and health seeking
- Conflict has destroyed the traditional culture embedded support for caregivers and children.

In-terms of diseases, diarrhoea and scabies (associated with poor personal hygiene and environment particularly in urban areas due to decrease in water availability) were reported to be the diseases that have been most influenced by conflict. The view being that, outbreaks of diarrhoea have increased. This was associated with displacement that results in poor sanitation, overcrowding and water shortages. Judgemental views on behaviours of caregivers from the LNGO and INGO personnel are reflected in Table 4.3 (Appendix 4).

Good and poor practices in health seeking

The good practices include visits to ante-natal clinics, recognising that a child may be ill and taking action, being particular about expiry dates for drugs and being more attentive to children during illness.

Poor practices associated with health seeking include administration of incomplete prescriptions (under-dosing), children are not taken for growth monitoring, extraction of teeth associated with diarrhoea and without infection prevention and delay in seeking treatment at health facilities.

Recommendations from Respondents

The recommendations that were proposed by various respondent groups or individual are presented in Table 4.4 (Appendix 4).

CHAPTER 5: DISCUSSION AND CONCLUSIONS

KAPS findings indicate that fostering customs and habits that will lead to optimal nutrition and health requires changes in both the micro-macro contexts in which infant and young child feeding and health seeking decisions are made and implemented. The findings have indicated that cultural based traditions heavily mandate decision making of most caregivers with social networks being an integral reinforcement mechanism in this process. They have also indicated that lack of well established widespread health systems as seen in Appendix 5 and poverty are underlying cores.

Findings of the KAPS revealed that health seeking practices across all livelihood zones in all regions tend to follow a generalized pattern. When a mother notices that the child is ill, the first thing is to pray, after which, depending on nature & severity of illness, the next step can be at any of the following areas: Traditional home health practice, traditional healer, buying medicine, getting the Sheikh to pray or seeking modern health care at a health facility. The general trend in health care taken by caregivers from all livelihoods is as shown in the model in Figure 2.

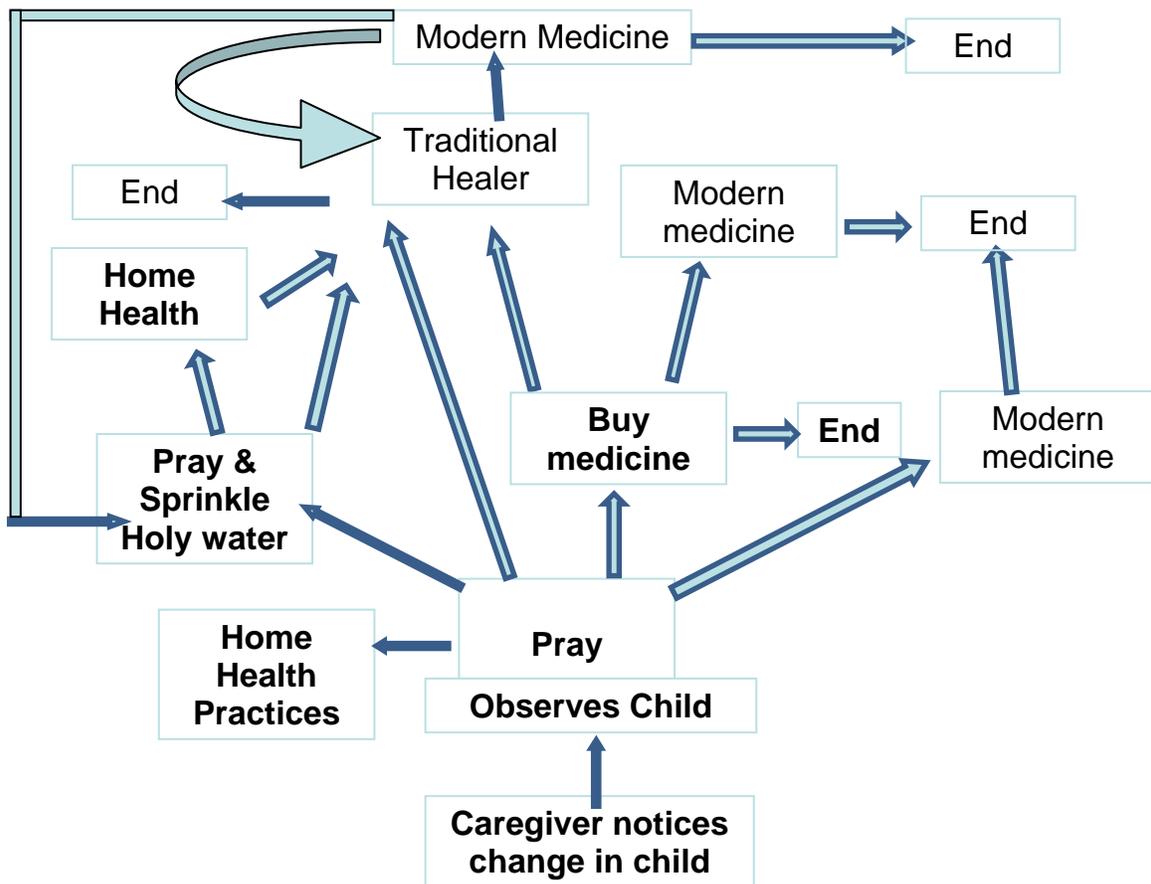


Figure 2: Child Caregiver Health Seeking Model
 (Model developed by W. Kogi-Makau & R. Opiyo for KAPS)

The current caregivers' knowledge and attitude sustain both appropriate and inappropriate behaviours of which KAPS has clearly documented. The process of intervention will thus involve

deciding the knowledge, attitude and practices that are to be and how they are to be protected (the good) and discarded, respectively, against the backdrop of strong cultural and network influence and to consider the availability of appropriate systems. For example, if nomadic people rely on traditional healers who, in the management of illnesses, expose children to risk yet there are no health facilities within reasonable access, deciding what to advise the caregiver is a real challenge. Another challenge is the non existence of a benchmark against which to gauge as effective or harmful some of the traditional cures. For example, if a traditional healer administers doses of '*hildid*' as a de-wormer, does evidence exist that can support dispelling its effectiveness or confirm its capacity to cause harm? Lastly it must be accepted that poverty is a pervasive hindrance to achievement and access to appropriate feeding or health seeking and hence must be put into context as feasible interventions are collated and undertaken.

KAPS clearly indicate that there are certain elements in child feeding that can be influenced through simple actions that do not have or have minimal financial cost implication to caregivers; such engulf, adoption of appropriate breastfeeding and response feeding behaviours and discarding of bad health management practices such as lopping of uvula and removal of the 'nylon and fox teeth' among others. Nonetheless, availability of adequately competent change agents including health facility staff and others at the community level in sufficient numbers and dispersion may be a hurdle requiring advance checking to facilitate launching of effective actions for behaviour change.

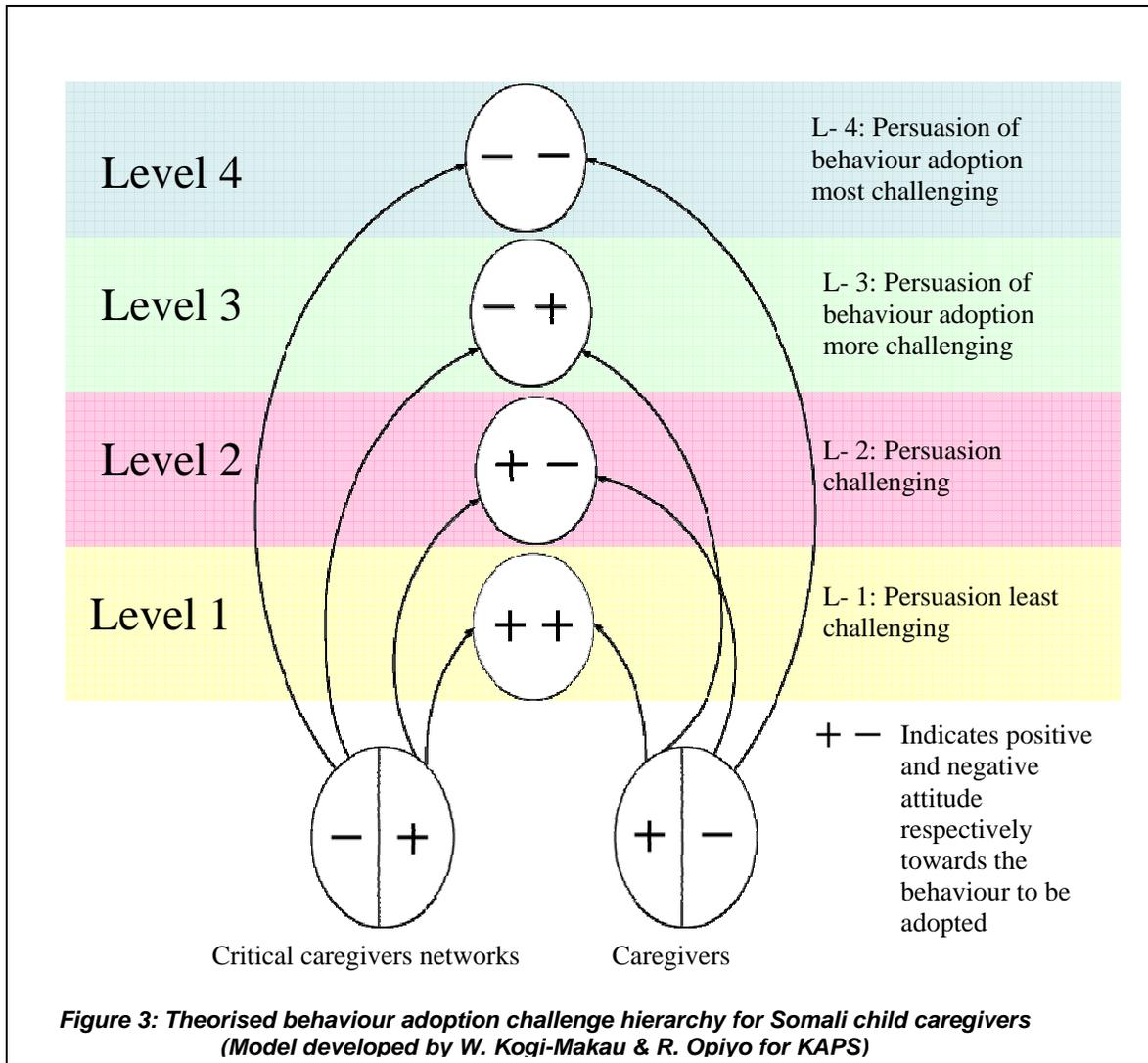
In-terms of the content of the messages to be communicated to caregivers, it is critical that the messages address the concerns they have raised. For example, while it is in-keeping with international recommendations that a child be put to breast within the first hour of birth and that the mothers sustain exclusive breastfeeding henceforth for a period of 4-6 months, the reality that some mothers do not have breastmilk for up to three days or more, that they feel pain when sucked must be acknowledged and the mothers assisted to deal with these reality. The mothers argue their case that there is no milk and they acknowledge that since Allah creates people differently, some will have breastmilk soon after birth while others take even up to seven days for milk to start flowing. Such experiences and arguments must be well appraised prior to giving advice.

The cultural practice that encourages (actually almost requires), maternal grandmothers of the child to spend "the 40 days period" following birth (*umol bah*) with their newly delivered daughter make it critical for interventions to target this group of network. Further, the fact is that maternal grandmothers of the children or of their mothers influence mothers particularly inform of advice and indeed have profound impact as they initiate new mothers into motherhood. More damaging is the fact that when they instil inappropriate knowledge, beliefs and the consequential behaviours these are often passed to the next generation of mothers. It is, therefore, imperative that they also be caught in the web of behaviour change efforts inform of the interventions to be derived out of KAPS.

Behaviour change communication (BCC) is key to better IYCF and health seeking, hence must be done with the whole purpose of creating awareness and instilling knowledge that will elicit trials and finally adoption of new appropriate behaviours. BCC, in this case will be a systematic attempt to influence positively the attitudes and practices of both caregivers and their networks at large through sharing of information (that is, ideas, emotions, knowledge and skills). For it to be successful, it thus must create a shared meaning with the caregiver and their networks.

Figure 3 which illustrates a theoretical scenario of challenges to caregivers in the process of adopting new behaviours is derived out of KAPS findings. The figure indicates that caregivers

have to consider their own feelings as well as those of their networks (often the custodians of cultural dimensions of issues) and implies that decision to adopt is more challenging when caregivers' networks have a negative attitude towards the behaviour to be adopted and in particular when caregivers are subjugated in-terms self determination, gender, age, and financially which is often the case among Somali mothers and other female caregivers. Interventions must therefore attempt to win the networks or somehow neutralise their negative view to the adoption of new behaviours. Any forthcoming inventions must therefore plan for visible involvement of networks in generation and acceptance of new behaviours and in dissemination processes using the available cultural mechanisms such as *umol bah*.



Interventions must therefore attempt to win the networks or somehow neutralise their negative view to the adoption of new behaviours. Any forthcoming inventions must therefore plan for visible involvement of networks in generation and acceptance of new behaviours and in dissemination processes using the available cultural mechanisms such as *umol bah*.

In the hierarchy of communication, the source of communication must formulate understandable messages that are packaged as acceptable phrases within the dimensions that guide the behaviour of the caretaker. In the context of the Somali caregiver, these dimensions are religion (Islam), traditions, the social networks, self and accessibility (distance and economic). The communicator must make a decision whether absence or incorrect performance of the target behaviour is due to, purely lack of knowledge and/or skills, absence of conditions favourable to performing it (cultural traditions that undermine adoption the behaviour being propagated and inaccessibility). They must also distinguish whether failure to perform is complete or it is being performed but at an unsatisfactory level (thus must decide whether it is more lack of knowledge/skills or a performance problem). According to KAPS all these factors combine to create the current inappropriate existing behavioural reality in child feeding and health seeking.

The practice of delaying initiation of breastfeeding is sustained by the belief that at delivery and for up to seven days the breasts do not have milk or it is inadequate and lack of effective awareness creation systems. Lack of awareness creation systems arises from, conflict related collapse and slow post conflict rebuilding of the health systems.

The factors that trigger initiation of complementary feeding are behavioural and situational in nature. The behaviour of the child (crying; after breastfeeding) and the following seven situations of either the child (age or its health status (illness) or the mother, serve as triggers for the need to initiate complementary feeding. The situations of the mother include the following, her availability and hence child's access to the breast, her physiological status manifested as a pregnancy or health status (ill) and her knowledge and its application. At the household level, the need for the mother to access financial resources (poverty) is also an influencing factor. It affects initiation of complementary feeding because many of the current situations require that the mother participates in generation of household income. The choice of the type of foods to give is tagged to women's access to financial resources at household level. Poverty manifested as un-affordability hence inaccessibility of food, availability of foods in the market, the age of the child, knowledge of what to give and the perceived nutritional quality of food are pertinent factors in the process of complementary feeding. Availability of the mother and views of child's father was also core in deciding the types of food to give.

The summary of attitudes and practices on child feeding and health seeking behaviours in SCZ, NWZ and NEZ are as shown on Table 9.

Table 9: Attitudes and Practices on Child Feeding and Health Seeking Behaviours

	Positive Attitudes & Best Practices	Negative Attitudes & Poor Practices
Pre-and post Natal Care	Traditional Post-natal care during the 40-days after delivery (<i>Umol Bah</i>)	<ul style="list-style-type: none"> • Poor attendance at MCH facilities during pregnancy and after delivery in rural areas • Traditionally restrictive diets, mainly in SCZ
Breast feeding	<ul style="list-style-type: none"> • Breastfeeding is acceptable to all mothers and their networks • Almost all children breastfeed and on demand in all regions • Total duration of breastfeeding is 2 years, based on the Koran, verse 2:233 surah al- 	<ul style="list-style-type: none"> • Delayed initiation of breastfeeding - after 3 days • Belief that colostrums is dirty, heavy & toxic with no health benefits. • Use of pre-lacteal feeds of water and sugar soon after birth • Non-existence of Exclusive Breast

	<p>BAQARAH –T.J. Irving: “<i>Mothers should breastfeed their children two full years, provided they want to complete the nursing</i>” For pastoralists, breast feeding continues beyond 3 years.</p> <ul style="list-style-type: none"> • Breastfeeding continues alongside complementary feeding in all regions 	<p>Feeding.</p> <ul style="list-style-type: none"> • Breast feeding practices guided by influence from grandparents • Negative attitude towards breastfeeding by men
Complementary Feeding	<ul style="list-style-type: none"> • Milk is an important component of the children’s diet • Responsive feeding practised to overcome refusals to feed. • Efforts made to achieve appropriate tasty complementary feeding for age • Caregivers have cues to tell if child is satisfied or not during feeding. 	<ul style="list-style-type: none"> • Early introduction of Complementary foods (0-3 months) • Lack of variety in children’s diets, no fruits or vegetables • No special dietary attention for children after 24 months. •
Health Seeking Behaviours	<ul style="list-style-type: none"> • The level of awareness of types of illnesses by name, signs and symptoms, as well as types of locally available community management resources. • Mothers are sensitive to indication of illness and are quick to respond • In some situations, attempts are made to provide food that is considered appropriate for specific illness. • Increased tendency to use modern health services and reduction in application of harmful traditional healing practices 	<ul style="list-style-type: none"> • Use of water & sugar as pre-lacteal feeds soon after birth • Poor garbage and faecal disposal. • Illnesses not well understood are associated with <i>evil eyes</i>. • Some responses to illnesses in children are not always appropriate. • Most health seeking responses are based on the traditional knowledge & beliefs • Harmful traditional practices with no infection prevention, e.g. burning parts of the body, lopping of uvula. • Seeking treatment in Health Facility considered as a last option by majority in SCZ • Total failure to take sick children to health facility • Low child immunization coverage

The following (Table 10) is a summary of reasons given by respondents for the negative attitudes and poor practices that negatively impact on child feeding and health seeking and hence form the basis for interventions.

Table 10: Issues/Problems/Obstacles in Infant and Young Child Feeding by Reasons

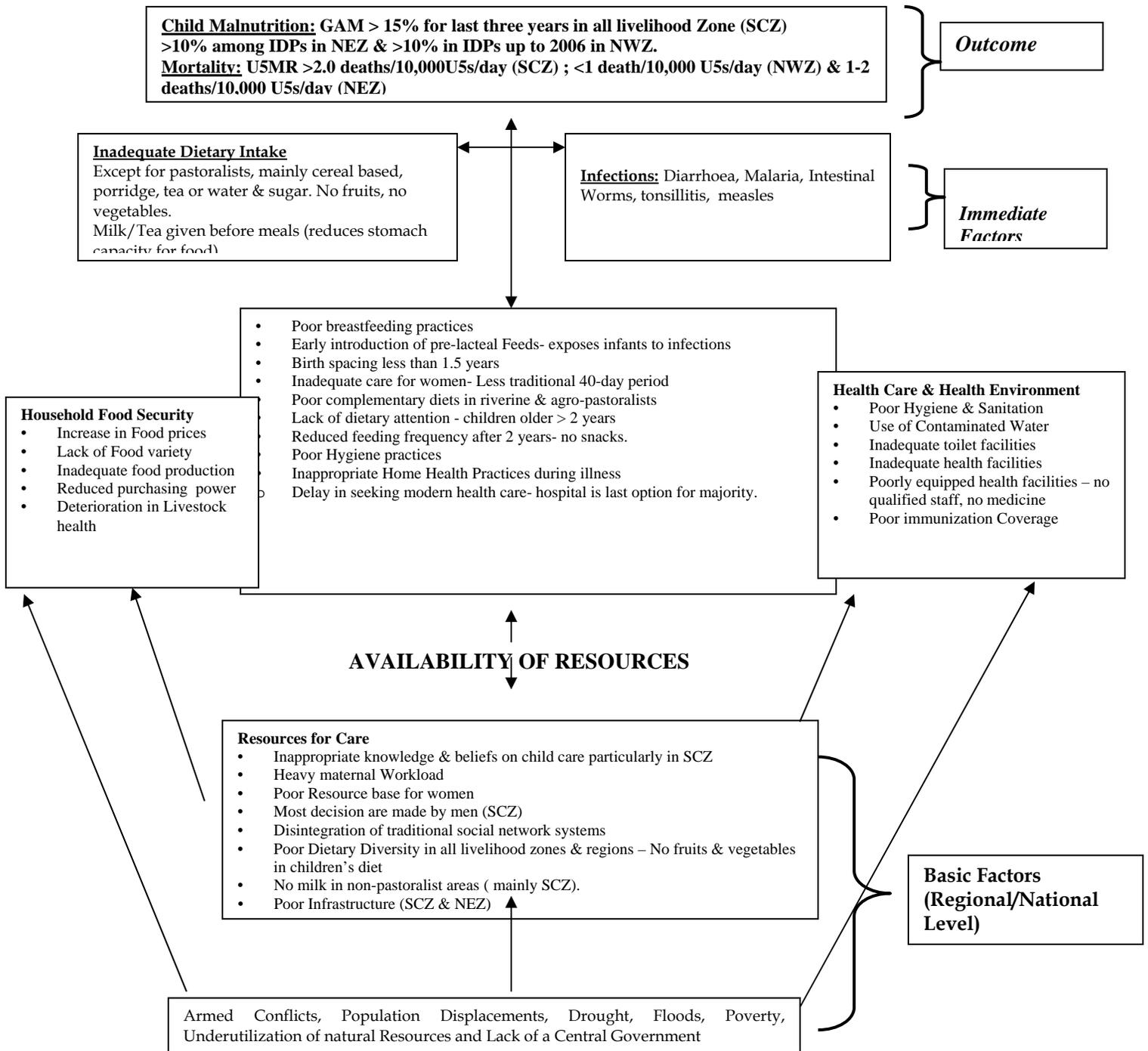
1. Breastfeeding	
Issue/Problem	Reasons
Delayed initiation (2-7 days)	<ul style="list-style-type: none"> Lack of appropriate knowledge on breast milk flow Breast has no milk yet, nipples are blocked Mum is too tired, is in birth related pain or is ill and breasts are painful. Baby is tired or cannot suck Pre-lacteal needed to aid in expelling things swallowed during birth process and to fulfil the traditional expectation (<i>inqirin</i>), particularly in Southern Central Zone Breastfeeding in 1st three days makes breasts large; this is not reversible and husbands in SCZ do not liked large breasts
Colostrum not fed to infants	<ul style="list-style-type: none"> Lack of appropriate knowledge on health benefits of colostrum It is believed to be inappropriate for the baby: too thick/too course, dirty, toxic, cause of illness and harmful to health hence must be got rid off from the breast
Neglected exclusive breastfeeding (EBF)	<ul style="list-style-type: none"> Lack of appropriate knowledge on health benefits of EBF Breastmilk is inadequate hence the baby needs additional fluids (water with sugar for energy) soft food or porridge within 3 months. Breastfeeding makes the child to feel hot, causing fever. The baby therefore needs water to cool down <ul style="list-style-type: none"> -Breastmilk makes baby thirsty (<i>haraad</i>) and hence needs water Exclusive breastfeeding can make cause deafness (<i>dhagol</i>)
Unachieved desired total breastfeeding duration (2 years as per Koran)	<ul style="list-style-type: none"> Pregnancy causes immature cessation of breastfeeding. A pregnant woman's milk is believed to be strong, red and poisonous for the child. If a pregnant woman breastfeeds, the child gets diarrhoea, vomits and becomes weak; the baby in womb also becomes weak. The Breastfeeding alone is not effective in protecting against pregnancy and use of artificial family planning methods is unacceptable within Islam. Women fear that the husband will get another wife if sex is not availed
Poor breastfeeding information communicated	Lack of appropriate knowledge due to inadequately informed social networks and inadequately skilled/informed communicators
2. Complementary Feeding	
Age of introduction	<ul style="list-style-type: none"> Introduced too early due to: <ul style="list-style-type: none"> -Lack of correct knowledge on when to start -Lack of confidence in adequacy of exclusive breastfeeding -Accessibility of breast milk substitutes and feeding bottles
Dietary content	<ul style="list-style-type: none"> Inadequate knowledge on what constitutes nutritious/balanced diets Poor food diversification. Diet is mainly cereal Riverine & Agro-pastoral) or milk-based (pastoral) Consumption of fruits and vegetables is a non-traditional practice in all livelihoods
Frequency	<ul style="list-style-type: none"> Meal frequency for non-breastfeeding young children is low. Child eats with adults, 2-3 meals per day, snacks in between meals rare.
Responsive feeding	<ul style="list-style-type: none"> Minimal special dietary attention after 24 months of age In refusal to eat child is forced or threatened to eat
Culture and traditions	<ul style="list-style-type: none"> Inappropriate beliefs on feeding such as exclusive breastfeeding or consumption of liver causing deafness in children

3. Health Seeking Behaviours	
Issue/Problem	Reasons
Delay in seeking health care at a health facility	<ul style="list-style-type: none"> • Praying while observing the child and waiting for too long to confirm illness • Waiting for the key decision maker who, in most cases, is the father.
Failure to take sick children to health facilities	<ul style="list-style-type: none"> • Belief that some illnesses can only be treated traditionally. For instance, diarrhoeas which is associated with teething (<i>Iligow</i> and <i>fox teeth</i>), measles and illnesses with convulsions (fevers) that are believed to be caused by <i>evil eye</i>. • Inaccessible health facilities in terms of: <ul style="list-style-type: none"> ○ Distance where some facilities are too far away from the population, especially among the pastoralists. ○ Cost: Utilization of private health facilities is preferred by majority of people in urban areas yet is not affordable in terms of cost. ○ Non-existent. Where health facilities do not exist, for example, Gagaab in NEZ, access and utilization of modern health care among the nomadic and isolated communities are poor.
Inconsistent use of health facilities	<ul style="list-style-type: none"> • Health facility does not meet client's expectation in terms of curing the disease to their expectation. Most people argue: <ul style="list-style-type: none"> ○ <i>"The last time the child did not get cured when treated"</i>. ○ <i>"Caregiver will always end-up buying drugs so; why not just buy drugs from chemist instead of bothering to go to the health facility?"</i> • The working hours of health facilities are not apt for clients • Poor quality of service. Most clients in all livelihood zones feel that the service providers are inadequately skilled. They also suspect that drugs are probably expired. Most facilities also lack capacity in terms of laboratory, x-ray and theatres. • Some health facility service providers refer clients to traditional healers • Home deliveries with own TBA are more preferred to health facility delivery. • Most private health facilities are financially not affordable.
Low child immunization coverage	<ul style="list-style-type: none"> • Reluctance to have children immunised due to low understanding of short term side effects of vaccines hence belief that vaccines make children sick, e.g., fever, restlessness • General belief that vaccines are not effective, e.g., measles • Suspicion with too frequent polio vaccinations in SCZ. • Unavailability of immunization services in rural and remote areas
Low utilization of facility based ante/postnatal care	<ul style="list-style-type: none"> • Unclear added value of attending MCH for mothers • Long distance to health facility

The inappropriate child feeding and health seeking behaviours undertaken by caregivers in SCZ, NEZ and NWZ are to a large extent responsible for the unacceptably high prevalence of child malnutrition that have been observed in most parts of the region in the past years. These behaviours in child feeding and health care are however attributed to the resource poor and war

ravaged country, with poor infrastructure, frequent food insecurity, characterized by Humanitarian Emergency phase of IPC. The complex relationships between malnutrition, child feeding practices, health seeking behaviours and related factors are as seen in Figure 4.

Figure 4: Causal Framework of Malnutrition in SCZ, NWZ & NEZ



Adapted from: P.L.Engle, et al (1997). *Care & Nutrition: Concepts & Measurements (IFPRI)*; Model updated with information from SCZ, NWZ & NEZ of Somalia (October 2007).

CHAPTER 6: RECOMMENDATIONS

The specific recommendations for each zone that were obtained from population representatives for NEZ and NWZ are spelt-out in Appendices 3 and 4. This study recommends the need to conduct a participatory dissemination workshop for KAPS findings to achieve buying in and hence ownership of its findings and active involvement of key community influence/change agents (religious, traditional and other local community leaders, NGOs, TBA and CHW), caregivers and their critical networks, in generating solutions for the challenges KAPS has documented. Specific recommendations on breastfeeding, complementary feeding and health seeking behaviours are outlined below. Due to the similarities in IYCF and health seeking, considering that the difference is in intensity rather than type of issues the recommendations are apt for all the zones.

Breastfeeding

- There is need for agencies to train, encourage and support Community Nutrition Workers (CNWs) and TBA in all zones and regions to promote positive breastfeed practices through Trials of Improved Practices (TIPS) techniques that involve counselling on recommended breastfeeding practices and follow-up visits to assess the progress made and confirm the outcome of the trials.
- The agencies should also build capacities of Sheikhs, TBA and other traditional leaders to promote appropriate knowledge and practices on breastfeeding.
- Maternal grandmothers, elderly women, TBA, men and other social support networks for mothers should be targeted with specific breastfeeding messages through radio broadcasting and posters.
- Annual celebration coverage for the World Breastfeeding Week should be encouraged, supported and expanded to include most rural areas in all zones rather than focussing in urban areas only as has been the case in the past.

Complementary Feeding

- There is need for agencies to train, encourage and support CNWs in all zones and regions to promote positive complementary feeding practices through Trials of Improved Practices (TIPS) by age which involves counselling and follow-up visits with mothers on recommended complementary feeding practices. The TIPs activities should also include recipe trials using nutritious local foods including fruits and vegetables.
- Radio messages, TIPs sessions and posters should be widely used by health and nutrition agencies in all regions and zones as channels of communicating messages on nutritional needs of all children below the age of 5 years and the need to continue feeding children well and frequently even after 24 months of age with nutritious snacks in between the main meals. The messages passed should also include the dangers of feeding children on tea frequently. Use of nutritious snacks to replace tea before the main meals should be promoted through these messages.
- Training and enabling siblings who attend the Madras classes all over Somalia on simple messages on personal hygiene, child feeding reminding parents to take children for immunization and breastfeeding through Child-to-Child Approach. The Child-to-Child approach is currently implemented in most parts of Somalia by UNICEF through schools and youth groups.

Health Seeking Recommendations

- There is need for agencies implementing water and sanitation activities to intensify promotion of good hygiene and sanitation to control most of the reported childhood illness. Promotion of safe drinking water through simple, acceptable, affordable and effective domestic water treatment methods at household level is also important.
- There is need to build capacities of caregivers on home-based care and management of common illnesses, especially in pastoral livelihood zones where health facilities are inadequate.
- There is need to build capacities of the caregiver's first contacts (Sheikhs, traditional healers and local chemists) during children's illnesses on recognition and role of referral of common childhood illnesses to health facilities. These first contacts should be encouraged to refer children to the nearest health facility immediately they receive them for treatment.
- There is need to conduct public campaigns for increased utilization of health facilities with collaboration and integration of traditional healers and TBA.
- Use of communication techniques such as peer education, drama, songs, posters, games and demonstrations should be encouraged among children in primary schools to enhance community sensitization on health and nutrition issues through Child-to-Child or Child-to-Community approaches. It is hoped that this would counteract negative cultural programming in children.
- There is need for further sensitization on polio in parts of SCZ where polio is mainly treated using traditional methods.

Recommendation on Training methodology

In response to the request for suggestion of training methodology, the following training methods should be considered for adult oriented learning. The basic approach should be participatory; to establish ownership by learners particularly of responsibility to utilize knowledge for change and sustenance of new behaviours. The learners include both mothers, their networks that stretch to engulf health providers both modern and traditional while partnering with Islamic leaders.

The training process should start with the development of a communication strategy that will guide it. The messages to be passed should be well articulated ready for delivery and propped with appropriate training materials. The method of delivery must be selected to ensure it has the capacity to convince and hence result in interest in learners to try out recommended behaviours.

Modified "Hearth Model Training" Approach

We recommend a modified training approach of hearth model that targets the caregivers and their social networks in childcare. This will be preceded by equipping trainers with both pertinent knowledge in IYCF and health seeking and training skills to ensure that they have the capacity to articulate messages correctly. The caregivers together with their networks will then be put in groups 'hearths' and trained together with the approaching using dialogue and negotiation as one of key training techniques. Selection of the 'hearth' members should be done to ensure a combination of both caregivers who are positive deviants (practising appropriate behaviours) and those who need to change behaviour. Peer-to-peer dialogues should also be integrated at which caregivers conduct guided learning from one another. The planning of overall training must take into account that some of those in positive deviant group in certain behaviours may be negative deviants in others. This may provide a good platform for behaviour change where concept of trade-ins can be applied with groups replacing a set of behaviours with a set of appropriate ones. Further they, particularly the networks, should be challenged to identify (perhaps up to four)

caregivers in their communities and work with them. Identify, on one hand behaviours that are appropriate and encourage them to continue and on the other negative ones and offer alternatives. The involvement of religious leaders in this effort should start with dissemination and dialogue on the KAPS findings and a briefing on the planned way forward. Their involvement will then be solicited as well as their mode of participation and implementation of interventions will be subsequent to these prerequisites.

The training must be conducted based on a good understanding of the types of existing structures that could be mobilised, learning materials and aids. The content must suit three scenarios as follows, where knowledge is completely lacking, where caregivers have knowledge but it is not being applied at optimal levels (low performance) and where knowledge exists, is being utilized but needs to be protected due to the dynamic nature of practices. To have a well thought-out training/awareness creation intervention, a planning activity beyond KAPS is required.

Long Term Recommendations

- It is important to incorporate religious leaders and traditional healers into modern health care systems.
- There is need for research on the “Role of traditional healing and herbal medicine to health situation in all Somalia”
- It is important to consider a more permanent solution to control the floods in the riverine that originates from the Ethiopia through construction of dykes and dams. This will reduce seasonal displacement of families due to floods, as well as improving the overall hygiene and sanitation in the affected areas and food security situation.
- There is need to expand the existing health facilities in terms of supplies and adequate staffing and to train more health staff to be based at the health posts and MCHs.
- Health agencies should try and establish effective ways to discourage harmful practices such as burning, cutting off haemorrhoids ‘*babasiri*’ and lopping of uvula with no infection prevention measures.
- Health agencies should consider providing a wider coverage of pre- and post-natal care to reduce morbidity and mortality in mothers and children.
- There is need to create a general improved nutrition and health environment by pushing for establishment of nutrition policy that will be vibrant in influencing nutrition interventions

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APPENDICES

Appendix 1: Tables of Study Sites and Data Collection Techniques

Table 1.1: Data sites by zones and livelihoods					
	Livelihood				
	Pastoral	Agro-pastoral	Riverine	Urban	Coastal
Regions	Central & South				
Bay	Dharqo	Boonkay	-	Baidoa	-
(Hiran)	Cali Ganecy Wardha Bey	Hiran Ceelgaal Beerhano Beardheer	Leebow Lafok Grash Baccyer Doola Yabein Hoyin Huddur Bor	Belet-Weyne	-
Middle Juba	Waregta Hargar	Nusduniya Hargar	Tatey Keytoy	Buale	-
Bakool	Huddur	Elgras Abal	-	Huddur	-
Gedo	Gedweine Hamare	Bashiro	Luuq	-	-
Regions	Puntland				
Bari	Carmo Kalabeyr Ufayne	Kalabeyr	-	Bossasso	Ufayne
Regions	Somaliland				
Sool	Wadaamagoo	-	-	Caynaibo	-
Togdheere	-	Ceel Bilciunle	-	Burao	-
Sanag	Sincaro	-	-	-	-
Awadl		Dila	-	-	-
Galbeed	Bali Gubadle Gumbaraha Salahlay QoolAdey	Adadlay	-	Hargeisa Gabiley	-

Table 1. 2: Data collection achievement by livelihood and technique					
Technique	Livelihood	Central & South	Puntland	Somaliland	Total
FGD	Pastoralists	6	4	5	15
	Agro-pastoralists	13	2	2	17
	Riverine	7	-	-	7

	Urban	12	1	3	16
	Coastal	-	1	-	1
Sub-total		38	8	10	56
Profiles	Pastoralists	8	4	5	17
	Agro-pastoralists	7	-	2	9
	Riverine	7	-	-	7
	Urban	2	-	3	5
	Coastal	-	1	-	1
Sub-total		24	5	10	39
KI	Pastoralists	-	1	-	1
	Agro-pastoralists	-	-	-	-
	Urban	3	3	7	13
	Coastal	-	3	-	3
Sub-total		3	7	7	17
Case studies		5	-	3	8

In Puntland one of the pastoral groups has frankincense and one of the FGDs was conducted with children (age 3-8 years)

Box 2: Indicators for IYCF: knowledge, attitude and practices:

Breastfeeding: Dietary changes during pregnancy and after delivery, categories of influential persons during ante/postnatal period, initiation of breastfeeding within first hour of birth, colostrum, breastfeeding on demand, period and practice of exclusive breastfeeding, total duration of breastfeeding.

Complementary feeding: Age at introduction of complementary feeding, continued breastfeeding, types of complementary diet, frequency of feeding.

APPENDIX 2: Tables on South and Central Regions

Matrix 1: Factors Affecting Access to Food by Livelihood Zone in SC Somalia

Factors Affecting Access to Food	Pastoral	Agro-Pastoral	Riverine	Urban
Inflation of food prices	✓	✓	✓	✓
Drought	✓	✓	✓	
Late Rains		✓	✓	✓
Floods		✓	✓	
Poverty (Financial constraints)		✓	✓	✓
Pests & Crop diseases		✓	✓	
Birds invading crops		✓	✓	
Poor Grazing Land	✓	✓		
Animal diseases	✓	✓		

Poor Cultivation techniques		✓	✓	
Unemployment		✓	✓	✓
Civil Insecurity	✓	✓	✓	✓
Lack of Farm Implements		✓	✓	

Table 2.1: Types of Children's Food Age in Pastoral SC- Somalia

Food/Liquid	Proportions (%) Reporting by Age of Child					
	0-3 Days (n*=19)	0-3 Months (n=18)	3-6 Months (n=19)	6-12 Months (n=19)	12-24 Months (n=18)	Over 24 Months (n=14)
Water and Sugar	47	22	5	-	-	-
Breast milk	26	44	42	32	5	7
Cow/goat milk	16	17	31	16	17	7
Other milk	11	11	11	-	5	7
Family Food	-	-	-	10	33	57
Porridge	-	-	5	21	17	7
Tea		6	5	10	17	14
Soft Food				10	6	6

n= the total number of Profile discussions held in data collection with 3-4 participants*

Table 2.2: Types of Children's Food by Age in Agro-Pastoral

Food/Liquid	Proportions (%) of Profiles Reporting by Age of Child					
	0-3 Days (n=16*)	0-3 Months (n=19)	3-6 Months (n=22)	6-12 Months (n=19)	12-24 Months (n=13)	Over 24 Months (n=11)
Water and Sugar	50	21	14	-	-	-
Breast milk	19	22	36	21	15	-
Cow/goat milk	19	32	18	26	15	27
Other milk	12	11	5	5	-	-
Family Food	-		-	16	38	55
Porridge	-		9	16	8	-
Tea			9	5	15	18
Soft Food			9	11	8	8

n= the total number of Profile discussions held in data collection with 3-4 participants*

Table 2.3: Types of Children's Food by Age in Riverine

Food/Liquid	Proportions (%) of Profiles Reporting by Age of Child					
	0-3 Days (n=15*)	0-3 Months (n=15)	3-6 Months (n=15)	6-12 Months (n=14)	12-24 Months (n=10)	Over 24 Months (n=10)
Water and Sugar	40	20	6.5	-	-	-
Breast milk	33	47	26	14	-	-
Cow/goat milk	27	20	26	14	20	30
Other milk	-	7	-	7	10	-

Family Food	-	-		21	30	60
Porridge		-	13	28	30	-
Tea		7	6.5	-	10	10
Soft Food			13	14	-	-

*n**= the total number of Profile discussions held in data collection with 3-4 participants

Table 2.4: Types of Children’s Food by Age in Urban SC- Somalia

Food/Liquid	Proportions (%) of Profiles Reporting by Age of Child					
	0-3 Days (n=5*)	0-3 Months (n=6)	3-6 Months (n=6)	6-12 Months (n=6)	12-24 Months (n=4)	Over 24 Months (n=3)
Water and Sugar	67	-	-	-	-	-
Breast milk	-	33	40	33	-	-
Cow/goat milk	-	33	40	33	25	33.3
Other milk	33	7	-	-	-	-
Family Food	-	-	-	-	50	33.3
Porridge		-		17	10	-
Tea		33	20	-	-	33.3
Soft Food				17	15	-

*n**= the total number of Profile discussions held in data collection with 3-4 participants

Appendix 3: Tables on North East Zone

Table 3.1: IYCF and health seeking in NER

Attributes
Reasons for not initiating breastfeeding within an hour of birth
<p>Pastoralists and Agro-pastoralists</p> <ul style="list-style-type: none"> • Belief that water with sugar should be given first (55%) • Belief that it is a guideline stated in the Koran (40%) • Belief that the newborn will get sick • Lack of knowledge • Illness, that is, the mother feeling ill after delivery • The traditional habit of giving breastmilk after seven days (60% of those who do not initiate would give this as a reason) • Inexperience in breastfeeding. <p>Coastal Communities</p> <ul style="list-style-type: none"> • Maternal age coupled with • Lack of experience • Lack of knowledge • Preservation of the shape of breast (do not want to have their breasts sagging (feels soft), desire to remain looking young) • Cultural beliefs
Reasons for delaying initiating breastfeeding for three days:
<p>Pastoralists and Agro-pastoralists</p> <ul style="list-style-type: none"> • Lack of breastmilk flow as it takes time to be established • Pain and injury of the breast which could be the cause of pain • Lack of experience which is sometimes associated with injury of the breast • Lack of knowledge

<ul style="list-style-type: none"> • Maternal state of health • Belief that the baby needs water
<p>Colostrum: Reasons for not feeding child</p> <p>Pastoralists and Agro-pastoralists</p> <ul style="list-style-type: none"> • The mother being sick or in pain- the pains were mainly associated with the contraction of the uterus that occur after delivery • Some newborns refuse the colostrum • The belief that there is no milk in the breast means that the child is denied the opportunity to suckle • Lack of understanding of either colostrum specifically or of breastfeeding as a system.
<p>Strategies applied in responsive feeding</p> <p>Pastoralists and Agro-past</p> <ul style="list-style-type: none"> • Entice to eat with praises and more praises • Entice with hugs and kisses • Entice to eat with promises (that certain rewards/goodies will be given) • Force to eat by instilling fear.

Table 3.2: Common illnesses by season and signs (Puntland)

Disease	Seasons			Considered affirmative symptoms
	Gu/Dyer	Hagaa	Jilaal	
Malaria (kaneeco)	✓			<ul style="list-style-type: none"> • Fever • Joint pains • Headache
Dysentery with blood (Xaar dhiig)			✓	<ul style="list-style-type: none"> • Stool with blood • Abdominal pain
Diarrhoea	✓	✓	✓	<ul style="list-style-type: none"> • Liquid stool • Frequent (≥3 times) • Vomiting • Loss of appetite
Pneumonia (Oof wareen)			✓	<ul style="list-style-type: none"> • Fast breathing • Chest (indrawing?)
Tonsillitis (Quaman)	✓	✓	✓	<ul style="list-style-type: none"> • Fever • Sore throat • Cough
Common cold (hargab)	✓			<ul style="list-style-type: none"> • Fever • Cough
Scabies (isnadaamis)		✓		<ul style="list-style-type: none"> • Skin rashes • Skin allergy
Conjunctivitis (daaf)	✓		✓	<ul style="list-style-type: none"> • Eyes -red/conjunctivitis • Pain in eye • Eye –discharge
Intestinal worm) (goroyaan)	✓	✓	✓	<ul style="list-style-type: none"> • Diarrhoea • Vomiting • Itching

Illness	Practices	Practice & Action	
	Good	Poor	Intervention
Malaria (kaneeco)	<ul style="list-style-type: none"> Use of mosquito nets 	<ul style="list-style-type: none"> Do not use mosquito nets 	<ul style="list-style-type: none"> Provide nets Create awareness
Dysentery with blood	<ul style="list-style-type: none"> Use of boiled water 	<ul style="list-style-type: none"> Drinking unsafe water 	<ul style="list-style-type: none"> Improve access to clean water
Diarrhoea	<ul style="list-style-type: none"> Use of ORS 	<ul style="list-style-type: none"> Drinking unsafe water 	<ul style="list-style-type: none"> Improve access to clean water
Cholera	<ul style="list-style-type: none"> Use of boiled water 	<ul style="list-style-type: none"> Drinking unsafe water 	<ul style="list-style-type: none"> Improve access to clean water
Pneumonia	<ul style="list-style-type: none"> Early treatment seeking 	<ul style="list-style-type: none"> Delay in seeking treatment 	<ul style="list-style-type: none"> Improve awareness to seek treatment early
Tonsillitis	<ul style="list-style-type: none"> Early treatment seeking 	<ul style="list-style-type: none"> Traditional practice of cutting the uvula 	<ul style="list-style-type: none"> Create awareness
Common cold	<ul style="list-style-type: none"> More fluid given 	<ul style="list-style-type: none"> Poor hygiene 	<ul style="list-style-type: none"> Create awareness
Oral thrush	<ul style="list-style-type: none"> Early seeking treatment 	<ul style="list-style-type: none"> Delay in seeking treatment 	<ul style="list-style-type: none"> Create awareness
Scabies	<ul style="list-style-type: none"> Improved hygiene 	<ul style="list-style-type: none"> Lack of proper hygiene 	<ul style="list-style-type: none"> Create awareness
Conjunctivitis	<ul style="list-style-type: none"> Early treatment seeking 	<ul style="list-style-type: none"> Delay in seeking treatment 	<ul style="list-style-type: none"> Create awareness
Intestinal worm)	<ul style="list-style-type: none"> Use of latrines 		<ul style="list-style-type: none"> Consult a doctor early Avoid contaminated foods
Measles	<ul style="list-style-type: none"> Early treatment seeking 	<ul style="list-style-type: none"> Belief that should not take drugs/do not go to health facilities 	<ul style="list-style-type: none"> Create awareness

Table 3.4: Recommendations from groups of respondents in NEZ

Based on the request: Please give recommendations/suggestions on how child feeding and health seeking for young children can be improved the following recommendations were registered:

(1) Kalabeyr Community Leaders-FGD [pastoralists cum-agro-pastoralists]

i. Access to safe water and sanitation: Assist the community to install one borehole to provide fresh non-salty water (already one borehole exists but water is salty). Training for better health and sanitation, provision of loud-speakers (public speaking systems) for community mobilization for safe water and good hygiene practices were also listed. The activities as stated by the leaders will be a collaboration between community, government and INGO.

ii. Food production: Investments for increased production by assisting community members to acquire farming equipment, such as, generators for pumping water, tractors, fencing (animals invade farms and destroy crops), pesticides. INGOs will take lead and key responsibility. Construction of water dams (this was highlighted as being very important).

iii. Health services: Improve systems by upgrading existing health posts to hospital in which management of accident patients (especially car accidents) will be considered and posting better skilled service providers. The accidents are cause of both deaths and maim people thus curtailing the capacity Infrastructure-buildings (both extensions/renovations and new) installation of beds, bed-nets, (also provide the latter at household level) and generators for lighting, skills development and equipment for treatment of wounds, set-up laboratory services, improve human resource for provision of better and more comprehensive health services. Consider providing services for women with breast problems, though incidence is low, there is need to establish a place where mothers can be managed.

An argument advanced is that administration of water with sugar originated from doctors and medical personnel who acquired inappropriate information during at the time they got trained.

iv. Community level awareness: Create awareness in health and sanitation and also provide public speaking equipment (put as loud-speakers) for community mobilization.

(2) : Woman group representatives

Poverty and economic empowerment of women: Address it through establishment and development of income generating activities (IGAs)

Health: Build health facilities to make services more accessible

Education: Make formal education more accessible by establishing more schools

Create awareness: sustained, intensified awareness creation to persuade and yield change by applying approaches such as peer-to-peer (woman-to-woman) and house-to-house. More trainers should precede hence trainers of trainers (TOTs) must be developed first.

Water and Sanitation- should be addressed

(3) UNICEF-Bossaso

i. Awareness: Lack of awareness on importance of breastfeeding: Advocate for breastfeeding and include efforts to dispel misconception based on beliefs such as a baby cannot survive without water or will become deaf.

ii. Formulate a nutrition policy- considering that a health policy has been initiated and noting that nutrition was neglected action is needed to give nutrition a voice in this process to ensure it is given the attention it is deserves

iii. Improve visibility of nutrition within the Ministry of Health (nutrition is integrated in health but it is hardly visible).

iv. Private clinics and pharmacies need sensitization on quality of services thus a study is needed to establish their status quo

v. Poor documentation in the area of nutrition and health in general

vi. Introduce use of child-to-child approach in nutrition

vii. Nomadic populations are neglected in health services as a whole and hence nutrition as well

Viii. Poor knowledge on complementary feeding

Ix. Low attendance of MCH was highlighted.

Proposed Strategies for Action

These are strategies that were proposed by some of the respondents:

- Advocacy for breastfeeding and immunization
- Study on health services including private (facilities, pharmacies and drug shops) and

sensitization. Little documentation exists about the quality of services (e.g., are service providers adequately skilled, are the drugs being dispensed expired or not- these were real concerns). Establishing the status would lead to appropriate actions for improved health services for children.

- Make Medical Association fully fledged so that it can contribute towards improvement of health provision for children as it will act as a regulatory body
- Apply child-to-child, woman-to-woman and peer-to-peer approaches
- Special consideration for nomadic populations acknowledging that due to their situation they have less access to health services
- A person with passion for nutrition be dedicated to participate in the health policy development process to ensure visibility of nutrition issues in the policy as they have been neglected in the existing draft.
- Apply demonstration as a technique in developing capacities of mothers in complementary feeding and diets of pregnant and lactating mothers
- Additional development agencies should be attracted to work in this region particularly in the more remote regions, such as the frankincense producing areas in the north east tip of NEZ.

Appendix 4: Tables on North West Region (NWZ)

Table 4.1: IYCF in NWZ
Reasons for delay in initiation of breastfeeding (not within the hour)
<p>Pastoralists</p> <ul style="list-style-type: none"> • Lack of breastmilk (54%) • Lack of knowledge (30%) • Illness (10%) • Pain after delivery (6-40%) • Tired and/or baby unable to suck (15%). <p>Urban communities</p> <ul style="list-style-type: none"> • Belief that the breasts have no milk (5%) • Pain resulting from delivery (70%), • Lack of knowledge (25%) • Maternal deaths • Maternal sickness (mother) • Baby not interested in suckling • Apprehension that breastmilk might cause diarrhoea
Reasons for delaying breastfeeding for 2-3 days
<p>Urban communities</p> <ul style="list-style-type: none"> • Mothers being sick • After birth pains • Belief that colostrum is not milk • Baby is unable to suck • Lack of proper breastfeeding knowledge • Possibility of availability of bottle-feeding
Reasons for not allowing consumption of colostrum by babies
<p>Urban communities</p> <ul style="list-style-type: none"> • Lack of knowledge on benefits of colostrum (20%)

<ul style="list-style-type: none"> • Belief that colostrum causes diarrhoea (cited as in the case in 4% of the cases) • Belief that colostrum makes children sick (1% of the cases) • Children are unable suck colostrum out of the breast • Babies are unable to breath while suckling • Mother being sick after delivery.
<p>Ways of convincing children to eat more food</p> <p>Urban communities</p> <ul style="list-style-type: none"> • Try to create conducive feeding atmosphere through songs and jokes and laughter • Tell them they are loved, closely hold them • Sweet talk and cooing • Taste the food before giving it to the child • Keep trying to make them eat • Play with them • Try to establish the cause of refusal and then deal with it.

Disease	Seasons			Considered affirmative symptoms
	Gu/Dyer	Hagaa	Jilaal	
Malaria (kaneeco)	✓			<ul style="list-style-type: none"> • Light fever • Chills
Dysentery with blood (Xaar dhiig)			✓	<ul style="list-style-type: none"> • Stool with blood
Diarrhoea	✓			<ul style="list-style-type: none"> • Watery stools • Frequent (>3 times) • Vomiting
Pneumonia (Oof wareen)	✓		✓	<ul style="list-style-type: none"> • Light fever • Nasal flaring
Tonsillitis (Quaman)	✓	✓	✓	<ul style="list-style-type: none"> • Disphagia
Common cold (hargab)		✓	✓	<ul style="list-style-type: none"> • Running nose • Cough
Scabies (isnadaamis)			✓	<ul style="list-style-type: none"> • Rashes with itching
Conjunctivitis (daaf)		✓		<ul style="list-style-type: none"> • Red eyes
Intestinal worm (goroyaan)			✓	<ul style="list-style-type: none"> • Stools with worms • Itching anus
Measles	✓		✓	<ul style="list-style-type: none"> • Rashes • Light fever

Illness	Sequential response to illness from action 1-3
Malaria	Self curing → traditional healer → H/F doctor
Dysentery with blood	Traditional treatment → H/F → H/F
Diarrhoea	Traditional treatment → Traditional Healer → H/F

Cholera	H/F→H/F→H/F
Pneumonia	Traditional treatment→H/F→H/F
Tonsillitis	Traditional treatment→H/F→H/F
Common cold	Traditional treatment→same→same
Vomiting	Homecare→Homecare→H/F modify diet
Scabies	Traditional treatment→H/F→H/F
Conjunctivitis	Home care→H/F→H/F Wash
Intestinal worm)	H/F→H/F
Measles	Traditional treatment→No oily food→H/F Food-boiled rice
Oral thrush	Traditional treatment→same →H/F

Table 4.4: Assessment of responses by illness and proposed interventions (NWZ)

Illness	Practice & Action		
	Practices Good	Poor	Intervention
Malaria (kaneeco)	<ul style="list-style-type: none"> Administering of pain killers . 	<ul style="list-style-type: none"> Self medication 	<ul style="list-style-type: none"> Educate caregivers Awareness campaigns
Dysentery with blood	<ul style="list-style-type: none"> Immediate seeking of treatment at H/F . 	<ul style="list-style-type: none"> Traditional treatment Diet reduction 	<ul style="list-style-type: none"> Build skills of CHWs Educate in hygiene
Diarrhoea	<ul style="list-style-type: none"> Administering ORS Pain killers 	<ul style="list-style-type: none"> Diet change Traditional treatment 	<ul style="list-style-type: none"> Educate all caregivers categories
Cholera	<ul style="list-style-type: none"> Give more fluid Urgently take to H/F 	-	<ul style="list-style-type: none"> Educate caregivers
Pneumonia	<ul style="list-style-type: none"> Increased child feeding Increased fluid intake Takes to H/F 	<ul style="list-style-type: none"> Applying burn treatment 	<ul style="list-style-type: none"> Health education Educate caregivers
Tonsillitis	<ul style="list-style-type: none"> Gurgling with salty water 	<ul style="list-style-type: none"> Traditional removal of uvula 	<ul style="list-style-type: none"> Educate caregivers on health seeking
Common cold	<ul style="list-style-type: none"> Increased child feeding- 	-	<ul style="list-style-type: none"> Educate caregivers
Vomiting	<ul style="list-style-type: none"> Increases fluid intake Seeks medical help 	-	<ul style="list-style-type: none"> Educate

Oral thrush	<ul style="list-style-type: none"> • Seeks medical help 	<ul style="list-style-type: none"> • Applying burn treatment 	<ul style="list-style-type: none"> • Health education
Scabies	<ul style="list-style-type: none"> • Improved personal hygiene • Seeks medical help 	-	<ul style="list-style-type: none"> • Increase latrines in rural and poor communities • Sanitation campaign
Conjunctivitis	<ul style="list-style-type: none"> • Cleans eyes • Seeks medical help 	-	<ul style="list-style-type: none"> • Education
Intestinal worm)	<ul style="list-style-type: none"> • Improved hygiene • Seeks medical help 	-	<ul style="list-style-type: none"> • Increase latrines especially in rural
Measles	<ul style="list-style-type: none"> • Increased child feeding • Increased fluid intake • Seeks immunization • Seeks medical help 	<ul style="list-style-type: none"> • Traditional treatment 	<ul style="list-style-type: none"> • Do awareness campaign for immunization • Educate all caregivers categories • Keep health workers updated with knowledge • Strengthen immunization campaigns include rural area
<ul style="list-style-type: none"> • Caregiver categories include: mothers, fathers grandparents 			

Table 4.5: Recommendations from various respondents in NWZ

<p>Recommendations from Respondents</p> <p>IYCF</p> <ul style="list-style-type: none"> • Put in place policies that restrict/prohibit breastmilk substitutes • Address issues of multi-parity; too-often-too-close-too-many pregnancies, considering that Islam rejects artificial planning of pregnancy spacing (referred to as supplementary gadgets) • Improve psychosocial care by investigating anger among children and child abuse (cases of child abuse on the rise) <p>Food security</p> <ul style="list-style-type: none"> • Assist in improvement of production and consumption of fruits and vegetables for improved nutrient intake and health (the case of diseases of lifestyle such as diabetes). <p>Water and sanitation</p> <ul style="list-style-type: none"> • Address poor hygiene through addressing water scarcity and therefore improve access to clean water. <p>General but relevant</p> <p>Communication for behaviour change</p> <ul style="list-style-type: none"> • Apply community-based enhancement to provide massive health education (preferably using door-to-door : face-to-face approaches as this is likely to be more successful).
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Capacity Building

- Build skills of health staff in counselling and MCH service provision
- Operationalize service provision operations from paper to actual implementation
- Address poverty in general especially among the pastoralists and IDP populations

- Apply community-based enhancement to provide massive health education (preferably using door-to-door : face-to-face approaches as this is likely to be more successful) to address among others:
 - importance of exclusive breastfeeding and non requirement of alternative other milks and also appropriate age to introduce complementary feeding
 - value of appropriate complementary feeding that also aims at encouraging including liver in children's diet and discouraging consumption of tea with meals
 - improvement of health seeking behaviours, i.e., prompt seeking of appropriate health services when a child becomes ill
 - importance of compliance in the administration of prescribed drugs
 - value of immunization
 - skills of health staff, counselling of MCH service providers was singled out. as one area in which health service providers need skills building.
- Create awareness among caregivers of importance of diversification of foods in complementary feeding including consumption of vegetables
- Educate caregivers on common illnesses specifically diarrhoea
- Increase SFP services due to too high IDP population
- Put in place policies that restrict/prohibit breastmilk substitutes
- Establish outreach services and facilitate operations
- Establish ways increasing caregivers' utilization of preventive health
- Improve access to drugs- make them affordable, address cost recovery strategies to favour the poor
- Address issues of multi-parity; too-often-too-close-too-many pregnancies, considering that Islam rejects artificial planning of pregnancy spacing (referred to as supplementary gadgets in view that breastfeeding is the acceptable way)
- Establish an effective referral system in the public health system
- Address poor hygiene practices through addressing water scarcity hence improve access to clean water; capacity enhancement for water treatment at household level was suggested as well as construction of more latrines
- Operationalised service provision from paper to actual implementation
- Investigate anger among children for better management strategies on the premise that reported cases of anger and child abuse are on the rise.
- Assist in increment of production and consumption of fruits and vegetables for improved nutrient intake and health (the case of diseases of lifestyle such as diabetes.
- Address poverty in general especially among the pastoralists and IDP populations.

Appendix 5: Case Studies

Case Study1: Pregnant Breastfeeding Mother

Her name is Habiba from Middle Juba Illustrative Health Seeking Behaviour

Prenatal and Antenatal Behaviours

Habiba is about 2.5 months pregnant- though not sure. She has not been tested for pregnancy; it is too expensive as there are no facilities in Buale and would have to travel to Dinsor or Kismayo (100/240 km from her home). She is still breastfeeding Luqman, who is nine months old. She had practised the same with the child preceding Luqman and the child had no problem. Habiba has four children Luqman included with the first one being six years old. She plans to stop breastfeeding Luqman when the pregnancy is about three months and confirmed. Habiba observes that some women stop lactating when they realise they are pregnant or when they notice that the health of the child is getting poor.

Habiba did not prepare herself for the pregnancy in anyway. Indeed, by the time of the interview, she had not confirmed that she is pregnant. This is the way it normally happens; a woman just realises she is pregnant.

Habiba visits the MCH at Buale to take children for immunization. She is not on a special diet currently but she plans to reduce intake between seventh months of pregnancy and birth to avoid a baby that is too big and hence complicated delivery. She nonetheless points out that she has some temporary avoidance due to morning sickness. She will reduce the amount (portion size) of 'hard' foods (maize and rice). She will continue taking milk and possibly increase amounts depending on whether she can afford. Habiba's husband is jobless but if he gets money, he buys the foods she needs, such as meat and liver.

Breastfeeding initiation and thereafter: When Luqman was born, Habiba put him to the breast and also gave him water and sugar mix and livestock milk. She continuously offering him the three in addition to breastmilk. Habiba's children take colostrum. She notes, colostrum is special as it gives protection against 12 diseases; though she could only identify diarrhoea.

Management of diarrhoea: Habiba affirms that the red worm (an underdeveloped tooth known as 'iligow') exists and the condition has to be managed by a traditional healer who extracts the tooth 'it is actually referred to as a red worm'. The red worm is responsible for the constant irritation in the mouth that results in diarrhoea but when it is extracted the worm dies and child gets cured. All her four children have been through 'iligow' management. The traditional healer is paid for his services. There is no fixed amount even the client can fix/pay they affordable amount or according to what they can (non monetary types). 'Often husbands are not aware and are not even consulted when the child is taken to the traditional healer for iligow'. The procedure is done without any infection prevention measures.

The last illness Luqman had is diarrhoea and no dietary adjustment was done.

Action 1: 'Read' Koran' which means prays.

Action 2: Took Luqman to the MCH, Buale. She was given a dry powder in a bottle and instructed to add water, up to the recommended level, shake to mix well and then administer to Luqman using a cup at the rate of three times a day. She used the cup of the bottle to give the solution. She used hot water. The child did not recover.

Action 3: She then took Luqman to a pharmacy where she purchased (on credit) a syrup.

After this experience Habiba wonders, "Why should I go back to the MCH?" MCH represents the MCH/OPD health facility in Buale that is run under World Vision Somalia. She believes that the facility is unable to get her children cured.

The other conditions Luqman has had is vomiting. For this she bought some medicines and in addition she also consulted a traditional healer.

The normal progression for her in health seeking is: - not above where action 2 is to go to MCH?

1=Read Koran while observing child for 2-3 days

2= Purchase drugs (use until the dosage is complete)

3=Traditional healer (if medicine from pharmacy fails)

In response to the question whether reading the Koran cures, Habiba's response was that it does not cure all the times but that it only does if the person believes.

Case Study-2: Pregnant First Time

Her names is Nurta from Baidoa

Nurta is 18 years old and a second wife, in her second trimester (six months pregnant) and goes to MCH.

Diet modification: during the pregnancy, she has reduced the amount of food she eats due to sickness and loss of appetite. She is not preparing in anyway for breastfeeding; she is just waiting to deliver and will breastfeed in case the baby is born alive- it is the will of God. There are no foods that are restricted in pregnancy and she has neither been advised to omit nor to add any in her diet. The most influential person is her mother. She says that what is taught at the MCH does not make a difference. From the MCH she has learnt about breastfeeding, e.g., when to start breastfeeding; that is, three days after the baby is born. She does not expect to have breastmilk before the lapse of three days. She goes to the MCH for two reasons, to get vaccinated for protection against tetanus or for treatment. Meanwhile, she says she will give water with sugar or milk, whichever will be accessible as she awaits breastmilk flow to be established. "I shall follow what my parents (her mother) advise". She explains why her mother has such influence on her. It is the Somali custom for a woman who is pregnant for the first time to be close to her mother who then guides her through the pregnancy and should live with her for 40 days after delivery. When her own milk production is well established, she will withdraw milk and will continue giving water but without sugar.

She started going to the MCH because she heard that advice is given but she observe "So far not much has been offered". She learnt about MCH from other people, seeing other women going there and she had heard about it from the radio. She plans to deliver at home and if there is a problem she will be rushed to a hospital. Her husband has not given her any advice on pregnancy. The advantages of going to the MCH are that she is informed on her weight gain, she learns whether it has increased or not. She then observes "It is good to increase weight so long as it is not from a sickness".

She does not know the age at which complementary feeding should be introduced. Her mother will instruct her on when to start. The complementary diet she plans to offer will comprise, porridge made of sorghum, ground beans, simsim, groundnuts and sugar, milk with sugar, plain water. She explained that sugar is added to water as a pre-lacteal to serve as a food while later plain water is given to quench thirst.

Blocked nipple: she said she has heard that blocked nipples are a problem to some mothers but she does not know much about this, not even what blocks the nipple. If she experiences this

problem she will consult her mother or any other mothers. She has never heard of colostrum. Would she go for advice from the first wife- “Never”, she can only go to her mother. This is her first pregnancy and she feels shy discussing it with other people. She will not go for advice from MCH either. She has already been to MCH twice and no advice has been offered. Why? It is needless, she will have been given adequate advice by her mother, who having given birth many times has a lot of experience.

She plans to breastfeed for a total duration of two years, for her child’s health. In response to whether breastfeeding has any advantage for mothers, she said she does not know because it is her first pregnancy.

She does not fully understand what exclusive breastfeeding is but she will introduce vegetables and fruits to the child’s diet at the age of six months if her mother advises her to do so. According to her, if a mother has adequate milk, there is no need to add other foods before the age of two years. She was not clear about this but said all she is sure about is that the child has to be breastfed for two years. Even MCH recommends the same. Mothers stop breastfeeding completely when the child has grown big and it is no longer necessary to continue breastfeeding.

Water and sanitation and Hygiene: She buys untreated water for domestic use from vendors and she knows that it can be chlorinated. Despite having seen her neighbours add chlorine into their water storage tank, she has never thought it is necessary to treat the water she uses.

She is aware that her neighbours do encourage/instruct their children to wash their hands before and after meals. She even helps her younger siblings.

She considers the faeces of children to be harmful. She expounded that if children touch it or eat it they suffer from diarrhoea. Some in her neighbourhood use potty, for others children’s waste disposal is indiscriminate but they all finally empty it into the toilet. She says observed that no faeces are left indiscriminate in their compound nor in others in the neighbourhood. She associated the occasional incidences of acute watery diarrhoea ‘*shuubaan biyowd*’ to unhygienic practices.

Psychosocial care: she notes that it is a common practice among mothers to monitor their children as they feed. She has observed that when a child is hungry it will not refuse. But if reluctant to eat the mother coaxes with promises, such as, I shall take you to a certain place, or invokes certain restrictions. If a child appears not have had enough they are given more, even more food can be cooked, milk is also given as a top-up. She then commented that where there are children one can never miss milk.

Types of interruptions during child feeding times included flies, visitors (usually welcomed and the caregiver continues to feed). She believes that these interruptions do not have a negative impact on the child’s feeding capacity.

She has observed that in intra-household food distribution, children get served first, then the husband and the woman serves herself last. Usual pattern is that younger children are served together and then older ones together in one plate. The portion size is based on the ages of the children. She also observed that there are no special foods for men.

When her child gets sick, she will seek treatment at the MCH (standing for health facility)

From this case study the following are observed

This is a case of an urban based young mother to be, 18 years old, a primavida at the edge of second trimester who has been to the MCH twice:

Knowledge: she does not have adequate or appropriate knowledge on:

- Initiation of breast feeding (within an hour)
- Colostrum (does not know what it is)
- Exclusive breastfeeding- does not understand what it is
- Complementary feeding – a variety of foods will be given including fruits but needs clarification on the appropriate age at which to introduce these foods.

Attitude-

- That whatever her mother experienced/practised is appropriate and is to be followed.
- That apart from immunization and treatment MCH offers little to expectant mothers. Therefore, the need to understand what the MCH offers, its quality and capacity to influence, to have an impact is indicated

Practice:

- She will start breastfeeding after three days
- She will give water with sugar as she waits for breast milk flow to be established
- Likely to continue giving water without sugar after starting breastfeeding hence likely not to practice EBF (what is the impact on breastmilk intake capacity?)
- She will have her child treated at a modern health facility
- The complementary diet is likely to be bulky and of low energy density
- Age at which to introduce complementary feeding will be determined by her mother (does she have appropriate knowledge to pass on to this new mother?)

The following key observations based on this case study:

- Advice is not likely to be followed if it contradicts traditions
- Mothers are important in shaping the feeding quality of babies, specifically the mother's mother. She has already played a critical role on her socialization as she grew up since childhood and is also the one who is trusted with instilling skills of motherhood at the initial stage (during the first pregnancy and period following birth (at least 40 days)).
- It is important then to establish ways of ensuring that mothers as the immediate networks pass appropriate knowledge and skills to their daughters.

Case Study 3: Mother with a Wasted Child

Her name is Hadija from Urban Middle Juba

Hadija, whose livelihood can be classified as poor urban, is a mother of seven children, four girls and three boys and is four months pregnant. The youngest two are girls, Abishira and Neema who are 25 months old. Today, I only met Abishira who was adorned with a red and white beads necklace. The mother clarified that it was purely decorative hence not associated with curing. Hadija's first born is 22 years old, married and lives in a different far-off village from her. Hadija's husband lives in the village where (for many months) he has been recovering from an injury and hence has not been contributing to the family's livelihood. Hadija says, in the absence of her husband, she is the full decision maker including matters of feeding and health seeking for her children.

Abishira has just been re-admitted at the stabilization centre at Buale with moderate malnutrition and diarrhoea. A week past, both Abishira and Neema had been admitted at the centre, with severe and moderate malnutrition respectively. On the first admission, Hadija had taken them to the MCH for management of diarrhoea, vomiting and fever and they were also immunized

against measles. They got diarrhoea from eating soil- Hadija clarified. According to Hadija, the children were put on medicinal syrups and registered for management at the stabilization centre.

When she notices her child is sick, she first gets the Sheikh to read the Koran (say prayers), second action, she consults a traditional healer and if this fails she seeks treatment at the MCH (health facility).

Prior to seeking help at the MCH, Hadija had the children's uvulas (dalqe) lopped by a traditional healer because they were too long and irritating to the throats. But because of the wound, she elaborates, the children were not able to feed. Abishira was worse off than Neema and because children even twins do not respond/recover at the same rate, Neema was less affected.

The consumption of soil by the children triggered a discussion around pica consumption among pregnant women. Hadija confirmed that practice of pica exists not only among children but pregnant women as well. The women's favourite is the red or black soil in the beds of water catchments. She believes that consumption of soil by both children and pregnant women is due to a deficiency (iron).

Abishira has just been re-admitted at the stabilization centre at Buale with moderate malnutrition and diarrhoea. A week past, both Abishira and Neema had been admitted at the centre, with severe and moderate malnutrition respectively. On the first admission, the mother had taken them to the MCH for management of diarrhoea, vomiting and fever. They were also immunized against measles. They got diarrhoea from eating soil- Hadija clarified. According to Hadija, the children were put on medicinal syrups and registered for management at the stabilization centre.

Breastfeeding

Practice: She waited for three days before initiating breastfeeding because her breasts did not have milk. During that period she fed the twins on milk using a cup and she gave water that is not boiled without sugar, the practice continued because breastmilk is too strong but boiling of the water and adding sugar were not sustained. The colostrum was sucked out and discarded. She fed both babies on one breast, because it had adequate milk and milk was squeezed out of the other and discarded. In response to why she did not keep the milk, she responded that breastmilk cannot be stored; it will spoil besides she had sufficient fresh milk, why use milk that is not fresh. In practice she breastfeeds from both breasts but she is aware that there are families with a tradition of breastfeeding from one. Although the Koran and Sheikhs advocate two years of breastfeeding, Hadija stopped breastfeeding the twins when they were 12 months. She started feeling sick with blurred vision.

Knowledge: Hadija does not know how long a child should exclusively be breastfed and has never been in a forum which addressed complementary feeding. She said this despite having been admitted at the stabilization centre. In response whether she has a radio or access to one (listens), she said she has none and no access [*It was explained by the interpreter that the radio systems in Buale are limited to shortwave and only BBC broadcast is received*]

Belief: A newly delivered mother has no milk until she has taken adequate amounts of fluids. Since breast milk is too strong, the babies need water. In explaining why she does she not boil the water; she believes it is safe since it is from a protected hand-pump well and thus is uncontaminated.

Current diet: The child was being fed on boiled diluted milk (diluted before boiling). Increasing volume was given as the reason for boiling. She cannot afford to buy enough milk. The main food for Abishira is unimix, BP5 (high energy biscuits) and anjera. [The basic ingredient for the anjera is wheat as the children do not like it when maize meal is incorporated. The diet was completely

devoid of fruits and vegetables. Hadija buys biscuits (that cost SSh 4,000 per daily, one packet for SSh1000) for the children.

The diet for the other children comprises anjera in which oil has been added and sprinkled with black tea that has sugar-for breakfast, and the main meals comprise maize and tomatoes. She also gives them tea with milk and sugar two times a day (morning and evening). All the children share the BP5 (energy rich biscuits).

Social networks: While Hadija was admitted with the twins, her 12 year old daughter was responsible for providing care and running the home. She was feeding the children on food given as food aid. Hadija's networks include her one-eyed grandmother and neighbours.

In response to the question whether there are mothers who prefer to focus on the healthy ones and hence somewhat neglect the sick, she responded that those who do not have substitute caretakers, of the healthy ones, sometimes do opt to focus on the healthy.

Water and sanitation: Hadija's household gets water from a protected well. The children defecate outside the house; she then collects and throws it into the bush. Older children and adults defecate in the bush. In response to whether children's faecal matter can be harmful to health, she responded that it is removed immediately thus it is not left long enough to be harmful.

Case Study 4: Pregnant without Children *Her name is Samey from urban Middle Juba*

Samey, who is 17 years of age and is a second wife in her fifth month of pregnancy and who already has visited the MCH once, for vaccination. She was asked to go for a revisit after a month hence will return when the pregnancy is seven months. What are the advantages of going to MCH? I asked Samey. She was vaccinated and since she had no appetite she was given some tablets that improved her appetite.

Anticipated place of delivery: She plans to deliver at home like everybody else does, including her mother and sister. She elaborated on the disadvantages of delivering at the MCH/OPD Buale (health facility) as follows: there is no light in the night and the facility does not even have a midwife and things are not ready when you get there; in comparison to a TBA whom you call for and comes to you; kitty and all, ready to conduct the delivery.

Dietary modification: Before pregnancy she was eating all food types but due to it she finds now she likes only meat and pasta. No vegetables except onions.

Breastfeeding and complementary feeding plans: She will breastfeed her baby for the first time after three days. When I asked, why not in the first day? She responded that other mothers begin breastfeeding after three days; reason being that the breast has no milk. She will also practice 'inqarin' which is the habit of offering livestock milk as a Prelacteal when the baby cries for the first time. This is a requirement as dictated by culture.

So what will be the baby taking in the three days? Undiluted boiled milk with sugar but if it is camel milk it will only be heated- boiling denatures camel milk. She will feed the baby with a bottle. When the baby is seven days old, she will start giving boiled water with sugar and will use a feeding bottle. She will continue with this feeding regime until the next pregnancy. Becoming pregnant will determine the total breastfeeding duration.

One-breast aside practice: This is the practice of breastfeeding the child on one breast (either right or left) while the other is left untouched for the husband to be cuddling. According to Samey this is only practised as tradition of isolated families- not all. The belief is that the milk from this breast shifts to the other breast and even the baby rejects this breast if offered. The milk is also squeezed out and the breast is cleaned. When I asked whether her it will not get sore “mastitis”? She said, from what she has learnt from her mother and sister, it will only leak for two to three days then stop. She also admitted that she has heard that one can get feverish but it will all pass away.

Samey identified diarrhoea, coughs and colds, teething problems and infection of uvula as the common childhood illnesses. She, however, does not have much experience with these conditions.

Appendix 6: Data Collection Tools for KAPS

FOCUS GROUP DISCUSSION (FGD) QUESTIONS

Pre-natal and post-post natal care for women

1. Are there special diets for women during pregnancy and breastfeeding (not family meals)
2. Are there any foods women are traditionally not allowed to eat and why?
3. Who are the main influential people for women during pregnancy and breastfeeding (*Role of TBAs, traditional healers and religious leaders*)
4. What daily activities are women engaged in from morning till evening
5. Do mothers receive any Nutrition education during pregnancy and after delivery- explore types of nutrition education given to mothers?
6. Which are the social support services available for women during pregnancy and breastfeeding period (*Why? who, what do they do and how do they support?*)
7. How do these services enhance or undermine breastfeeding (initiation, exclusive, frequency and continuation of b/feeding)?
8. How do these services enhance or undermine complementary feeding (Introduction, nutritional quality, frequency, and amount given)

Breastfeeding

Starting of Breastfeeding

1. What proportion of mothers in the community start breastfeeding within the first hour of life?
2. Find out reasons for not initiating breastfeeding in the first hour of life(% for each reason)
3. Find out the proportion of women who breastfeed within the first 3 days of life? Do they give colostrums, what % do?
4. Those who do not give colostrums, what are the reasons?
5. Those who do not breastfeed in the first 2-3 days of life, what are the reasons and what do they feed children on during this period?

Giving Breast milk only without even water or milk

1. At what age do mothers introduce other feeds to infants apart from breast-milk
2. For how long do mothers exclusively breastfeed without giving any other liquids or solid foods?
3. What is the meaning of breastfeeding only as understood by the community?

Duration of breastfeeding

1. When do mothers stop breastfeeding (If several ages are given, do proportional piling to establish proportions for different periods).

Water and Sanitation

1. What are the main sources of water for domestic use?
2. Is drinking water from main source treated before use?
3. Are children encouraged to wash their hands before and after eating?
4. Do you think that infants and children's faeces can cause health problems? How are infants and children's faeces disposed of in this community?
5. What are the main sanitation & hygiene problems/issues affecting children's health in this community?

Psychosocial Care

1. Is it common for mothers/caregivers to sit and monitor how the child eats? (what % does so?)
2. What things do mothers do and say to encourage the child to eat?
3. What happens if a child refuses completely to eat? (*Forced or left alone – discuss further*)
4. What happens if food is served and is not enough or children ask for more? (Probe according to the answers given).
5. What are some of the interruptions that happen when a child is being fed?
6. What is the impact of these interrupt on the child's feeding?
7. How does the caregiver handle these destructions

Intra-household food distribution

1. During meal times, who is served first. When are the <5s served
2. What criteria are used in the households to decide on the portion sizes to serve?
3. When food is not enough, what other criteria is used to serve food
4. Which foods MUST be served specifically by men or women and why?

Complementary Feeding

1. What proportion of women in the community ALWAYS wash their hands before preparing, serving and feeding young children (*Proportional piling*)
2. How does a caregiver know that the child is old enough to adequately eat on his own without being assisted.
3. When children eat from one common plate, how does a mother know each child is satisfied?
4. What types of foods are children in this community fed on from 0-5 years?
5. Among the foods given, are there some that a child eats almost daily?
6. For the rest of the foods that are not eaten everyday, how many times (2-3 times/week, once a week, special occasions-*which occasions*).–*Explore reasons for not eating daily.*
7. How does a mother decide that the child has eaten enough types of food for the day for health and growth
8. During food preparation what efforts do mothers make to make the food suitable and appealing to the child (probe for flavour/taste, texture and appealing to the eyes (*aragti*))
9. What are main sources of food for most households in this community (*proportional piling.*)
10. What factors affect access to food normally and currently? (*Proportional piling*)
11. How does access to Food affect child feeding practices in this community?.
12. Are there times when children are not allowed to eat certain foods? When & why?
13. In what ways are boys and girls fed differently in this community?
14. How many times are children fed in a day? (*Profile by age*)

Health seeking behaviour

2. What are the most common childhood illnesses (Rank the diseases in order of prevalence in the community)
 2. When children in this community fall sick, what are the actions in order of priority- [Feel answer in separate page **not** in the table below] *Do proportional piling for each.* (This gives progression of health seeking behaviour/management

Disease	1 st Action	2 nd Action	3 rd Action	Any Comment
Diarrhoea				
Malaria				
Coughs				
Intestinal Worms				
Malnutrition (Thinness)				

Skin Infections				
Convulsions				
<i>Ask duration (how long it takes) before the next action for each disease</i>				

- a. How is diarrhoea managed and what do people perceive to be the effects of diarrhoea (probe for both the immediate and long term effects).
- b. Who makes decisions on treatment of sick children in the household
- c. What factors influence a mothers decision to take her child for treatment?
- d. In a situation where a child is sick and a mother has many young children is all alone, what types of alternative decisions does she have?
- e. When a mother has many children <5s) does this influence her decision?
- f. Do people in the community report childhood illnesses to the health facilities, if not why and which ones are not reported?
- g. What is your view about the available health services in the community?
- h. What is the community's view on vaccinating children against diseases?
- i. When a child is ill, what social support services are available for the caregivers (Why? *who, what do they do and how do they support?*)
- j. How do these social support system enhance or undermine appropriate care of the sick child

Alternative Caregivers

- k. Who takes care of children in this community besides the mother? (What is role of men?)
- l. Explore the main differences when children are cared for by adults and when they are cared for by young children.
- m. What is the impact of conflict on traditional Social Network Support

Recommendations/Suggestions for improving Child feeding

What are your suggestions on improving child feeding practices in this community? (*List Different options, then do proportional piling to rank the feasibility of suggestions for improvement as Easy, Not Easy and Impossible*)

Key Informant Interviews Questions

Pre-natal and Post-natal Care

9. Are there special diets for women during pregnancy and breastfeeding (not family meals)
10. Are there any foods women are traditionally not allowed to eat and why?
11. Who are the main influential people for women during pregnancy and breastfeeding (*Role of TBAs, traditional healers and religious leaders*)
12. Do mothers receive any Nutrition education during pregnancy and after delivery- explore types of nutrition education given to mothers?
13. Which are the social support services available for women during pregnancy and breastfeeding period (*Why? who, what do they do and how do they support?*)
14. How do these services enhance or undermine breastfeeding (initiation, exclusive, frequency and continuation of b/feeding)?
15. How do these services enhance or undermine complementary feeding (Introduction, nutritional quality, frequency, and amount given)

Breastfeeding

Initiation of Breastfeeding

- When do mothers initiate breastfeeding?
- What are the reasons for not initiating breastfeeding in the first hour of life
- Do mothers give the child colostrums if not, why?
- Those who do not breastfeed in the first 2-3 days of life, what are the reasons and what do they feed children on during this period?

Giving Breast Milk Only Without Water or Milk

- At what age do mothers introduce other feeds to infants apart from breast-milk
- For how long do mothers exclusively breastfeed without giving any other liquids or solid foods?
- What is the meaning of exclusive breastfeeding as defined by the community?

Duration of breastfeeding

At what age do mothers stop breastfeeding?

3. Water and Sanitation

1. What are the main sources of water for domestic use?
2. Is drinking water from main source treated before use?
3. Are children encouraged to wash their hands before and after eating?
4. Do you think that infants and children's faeces can cause health problems? How are infants and children's faeces disposed of in this community?
5. What are the main sanitation & hygiene issues affecting children's health in this community?

4. Psychosocial Care

1. Is it common for mothers/caregivers to sit and monitor how the child eats? (what % does so?)
2. What things do mothers do and say to encourage the child to eat?
3. What happens if a child refuses completely to eat? (*Forced or left alone – discuss further*)
4. What happens if food is served and is not enough or children ask for more? (Probe according to the answers given).
5. What are some of the things that may destruct a child during feeding?
6. What is the impact of these destructions on the child's feeding?

7. How does the caregiver handle these destructions

Intra-household food distribution

- 5. During meal times, who is served first? When are the <5s served?
- 6. What criteria are used in the households to decide on the portion sizes to serve?
- 7. When food is not enough, what other criteria is used to serve food
- 8. Which foods MUST be served specifically by men or women and why?

Complementary Feeding

- 15. Is it a common practice for women to wash their hands before preparing, serving and feeding young children
- 16. How does a caregiver know that the child is old enough to adequately eat on his own without being assisted.
- 17. When children eat from one common plate, how does a mother know each child is satisfied?
- 18. What types of foods are children in this community fed on from 0-5 years?
- 19. Among the foods given, are there some that a child eats almost daily?
- 20. For the rest of the foods that are not eaten everyday, how many times (2-3 times/week, once a week, special occasions-*which occasions*).-*Explore reasons for not eating daily.*
- 21. How does a mother decide that the child has eaten enough types of food for the day for health and growth
- 22. During food preparation what efforts do mothers make to make the food suitable and appealing to the child (probe for flavour/taste, texture and appealing to the eyes (*aragti*))
- 23. What are the main sources of food for most households in this community (*Use proportional piling.*)
- 24. What factors affect access to food normally and currently? (*Proportional piling*)
- 25. How does access to Food affect child feeding practices in this community?.
- 26. Are there times when children are not allowed to eat certain foods? When & why?
- 27. In what ways are boys and girls fed differently in this community?

Health seeking behaviour

- 8. What are the most common childhood illnesses (Rank the diseases in order of prevalence in the community)
- 9. When children in this community fall sick, what are the actions in order of priority- *Do proportional piling for each.* (This gives progression of health seeking behaviour/management)
- 10.

Disease	1 st Action	2 nd Action	3 rd Action	Any Comment
Diarrhoea				
Malaria				
Coughs				
Intestinal Worms				
Malnutrition (Thinness)				
Skin Infections				
Convulsions				

Ask duration (how long it takes) before the next action for each disease

- 11. How is diarrhoea managed and what do people perceive to be the effects of diarrhea (probe for both the immediate and long term effects).
- 12. Who makes decisions on treatment of sick children in the household

13. What factors influence a mothers decision to take her child for treatment?
14. In a situation where a child is sick and a mother has many young children is all alone, what types of alternative decisions does she have?
15. When a mother has many children (<5s) does this influence her decision?
16. Do people in the community report childhood illnesses to the health facilities, if not why and which ones are not reported?
17. What would you say about the available health services in the community?
18. What is the community's view on vaccinating children against diseases?
19. When a child is ill, what social support services are available for the caregivers (Why? who, what do they do and how do they support?)
20. How do these social support system enhance or undermine appropriate care of the sick child

Social Network and Alternative Caregivers

21. Who takes care of children in this community besides the mother? (What is role of men?)
22. Who do mothers go to for childcare support (all types)?
23. What is the impact of conflict on traditional Social Network Support

Recommendations/Suggestions for improving Child feeding

- What are your suggestions on improving child feeding practices in this community?

RAPID PROFILING OF FEEDING PRACTICES & ASSOCIATED SIMPLE CHILDHOOD DISEASE MANAGEMENT AMONG CHILDREN 0-5 YEARS

1. Profiling of feeding practices

- Conduct in-depth interviews with 3-4 women on feeding profile and disease patterns
- What foods are given to children at different ages between birth and 5 years of life (probe)

Age Category	Types of Food	Feeding frequency	Mode of Feeding	Psychosocial Care		Comments
				Do	Say	
First 3 days of life						
Birth to 3 months						
3-6 months						
6 – 12 months						
12-24 months						
More than 24 months						

Summary of issues of Concern and Recommendations

Issue of concern by Rank	Suggested Action/Response	Feasibility of Response (%) ¹²			Comment
		Easy	Not Easy	Impossible	

Probe further if Feasibility of response is "impossible"

¹² Do proportional piling to get the most feasible and acceptable action to address the issue in the community

Profiling of diseases

- Conduct in-depth interviews with 3-4 women on disease patterns
- What diseases affect children at different ages between birth and 5 years of life (probe)
- What are the major causes of these diseases and how are they managed during the specified age categories?

Age Category	Disease	Cause of disease	Management		Comments
			Food-related Management	Non-food related management	
First 3 days of life					
Birth to 3 months					
3-6 months					
6 – 12 months					
12-24 months					
More than 24 months					

Summary of issues of Concern and Recommendations

Issue of concern by Rank	Suggested Action/Response	Feasibility of Response (%) ¹³			Comment
		Easy	Not Easy	Impossible	

Probe further if Feasibility of response is “impossible”

Profiling of Decision making in Health Seeking Behaviours

- Conduct in-depth interviews with 3-4 women on main decision makers for various diseases
- What are the consequences if the decision maker is different from the main one?
- What happens if the main decision maker is not at home when a child is sick?

Age Category	Disease	Main Decision maker	Consequences if different decision maker (not main)		Comments (If main decision maker is not at home what happens)
			Good	Bad	
First 3 days of life					
Birth to 3 months					
3-6 months					
6 – 12 months					
12-24 months					
More than 24 months					

Summary of issues of Concern and Recommendations

Issue of concern by Rank	Suggested Action/Response	Feasibility of Response (%) ¹⁴			Comment
		Easy	Not Easy	Impossible	

¹³ Do proportional piling to get the most feasible and acceptable action to address the issue in the community

¹⁴ Do proportional piling to get the most feasible and acceptable action to address the issue in the community

<i>Probe further if Feasibility of response is “impossible”</i>					

Profiling of Sanitary Practices by Age

- In your community, do people associate health status of children with water? If so, in what ways and which water? *Discuss both the positive and negative ways.*
- If thin or fat children are not mentioned, probe (*Probe for the role of water in making children thin or fat*)
- What is your source of information/belief?

Child	Faecal disposal method	Is Faeces harmful to health?	Whose Health		Comments
			Child	Adult	
First 3 days of life					<i>(meconium)</i>
Birth to 3 months					
3-6 months					
6 – 12 months					
12-24 months					
More than 24 months					

Summary of issues of Concern and Recommendations

Issue of concern by Rank	Suggested Action/Response	Feasibility of Response (%) ¹⁵			Comment
		Easy	Not Easy	Impossible	
<i>Probe further if Feasibility of response is “impossible”</i>					

APPENDIX 5: Distribution of Health Facilities by Region

REGION	HOSPITAL	HP	MCH	MCH/HP	MCH/OP	OP	TOTAL
SOUTH CENTRAL ZONE (SCZ)							
Bakool	1	19	1	-	4	-	25
Bay	7	44	19	-	4	-	74
Galgadud	4	3	1	-	5	1	14
Gedo	3	54	2	-	10	-	69
Hiran	1	31	5	1	5	1	44
Lower Juba	2	3	7	-	12	-	24
Lower Shabelle	7	6	10	-	6	2	31
Middle Juba	-	4	-	-	6	-	10
Middle Shabelle	2	1	1	-	12	-	16

¹⁵ Do proportional piling to get the most feasible and acceptable action to address the issue in the community

Total SCZ	27	165	46	1	64	4	307
NORTH WEST ZONE (NWZ)							
Awdal	2	32	6	-	6	-	46
Sanaag	4	19	2	-	9	-	34
Sool	2	36	6	-	7	-	51
Togdheer	3	26	6	-	10	-	45
West Galbeed	9	28	10	-	2	-	39
Total NWZ	20	141	20	-	34	-	215
North East Zone (NEZ)							
Bari	7	44	19	-	4	-	74
Nugal	3	7	3	-	6	-	19
Mudug	6	2	2	1	8	1	20
	16	53	24	1	18	1	113

Appendix 7: Lexicon

Part 1: Common terms of relevance to KAPS

<i>Aragti</i>	Appearance
<i>Aminsanam</i>	Attitude
<i>Anqirin</i>	The traditional practice of giving livestock milk to a child immediately after birth.
<i>Aqoon</i>	Knowledge
<i>Ciiri/garoor</i>	Milk which has all the fat removed
<i>Carruur</i>	Children
<i>Dalqe</i>	Uvula
<i>Danbar</i>	Colostrum
<i>Dhiil</i>	The traditional child's preserved milk container
<i>Dhagol</i>	Deaf
<i>Garoor</i>	Fermented cow-milk
<i>Garowga and ama hadhuudhka'</i>	
<i>Hildid</i>	Tree-gum used in traditional cure for diarrhoea
<i>Iligow</i>	A red-tooth- associated with teething diarrhoea and the package involves its removal
<i>Inqirin</i>	The process of silencing the baby's first cry
<i>Jacjacle</i>	Type of tree used in preserving milk- it has a pleasant smell and also kills germs
<i>Macluul</i>	Without energy due to lack of food
<i>Muqmad</i>	Preserved meat
<i>Qod qod</i>	What else? Word KAPS exploited in explaining the concept of probing
<i>Shifa</i>	Health
<i>Suuli</i>	Traditional latrines
<i>Suusac</i>	Fermented milk
<i>Tahaliil</i>	Holy water sprinkled on people by Sheikhs to protect them against evil eye
<i>Uboure</i>	A tree whose leaves are used in concocting cure for treatment of conditions associated with the evil eye
<i>Umol Bah</i>	Forty days after delivery period

Uur lay iyo u mul Pre/post delivery/natal
Waxqabad Practice

Part 2: Lexicon Illness Conditions/Diseases

<i>Ameebe</i>	Amoeba
<i>Babasir</i>	Haemorrhoids
<i>Cabeeb</i>	Oral thrush
<i>Daaf</i>	Conjunctivitis
<i>Ilka dawaco</i>	fox teeth diarrhoea
<i>Gorayaan</i>	Intestinal worms
<i>Gooryaan/mulaaxeed</i>	Ascaris/roundworms
<i>Hargab</i>	Common cold
<i>Jaardiya</i>	Giardia
<i>Kalaazar</i>	Kalaazar
<i>Kadhi diq</i>	Bilharzia
<i>Keleyl</i>	Heat
<i>Kolera</i>	Cholera
<i>Isnadaamis</i>	Scabies
<i>Kuleyl</i>	Fever
<i>Jadeeco</i>	Measles
<i>Kaneeco</i>	Malaria
<i>Matag</i>	Vomiting
<i>Nafaqodaro</i>	Malnutrition
<i>Oof wareen</i>	Pneumonia
<i>Quaman</i>	Tonsillitis
<i>Qandho/Xumad</i>	Fever
<i>Shuban</i>	Watery diarrhoea (simple diarrhoea)
<i>Sonkorow</i>	Diabetes
<i>Umulow</i>	A disease that a mother with a newborn suffers (a kind of anaemia) which is treated by eating cow-tongue but does not affect the breast in anyway
<i>Urug</i>	TB
<i>Walac or heestimo</i>	Morning sickness, characterised by nausea, vomiting and loss of appetite
<i>Xaar dhiig</i>	Dysentery with blood
<i>Xiiq</i>	Whooping cough

Part 3: Things Mothers say to motivate the children to eat

Hoobale Word repeatedly chanted to urge a child to eat or do something
Maxaad weydood walootay
Maxaa waakoy ku yeelay
Maxaad waabkaa ka waysay

Hobeeya A song chanted and used by the mothers in North West Zone to console their children when they are sick and crying or to urge them to eat

Yaa iga dilay oo dagaalay
Yaa duurr kulul ku jeexay
Ninkii dilay doonimaayo
dagaalbaa naga dhexeeya.