MOTHERS AND " THE INVOLVED OTHERS" IN CHILD FEEDING PRACTICES: THE SOCIOCULTURAL CONTEXT OF IMPLEMENTING THE RECOMMENDED CHILD FEEDING PRACTICES IN SEBETA AWAS WOREDA, OROMIA REGION- ETHIOPIA.

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY (SOCIOLOGY)

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I, Fekadu Dereje Asefa, do hereby declare to the School of Graduate *Studies* of Addis Ababa University that this dissertation entitled "*Mothers and "the Involved Others" in Child Feeding Practices: The Sociocultural Context of Implementing the Recommended Child Feeding Practices in Sebeta Awas Woreda, Oromia Region- Ethiopia*" is the product of my original research work, complies with the regulation of the University and meets the accepted standards with respect to originality and quality.

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Fekadu Dereje Asefa

DEDICATION

To all Ethiopian mothers!

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ABBREVIATIONS AND ACRONYMS

AIDS/HIV	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
ANOVA	Analysis of variance
CBN	Community Based Nutrition
CSA	Central Statistical Authority
EDHS	Ethiopian Demographic and Health Survey
EOS	Enhanced Outreach Strategy
FGDs	Focus Group Discussions
GoE	Government of Ethiopia
HEWs	Health Extension Workers
HIV	Human Immune Deficiency Virus
IYCFP	Infant and Young Child Feeding Practices
KII	Key Informant Interview
MDGs	Millennium Development Goals
MoFED	Ministry of Finance and Economic Development
MoH	Ministry of Health
NNS	National Nutrition Strategy
ORS	Oral Rehydration Salt
PNC	Postnatal Care
SPSS	Statistical Package for Social Sciences
TBAs	Traditional Birth Attendants
UNDP	United Nations Development Program
UNICEF	United Nations Children's Fund
USAID	United States of America Agency for International Development
VCHPs	Volunteer Community Health Promoters
WFP	World Food Program
WHO	World Health Organization

ABSTRACT

Recommended child feeding is not simply a mothers' response to the metabolic demands of her child, but involves a complex web of behaviors and interactions among people including fathers, grandmothers and health workers. These interactions emanate from meanings that people hold, conditioned by myths and beliefs about the vulnerability of babies to nature and evil spirits. Concurrently, this study investigated the embedded nature of child-feeding practices in the socioeconomic and cultural contexts of the households and the urge of considering this dynamism in the biomedical discourses and policy interventions related to child nutrition.

Taking mothers as the primary actors in child feeding, the study utilized mixed research approach that triangulated the methods and data from the research process. The study utilized quantitative method to measure the variations in child-feeding practices, and qualitative method to interpret meaningful actions and to highlight interpretations that participants give of themselves or others. Subsequently, 707 mothers whose children were less than 24-month age responded to the survey questionnaire with response rate of 99%. Concerning the beliefs, policy, operational opportunities and challenges, 12 focus group discussions as well as 15 in-depth and 15 key informant interviews were conducted with mothers, men, senior women, health extension workers, and experts. In addition, seven case studies illuminated the experiences of mothers and senior mothers about recommended child-feeding practices.

Guided by the socio-ecological model, the results of the study indicated the significant roles of economic and socio-cultural contexts as well as mothers' agency in shaping the concept and practice of recommended child-feeding guidelines. Specifically, the collective nature of child rearing values that assigned specific roles to men, female children and senior women, made men and senior women to act as advisors, supervisors, and providers in child-feeding and health seeking behaviors. Furthermore, the role of adult female children and community networks were also found significant assets in sharing mothers' domestic responsibilities and to focus on childcare and feeding practices. Yet, the actors considered the child-feeding recommendation as "ideal" and the "medicalization" of motherhood. As the result, the implementation of the recommendation faced various barriers such as poverty, employment laws, infrastructure and service amenities, as well as lagging changes in cultural attitudes supporting customary child-feeding practices. Overall, the study indicated child-feeding practices as an arena where struggle, negotiation, and encounters take place among the actors— mothers, men, senior women and health

workers. In effect, mothers responded to the child-feeding recommendations differently— adoption, adaptation, and rejection.

The study called for the coordination of multi-sector partners to addresses the economic, social, and cultural needs of mothers and the actors in household and community contexts for optimal child-feeding practices. Similarly, child-feeding intervention should be "de-medicalized" to incorporate the traditional beliefs, preferences and practices of the community. Accordingly, establishing linkages in traditional and modern child- feeding promotional messages were encouraged to enrich the recommended child feeding efforts. In addition to strengthening the baby-friendly health facilities and services, the employment policies and working environments should be baby friendly to keep the balance between "good mother- good worker" roles. Lastly, nutrition related issues are advised to be included in formal education and agriculture related professional trainings to engage men and senior women in sustainable support of recommended child-feeding practices and life cycle based nutrition interventions.

Key terms: Sociology of food, recommended child-feeding practices, Child nutrition, Ethiopia

CHAPTER ONE: INTRODUCTION

1.1 Background of the study

Poor child[1] feeding is responsible for two thirds of child malnutrition that developing countries are facing as the major public health problem (Abate and Belachew, 2017). Furthermore, malnutrition contributes to 60% of the under-five mortality worldwide (Beka et al., 2009; Pelletier et al., 1995; Setegn et al., 2012) with irreversible consequences that trap the society in to a vicious cycle of poor health, poverty and deprivation (Black et al., 2013; Victoria et al., 2008; WHO, 2006; World Bank, 2006). To reverse the problems associated with child malnutrition, WHO (1991) declared Innocenti Declaration[2] that promote, protect and support breastfeeding. Similarly, considering breastfeeding as a panacea for many of child illness and malnutrition, WHO declared the World Breastfeeding Week (1-7 August) in 1992 in which partners working on child health jointly organize events that promote breastfeeding (WHO, 2002). According to the child-feeding recommendation, infants should be exclusively breastfed for the first six months, fed with complementary foods from at least four food groups three to four times daily and breastfeed at least for two years (MoH, 2004; WHO, 2002).

The impacts of poor child-feeding practices are significant in developing counties (Pelletier et al., 1995), and the level is particularly high among sub-Saharan African countries where access to basic needs and health services are scarce (Desalegn al., 2013; WHO, 2008). According to the studies in Africa, child-feeding practices are significantly influenced by the sociocultural beliefs and actors in various contexts (Aubel and Rychtarik, 2015; Chisenga et al., 2005; Engebretsen et al., 2007; Mutuli et al., 2016; Thairu et al., 2005). Moreover, Steinman et al. (2011) has argued for the strong need of child-feeding recommendations for African societies that consider their cultural contexts than the Western biomedical approaches.

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[1] World Health organization (WHO) uses "**infants"** for those children less than one year and **"child**" for those whose age is between one and five. In this study, however, unless expressed otherwise, the term "**child/ children**" represent those age categories represented by WHO (2002) as "**Infant and young children**," and whose age is between 0 and 24 months.

[2] **The Innocenti Declaration** is a global initiative on the promotion, protection and support for breastfeeding that was produced and adopted by participants at the WHO/UNICEF policymakers' meeting on "Breastfeeding and was held at the Spedale degli Innocenti, Florence, Italy, on 30 July- 1 August 1990.

Ethiopia adopted WHO's (2002) infant and young child-feeding recommendations serving as a framework for National Nutrition Strategy (NNS) (MoH, 2004; Setegn et al., 2012). Furthermore, the government designed a well-versed health extension program (HEP) with a program of basic and essential promotive, preventive, and selected high impact curative health services effected the recommendation (Ali et al., 2011; Dessalegn et al., 2012; Kesetebirhan, 2013). The program supports the policy direction inclined to expand primary health care services and improve the health status of families using local technologies, community resources, skill and wisdom (Beka et al., 2009; MoFED, 2010; FMoH, 2015). Accordingly, Ethiopia has made significant progress in developing its policy environment and service delivery platforms towards eliminating stunting and malnutrition over the past 15 years that reduced stunting rates from 57% in 2000 to 38% in 2016. Furthermore, the government publicly pledged to end child under nutrition by 2030 in the 2015 Seqota Declaration (EDHS, 2016; Kennedy et al., 2016; Warren, 2016). Yet, the national and local nutrition programs failed to achieve the targets due to-

- High level of illiteracy among mothers and caretakers which causes many mothers to be unaware of information related to optimal feeding practices;
- Insufficient knowledge on the part of health care providers regarding optimal feeding practices which leads to dissemination of incorrect information; and
- The lack of appropriate policies to create an enabling environment for promotion of appropriate infant and young child-feeding practices (MoH: 2004: iii).

As the result, the percentage of infants exclusively breastfed up to six months has decreased from 38.1% to 36% between 2000 and 2016 while the percentage of bottle-fed children of age one month has increased from 5.8% to 8.8% in the period. Furthermore, only 7% of the children received the minimum acceptable diet (EDHS, 2016). In the same way, falling short of the nationally proclaimed target of 92% of children breastfed in the first hour of their birth, only 52% of infants started breastfeeding within the recommended time and 80% within the first day (EDHS, 2016). Studies also documented a wide range of harmful infant feeding, some of which are related to lack

of knowledge, widespread poverty, food shortage and beliefs related to breastfeeding (Desalegn et al., 2013; Netsanet et al., 2016, Save the Children, 2012).

In order to understand the sociocultural contexts influencing the implementation of recommended child-feeding practices, this study assumed the inadequacy of "normative reductionist approach" (Alemu et al., 2017) to look in to the agency of mothers in child feeding practices. The study also assumes the influence of individuals' personal experiences and dispositions in interpreting contexts and adapting to new socio-cultural structures in implementing the recommended child-feeding practices.

1.2 Statement of the Problem

Poor child-feeding practice in the first two years of infancy is one of the immediate causes of child malnutrition that adversely affects the physical and mental development of the person. It also diminishes the intelligence, educability and productivity of the children and creates vicious circle that brings short and long-term effects on the individual, the family, and the community at large, creating a major obstacle to sustainable socio-economic development of the country (Case et al., 2002; Gulati, 2010; Guled et al., 2016; Setegn et al., 2012; WHO, 2010). Cognizance of this, national and international health actors promoted recommended child-feeding practices that can prevent a fifth of child mortality and a third of deaths of children under 2 years (Abuya et al., 2012; MoH, 2004; Setegn et al., 2012).

Many researchers have found out poor knowledge and attitude as well as poor availability and access to health resources as the major determinants of poor child-feeding practices in Ethiopia (Ali et al., 2011; Setegn et al., 2012). Such studies were rooted in individualistic view of Western biomedical or reductionist approach that assume mothers as rational actors who freely decide on the child-feeding options (Fouts et al., 2012; Law, 2000; Palmquist, 2015; Rudzik, 2015; Steinman et al., 2011). Moreover, the researchers approached child-feeding issues from the essentialist perspective, which focus on the essential nutrients for health and growth of a person (Save the Children, 2012; WHO, 2005). Even if the results indicated part of the reality, the nature of such studies masked the issues related to child feeding that have also sociocultural

dimensions. This is because the target of the studies was to increase breastfeeding rates or compliance around complementary feeding without due regards to social inequalities embedded in the broader sociocultural and political systems influencing power relationships (Esterik, 2002; MacKean and Spragins, 2012). Similarly, Carolan (2012:84) extensively criticized the nutritional guidelines, such as Infant and Young Child-feeding (IYCF) guideline as follows:

> *The guidelines in themselves do little to change actual dietary patterns. This is especially true among the most disadvantaged in society, recognizing that eating healthy often costs more than a diet that does not meet the recommended guidelines. …Making transparent the nutritional value of foods also allows food companies to play the "individual choice" card and thus steer debate away from the food system itself. Under this ideological rubric, obesity, poor diet, and malnutrition all become issues attributable to the individual, via such alleged personal faults as poor self-control, lack of individual dietary knowledge, or just plain laziness.*

Similarly, the recent scientific reviews advise the inclusion of the socio-cultural and economic dimensions in designing interventions related to recommended child-feeding practices. For example, USDA (2009:101) advises considering infant's developmental stage and family's socioeconomic factors upon the practicality of recommended complementary feeding. In addition, Association of American Pediatrics (AAP) indicated the contextualized nature of recommended child feeding as follows:

> *Study results to date suggest that there is no significant harm associated with introduction of complementary foods at 4 months of age and no significant benefit from exclusive breastfeeding for 6 months in terms of growth, development, iron/zinc nurture (limited data), allergy, or infections.... However, evidences suggest that subgroups, such as infants who consume low amounts of human milk and those with low birth weight, may need an earlier initiation of complementary foods* (AAP, 2009: 128).

As it is indicated above, AAP (2009) and USDA (2009) underlined contextualizing the recommended child-feeding practices to the physical, socio-cultural and economic realities of the infants, that also offers symbolic meanings of motherhood and the underlying role sets (Palmquist, 2015). In addition, some researchers challenged the 'breast is best' promotions (Fouts et al., 2012; Esterik, 2002; Wolf, 2007:595) and conclude such promotions as based on studies that are "Inconsistent, lack strong associations and do not account for plausible confounding variables such as the role of parental behavior in various health outcomes" (Wolf, 2007:595). Similarly, child-feeding

recommendations "*are very much organized according to the logic of the broader medical discourse and characterizes contemporary parenthood as a process of increasing medicalization*" (Andrews and Knaak, 2013:88). This legitimized the process in which health professionals, not mothers, are deemed the primary expertise of child health, and the moral gatekeepers of contemporary parenthood (Andrews and Knaak, 2013; Blaint, 2009). Furthermore, the medicalization of parenting emphasized on women's role in reproductive arena without adequate balance of the health and economic costs of 'good motherhood' (Law, 2000) that. Lee (2007) criticized as "a morally defective hegemonic ideology" (p. 1078).

Few ethnographic and sociological studies have envisaged the other dimensions of child feeding practices but with limited emphasis. In their qualitative studies on child-feeding practices, for example, Aubel et al. (2012), Glenn (1994), Kristen (2003), and Tom (2015) investigated the influence of "significant others" to customize the recommended child-feeding practices. Selamawit et al. (2016) has also revealed the role of fathers in child-feeding practices. Similarly, Ethiopia acknowledged the influence of community elders in health seeking behavior though without adequate emphasis on the diverse socio-cultural and economic contexts of the communities (MoH, 2004; Steinman et al., 2009; WHO, 2002). Likewise, recent studies overlooked the institutional dynamisms and the effect of socioeconomic changes on child-feeding practices (Carolan, 2012). For example, the indicators of recommended child-feeding practices were lagging behind the improvements in economic and social aspects of Ethiopia (Aaron, 2017; EDHS, 2016; FMOH, 2015) while the relationships were not well understood (Menon, 2012).

The studies of child feeding have also exhibited methodological limitations. Some approached the subject matter from the essentialist perspective— the perspective that disguised the dimensions of power in feeding processes and outcomes. Scrinis (2008: 44), quoted in Carolan (2012:77), refers this approach "the ideology of nutritionist— a quantitative logic that obscures the broader cultural, geographical, and

ecological contexts in which foods, diets, and bodily health are situated." Carolan (2012:77) elaborated the inadequacy of the approach as:

> *…the attention being paid to nutrients in isolation— rather than understanding nutritional health as a complex socio-ecological process— deliberately distracts consumers from asking "deeper" questions about their food. …Similarly, reducing food to fundamental chemical components makes it hard for us to talk about food systemically and therefore blinds us to, say, a food's ecological footprint or to questions related to whether it was raised and processed in a socially just way.*

Derived from the dominant positivistic approach in Western perspective, the studies of child-feeding practices in Ethiopia failed to examine diverse socio-cultural contexts and actors that contributed to high prevalence of malnutrition and associated child-feeding practices. As the result, the "universal" child-feeding recommendations and the intervention to secure the compliance of recommended child-feeding practices seem naïve to bring realistic changes in non-Western countries (Aubel, 2012; Steinman et al., 2009). Mutuli et al (2016:3) also illustrated the sociocultural factors affecting the child-feeding practices as:

> *Despite the guidelines and polices put in place to promote exclusive breast feeding and appropriate complementary feeding, the practice is still low due to many factors and one being sociocultural practices and beliefs.*

Yet, previous studies fall short of intimacy to explore the interactions among different social actors and the cultural meanings associated to child-feeding practices in diverse settings (Nousiainen, 2014; Steinman et al., 2011). As the result, the broader view of interaction and processes in child-feeding practice did not get the attention it deserves except the emerging trend in the contexts of developing countries (for example, Aubel, 2012; Mutuli et al., 2016; Nousiaine, 2014). Concurrent to some sociological model, (for example, Nousiainen (2014), Tahiru (2009) and Palmquist (2015)), nevertheless, this study relies on the relationship between large-scale systems or process and individual beliefs, attitudes and behaviors that transcended beyond mothers' scope calling for multi-sectorial interventions (Netsanet et al., 2016). In effect, this study gives the overwhelming attention to hierarchically organized sociocultural and policy contexts that influence the world experiences of individuals that modify the larger systems in the processes of implementing the recommended child-feeding

practices. The study also attempted to look for the coherence between the indicators of recommended child feeding practices and the systems that attach meanings to the child feeding practices.

1.3 Objectives of the study

The general objective of this study is to analyze the roles of mothers and significant others in implementing the recommended child feeding practices embedded in the socio-cultural contexts of the study area. Specifically, the study aimed to:

- Analyze the role of households' demographic and socio-economic characteristics on the implementation of recommended child-feeding practices in the study area
- Explore the cultural values, norms and beliefs that affect the childcare and feeding practices in the study area
- Analyze households' access to, and utilization of, health promoting resources in child feeding practices, and
- Examine the barriers and facilitators in the implementation of recommended child-feeding practices in the study area.

1.4 Operational definitions of terms and concepts

Based on WHO (2002) and Tahiru (2005), the terms and concepts central to this study are defined as the following:

Breastfeeding - is an activity of feeding an infant with breast milk either directly from the breast or expressed. Breastfeeding practices are further described according to timing and frequency. In terms of timing, breastfeeding is described as on-demand (by the infant) or on schedule (determined by a schedule or work/separation demands of the mother).

Breast milk substitute - is any food marketed or otherwise presented as partial or total replacement from breast milk.

Exclusive breastfeeding- is feeding an infant with breast milk from his/her mother or a wet nurse; or expressed breast milk from his mother with the exception of drops or syrups consisting of vitamins, mineral supplements, or medicines.

Predominant breastfeeding –is when an infant's predominant source of nourishment is breast milk, but the infant receives water, water-based drinks; fruit juice; Oral Rehydration Salts (ORS); drop and syrup forms of vitamins, and minerals

Complimentary feeding – is feeding an infant with some artificial feeds, either milk or cereal, or other food in addition to breast milk.

Replacement feeding - is weaning an infant from breast milk and feeding with a diet that provides all of the infant's nutrition

1.5 The study context: Background information of the study area

1.5.1 Ethiopia: the brief Country Profile

Ethiopia is a landlocked country located in the horn of Africa. It is bordered by Eritrea in the North, Sudan, and South Sudan in the West, Djibouti and Somalia in the East and Kenya and Somalia in the South. The area of the country is 1, 127,127 square kilometers with steadily growing population of 92 million of which 80.3% are living in rural area (UNICEF, 2016). According to EDHS (2016:13), the age structure of the Ethiopian population indicates the dominance of youths in which 47% of the population is less than 25 years, a typical age structure of low- income countries. Furthermore, 15% of the Ethiopian population is less than 5 years while age less than 2 years accounts about 7% of the population. Christianity and Islam are the main religions, and there are more than 80 ethnic groups and 90 languages from which Oromo accounts 40% (Adejumobi, 2007:3). The current administration of Ethiopia is structured in ethnic-based federalism that comprises nine regional states (Tigray, Amhara, Afar, Oromia, Harar, Somale, Benishangul Gumuz, Gambella, and Southern Nations, Nationalities and Peoples) and two city councils (Addis Ababa and Dire Dawa) (Aaron, 2017; UNICEF, 2016).

In spite of its ancient civilizations in the world (Adejumobi, 2007), Ethiopia is one of the least developed countries where 80% of its population live on subsistent agriculture that accounts 41.9% of its Gross Domestic Product (GDP). The International Food Policy Research Institute [IFPRI] (2015:4) noted significant economic growth of the

country, 10.7% between 2004/5 and 2013/14, one of the fastest rates of economic growth in the world over the last decade. Similarly, Aaron (2017:94-95) summarized the recent economic growth of the country as follows:

> *Ethiopia is now one of the fastest growth economies in Sub-Saharan Africa. Its economic growth is impressive, especially for a non-oil producing economy. It is among the few nations that are on track to achieve many of the Millennium Development Goal targets set by the United Nations. …Since 2004, Ethiopia's economy has grown by an unprecedented 11% average – up from less than 3% annual growth during the past 7 years and much faster than annual growth in Africa as a whole ... per capita income has more than doubled over the same period.*

Despite such growth of Ethiopian economy, the country experienced significant increase in the price of basic food and non-food items that adversely affected the availability and affordability of foods for majority of the households (CSA, 2017). For example, taking December 2006 as an index month, the following table indicates the continuous increase in the price of food over the decade.

Table 1.1: General Food Consumer Price Index and Its components (2014-2016)

	Food Consumer Price Index Components								
Month and Year	Food and Non-Alcoholic Beverages	Bread and Cereals	Meat	Milk, cheese and eggs	Oils and fats	Fruit	Vegetables	Sugar, jam, honey, Chocolate.	Other Food products
December 2006 (Index)	100	100	100	100	100	100	100	100	100
July 2012 - June 2013	117.6	119.4	141	127.8	107.7	125.5	121.4	108.9	117.0
July 2013 - June 2014	124.5	127.5	154.7	140.8	110.9	124.5	128.0	112.8	122.3
July 2014 - June 2015	133.8	126.1	164.6	159.8	132.4	137.1	139.8	114.9	147.7
July 2015 - June 2016	148.7	134.8	184	185.9	142	158.6	159.9	121.7	196.1

Source: Adapted from CSA, 2017

According to the table (Table 1.1), the price of food has increased by 48.7% over the last decade while it went higher for food stuffs that were vital for the diversification of foods for infants' and children's proper growth and developments – meat (84%), milk and eggs (85.9%), fruits (58.6%), vegetables (59.9%) and other food products (96.1%). Furthermore, the currency devaluation has adversely affected the economy, resulting constraints of basic food and social services that also affected child nutrition

and feeding practices. In line with this, Aaron (2017:111) elaborated the effect of devaluation on the economy and household consumption as follows:

> *There is the issue of the Ethiopian currency, the birr, which has been devalued significantly since 1991. Devaluation not only has helped to increase export competitiveness and resolve foreign exchange crises, but has also led to several structural challenges, namely an increase in the prices of imported inputs critical to development and particularly food items.*

Similarly, the 2016 humanitarian requirement document estimated that 10.2 million people in the country require relief food assistance and the number of children in acute malnutrition stands at 420, 000. Furthermore, the health resources and service qualities of Ethiopia are poor even when compared to other African countries (WHO, 2015). For example, according to EDHS (2016), the national average of access to safe water supply[3] in 2016 was 97% in urban and 57% in rural areas, respectively, with wide variation among regions. Furthermore, 93% of urban and 7% of rural households have access to electricity while 39% of rural and 7% of urban household do not have toilet facility (EDHS, 2006: 9).

Regarding access to health facilities such as health centers, Somali and Afar regions have the largest population to health center ratio (136, 985 and 53, 796, respectively) compared to Gambella and Harari regions (15, 054 and 24, 753, respectively) which indicate the relative scarcity of health infrastructure in Afar and Somali regions. Similarly, supply of potable water is relatively scarce in rural Ethiopia and costs significant time and energy of the rural women than urban counterparts. Furthermore, EDHS (2016:10) indicted that 53% of the households travel more than 30 minutes or longer trips to fetch drinking water and women are the most responsible to fetch the water in rural areas (68%) than the urban counterparts (17%). The report further indicated that female children under age 15 are three times more likely than the males in the same age group to fetch water (13% vs. 4%). By implication, in addition to the scarcity of drinking water as vital resource for child health, obtaining drinking water significantly increases the burden of women and female children in rural

[3] *Access to safe water supply* refers to the proportion of population covered with pure potable water supply based on the provision of 20 liters per capita per day for urban areas and 15 liters per capita per day for rural areas (MoFED, 2011: 54).

Ethiopia. As the result, Human Development Index rank of Ethiopia is 174 out of the world 188 countries in 2015 (UNICEF, 2016).

In terms of child nutrition[4], the three child nutrition indexes indicate more concerns and interventions to improve child health. According to EDHS (2016:188), though there are increments over the last two decades, thirty-eight percent of children under age 5 are stunted; 10% are wasted; and 24% are underweight. Such malnutrition conditions are the results of poor feeding practices and disease (Black et al., 2013). According to EDHS (2016), almost all (97%) children are breastfed yet only 58% of infants under age 6 months are exclusively breastfed. Furthermore, the study reported that only 7% of children, ages 6-23 months, meet the minimum acceptable dietary standards and 14% of children had an adequately diverse diet.

In effort to accelerate the reduction of under nutrition, the Government of Ethiopia developed the National Nutrition Strategy (MoH, 2008) and the National Nutrition Programs (NNP). The second phase of NNP (NNP II), covers the period from 2016 to 2020 and addresses the multi-sectoral and multi-dimensional nature of nutrition, and guides policies, strategies, programs, and partnerships that deliver evidence-based, cost-effective nutrition interventions (FDRE, 2013). Other initiatives such as the Seqota Declaration embody the government's commitment for improved nutrition (FMOH, 2015).

1.5.2 Sebeta Awas *Woreda*: The study area

Location, population and climate of the *woreda*

Sebeta Awas *woreda* is one of the districts of Oromia Regional State located in Finfinnee Surrounding Oromia Special Zone. Its administrative center is Sebeta town, 25 km away from the capital Addis Ababa in South West. The *woreda* extends from $08^{0}37'$ to $09^{0}3'$ latitude and $38^{0}25'$ to $38^{0}46'$E longitude. Prior to 2005, the *woreda* was

[4] EDHS (2016) measures child malnutrition in terms of the standard deviation of the three indexes- stunting, wasting and underweight. Stunting is a measure of linear growth retardation and cumulative growth deficits. Wasting is the weight-for-height index that measures body mass in relation to body height or length and describes current nutritional status. Underweight is a composite index of height-for-age and weight-for-height that accounts for both acute and chronic undernutrition.

named *Alemgena woreda* (SOFED[5], 2014). According to the projection from CSA (2008) and Community Health Information Survey (CHIS) conducted in 2014 by the district's health office, the *woreda* hosts a population of 103, 601 (51336 male, 52265 female). Furthermore, 11,044 (10.66%) of the population are children under 5 years, of which 20% are infants of age less than 1 year and living in 21,028 households with average household size of 4.93, which is greater than the national average 4.6 (EDHS, 2016).

According to the official document of the *woreda* (SOFED, 2014), the land coverage of the district is 72, 524 hectares, divided into 38 rural *kebele*[6] administrations and 3 towns (Awash- Melka, Tafki and Bonaya). The *woreda* shares its boundary with Welmera district and Addis Ababa in the North, Akaki *woreda* in the East, Ilu, Ejere and Tole *woredas* in the West and Kersa Malima *woreda* in the South. The topography of the *woreda* ranges between 1750 and 3385 meters with an average of 2568 meters above sea level, the lowest altitude located in Awash valley. The annual rainfall of the *woreda* ranges from 866-1200mm with average temperature of 21.5^{0}C. Furthermore, the *woreda* has two major perennial rivers, Awash and its tributary Atebella.

Livelihoods of the rural *kebeles*

Agriculture is the mainstay of the rural *kebeles* of the *woreda* while petty trading and wage also employ significant number of the residents in towns and the surrounding rural *kebeles*. According to the socio-economic profile of the *woreda* (SOFED, 2014), the total land of the *woreda* is 72542 hectares out of which 60719 hectares (83.7%) is cultivable, that makes the average landholding size of the households 2.89 hectares, while 15% of these households own less than 1 hectare of land for residence and farming activities.

[5] SOFED- Sebeta-Awas District Office of Finance and Economic Development.

[6] *Kebele* is the lowest administrative structure in Ethiopian government hierarchy— the regions is divided into zones and zones comprise *woredas* (Amharic equivalent for district) which are further divided into *Kebeles*).

Table 1.2: Average Landholding Size of the Households

S.N	Land holding size (in hectares)	Number of Households	Percent
1.	Land Less	547	1.86
2.	0.5	4455	13
3.	1.0	4515	13.5
4.	1.5	9365	28
5	2.0	5785	17.3
6	2.5	2912	9
7	>3.0	5707	17
	Total	**33286**	**100**

Source: Sebeta-Awas woreda Office of Finance and Economic Development, 2015

Since majority of the households live on subsistence production, oxen are the principal means of cultivation and access to oxen is one of the factors of the production. According to the data from the *woreda*, 437 (1.3%) households have no ox while 2650 (8%) of households have only 1 ox and 45.5% of the households had two (SOFED, 2014). Households without oxen share their labor in return for using oxen, or those who have one ox would participate in an ox-sharing arrangement by joining the ox with another. Pack animals also generate income by transporting grains and other goods to and from where there is no alternative transportation.

The major crops common in the *woreda* include cereals, pulses, and oilseeds. Cereals (*teff*[7], wheat, sorghum, barley, maize, and millet) account for 70% of the cultivated land, and *teff* occupies 30 to 40 % of the cultivated land. Furthermore, the production of *teff* along with wheat has increasingly become fertilizer-dependent. Livestock is also a vital aspect of rural livelihood since cattle and small stock serve rural households in many ways: as sources of draft power and foods (such as milk, yogurt and meat). Households also raise goats, sheep and poultry as part of the household economy and women control incomes from these animals. Moreover, favored by their proximity to the capital, people of the *woreda* undertake a variety of complementary income generating activities, in addition to farming. Concurrently, rural women trade some kinds of primary products including; milk and milk products, chickens and eggs, garden crops, green grass, cow-dung, various leaf, wood, root products and labor for casual work. Furthermore, the *woreda* hosts more than 20 medium and small-scale

[7] *Teff* is a species of Eragrostisnative to Ethiopia (Tigist et al., 2015:2)

industries in the fields of food processing and flower companies that created employment opportunities for the majority of rural and urban women.

Infrastructure and basic social services

The *woreda* has 616.44 km^2 all-weather roads connecting the *kebeles* and the adjacent *woredas.* As the result, the people of the *woreda* can physically access markets and basic social services within a radius of 40-60 minutes journey. However, the level and quality of services might differ among the *kebeles* that have significant implication on residents' access to health and education facilities. As to schools, the children in the *woreda* can attend primary level in each of their *kebeles* as there are 46 primary schools and two secondary schools (grade 9-10) (in Tafki and Awash-Malka) in addition to Sebeta secondary and preparatory school (WOE, 2015). The *woreda* people attend health services at Awash Melka, Alemgena, Furi, Sebeta and Tafki health centers in addition to the health posts at each *kebele* providing primary health care. The *woreda* deployed two health extension workers in each rural *kebele* who are responsible to work on primary health services and implement Health Extension Program (HEP). Nevertheless, the quality and range of health services are limited due to shortage of supplies, equipment, and health personnel (SOFED, 2014). The rural households have acute shortage of water and 42% of the households in the CHIS survey have access to pipe water.

1.6 Research Methodology

Research approaches construct the overall roadmap that spans from the philosophical assumptions to detailed methods of data collection, analysis, and interpretation (Creswell, 2011). Accordingly, this section describes the philosophical and methodological orientation of the study, with discussions on the processes, procedures and the ethical considerations of the study.

1.6.1 The Philosophical underpinning of the study

Philosophical paradigms guide the overall direction of research process by constructing the basic beliefs about the ultimate principles of humans' worldview (Scotland, 2012). Social scientists classify paradigms in a continuum, the ends being positivists and interpretivists (Brayman, 2004). For example, Denzin and Lincoln (1994)

divided the paradigms in to four —positivism, post positivism, critical/feminist theory, and constructivism. According to Brayman (2004), positivism considers reality as defined explicitly through human senses and advocates more of quantitative research methods that involve survey and controlled experiments. Post-positivism, on the other hand, leave rooms for the possibility to integrate qualitative methods with quantitative inquiries. Interpretive philosophy is engaged in the interpretation and apprehension of human social phenomena. For example, Creswell (2011) notes that interpretative paradigm emphasizes the reconstruction of subjective interpretations in knowledge generation and research procedures. As a result, the constructivist's perspective tilts more towards qualitative research (Brayman, 2004).

Similarly, pragmatism is a philosophical school founded in the United States in the nineteenth century, and originates in philosophical standards of truth. It advocates that the efficacy of the practices that would result from their use should be the standard of truth. Moreover, the insight notes that tacit consciousness in habitual ways guides the performances of most actions in everyday life (Turner, 2006). In the research philosophy, scholars appreciate the power of pragmatism as *"it creates new worldviews and social contexts that have widespread impacts on the conduct of inquiry"* (Morgan, 2014:1051) and gives insight into mixed research approach (Creswell, 2009: 28). Similar to Cameron (2011) who described pragmatism as practical approach Creswell (2003:12) explains pragmatism as:

> *The paradigm that is committed to mixed research methods that inquirers draw liberally from both quantitative and qualitative assumptions. It opens the door to multiple methods, different worldviews, and different assumptions, as well as different forms of data collection and analysis. Accordingly, pragmatist researchers look to the 'what' and 'how' to research based on its intended consequent —where they want to go with it. They agree that research always occurs in social, historical, political, and other contexts.*

According to Wahyuni (2012:70), the derivations of research methodology from higher-level philosophies and beliefs to specific research method is in a continuum beyond the quantitative- qualitative research dichotomy. The following table (Table 1.3) summarizes the relationship between the philosophical orientations and the specific research methods.

Table 1.3 Fundamental beliefs of research paradigms in social sciences

	Research Paradigms			
Fundamental Beliefs	*Positivism (Naive realism)*	*Post-Positivism (Critical realism)*	*Interpretivism (Constructivism)*	*Pragmatism*
Ontology: the position on the nature of reality	External, objective and independent of social actors	Objective. Exist independently of human thoughts and beliefs or knowledge of their existence, but is interpreted through social conditioning (critical realist)	Socially constructed, subjective, may change, multiple reality	External, multiple, view chosen to best achieve an answer to the research question
Epistemology: the view on what constitutes acceptable knowledge	Only observable phenomena can provide credible data, facts. Focus on causality and law-like generalizations, reducing phenomena to simplest elements	Only observable phenomena can provide credible data, facts. Focus on explaining within a context or contexts	Subjective meanings and social phenomena that focus upon the details of situation, the reality behind these details, subjective meanings and motivating actions	Either or both observable phenomena and subjective meanings can provide acceptable knowledge dependent upon the research question. Focus on practical applied research, integrating different perspectives to help interpret the data
Axiology: the role of values in research and the researcher's stance	Research is undertaken in a value- free way, the researcher is independent of the data and maintains an objective stance	Research is value laden; the researcher is biased by world views, cultural experiences and upbringing	Research is value bond, the researcher is part of what is being researched, cannot be separated and so will be subjective	Values play a large role in interpreting the results, the researcher adopting both objective and subjective points of view
Research Methodology: the model behind the research process	Quantitative	Quantitative or qualitative	Qualitative	Qualitative and Quantitative (mixed or multi method design)

Source: Adapted from Wahyuni (2012:70).

Based on the preceding discussions, this study applied pragmatism paradigm that uses mixed research methods to explore and analyze the multi-layer influence of structures and mothers' experience in child-feeding practices. Furthermore, the approach renders good opportunity to benefit from the multitudes of methods, theories and facts. In other words, mixed research method helps to triangulate methods and techniques that bring complete analysis of data from various observation units (Ruane, 2005). Based on these facts, the study employed sequential mixed methods consisting of two phases. The first phase involved collection of quantitative data through administration of survey questionnaire to representative samples of caretakers of children aged less than two years. The second phase employed qualitative data collection techniques such as in-depth interviews, key informant interviews, focus group discussions as well as case studies.

1.6.2 The Study design and data sources: Mixed Research Approach

As the main axiom of the methodological gap to be addressed using social ecological model, this study approaches the analysis of mothers and other actors involved in the implementation of recommended child-feeding practices by integrating both the quantitative and qualitative research methods ignored by previous studies on the issue. Accordingly, in line with the advantages drawn from pragmatism (Creswell, 2003), the study has attempted to collect and analyze the socioeconomic and demographic data that influence mothers' decision about what, when and how to feed their children. The mixed approach also explored the cultural and policy contexts that influenced the dynamic relationships between different factors contributing to mothers' child-feeding experiences.

The target population of the study was mothers of children less than 24 months in Sebeta Awas *woreda*. The age limit for children was defined on the evidences literature (e.g., MoH, 2004; WHO, 2002; UNICEF, 2009) that consider the first two years as the "window of opportunity" for rapid physical and mental development of the children. Community elders, officials and health workers in the *woreda* were interviewed to

investigate the structural dimension of child-feeding practices. The focus of the interviews includes understanding about cultural norms, values, and beliefs and in-depth and key informant interviews, case studies and focus group discussions were the main research techniques utilized. Furthermore, a cross-sectional research survey design was selected to collect a body of quantitative and qualitative data. As the result, the survey solicited factors that influence mothers' decision about what and how to feed their children, patterns of associations between the variables and the underlying factors influencing the variations. The data was collected from January to March 2015.

1.6.3 Quantitative data collection processes and procedures

1.6.3.1 Definitions of the study variables

The dependent variable of the study was child-feeding practices measured as a dichotomous variable categorized either 'properly fed' or 'not properly fed'. According to the recommendation by WHO (2002), a child is said to be properly fed when he/she is exclusively breastfed for the first six months, get adequate complementary food (initiated on the seventh month, composing at least four food groups, fed at least four times daily), and continued breastfeeding up to two years. Independent/explanatory variables of the study include socioeconomic and demographic factors of mothers and their households, household food security and exposure to media that determine knowledge and attitude towards child-feeding recommendations. The section of questionnaire collecting data on mothers' knowledge about the recommended child-feeding practices was adapted from standard questionnaire of EDHS (2014). In addition, community level factors such as access and utilization of health facilities, access to water, access to alternative power sources and transportation, gender roles, the prevailing social supports as well as dominant norms and beliefs were investigated as explanatory variables. See Appendix 5 for the definition and relationships between dependent and independent variables.

1.6.3.2 Survey sampling procedures

In order to select representative respondents, the study used stratified-sampling procedures. First, the *kebele* administrations in the *woreda* were categorized into two strata based on the relative availability of health facilities and resources. Among the 41 kebele administrations, 28 of them were in the first stratum as they were categorized as those with better access to health facilities and services as well as transport routes. The rest 13 *kebele* administrations were remote and had relatively lower access to health infrastructures and services due to the limited transportation routes to nearby urban centers. Furthermore, these *kebele* administrations were lowlands with seasonal food shortages, compared to the first stratum. Therefore, the *woreda* administration treats these strata in response to their specific feature and health service demands. In proportion to their number, ten *kebele* administrations were selected from their respective stratum; seven *kebele* administrations from the first category and the rest three from the 2nd stratum.

In the second stage, sampling frame of households with the inclusion criteria were obtained from the health extension workers of the *kebele*. After determination of the number (n) of households that have to be included in the sample from that particular *kebele* administration, the lists from the respective health extension workers were used as sample frames. The households were selected using systematic random sampling technique. Although mothers with the last children in acute illness can deliver their opinion about the changes in their child feeding due to the illness, they were excluded from the survey with the assumption that their emotional disturbance may prevent them from giving reliable responses. In such cases, the next eligible household was replaced. Yet, the issues of feeding behavior during illness were discussed FGDs and in-depth interviews conducted with mothers and senior women. Sample size for the survey was determined by the general formula developed by Arya et al. (2012):

$$n = \frac{[(Z_{\alpha/2})^2 P (1-P)] * D}{d^2}$$

Where

n= required sample size

Z $_{\alpha/2}$ = critical value for normal distribution at 95% confidence interval which equals to 1.96 (Z value at alpha=0.05).

P= Established prevalence of the effects of poor child feeding practice, malnutrition, based on the EDHS (2011)

d= an absolute precision, **D=**design effect.

As the result, the equation for the sample size was $n = \frac{(1.96)^2 * 0.47 * (1 - 0.47) * 2}{(0.05)^2}$

which yielded the sample size of 766 mothers or caretakers of a child leess than 2 years old to be included in the survey. The assumptions include 95% Confidence Interval, 5% desired precision, prevalence of optimal child-feeding practices 47.0% (P=0.47), and design effect for the two stage sampling (D=2). As the result, 707 sampled households have furnished the complete information in the survey questionnaire, which made the response rate 92.3%, which is within the acceptable range.

1.6.3.3 Quantitative data collection procedure and tools

Structured questionnaire was employed to collect the quantitative data. With the fact that majority of rural mothers in Ethiopian are illiterate or cannot fill out the questionnaire by themselves (EDHS, 2016), four female research assistants who can speak and write Afan Oromo, Amharic and English were employed and trained on the basic issues of the data collection. The training included skills to establish rapport with the respondents, conducting the interviews in a respectful and private manner, and ensuring the confidentiality of the data. Consequently, the training familiarized the research assistants with the purpose of the study, contents of the questionnaire and procedures as well as ethical considerations during data collection. The data collectors have exercised the research instruments before the commencement of the actual data collection process. The questionnaires were administrated by the research assistants at the respondents' home with an average duration of 40 minutes. The researcher and field supervisor

monitored the household survey to insure the observance of the sampling procedures and the completion of the questionnaire.

1.6.3.4 Data quality management and analysis

In order to evaluate the manageability and relevance of items and procedures of survey data collection, the study procedures and tools were pretested on 30 households of two *kebele* administrations in the *woreda* that were not selected for the final study. Based on the observation from the pilot study, irrelevant questions were omitted, and about seven questionnaire items were refined. Overall, the field observation and comments from supervisors and faculty members on the pilot study resulted in revisions in the contents and relevance of the research instruments and sampling procedures for final study. Appropriate data quality assurance mechanisms were established from collection to analysis and reporting. Accordingly, the questionnaire items were constructed in clear and brief statements; the English version of the questionnaire was translated to the participants' local language, Afan Oromo. Data was edited manually to minimize errors during data entry to SPSS for windows version 20 (SPSS Inc., Chicago, Illinois) for advanced statistical analysis.

The relationships between determinant variables in the implementation of recommended child-feeding practices were analyzed using correlations and regression statics. Furthermore, mean differences between urban and urban respondents were analyzed using t-tests while F-test was employed to test the difference of means among groups greater than two did. Chi- square test was used to test the associations between variables measured at categorical and ordinal level and Somer's delta (D)[8] level was used to measure the strength of association found significant in chi-square test (Argyrous, 2005). In all the statistical tests, 95% was used as a confidence interval that is common in social science research methods (Kothari, 2004).

[8] Somer's delta (D) is asymmetric measure of association that calculates the association in terms of proportion of all concordant and discordant pairs plus pairs tied on the dependent variable. For example, if D= is 0.7, it means that the probability of the pairs between tied concordant variables is 70% (Argyrous, 2005:101)

1.6.4 Qualitative data collection procedure and tools

In addition to the quantitative techniques, ranges of qualitative data collection techniques were employed to analyze the norms, values, and traditions in child-feeding practice. The techniques include focus group discussions, in-depth interviews, key informant interviews, and case studies. The interviews and discussions were conducted in the respondent's local language Afan Oromo. Yet, in case where respondents are less fluent in Afan Oromo, Amharic was used as an alternative medium of communication. Each key informant interview lasted for approximately forty minutes while the focus group discussions were extended up to an hour.

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1.6.4.1 Sampling procedure of qualitative methods

Unlike the quantitative research claiming representative sample (Bryman, 2004), FGD participants and interviewees were included in the qualitative method through purposive sampling technique, the technique that selects samples "*on the basis of knowledge of population, its elements, and the purposes of the study* (Babbie 2010:193)." Based on this, key informants, in-depth interviewees, and FGDs discussants were selected after the researcher has made brief description with gatekeepers of the community, officers, and health workers. After conducting interviews with health extension workers and nurses, stories and scenarios in recommended child-feeding practices were captured, that were also used to communicate those mothers included as case studies. Extra lists of informants were identified to collect the data from those who consented for the interview.

Focus Group Discussions (FGDs) – Themes and categories

Twelve (12) focus group discussions, divided into four categories and consisting of 102 participants, were conducted to obtain data concerning the cultural issues in childcare and feeding practices. The first category engaged 26 mothers of children up to six months of age. The major issues focused in the discussion include initiation of breastfeeding, introduction of pre-lacteal foods, enablers and challenges in exclusive

breastfeeding and the socio-cultural and economic factors affecting the courses of exclusive breastfeeding. The second category included 29 mothers whose children are 6-24 months old with the thematic focus on complementary feeding. The discussion also focused on the challenges and opportunities as well as decision-making processes in health related issues and child-feeding behaviors in the communities. The third and fourth categories involved 22 men and 25 senior mothers from the community. The discussions with these informants primarily concentrated on the sociocultural and economic factors underlying child-feeding practices as well as the supports from mothers' 'inner circles'-men and senior women. The number of participants in each focus group ranged from six to ten people.

To facilitate the discussion and obtain valuable information, the researcher moderated the discussion with one research assistant assigned to take detailed notes. New issues appearing in the discussion were probed until clear understanding on the issue was reached. Breaks and refreshments were arranged in the middle of each discussion without interrupting the discussion's spirit.

The FGDs with mothers were held in the health post compound where the targeted mothers visit the facility for vaccination and health development army meetings. The health extension workers played a significant role in screening the mothers. Assuring their consent to participate in the discussion, the principal and assistant researchers conducted the discussions in the absence of the health extension workers so that the mothers feel free to express their experience on recommended child feeding practices. In the case of the men's FGD, the researchers arranged the session with the support of agricultural extension workers of the respective rural *kebeles* around their offices, keeping the proper mix of age categories. The duration of the FGDs in the study is an hour in average with refreshments in the middle of the duration. Consent was sought and all discussions were taped. At the end of each focus group discussion session, the participants were thanked and told suggestions in relation to their discussion outputs. The researcher and note-taker have discussed on the main issues that appeared during the discussion to frame on what issues to focus on in the next focus group discussions

and key informant and in-depth interviews. The following tables (Table 1.4 and Table 1.5) listed the categories and sample size of respondents included in the FGDs and in-depth interviews.

Table 1.4 Lists and categories of FGDs

Category	Location	Number	Participants	Comments
Mothers of children up to 6 months of age	Koche, Tafki, and Bonde	3	26	Urban, peri-urban and Rural
Mothers of children 7 to 24 months of age	Koche, Tafki, and Bonde	3	29	
Men	Koche, Tafki, Bonde	3	22	
Senior women	Koche, Tafki, Bonde	3	25	
Total		12	102	

In-depth and key informant interviews

Key informants are persons whom the researcher selected purposively due to their unique knowledge about things under investigation (Bernard, 2006). Corbetta (2003) explains key informants as persons (member or nonmember of the community under study) who are expertise of those phenomena. Key informant interview helps "*to understand the issues and events the interviewee views as important in explaining and understanding events, patterns, and forms of behavior*" (Brayman, 2004:321). In this study, thirty (15 key informant interviews and 15 in-depth interviews) were conducted to get details about the intentions, contentions and the dynamism of child-feeding practices. The informants were communicated on the objective of the research through the interview schedule. The consented key informants were interviewed in their working environment with prior arrangement of time that lasted between 40 minutes and an hour. In-depth interviews were conducted after the completion of the FGDs with mothers and men. In addition, the health extension workers were used as the source of preliminary information to select the informants.

Table 1.5: Categories and sample sizes of key informants and in-depth interviewees

Categories	Location	Number	Comment
Rural Mothers	Koche, Bonaya, Bonde	3	Farmers, petty traders
Urban Mothers	Koche, Tefki, Awash-Balo	3	Formally employed mothers and housewives
Senior women	Awash-Balo, Bonde, Tafki	3	Urban, rural in transition, rural; In depth interview
HEWs	Awash-Balo, Gadamba, Tafki	3	Key informant interview
Public Service Officials	Sebeta Awas *Woreda*, Sebeta Town	2	Key informant interview
Women and Child Affair Officers	Sebeta Awas *Woreda*, Sebeta Town	2	
Media experts	Ethiopian Broadcasting Corporation (EBC), Fana Broadcasting Corporation (FBC)	2	One Public, One private, Key informants
International and Indigenous NGOs	Regional Offices of the NGOs, Addis Ababa	3	One Indigenous and two International NGOs, Key informants
Private Employing Organizations	Dima, Alemgena	3	Flower Companies, Garment factories, Key informants
Men	Koche, Bonde, Geja Gadamba	6	Urban, rural, In-depth interviews
Total		30	

Source: Fieldwork, 2015

Case studies

Case studies "*entail the detailed and intensive analysis of a single case by emphasizing on its setting*" (Bryman, 2004:48). In this study, to bring the whole picture about the mothers or caretakers' child-feeding practices, six mothers (three from rural and three from urban) and one grandmother were selected purposively to bring insight about child-feeding practices in the real setting. The researcher selected the case respondents purposively. The case studies were conducted in the final stage of the field research and the cases were communicated in their homes after earlier communication on the objective of the study and sufficient rapport building via health extension workers. The cases were captured using informal and extended interviewed as well as observation of their daily household routines and child-feeding practices.

1.6.4.2 Qualitative Data organization, presentation, analysis and discussion

Using interview guideline as the major research instrument, the qualitative data were collected with intermittent identification of data saturation and emerging themes. Furthermore, tapes from the focus group discussions, in-depth interviews, and key informant interviews were transcribed and translated into English. Qualitative data were analyzed iteratively between collection and analysis. This means, analysis started after some of the data have been collected and the implications of that analysis shaped the next data collection process. Accordingly, new issues obtained in each discussion and interviews were considered in the next key informant interviews and focus group discussions. The thematic areas identified from qualitative data were (1) the meaning attached to child feeding, (2) knowledge and attitudes toward recommended child feeding practices, (3) roles played by community members and health workers and (4) the facilitators and barriers in the implementation of recommended child-feeding.

The case studies were included to gain full picture about mothers' child-feeding experiences. Based on the issues raised through other methods, the case respondents reported their daily routine activities. The researcher also attempted to identify the main chores they perform, how these chores affect the child-feeding practices and the ways they care for their child during health and illness. The data presented using narration and verbatim were used when the researcher thinks they best reflect the informants' intention.

1.7 Validity and reliability of the Study

Validity indicates the degree to which an instrument measures what it is supposed to measure, and a measuring instrument is reliable if it provides consistent results (Creswell, 2009). Based on this concept, the study attempted to assure the validity of the findings through different mechanisms. One of these mechanisms was pilot testing to ensure the content and format of the survey questionnaire. Based on the data from the pilot study, the conceptual adequacy and format as well as sequences of the survey items were revised based on the objective of the study. In addition to comments during seminars on the proposal and draft findings, experts in research team of Oromia Health Bureau also contributed to the concept construction of the study.

The accuracy of the questionnaire was ensured using back ward- forward translation technique. Accordingly, friends perusing post- graduate program in Afan Oromo Literature (Addis Ababa University) translated the questionnaire from English to Afan Oromo and then to English. Then, the original and the translated versions of the questionnaire were compared for consistency. Furthermore, Cronbach's Alpha (0.672) showed acceptable reliability of the 20 items constructed by the researcher to measure mothers' attitude towards recommended child-feeding practices (George and Mallery, 2003). Furthermore, triangulating the data from different sources such as in-depth interview, focus group discussions, key informants, and case studies assured the validity of qualitative data. Accordingly, the participants checked the validity of the themes developed from the qualitative data in follow-up data collection sessions. In addition, the cases stories and the transcripts were presented in detail to convey the findings and to share researcher's field experiences about the sites and the phenomena under the study.

On the other hand, owing to the emotional sensitivity of child feeding practice to their mothers and significant others, the resesearcher controlled the possible effect of "socially desirable response" in the survey research by reframing the issues in respective focus group discussions. Accordingly, the researcher probed the discussants for further discussions on issues that seem incoherent or "socially desirable" responses in the survey data. Furthermore, hypothetical cases were given for the FGD discussant to understand the behavior of mothers with respect to recommended child feeding when a mother faces competing social, economic or cultural interests. This approach articulated factors that mothers could not reveal in the indivudal survey responses.

1.8 Ethical issues of the study

Government and non-government institutions were communicated through a formal letter written by the department of Sociology, Addis Ababa University. Following the submission of the letter to Oromia Regional Bureau of Health, the bureau wanted a copy of the approved research proposal for issuance of ethical clearance before commencing the fieldwork. In effect, a concerned department of the bureau has commented the proposal and sought further explanation on the scope and procedures of

the study. Satisfied with the explanations and revisions of the study proposal, the bureau has written a formal letter to the Finfinnee Surrounding Special Zone of Oromia health office (Ref. No. BEFO/HBTFH/1-8/3627; Dated 18/05/2007 E.C) that requests the zone and Sebeta-Awas *woreda* to furnish official data and any cooperation requested by the researcher. Similarly, the researcher has signed the agreement that demands submitting a copy of the final research report to the bureau and the *woreda* (see Annex 4 for scanned copy of the letter).

Based on the gaps shown from the pilot study, the researcher developed the survey questionnaire with clear items and response categories with pertinent local language to minimize the likelihoods of misunderstanding or misinterpretation. In the same way, the researcher trained the research assistants on the contents of the questionnaire, the procedures of sample selection, and the ethical issues they have to consider during the data collection. Furthermore, informants were told their right to withdraw from the interview whenever they think so and can refuse to answer whatever question they do not feel comfortable. The interviews were held at a time convenient for them without interrupting their wellbeing and that of their child. In addition, the numerical codification of the questionnaires immediately after the interview assured the anonymity of the survey participants. Consent to be audio-recorded was sought in FGDs and key informant interviews after explaining the purpose of the study. Out of the 30 interview participants, four (one key informant and three in-depth interview participants) have allowed to participate but not to be audio-recorded, and in this case detailed notes were taken to ensure the inclusion of all ideas of the interview. Confidentiality of the FGD was ensured by informing the participants not to divulge issues discussed with non-participants; not to address individual and emotionally involved comments that may harm others. Similarly, the names of the research participants were never mentioned in the research report. Instead, generic terms like informant or discussant, coupled with few specific markers appeared in the analysis. No financial inducement for what so ever cases were involved.

1.9 Delimitation and limitations of the study

Child-feeding practice and its outcomes are partly influenced by psychological and health factors. Yet, the scope of this study is confined to the sociocultural and demographic factors and did not address the nutrition outcomes of the child-feeding practices. On the other hand, the study has encountered some limitions that are worthy of mentioning here. First, with the absence of standardized instruments developed to rate the level of mothers' knowledge about recommended child-feeding practices, the researcher set the cut-off points to rate mothers' level of knowledge and practices on the issue. Furthermore, cross-sectional design may not show the causal relationship between respondents' knowledge and the practice of recommended child-feeding practice. Rather, such linkage is best understood if investigated in cohort studies and randomized trials that this study did not employ. Finally, the political instabilities in the Oromia Region since 2015, and the continuous turnover of officials in the zone and the *woreda* as the result, made it difficult to get the key informants to clarify ambiguous issues that the researcher encountered during the data analysis.

1.10 Organization of the Study

The study is organized into seven chapters. Accordingly, Chapter 2 placed the infant and child-feeding practices in a sociological domain. This was made possible by adopting the conceptual framework that guided the study. Chapters 3 to 6 presented the findings of the study. Following this, Chapter 3 presented the influence of socio-demographic factors on child-feeding practices, with the focus on factors such as age, educational level, and marital status of the mothers. Chapter 4 discussed the sources and utilization of information regarding infant and young child feeding and the translation of such information to knowledge and practices of proper child feeding. Chapter 5 discussed the familial and socio-cultural determinants in child feeding practices with the major focus on the role of men and senior women as the "significant others." Chapter 6 has discussed the enablers and barriers of child-feeding practices. The final chapter of the study, Chapter 7, presented the theoretical reflection of the study followed by conclusions and recommendations.

CHAPTER TWO: THE CONCEPTUAL AND THEORETICAL FRAMEWORKS IN CHILD-FEEDING PRACTICES

The birth of a baby assigns new status and roles to the parents and community members (Fouts et al., 2012; Kerr, et al., 2007). Similarly, child-feeding practices are rooted in the social nature of human society that allowed women to draw upon the resources from other individuals, especially from kin in raising children (Gibson and Mace, 2005). However, the parental investment is high among certain human groups, specifically among mothers and senior women and it may take less share in "others" (Aubel and Rychtarik, 2015; Selamawit et al., 2016; Thairu et al., 2005).

This chapter comprised the conceptual and theoretical framework that serves as foundations for the remaining chapters. As a prelude to the data analysis, the chapter discussed the concepts and components of child-feeding practices, connecting them to the broader sociological enquiries. Contextualizing child feeding to the sociological perspectives, the chapter presented the relevant theories, followed by the theoretical framework that analyzed the individual, institutional, and sociocultural factors influencing the implementation of recommended child-feeding practices.

2.1 Child-feeding practice as a sociological enterprise

The study of food-related issues is not a recent development in sociology (Beardsworth and Keil, 2002; Carolan, 2012). Nevertheless, sociology of food on its own is a recent development except its long domain in sociology of agriculture (Carolan, 2012). According to the sociology of food, human eating is not simply an activity aimed at obtaining the required nutrients for healthy physiological functioning of human body; it also involves "consuming" meanings and symbols of identity (Beardsworth and Keil, 2002; Burgoyle and Charles, 1983; Carolan, 2012; Counihan and Kaplan, 2005; Jerome et al., 1980). Consequently, any culture typically rejects a range of potentially nutritious items or substance while often including other items of less nutritional value (Falk, 1991; Mennell et al., 1992; Nousiaine, 2014; Steinman et al., 2011). For example, Carolan (2012:130) discussed this issue concisely as follows:

Food is clearly more than just a material artifact; more than a mere vessel of macro and micronutrients. Food blurs boundaries, between internal/external, self/other, and nature/culture. You are what you eat – literally – and how, when, where and why you eat.

Similar to changes in the field of sociology of agriculture, there are contemporary developments in sociology of food— a shift from analysis of the process of food production to the social organization of consumption and to the ideological foundations of consumerism in its many guises (Carolan, 2012; Case et al., 2002). As the result, the sociology of food focuses on social organization of production and its consequences on social, economic, and political dynamics of the society. Owing to the importance of food items in the household's expenditure patterns and social differentiation (Beardsworth and Keil, 2002), sociology of food also conceptualizes food system as an immensely complicated process of food production, distribution, preparation, and consumption as well as disposal of its waste products (Carolan, 2012). Furthermore, sociology understands food as a patterned social organization conveying meanings to the food consumer and to the society, that also serve as a code communicating social events and social relationships like hierarchy, inclusion, exclusion and transactions across boundaries (Douglas, 1984).

In line with this, food exchange represents mutual interdependence and reciprocity whereas providing food for another without reciprocity can express one's dominance over the other (Shils et al., 2006). In a family context, nevertheless, the preparation and serving of food expresses care and concern, although more subtly, the responsibility to prepare food expresses server's effective subordination to the provider (Beardsworth and Keil, 2002). Furthermore, family socializes its members with preparation and consumption of a range of "acceptable" food that reflects social patterns such as age and gender roles (McIntosh, 1996). For example, parents exert control over the child's food preference by offering rewards if the child consumes what the parents regard as desired foods and discourage for foods that are culturally "unacceptable" (Falk, 1991).

The linkage between diet and health is significantly strong as individuals see certain dietary choices as maintaining or enhancing an individual's resistance to disease

or as promoting the efficiency or durability of the body (Beardsworth and Keil, 2002; Case et al., 2002). Specifically, individuals see particular diet options or particular foodstuffs as capable of preventing or managing particular disease (Fieldhouse, 1986). On the other hand, grossly inadequate food intake that can result from unbalanced diet or poor assimilation of the food items may lead to nutrient deficiencies and eventually to death (Falk, 1991).

Food intake can also act as a channel for the introduction of harmful agents into the body (Beardsworth, and Keil, 2002; Hole, 1992) while inadequate dietary intake can also result illness (World Bank, 2006). For example, a child suffering from inadequate dietary intake is more susceptible to diseases, and diseases in turn depress appetite of the child that inhibit absorption of nutrients in food and compete for the energy of the child (Marmot, 2006; MoH, 2004; Smith and Haddad, 2000). Therefore, solving the problem of malnutrition— both dietary intake and illness, needs crucial attention (World Bank, 2006).

From the above discussions, it can be concluded that food systems and the symbolic meanings attached to patterns can affect the health of society, which is usually contextualized to the social, economic and political as well as the ecological aspects of the society. In effect, contextual understanding about these issues reveals the reasons for why particular social or age groups prefer some foods, and its impact on the health and wellbeing of the individuals.

On the other hand, evidences corroborated the influences of social supports on promoting good health. For example, Aubel (2012) suggested the various forms of social support and social contact with beneficial effects on health or such support may create isolation and could lead to poor health. Similarly, supports from health workers and community members through community networks bring vital child health and wellbeing (Kesetebirhan, 2013). Kin support is also a unique social fabric to human society that contributes to the continuity of generations, like the investment of grandmothers in health and childcare practices (Ginson and Mace, 2005). Accordingly, the support of grandmothers correspond to, and cater to the needs of, younger mothers due to the crucial influence of socio-demographic factors such as age, sex and level of

relatedness of the kin (Aubel, 2012; Ginson and Mace, 2005). This is common in non-Western societies with extended family system that exert significant influence on younger mothers' childcare practices (Aubel, 2012).

Comparatively, while men are primarily responsible for financing and providing resources for the mother and the child, senior mothers play advisory and supervisory roles in child-feeding practices (Aubel et al., 2004). Subsequently, elders function as "guardians of the tradition" who are responsible for transmitting the core values of the society in issues related reproductive health and childcare practices (Aubel, 2012; Guled et al., 2016). Following this, Judi Aubel and Alyssa Rychtarik (2015) characterized the African culture as "collectivist" that distributes the responsibility of childcare practices to the whole community and Western's culture as the "individualist, the one that magnifies individual's motive, interest as well as free will " (p. 15).

Table 2.1: Differences between collectivist and individualist cultures

Characteristics of Collectivist (Non-Western Cultures)	Characteristics of Individualist (Western Cultures)
Interdependency and solidarity with others are highly valued	Independence and individual achievement are highly valued.
Individuals want to conform to the group rather than being different.	Individuals like to express their individuality.
Collective decision-making and following, the decision of the groups are encouraged.	Individual decision-making and action are encouraged.
Multigenerational families and strong ties with extended family members predominate	Nuclear families predominate and ties with extended family members are weak.
Young people learn from the elders who pass on their experience and knowledge.	Young people learn primarily from their peers, but also from adults.
Respect for elders, traditional knowledge and the past.	Ageist attitudes and a focus on innovation, youth and the future

Source: Adapted from Judi Aubel and Alyssa Rychtarik (2015:13)

Similarly, Aubel (2012) noted the significant role of grandmothers in improving the nutritional welfare of grandchildren. Furthermore, she noted the primary responsibility of grandmothers in childcare when the biological mother is too young or

unable to care for her child due to death or infirmity. Likewise, Gibson and Mace (2005) found the positive impacts of grandmothers in child survival and mothers' health, and the collectivist nature of childcare and feeding practices in Ethiopia.

2.2 Components of recommended child feeding practices

Ethiopia adopted the WHO's infant and young child feeding guideline that recommends exclusive breastfeeding for children up to six months of age, nourish them with appropriate complementary foods and continued breastfeeding until 24 months or more (MoH, 2004; WHO, 2002). To enable mothers establish and sustain exclusive breastfeeding, the guideline recommends initiating breastfeeding within the first hour after birth. Furthermore, the guideline recommended colostrums feeding, exclusive breastfeeding, on-demand breastfeeding, and no use of bottles, teats or pacifiers (WHO, 2004). Based on this fact, this section provides an overview of the two major components of recommended child-feeding practices– breastfeeding and complementary feeding.

2.2.1 Breastfeeding

Breastfeeding is a cost-effective child-health intervention as it has the potential to prevent more than one-third of under-five child mortality rates in developing countries (Setegn et al., 2012; UNICEF, 2009). This is because breast milk naturally contains nutrients that are adequate for the growth of infants up to six months, and it has appropriate balance of nutrients that are easily digestible (UNICEF, 1990; WHO, 2006). In addition, initiation of breastfeeding within the first one hour after delivery helps the infant to suckle the colostrums which is enriched with immunoglobulin and protects the infant against the bacteria and viruses that may be acquired from the birth canal and human contact (Thairu et al., 2005; WHO, 2002).

Exclusive breastfeeding is defined as feeding infants only breast milk, be it directly from breast or expressed, with no addition of any liquid or solids apart from drops or syrups consisting of vitamins, mineral supplements or medicine, and nothing else (MoH, 2004; Setegn et al., 2012; WHO, 2009). In view of this, the international and national guidelines for Infant and Young Child feeding Practice (IYCFP) recommend exclusive

breastfeeding for the first six months as it promotes healthy development for the infants and protects them from infection by limiting orally introduced pathogens and reducing bacterial and viral growth (MoH, 2004; Mukuria, 2006; UNICEF, 1990; WHO, 2002). For example, analyzing the political economy of food, Carolan (2012:81) explains the superiority of breast milk to the infant formula as follows:

> *There is no disputing the superiority of mother's milk over that from cows, goats, or a formula container. Particularly in low-income countries, mother's milk provides a child with immunities that can make the difference between life and death in light of the unsanitary conditions they may be exposed. So how do you market and sell a commodity, namely infant formula, which is inferior to the product it is meant to replace?*

Empirical studies also showed further benefits of exclusive breastfeeding. According to the studies by UNICEF (2009) and WHO (2002), infants who were mixed fed before 6 months of age are four times more likely to die compared to those who are exclusively breastfed. Thairu et al. (2005) also reported that, compared with exclusively breastfed infants of their age, infants who are less than two months and are mixed fed are six times more likely to die whereas the likelihood of death decreases to 2.5 times for infants of 4-5 months old. The emerging researches, however, introduced the subjectivity in the time of introduction of complementary food. According to the latest scientific updates, the development stage of the infants and the socioeconomic and cultural contexts of the household should be considered in advising the proper time of introducing complementary food (USDA, 2009). Similarly, AAP (2009) comments that there is no evidence of harm if complementary food is introduced at 4 months of the infant's age. Following this, some nutritionists advice complementary foods at 17 weeks and not beyond 26 weeks of the age of the infant (Stettler et al, 2011). Nevertheless, the benefit of exclusive breastfeeding is signifcant for poor households where availability and access to pure water and energy sources are limited for the preparation and preservation of food (Dettwyler, 1988).

Breastfeeding has also benefits for the mother and the society. According to UNICEF (1990) and WHO (2006), the benefits of breastfeeding for the mother include birth spacing, less postpartum bleeding, earlier return to pre-pregnant weight, decrease in chronic illnesses that include diabetes, osteoporosis and ovarian cancer. For the family,

it allows the family to save the money that otherwise would be spent on infant formula, other milk substitutes and feeding equipment. For the wider society, breastfeeding contributes to environmental health, as it is a natural resource renewable in each pregnancy, does not deplete natural resources nor create environmental pollution (Thairu et al., 2005). In addition, it increases the self-esteem of the mother as many societies show respect for breastfeeding mothers (Beardsworth and Keil, 2002; WHO, 2006). Nevertheless, infants should not breastfed in few medical conditions like, when the infant has severe galactosemia, when the mother uses illegal drugs or when diseases compromise her immune system (Thairu et al., 2005; USAID, 2006).

Despite the recommendations, however, majority of mothers could not put the recommendation in practice due to various reasons (Ali et al., 2011; Carolan, 2012). In some sub-Saharan countries, pre-lacteal fluids (such as water, cow's or goat's milk, fresh butter, infant formula and to lesser extent, honey and herbal teas) are commonly given to infants (Aubel et al., 2012; Fieldhouse, 1986; Thairu et al., 2005). These foods are introduced due to one or more of the traditional beliefs— such as cleansing and preparing the baby's gastrointestinal tract for digestion, flushing the bladder, or "breast milk insufficiency syndrome" (Ali et al., 2011; Beka et al., 2009; Thairu et al., 2005). Nevertheless, the breast feeding 'facts' and guidelines have been shown to intertwine with broader discourses on motherhood, contributing to the formation of a collective understanding of what is 'normal,' 'socially desirable', 'appropriate' and expected mothering behavior (Andrews and, 2013:89)."

On the other hand, cultural beliefs and practices affect the notion of breastfeeding (MacKean and Spragins, 2012). According to Daglas and Antoniou (2012:356) for example, the women of the Mende tribe in Sierra Leone (Western Africa) believe that the sperm can contaminate mother's milk and, consequently, the baby can fall ill. Women from this tribe, therefore, stop breastfeeding early to resume their sexual relationship, and get rid of the responsibilities borne by them if the baby falls ill. Furthermore, these civilizations interpret the artificial feeding of a child by the man in a public place as a sign

of the child's acceptance by the father; and they believe that it helps the strengthening of their emotional bonding.

In Ethiopia, breastfeeding is universal, yet shorter duration of exclusive breastfeeding. According to EDHS (2016:192), for example, only 36% of infants between 4 and 5 months are exclusively breastfed and 24% of the children stopped breastfeeding by the age of two years or less. The average duration of exclusive breastfeeding is less than 3 months— Afar (2.7), Oromia (2.8), Gambella (2.9) and Addis Ababa (2.9) while it is relatively longer in Benishangul Gumuz (4.6), Amhara (4.1) and Tigray (3.8). Furthermore, the percent of infants who received prelacteal food is highest in pastoral communities of the east; the highest in Afar (40.7) followed by Somali (38.8). Surprisingly, Addis Ababa accounts the fourth highest (20.9%) of prelacteal feeding, which brings the effect of health education on exclusive breastfeeding less significant. Furthermore, the level of mothers' education did not improve the prevention of prelacteal feeding as 17.3% of mothers who have more than secondary education introduced prelacteal foods compared to 8.1% of mothers with no education (EDHS, 2016: 204 - 6). Similarly, Ali et al. (2011) found that 9.5% of mothers sampled from Tigray and SNNP regions introduced prelacteal foods and these foods include honey (0.4 %), plain water (46.3 %), sugar water (10.2 %), tea (0.4 %), milk other than breast milk (1.8%), raw butter (29.5%), and others (17.9%).

Beka et al. (2009) and Zewditu et al. (2001) also reported that the introduction of prelacteal foods is deep-rooted tradition and with significant malnutrition effect on the children. In their study about the determinants and magnitudes of child malnutrition in food secured *woredas* of Ethiopia, Beka et al. (2009) have found out those children who had prelacteal foods are more likely to be stunted by 1.8 times compared to those who did not. In addition, the study revealed rural mothers discarding colostrums because of its color, and belief that it causes infection to the infants. This doubled the likelihoods of stunting for children who did not receive colostrums.

2.2.2 Complementary feeding

Complementary feeding, giving additional food for infants while remaining breastfed, is necessary for children after six months because breastfeeding alone is not sufficient for healthy physical and mental development of a child (Almendon, 1991; WHO, 2002). For a child's healthy and productive development, adequate quality and quantity complementary food should start when the infant is six months and increase appropriately as required (Kedir et al., 2016). Accordingly, complementary feeding is an effective child survival strategy that can prevent about 6% of under five mortality (Black et al., 2013). Nevertheless, complementary feeding is more complex and depends on factors outside of the caretaker's control. Some of these factors include the availability and accessibility of health resources and infrastructures as well as employment and environmental conditions (MoH, 2004; Thairu et al., 2005). Furthermore, knowledge of appropriate combination and timing of food is another factor that complicates the lack of resources (Ball, 2010). Accordingly, food security is a necessary but not sufficient condition for proper complementary feeding (Bake, 2004). MoH (2004:5) describes the intricate nature of complementary feeding as follows:

> *Optimal complementary feeding depends on accurate information and skilled support from the family, community and health system. Inadequate knowledge about appropriate foods and feeding practices is often a greater determinant of malnutrition than the lack of food… Diversified approaches are also required to ensure access to foods that will adequately meet the energy and nutrient needs of growing children, for example, the use of home and community based technology to enhance nutrient density, bioavailability, and the micronutrient content of local foods.*

Similarly, Engebretsen et al. (2007) listed hosts of factors that limit the quantity and diversity of complementary foods. These include, among others, unavailability and unaffordability of ingredients required to diversify and cultural values on food sharing, leading families to feed their child from the pot of the rest of the family members.

As true in other developing countries, timely initiation and variety of complementary feeding are problems in Ethiopia (Ali et al., 2011). According to EDHS (2016), for example, the mean duration of breastfeeding is 23.9 months and almost fifty percent of the children stop exclusive breastfeeding by 3.1 months. Similarly, the survey

reported that one in two of the children were given food at the age of 6-8 months with the belief that prolonged breastfeeding substitute for complementary feeding (Beka et al., 2009; Zewditu et al., 2001). In terms of food variety, EDHS (2016) reported the dominance of grains (40.5 percent), while legumes and nuts (15.2 percent) account smaller part of the complementary food. Similarly, only 20 percent of the children got vitamin A rich foods while only 5.6 percent of the children were fed with meat, fish and poultry. Similarly, Beka et al. (2009), and Getaneh et al (1998) reported the dominance of cereal crops the factors that contribute to child malnutrition in Ethiopia. This is mainly due to the unavailability and unaffordability of other foodstuffs, in addition to poor mothers' knowledge to combine these ingredients.

As it was true for exclusive breastfeeding, mothers also listed energy and water problems as the top determinant factors in limiting preparation and preservation of appropriate food for children (Pelletier et al., 1995). In majority of developing countries, pure water for drinking and cooking children's food is highly meager, especially for rural households (Gillespie and Haddad, 2001). Lack of pure water exposes the children to drink infected water and is a means of injecting pathogens to their body. On the other hand, the difficulty in obtaining pure water affects the time and energy mothers would spend on feeding and caring for their children (World Bank, 2006).

According to the above discussion, lower educational status, food insecurity and lack of infrastructure have limited mothers' attempt to recommended child feeding practices. Particularly, pre-lacteal feeding and the introduction of foods as substitute of breast milk before six months affect the health of children in countries like Ethiopia where there is no protected water and sanitation for majority of urban and rural households.

2.3 Child feeding practices in Ethiopia: Policy and practices

2.3.1 Health policy of Ethiopia and recommended child feeding practices

The health policy of Ethiopian was the result of changes in economic and political genesis and reforms since the fall of Derg—the military Junta that led the country from 1974 to May 1991 (Kassahun and Poulton, 2014). The reform was the result of transition of the political ideology from socialist-oriented command economy to market based liberal type economic system, under the ideological guise of so called "revolutionary democracy" initially and "developmental state" currently (Taye, 2008). The "developmental state" ideology strives to involve private sectors in the economic, social and political development of the country except for identified areas reserved for government control (Kassahun and Poulton, 2014).

Compared to other developing countries, Ethiopia struggled with persistently high child mortality, and access to mothers' and child health services were limited particularly for the large proportion of people living in rural areas (Kesetebirhan, 2013). As the result, the government of Ethiopia has formulated a responsive health policy (TGE, 1993) with the vision to see "*Health, Productive and Prosperous Ethiopians*" and with the following mission statement:

> *To reduce morbidity, mortality, and disability and to improve the health status of Ethiopian people through providing a comprehensive package of promotive, preventive, curative, rehabilitative, and regulating health services via decentralized and democratic health system in collaboration with stakeholders.*

Similarly, the developmental state ideology calls for the participation of community and the involvement of private sectors for equitable and quality health service. Nevertheless, private sectors were hardly visible in preventive measures that the policy takes as a pillar. On the other hand, the HEP strived to create a sense of ownership in the community and civic organizations to contribute resources and monitor the progress (Kennedy et al., 2016). Subsequently, the health needs of women and children were addressed through facilitating access to infrastructure by increasing the participation of local community and other stakeholders (Kesetebirhan, 2013).

On the other hand, Ethiopia had been running towards the achievement of Millennium Development Goals (MDGs) and its macroeconomic performance was reported "impressive" — an average economic growth rate of about 10 percent per annum since 2003, compared with the sub-Saharan average of 5.4 percent (Aaron 2017; MoFED, 2010). As the result, social services such as education, health (EDHS, 2005; 2011; 2016) and poverty reduction efforts were improving over the decades (Aaron, 2017). Similarly, national and global reports indicated improvements in accesses to, and utilizations of, health resources and services (MoH, 2010; WHO, 2015; UNICEF, 2016). The result was partly due to the facilitation of the prevention and high impact curative policy to decrease the suffering of mothers and infants from preventable diseases through HEP that utilized local resources and technologies (Kesetebirhan, 2013). In line with this, the Government of Ethiopia adopted the Infant and Young Child-feeding guideline from WHO (MoH, 2004; WHO, 2002). The guideline was included in National Nutrition Strategy being implemented by health extension workers at *kebele* level (ACIPH, 2009; Abebe et al., 2008).

Based on the philosophy of progressive planning, the 2004 National Nutrition Plan (NNP) of Ethiopia was revised to meet the targets and components of the first Growth and Transformation Plan (GTP I). Nevertheless, the demands emerged during the implementation of the revised National Nutrition Strategy (NNS) and, the lesson learned from implementations brought the need of comprehensive National Nutrition Policy.

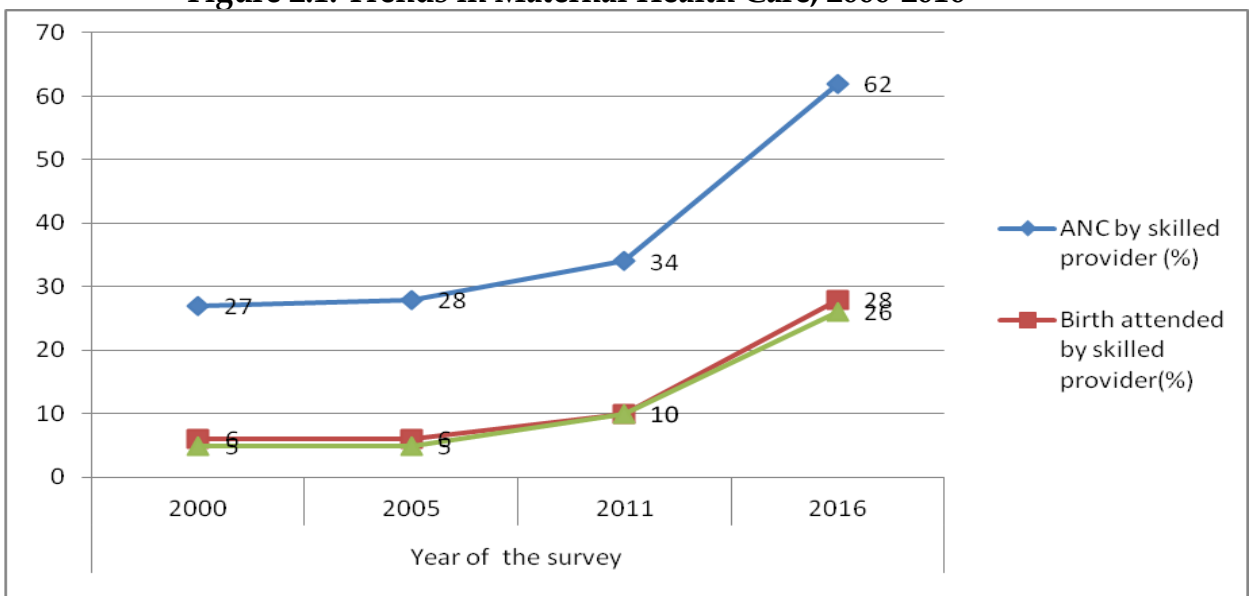
2.3.2 Health Extension Program (HEP) and child feeding practices

HEP is one of the 20-year Health Sector Development Plan (HSDP) introduced in 1997 (FMOH, 2015). According to Kesetebirhan (2013), HEP has been working at primary health care unit level to promote health and provide basic preventive and selected high-impact curative health services. Similarly, Ethiopian Ministry of Health (FMoH, 2015) underlined that the program ensures the ownership and participation of community members and promotes healthy lifestyles of families. Some of the nutrition-related

services in the HEP include educating communities on environmental health, caring practices, nutrition and growth monitoring services.

According to FMoH (2013), the program has mobilized different segments of the community through voluntary community health workers who facilitate the health promotion with the health extension workers. In the same way, the health sector has formed an organized and functioning Health Development Army (HDA) that develops the spirit of solidarity to improve access and utilization of key health interventions (Kesetebirhan, 2013; FMoH, 2015; Selamawit, 2015). Following this, studies reported that HEWs and subsidiary social networks have improved child-feeding practices and maternal healthcare services (EDHS, 2016; Kennedy et al., 2016; Selamwit, 2015; UNICEF, 2016). Nevertheless, the child and infant mortality rates of Ethiopia are still high even in sub-Saharan African standards (Selamawit, 2015). The following figure (2.1) summarizes the maternal health care trends over the last two decades.

Figure 2.1: Trends in Maternal Health Care, 2000-2016



Source: EDHS, 2000; 2005; 2011; 2016.

Implementation of recommended child-feeding practices may require a synergy among components of HEP and media promotion. As the above figure indicates, there is a concomitant increase in preventive health services such as antenatal care (ANC) and assisted delivery. Similarly, WHO (2015) indicated improved health seeking behavior

implicated in access and utilization of latrines; increasing contraceptive acceptance rate, expanded vaccination services; malaria control and prevention and reduction of new HIV infection that are included in HEP. On the other hand, EDHS showed an improving access to media that may also enabled mothers to acquire knowledge and awareness of new ideas, social changes, and opportunities that affect individual's perceptions and health seeking behavior (EDHS, 2000; 2005; 2011; 2016). Although media advertise infant formula that may encourage parents to introduce the complementary foods earlier than the recommended time (Kyle, 2010; Thackeray et al., 2012), the demographic and health surveys in Ethiopia indicated improvements in recommended child feeding practices over the last sixteen years (*see Table 2.2)*.

Table 2.2: Trends of IYCFP indicators (in percent) from 2000 to 2016

		Year of the survey			
		2000	2005	2011	2016
Key Indicators of IYCFPs	Ever breastfeed	98.8	98.4	97.5	97
	Initiated breastfeeding within an hour	51.8	NA[9]	51.5	73
	Received colostrums	42.5	NA	NA	NA
	Received pre-lacteal foods	10.2	29	27.1	8
	Introduced plain water before six months	17.1	14.5	18.6	17
	Introduced liquids other than water (water based juice and milk) before six months	32.2	21.7	17.8	10
	Introduced complementary food before six months in addition to water and other liquids	10.2	13.5	10.1	11.1
	Exclusively breastfed at the age of 5 months	38.1	49.0	52	36
	Introduced complementary foods between 6 and 8 months	43	44.9	49	60

Source: EDHS, 2000; 2005; 2011; 2016.

According to Table 2.2, breastfeeding is a universal practice for an Ethiopian mother except little decrease in the period (2000- 2016). Even though there is no evidence on the status of feeding a child with colostrums compared to the index year, the data indicted an increasing practice of recommended child feeding that include increase in the percent of mothers' initiating breastfeeding within an hour of birth and decrease in the introduction of prelacteal food. Yet, the percent of exclusively breastfed infants in Ethiopia has decreased while it is targeted to increase due to increasing child-feeding

[9] "**NA**" indicates that the data in the required form is **N**ot **A**vailable

promotion and health education. Overall, the health status of Ethiopia is still poor compared to other low-income countries and communicable diseases as well as under nutrition accounts for more than 75% of the health problem in the country (FMoH, 2015). The prevalence of these diseases is due to poor socio-economic condition, low awareness about health and inadequate health service delivery (UNICEF, 2016).

2.4 Linkages among national polices and strategies on recommended child feeding practices

The coordination of national policies indicates the commitment of countries for effective child-feeding practices (Gupta et al., 2012; Kennedy et al., 2016). Owing to the fact that better empowerment of women in different directions serve as a stepping stone for better child-feeding practices (Smith and Haddad, 2000), Ethiopian National Nutrition Program II (NPP-II)[10] also called for the coordinated efforts of different stakeholders both at policy and grass root levels (Kennedy et al., 2016). Such integration increase nutrition knowledge, access to food and labor management as well as focus on families in disaster and emergency situations.

The country profile of Ethiopia and the study *woreda* indicated that agriculture dominates the livelihoods of Ethiopian citizens and the share of national domestic product (Aaron, 2017). Furthermore, the agriculture sector plays vital role in making diverse nutritious foods available and accessible at all times from the market or farmers' own production (UNICEF, 2016). Despite the increasing trends of agricultural production and productivity over the last two decades in Ethiopia (Aaron, 2017), however, there was no equivalent increase in child nutrition and feeding practices (EDHS, 2000; 2005; 2011; 2016). As the result, the sector needed to recognize its role in establishing sustainable

[10] National Nutrition Program II (NNP-II) is the second national nutrition program designed to meet the Second Growth and Transformation Plan (GTP II) of Ethiopia. The document envisaged reducing the three nutrition related indicators, namely stunting, wasting and underweight, based on Life-Cycle Approach –an intervention approach that starts with the first 1000 days starting from conception and continues following the life cycle of individuals– infants, children, adolescents and women. The signatories of the document include Ministry of Health, Ministry of Education, Ministry of Agriculture and Natural Resources, Ministry of Women and Children Affairs, Ministry of Youth and Sports, Ministry of Industry, Ministry of Water and Electricity, Ministry of Trade, Ministry of Finance and Economic Development and Ministry of Labor and Social Affairs (FMOH, 2013).

household and nutrition through improving production diversity, nutrition knowledge and women's empowerment (UNICEF, 2016).

With the fact that majority of Ethiopian households are farmers, the national nutrition strategies and programs attempted the integration of the agricultural and health sectors for the holistic economic and social development (FMOH, 2015). Consequently, the government of Ethiopia has endorsed the agricultural extension program that has been changing a good deal under the new policy framework in mid 1990s. The key packages of services provided by the program were improving farming practices and natural resource management skills, credit for the purchase of agricultural inputs and demonstration and counseling on better agricultural practices. The extension program relied on a network of locally based extension workers throughout all rural *kebeles* (Kassahun and Poulton, 2014). Since the males dominate this economic activity and control household resources, the HEP attempted to maximize the engagement of male in child-feeding practices (Gulati, 2010; Setegn et al., 2012).

The other policy with the immense importance in recommended child-feeding practices is the employment policy that protects mothers from the pressures related to their working condition. For the purpose of this study, maternity protection involves releasing mothers from work so that they can spend on activities related to enhancing childcare practices. Consistently, Gupta et al. (2012) described that maternity leave and breastfeeding breaks are the essentials for formally employed mothers who are breastfeeding while maternity protection for rural mothers involves reliving mothers from heavy workloads. Similarly, Ethiopian government strived to protect working mothers form potential discriminations through the labor and civil servant proclamations. Concurrently, the Federal Civil Servants Proclamation No. 515/2007[11] granted civil servant mothers the leave with pay and paternity leave to encourage fathers'

[11] Though the informants referred to the previous proclamation (No. 515/2007) during the fieldwork that was also used in the data analysis, the government of Ethiopia has extended the maternal leave to four months (one month before delivery and three months after delivery) for Civil Servants since December 2017 (Federal Civil Servants Proclamation No. 1046/2017).

support of mothers. The following is an article about the maternity protection from the proclamation[12]:

Article 42: Maternity Leave

1. *A pregnant civil servant shall be entitled to:*
   a) *Paid leave for medical examination in accordance with a doctor's recommendation;*
   b) *Paid leave before delivery if recommended by a doctor.*
2. *A pregnant civil servant shall be entitled to a period of 30 consecutive days of maternity leave with pay preceding the presumed date of her confinement and a period of 60 consecutive days of maternity leave after her confinement.*
3. *If the pregnant civil servant delivers on before the completion of prenatal leave that is granted under sub-article 2 of this Article, the unused prenatal leave will be granted after her confinement.*
4. *If the pregnant civil servant does not deliver on the presumed date, the days subsequently taken before her confinement shall be replaced by the annual leave she is entitled to within the budget year or that of the following budget year if no annual leave is left.*
5. *The civil servant shall be entitled to sick leave in accordance with Article 42(1) of this Proclamation, if she becomes sick after completion of her maternity leave under sub Article (2) of this Article.*
6. *Any civil servant shall be entitled a paternity leave with pay for five working days at the time of his wife's delivery.*

Compared to the Labor proclamation No 377/2003[13] that governs the employment relationships created between workers and those subjects usually known as "private" enterprises, Civil Servant proclamation was generous in that it entitled a civil servant mother to use the days she did not use before the delivery while this is not the case for the Labor Proclamation. To compare the rights between civil servants and those governed by the Labor Law, article 88 of the Labor Proclamation 377/2003 is reproduced as follows:

Article 88: Maternity Leave

1. *An employer shall grant leave to a pregnant woman worker without deducting her wages, for medical examination connected with her pregnancy, provided, however, that she is obliged to present a medical certificate of her examination.*
2. *A pregnant woman worker shall, upon the recommendation of a medical doctor, be entitled to a leave with pay.*

[12] Federal Civil Servants Proclamation No.515/2007, *Federal Democratic Republic of Ethiopia Negarit Gazette*, 13th year, No.15(2007)

[13] Labor Proclamation No.377/2003, *Federal Democratic Republic of Ethiopia Negarit Gazette*, 10th year, No.12(2004)

3. *A woman worker shall be granted a period of 30 consecutive days of leave with pay preceding the presumed date of her confinement and a period of 60 consecutive days of leave after her confinement.*
4. *Where a pregnant woman worker does not deliver within the 30 days of her prenatal leave she is entitled to an additional leave until her confinement in accordance with sub-article 2 of this Article. If delivery takes place before the 30 days period has elapsed, the postnatal leave under sub-article 3 of this Article shall commence.*

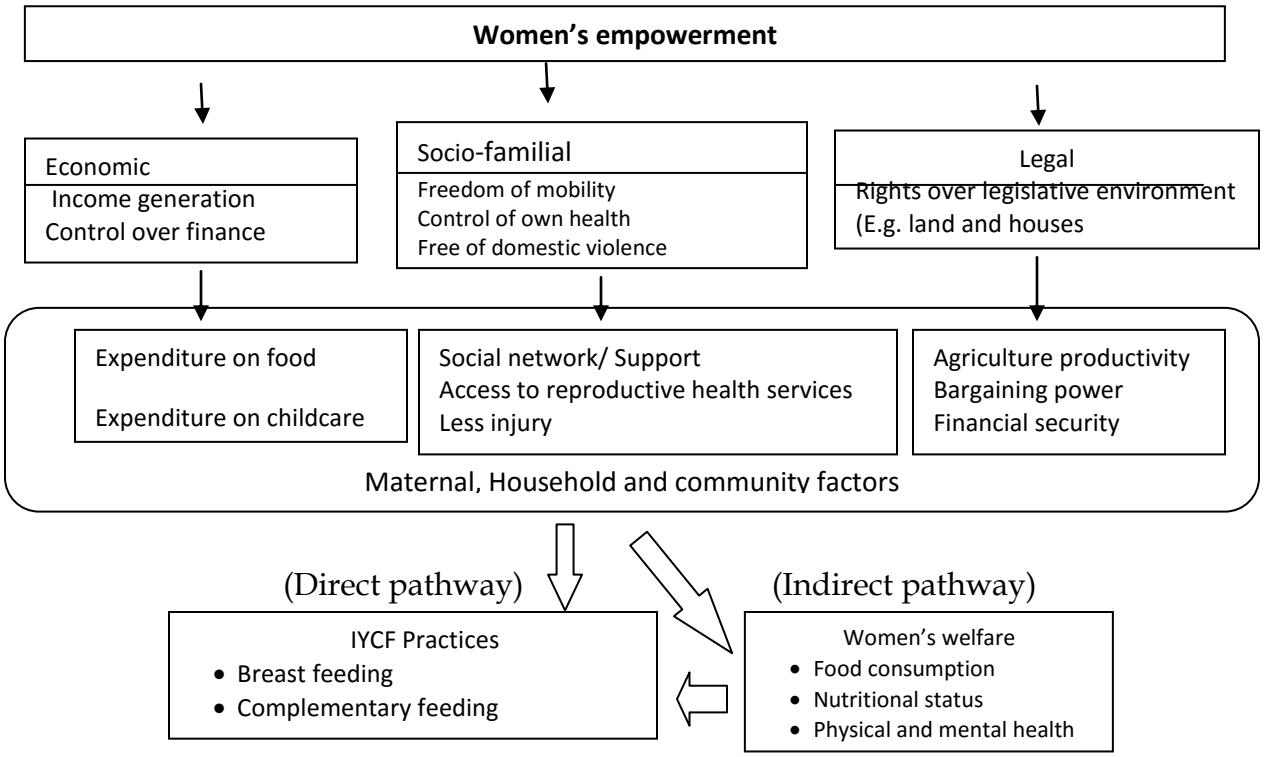
As understood from both proclamations, the maternity leaves are 60 consecutive days after delivery for those mothers governed by the labor proclamation and 90 days for civil servants. In both cases, however, the periods are not sufficient compared to the recommended period of exclusive breastfeeding (Alemu et al., 2017; Kennedy et al., 2016). On the other hand, the effort of integrating polices to the recommended child-feeding practices includes various issues related to women's empowerment. Empowerment in this context refers to *"people's ability to make strategic life choices in contexts where this ability was previously denied to them* (Kabeer, 1999:437)." Following this, women's empowerment is enabling women to decide on the issues of their life and their family members at household and community levels that capacitate women. According to Kabeer (1999), Save the Children (2012), women empowerment involves investing on girls' education and interventions to facilitate credit systems.

Women's empowerment has significant linkage with short and long-term nutritional status of children that also enhances good health and increased work capacity of women and their offspring (EDHS, 2016). For example, according to Smith et al. (2005), equal status between men and women reduces the number of malnourished children in sub-Saharan by 1.73 million. On the other hand, researchers associated mother's nutritional status to their access to, and control of, productive resources (Cassidy, 2015). In addition to the constructive involvement of fathers in recommended child-feeding practices, studies (for example, Beardsworth and Keil, 2002; Burgoyle and Charles, 1983; Case et al., 2002; Ramalingaswami et al., 1996) also considered intra-household food sharing as an important point of intervention.

Conversely, Na et al. (2015) pointed out that women's empowerment is not automatic in improving the practice of recommended child-feeding practices as the

empowerment may enhance their employment opportunity and reduces the time they share with their children. The relationship between women empowerment and recommended child-feeding practices is further explained as *"empowered women may enjoy more freedom to participate in job market and to move around in their leisure time, but may have less time available for childcare and feeding* (Na et al., 2015:3157)." The following is a conceptual framework that broadly linked the level and dimensions women empowerment to child feeding and women's welfare.

Figure 2.2: Women's Empowerment and Child Feeding Practices



Source: Adopted from M. Na et al. (2015:3156)

The framework above emphasizes the linkages between women's empowerment and control over resources with child feeding practices. The framework conceptualizes empowerment as *"ability to make strategic choices"* that contextualizes access to resources to a myriad of factors. According to the framework, child feeding is behavior of a mother is influenced by a number of factors at the individual as well as the household level (interpersonal level) and at the community, organizational and political level. There are factors that influence a society and within the society, influenced by other individual

characteristics, as well as cultural beliefs and attitudes. The framework is supported by research findings that indicate that women in lower socioeconomic status are at higher risk of being unhealthy and mentally depressed or injured as the result of limited access to reproductive health services and domestic violence. The framework is also useful in understanding women empowerment from the legal dimension that underlines securing women's property rights as a tool to promote welfare and well-being of themselves and their children through increased agricultural productivity, intra-household bargaining power and financial security.

2.5 Child feeding practices through selected sociological perspectives

In their attempt to explain how individuals and social structures are integrated, some of the sociological theories (such as structural functionalism, conflict perspectives and feminist perspective) relied on the influence of larger structures that determine individuals' action and interaction. Other theories (such as symbolic interactionism, ethnomethodology and rational choice theory) assumed individuals as active agents who construct their contexts. In his classical structural functionalism, for example, Parsons explained norms as social structures in which the instrumental and expressive roles are assigned to men and women in the maintenance of society (Ritzer, 2011).

Similarly, Winton (1995) illustrated the functional relationships between men and women. According to the literature, men play *instrumental* roles since they are the ones who provide for the family, and make them focus on meeting the physical needs of the members in terms of food, shelter, education, and income. In contrast, women play *expressive* roles to meet the emotional needs of family members by nurturing and smoothing out problems in relationships. Furthermore, Winton (1995) further indicated the biological imperatives of motherhood that predispose women to "indoor" work whereas the physical strength of men leads them into the provider role.

Symbolic interactionism is a micro sociological perspective that analyzes the action and interaction among individuals, and their process of defining and interpreting symbols (Wallace and Wolf, 1995). It is useful in the study of child-feeding practices as it

explains the intentions and perceptions different actors develop in their sociocultural and economic contexts. Therefore, given the common motherhood ideology (Bassin et al., 1994), pregnant mothers construct the way they feed their children. Furthermore, the experienced mothers prepare the pregnant mothers to play their motherhood role appropriately (Aubel et al., 2001). Similarly, based on the classification by H. Meads (1934), this study applied the theory to child-feeding practices focusing on the interaction between mothers and their "*significant others*". In this sense, "significant others" refers to influential people with whom an individual interacts and who are members of a primary social group where face-to-face contact occurs. Following Aubel (2012) and Rempel and Rempel (2004), partners and senior women exert substantial influences on mothers' infant feeding choices.

On the other hand, feminist perspective analyses women's place in a larger social structure and the effects of these structures on gender inequality. Based on a multi-disciplinary group of scholars developing different strands of feminism (Lengermann and Neibrugge-Brantley, 2000), feminism raises the question of women in social, economic and political arena and explain how different social arrangements have contributed to the subordinate position of women in relation to men due to difference in race, class, ethnicity and age (Evans, 2009). In terms of child-feeding practices, feminists draw that family is the social institution organized particularly in industrialized societies supporting males' supremacy. The advocates of this perspective argue that women and men in specific historical circumstances constructed "mothering" as the practice organized by, and consistent with, cultural beliefs and gender roles. For example, Glenn (1994: 3) explained this as:

> *Responsibility for mothering rests almost exclusively on the biological mother, for whom it constitutes the primary if not sole mission during the child's formative years. The corollary view of children is that they require constant care and attention from the mother.*

The above discussion implies the dialectical nature of social norms and values attached to motherhood. According to the feminist perspective, motherhood is historically conditioned to benefit men by assigning childcare responsibilities to women. The perspective further explains mothering as a dimension of gender inequality and

exploitation (Andrews and Knaak, 2013; Ritzer, 2011). For example, in both developed and developing countries, even after women enter the public sphere, the society expects women to manage the private sphere and take care of household duties and child rearing (Bassin et al., 1994). Consequently, feminists criticize child-feeding practice as the manifestation of gender oppression (Charles and Kerr, 1988). Based on this premise, since 1970s, the feminist thinkers have dedicated themselves to demystify motherhood and the traditional nuclear family ideal (Collins, 2000). This critique led some feminists to focus on mothers' subjectivity and to explore how and why mothers are 'made' (Bassin et al., 1994). Similarly, Hays (1996: 108) explained the relationship between women's empowerment and women health as follows:

> *The poor social and economic status of women, even in well-off economies, is highly important in this (malnutrition problem) regard. Persistently high maternal mortality ratios, elevated fertility rates, and accompanying figures for maternal anemia are indicators of inequity in women's social status. This is reflected through poor access to nutrition and health facilities and lack of choices and resources for women.*

In the same way, researches indicated that women's empowerment significantly improves child-feeding practices and nutrition (Counihan et al., 2005; Rempel and Rempel, 2004; UNICEF, 1990; WHO, 2015). In South Asian region, for example, Ramalingaswami et al. (1996) identified the existence of low status of women in relation to men as the contributory factors of the high child malnutrition. Therefore, according to feminists, women's empowerment brings multifaceted outcomes in their economic and social aspects that in turn minimize the domestic workload they shoulder by creating shared responsibility in child-feeding practices (Save the Children, 2012).

As discussed above, symbolic interactionism contributes to this study as it assumes that mothers construct and interpret their life world in relation to child-feeding practices. On the other hand, feminism underlines the structural inequality in mothers' access to productive resources and enlightens the gender aspects of child-feeding practices. Where both perspectives explain how society works, still they have pitfalls (Ritzer, 2011). While symbolic interactionism is criticized as ignoring the structural aspects determining individual's behavior, feminism is criticized of overemphasizing these structural aspects (Wallace and Wolf, 1995).

As a conceptual extension of symbolic interactionism, this study also utilized the *theory of planned behavior* that maps the factors affecting behavioral change. Similar to the concept of culture and "significant others" in sociology, the theory uses the concept of subjective norm, that deals with the influence of social environment or pressure on the individuals and thus on behavioral intention. In this sense, Ajzen (2002) operationalized subjective norm as the person's perception of social pressure to perform or not perform the behavior under consideration. Accordingly, this study conceptualized "*subjective norm*" as the mothers' perception of the likelihood that the potential referent group or individuals will approve or disapprove of recommended child-feeding practices; and the degree of influence from social referents will affect mothers' intention to recommended child-feeding practices (Gijsbers et al., 2007).

On the other hand, perceived behavioral control deals with situations where individuals may lack complete volitional control over the behavior (Ajzen, 2002). Similarly, Ajzen (1991) defines perceived social control as the individual's perception of the ease or difficulty in performing the behavior of interest. Furthermore, perceived behavioral control depends on experiences that family and friends communicate through the exchange of information that may control the level of perceived difficulty of performing the behavior of interest (Ajzen, 2002). In this study, perceived behavioral control was defined as the degree of anticipated ease or difficulty of recommended child-feeding practices and confidence in the ability to carry out the behavior. Given the increase in resources and opportunities, the greater is the perceived control of the practice of recommended child feeding. *Behavior* in the theory of planned behavior is a manifestation that is observable with respect to a specific target in a given situation at a given point of time. Behavior leading to the achievement of a goal is made up of transitional targets with its own problem of executions. Furthermore, the precision of behavior prediction will usually decline with the increase in time that intervenes between measurement of intention and observation of behavior (Ajzen, 2002).

2.6 Determinants of child-feeding practices and malnutrition: conceptual and theoretical frameworks

Child malnutrition is one of the main public health problems contributing to a third of infant and child mortality (Pelletier et al., 1995; Save the Children, 2012). The effect of malnutrition is more significant during the first two years of the child's age (WHO, 2006). This is because growing up without enough energy, protein, vitamins and minerals retard children's brain and body development, leading to stunting. As the result, malnutrion brings a permanent devastating impact, as stunted children are not able to fulfill their physical, academic or economic potential (MoH, 2004; Setegn et al., 2012; UNICEF, 2006). Furthermore, malnutrition have multi generational effect as stunted mothers are more likely to have underweight children (Abate and Belachew, 2017; Beka et al., 2009; Das and Sahoo, 2011; Gulati, 2010).

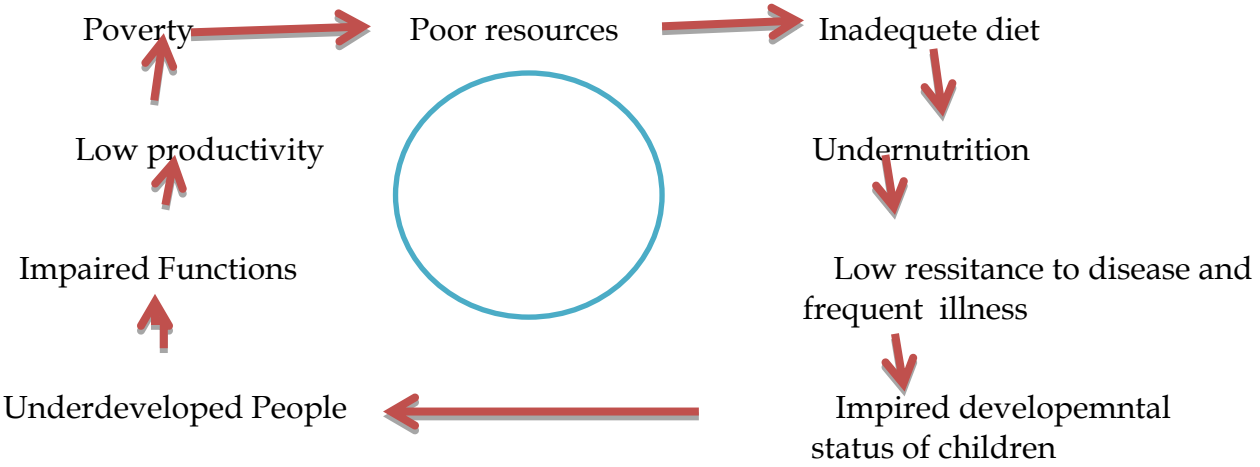
The determinants of child malnutrition are multi-layer (Marmot, 2006). At the most immediate level, child malnutrition is caused by inadequate diet and disease (Black et al., 2003) and this in turn is influenced by access to food, healthcare, water and sanitation, and the way a child is cared for. Underlying all of these primary and intermediate causes of malnutrition are poverty, lack of resources, and social, economic and political factors (MoH, 2004; UNICEF, 1990). Save the Children (2012:39), an international humanitarian non-government organization, reports the relationship between poverty and child malnutrition as follows:

> *Poverty is a main underlying cause of malnutrition. Children are malnourished not simply because there is no nutritious food available, but because their families cannot afford to buy it. …. Researches show that a significant proportion of families in selected communities in Bangladesh, Ethiopia, and Kenya could not afford to feed their families a nutritious diet even if they spent all of their income on food.*

Gulati (2010) also underscored poverty as the major cause of malnutrition along with ignorance that also puts the society in a vicious cycle. According to him, poverty leads to inadequate food intake and under nutrition, which further influence the physical growth and development of children causing impaired functioning, and low productivity again leading to poverty (*Fig. 2.3*). In this way, poverty imposes restrictions on food intake of poorer sections of society and the worst sufferers are young children,

adolescents, as well as pregnant and nursing mothers. Concurrent to this premise, UNCIEF (2003) documented poor people are the nutritionally at risk population. Even with in that group, women and children are the most fragile and vulnerable sections of every society.

Figure 2.3: Vicious Circle of Poverty and under nutrition



Source: Adapted from Gulati (2010)

In addition to the capability of mothers to acquire necessary resources for optimal child feeding, the size and interaction among the members of the family affect children's nutritional status (Aubel, 2004; Kerr et al., 2007; Wray, 1991). For example, the family environment in which there are poor parenting skills, family conflict and marital instability predicts children's failure to thrive (Shils et al., 2006). In addition, family size affect the nutritional status of children in the family since the greater number of children starches resources (money, time, and food) which decreases the life quality of family members including nutritional status (Bake, 2004; Charles and Kerr, 1988). In general, children from larger families are more likely to be stunted (Beka et al., 2009; Cassidy, 2015; Kerr et al., 2007). Furthermore, lack of availability of infrastructure and services affect the nutritional status of children (Save the Children, 2012).

Similarly, literatures indicate the significant differences among urban and rural mothers on child-feeding practices. For example, Setegn et al. (2011), Otoo (2009), and Ryan et al. (2006) have attributed the lower likelihood of exclusive breastfeeding in urban

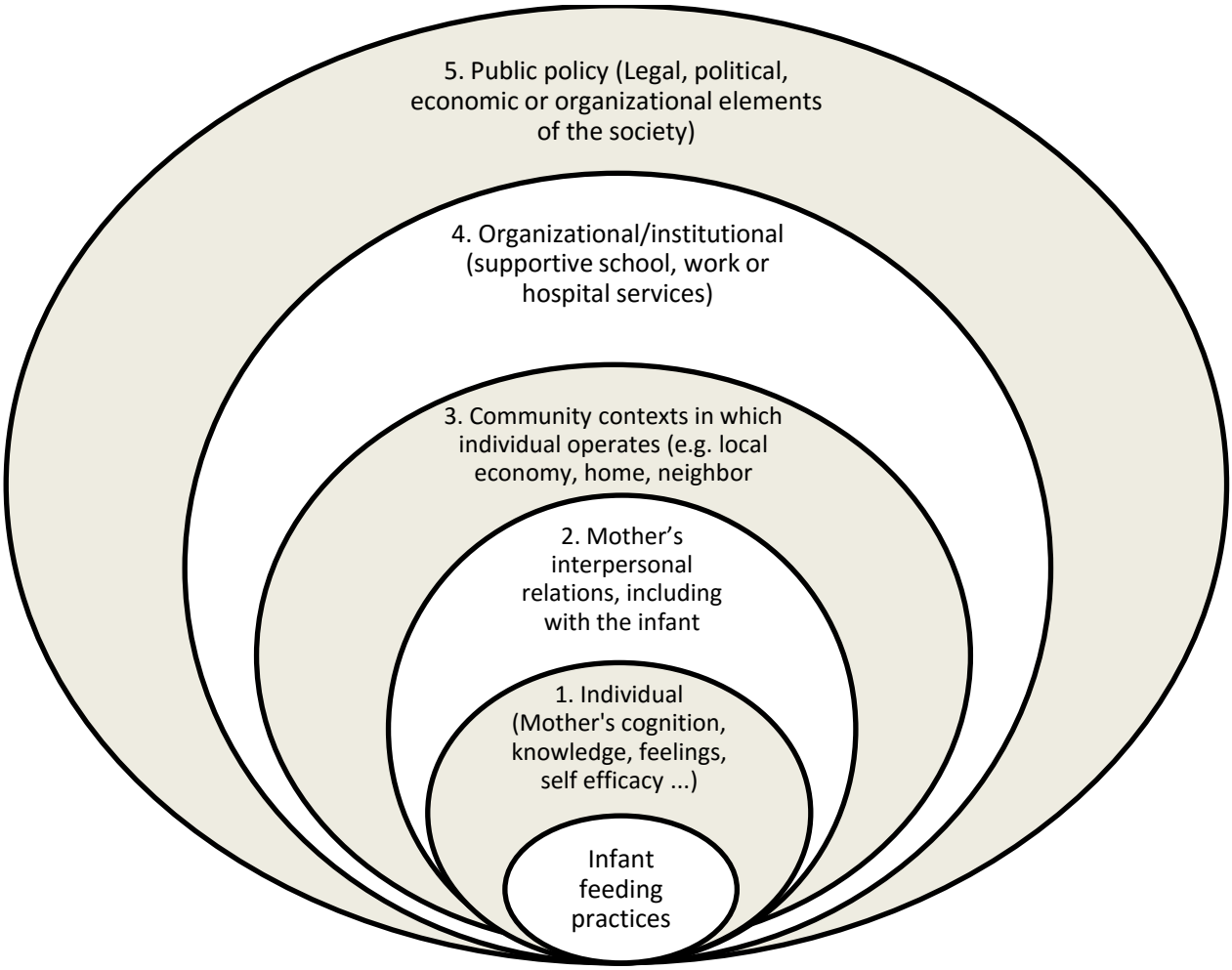
areas to family structures and the employment status of mothers. According to the findings, formally employed women tended to feed their infants with foods other than breast milk before six months, as their maternal leave after delivery is shorter and most of the working environment does not encourage breastfeeding. In addition, researchers claim that sociocultural norms and practice also affect workplace breastfeeding for employed mothers, for example unfavorable attitude towards expressed breast milk (Thairu et al., 2005; MacKean and Spragins, 2012).

With the culturally embedded nature of feeding (Beardsworth and Keil, 2002), mother's child-feeding decision is better understood in relation to her circumstances and immediate experiences (Black et al., 2013). Therefore, following Black et al. (2013), Bylaska-Davies (2011), Bronfenbrenner (1979), Chrisisten (2010), Tahiru (2005), Stewart et al. (2013), MacKean and Spragins (2012) and Paul et al. (2011), this study utilized the social- ecological framework that links child-feeding practices to the broader social, economic and political contexts. Accordingly, the framework recognizes the importance of cultural, environmental, and social systems on human behavior that conceptualizes ecological space as operating on different levels of systems. Using the framework, different authors have classified determinants of child-feeding practices into different categories. For example, Stewart et al. (2013) categorized the factors into communal and societal levels with wider view of political economy, agriculture and environmental resources. Similarly, Paul et al. (2011) briefly summarized these factors into household and local contexts with overlapping concepts from previous models of UNICEF (1990) and Engle et al. (1999).

This study also groups the factors into three levels—individual, interpersonal, and structural factors. Personal factors include cognition and feelings related to infant feeding as well as individual characteristics such as "self-efficacy," age or employment status. The proximate context comprises interpersonal relationships (with the infant, the partner, or with health care providers) and the physical and organizational settings in which these occur. The distant context includes structural factors at the national and at the international levels. In reality, nevertheless, these domains overlap and reciprocally

influence each other (Bylaska-Davies, 2011). Yet, the framework is best represented as an *"onion model"* that illustrates the influences and dynamic relationships among individuals, family, community, and cultural systems surrounding the individual. Consequently, the model begins with the analysis at individual level and then diverges out to family, community, and cultural systems that surround the individual mother on all aspects (Aubel and Rychtarik, 2015:12). Following are examples of factors that show influences of various actors and structures on infant and young child-feeding behaviors.

Figure 2.4: Ecological framework and agencies in infant child feeding behaviors



Source: Adapted from Aubel and Rychtarik (2015), Bronfenbrenner (1979), MacKean and Spragins (2012).

1. Individual level factors

Appropriate child feeding is a skill that is learned and for which physical and socioeconomic problems are often associated (MoH, 2004). Accordingly, individual-level factor affecting the practice of child feeding include mothers' attitudes, beliefs and knowledge about child feeding (Avery and Magnus, 2011), physical feeding difficulties (Redshaw and Henderson, 2012), lack of confidence and self-efficacy (Forster et al. 2012), mother's' health (Floweret al., 2008), pumping difficulties (Avishai, 2007), and infants' health (Flower et al. 2008). Specifically, researchers have reported the individual level characteristics that affect child-feeding practices including mother's' age, level of education and choice to work or not (Pelto and Klemsu, 2011). Therefore, the social ecological model accentuates the different reasons mothers attribute to their decision. According to Flower et al. (2008) and MacKean and Spragins (2012), mothers wean infants or top-up infant formula because of their health and the health of their babies or because they perceive that the child is not gaining weight. With respect to mother's' own health, poor diet, smoking, alcoholism, way of delivery, labor duration and neonatal health status determine her physiological and emotional readiness to initiate and continue breastfeeding (Flower et al., 2008). Redshaw and Henderson (2011) further illustrates that the post-operation pain due to caesarian section destruct mothers' intention to exclusively breastfeed.

2. Mothers' interpersonal interactions in the family and community contexts

Child-feeding practice is an interactive process among the infant, mother and other household members that also entails intimate social interactions. It also reflects cultural ideas and practices about social relationships, childcare and child development (Van Esterik, 2002). In addition, decision-making about infant feeding is interactive in response to infants' perceived needs, health and behavior (Fouts et al., 2012). Moreover, community contexts including family caring behaviors, cooking, sanitation and hygiene resources, food insecurity, poverty as well as maternal livelihood and health statuses determine child-feeding practice (Kesetebirhan, 2013).

Child-feeding practices also include the customs of having family meals, mothers' time constraints and the supports from men and other family members (Aubel, 2004; Kerr et al., 2007). In line with this, Andrew and Harvey (2011) concluded that *"infant feeding practices are influenced more by familial relationships and social attitudes than by socio-demographic factors"* (p.514). On the other hand, community participation integrates the indigenous knowledge and practice that positively contribute to proper child-feeding (Aubel et al., 2001). Understanding this, many developing countries already operate *"community-based"* programs that aim to empower families, especially women, to facilitate and advance their own development (Save the Children, 2012; Kesetebirhan, 2013; UNICEF, 2009). This is based on the philosophy of *"collective culture"* that assess the influence of family system and multigenerational customs on mother's' decision about child-feeding practices (Aubel and Rychtarik, 2015). Health development armies are examples of the social networks for successful childcare (Kesetebirhan, 2013).

3. Institutional and structural contexts of child-feeding practices

Institutional and structural aspects of society including cultural, political, and social contexts affect the availability and quality of caregivers' resources and the care for children (Fouts et al., 2012; Nousiainen, 2014). Similarly, social, economic and trends such as inflation, famine and employment opportunities significantly influence child-feeding practices. Furthermore, the institutional level determinants like social institutions, organizational regulations, cultural beliefs and healthcare setting influence child-feeding practices (Fleury and Lee, 2006). For example, while counseling on the recommended child feeding during ANC visits encourage exclusive breastfeeding (Dettwyler, 2004), the procedures during delivery discourage the initiation of breastfeeding within the recommended time (MacKean and Spragins, 2012). Employers' support for exclusive breastfeeding also affects workers' breastfeeding experiences. Save the Children (2012:18), for example, suggested the following:

> *Women often stop breastfeeding because they return to work. ... Some employers are not happy with the stipulated maternal leave nor do arrange private place nor allow mothers to breastfeed. Legislation around maternity leave and policies that provide time, space, and*

support for breastfeeding in the workplace could reduce this barrier. For mothers who work in farming or the informal sector, family and community support can help them to continue breastfeeding, even after returning to work.

Public policy is also one of the macro-level factor influencing recommended child feeding practices. Public policy, in this context, encompasses the wider domain related to the health, morals and wellbeing of citizens. As discussed in the preceding sections, national and international agents have been interested in supporting recommended child feeding practices through strategic supports and integration of various sectors including agriculture, health and employment policies and strategies. For example, the government of Ethiopia has made significant effort in creating synergetic intervention to improve child nutrition and feeding practices through health and agriculture extension packages. Similarly, the government has organized cross-sectorial integration that work on improving urban and rural livelihoods. Concurrently, women empowerment polices and maternity protection laws are the pillars acting at the macro levels in contextualizing recommended child-feeding practices in Ethiopia. In general, unlike the reductionist approach that analyses mothers' individual beliefs and practices, the socio- ecological model comprehensively analyzes the agency of mothers with broader focus on multi-level determinant factors in the implementation of child-feeding recommendations.

CHAPTER THREE: SOCIO-ECONOMIC DETERMINANTS IN CHILD FEEDING PRACTICES— THE CASE OF MOTHERS

Mothers' demographic and socio-economic statuses significantly influence their decision about recommended child-feeding practices (Griffiths et al, 2005; Meedya et al., 2010). Nevertheless, other authors claimed the psychosocial factors such as parental attitudes and values as the most important predictors of recommended child-feeding practices (Datta et al., 2012; Meedya et al., 2010). Others add community and policy supports as significant factors determining health behavior of society and childcare practices (Fouts et al., 2012; Nousiainen, 2014; UNICEF, 1990). In line with these arguments, the socio-ecological framework underlines the influences of these factors on mothers' actions, yet with different degrees based on their contexts and underlying structures. Following this, this and the next three chapters discuss the findings related to individual and community factors determining child-feeding practices. Nevertheless, this chapter focuses on the socio-economic and demographic factors that affected mothers' child-feeding decisions with the major focus on age, education, family composition, economic and working conditions of mothers, and their partners.

3.1 Basic profile of the respondents

The socioeconomic profiles of mothers showed diverse contexts and outcomes on child feeding practices (Meedya et al., 2010). Following this premise, this study included both urban and rural mothers, and 425(60.1%) of the mothers were living in rural areas and the rest 282(39.9%) in urban. The majority (71.1%) of the respondents were Orthodox Christians, followed by Islam (14%) and Protestant Christianity (12.4%). Furthermore, about 1.8% of the respondents were followers of *Wakefata,* an indigenous religion followed by the Oromo Ethnic group of Ethiopia. Nevertheless, there is a significant variation in terms of the proportion on the composition of this religious distribution compared to the national distribution, which was 45% for Orthodox Christianity, 31% for Islam and 23% for protestant Christianity (EDHS, 2016:33).

Oromo was the dominant ethnic group in the sample (74.5%), and the proportion was high for rural areas (80.94%) compared to urban (64.89%). Gurage ethnic group took

the next majority (11%) with relatively high proportion in urban areas (16.7%) compared to the rural areas (7.3%). Amhara was the third largest ethnic group in urban (10%) but the second in rural areas (9.41%).

Table 3.1: Socio- demographic condition of the respondents by their residence

Socio-economic Variables	Category of the responses	Current residence of the respondent (frequency)		Total (%)
		Urban (%)	Rural (%)	
Religion of the respondents	Orthodox Christianity	150 (53.19)	357 (84)	507 (71.7)
	Protestant Christianity	80 (28.36)	8 (1.9)	88 (12.4)
	Islam	51 (18.08)	48 (11.29)	99 (14)
	Wakefata	1 (.35)	12 (2.82)	13 (1.8)
	Total	**282 (100)**	**425 (100)**	**707 (100)**
Marital Status of the respondents	Not in marital union[14]	7 (2.48)	8 (1.9)	15 (2.1)
	In martial union	275 (97.51)	417 (98.1)	692 (97.9)
	Total	**282 (100)**	**425 (100)**	**707 (100)**
Ethnicity of the respondent	Oromo	183 (64.89)	344 (80.94)	527 (74.5)
	Amhara	31 (11)	40 (9.41)	71(10)
	Tigre	10 (3.5)	2 (.47)	12 (1.7)
	Gurage	47 (16.7)	31 (7.3)	78 (11)
	Walayaita	9 (3.2)	3 (.7)	12 (1.7)
	Others	2 (0.7)	5 (1.17)	7 (1)
	Total	**282 (100)**	**425 (100)**	**707 (100)**
Educational Status of the respondents	Can't read and write	11 (3.9)	55 (12.94)	66 (9.2)
	Elementary (Grades 1-8)	84 (29.79)	352 (82.82)	436 (61.8)
	Secondary (Grade 9-12)	104 (36.88)	18 (4.23)	122 (17.3)
	Certificate and above	83 (29.43)	0	83 (11.7)
	Total	**282 (100)**	**425 (100)**	**707 (100)**
Employment Status of the respondents	Farmer	21 (7.44)	339 (79.76)	360 (50.8)
	Formally employed	63 (22.34)	0	63 (9.2)
	Self employed	11(3.9)	77 (18.12)	88 (12.3)
	Casual workers	187 (66.31)	9 (2.12)	196 (27.7)
	Total	**282 (100)**	**425 (100)**	**707 (100)**

Source: Fieldwork, 2015

Though majority of the samples are from rural area (*see* Table 3.1), the expanding industrial zones in the *woreda* witnessed intense labor dynamics among and between urban and rural *kebeles* that blurred the difference in child-feeding experience of the mothers. This also created a relatively heterogeneous population in the study area with

[14] This broadly represents mothers who were divorced, separated or widowed.

specific reference to ethnicity, religion and employment conditions that have significant implication on the diversity in childcare practices. In addition, the table indicates that almost all (97.6%) of the respondents were married and living with their partners while a few (2.3%) were not in marital union due to divorce or death of their partners. A case study is presented to further indicate the relationship between marital relationship and better child-feeding practices. The pseudo name of the case respondent was Megertu, and the case indicated the positive role of marital stability in child-feeding practices. The case also indicates the adverse effects mothers' socioeconomic and physiological grounds of recommended child-feeding practices in households with marital instability or divorce.

Megertu, age 32, was married to a person from the same village in rural area Tafki. However, due to the family-based violence she had been experiencing, the first marriage ended. As a result, she came to Tafki Town to lead her life independently, living on selling *tella*[15]. In the meantime, she gave birth to the second child from one of her customers. She narrated the experience as follows:

> *My first child was born from my former husband and I was taking care of the child in relatively good condition. By then, we used to cultivate crops and buy few food items that we could not produce. After the divorce, I started living here in Tafki Town in a rented house, working on selling tella. In the process, I found someone who wanted to marry me, and he occasionally come to my home. Soon I knew that I was pregnant, we intended to legitimize our marriage. In the meantime, his first wife appealed to a court for civil adjudication, claiming that our relationship was unlawful. Finally, the husband and his wife settled the issue by arbitration, and he committed himself to support his child though we could not marry. As the result, I went on living on selling tella with his seldom monetary support for the youngest child.*
>
> *Practically, as you can observe from my home and my physical condition, I am in a serious economic problem due to raising two children who have been neglected by their fathers. Both children are not getting sufficient attention for I spend longer time on domestic chores to keep the life 'breathing'. There is scarcity of food in quantity and diversity for both children. This prevented the children from growing sufficiently as their peers in the village, and the younger child is sick with diarrhea frequently that increased my expenditure on his medication. I could not get moral and material support from my*

[15] *Tella* is a traditional Ethiopian (mostly) home brewed drink from fermented mixture of several crops (such as *teff*, barely, maize, millet and sorghum and *gesho*–a small tree in the family Rhamnaceae whose shiny and berry-like fruits as well as leafs are used within a largely similar effects as hops do in beer.

family where I was born from, only my younger sister living in Finfinnee gives me some support in monetary and in kind, especially giving me money when the children feel sick. She also gives salvage clothes she used to wear and those clothes that her children do not wear any more.

The above case portrays the effect of marital breakdown on the child-feeding practices and the potential psychological, social, as well as economic support fathers could provide in child feeding practices. According to the case respondent, the influence of marital breakdown became beyond her control, and one of its causes is the social norm that confines child bearing to legitimate marital relationship. In this case, children shouldered the disproportionate share of poverty and marital problems. Furthermore, the woman in the case boldly underlined the gender dimension of family relationships and the vicious circle of urban poverty and dependence that affected the wellbeing of her children. Furthermore, the case showed mothers' efforts for the existence of their families and the effect of mothers' workload on their intention to nurse their young children. This case study corresponds with another study in Ethiopia that showed that 14% of men reported having co-wives and the higher likelihood of divorce among women (6%) than among men (2%) does (EDHS, 2016). The effect of marital status was also reported by studies in Africa and Ethiopia that showed adverse effects of divorce or separation on children's nutrition outcome and feeding practices (Abate and Belachew, 2017; Abuya et al., 2012; Cassidy, 2015; Datta et al., 2012; MacKean and Spragins, 2012; Masresha et al., 2013;Mutuli et al., 2016).

On the other hand, the household size of the respondents ranged from three to eight, and it was high for rural households (mean = 6.62, standard deviation = 1.91) compared to urban households (mean = 5.45, standard deviations = 1.786). In terms of the number of children, 155(21%) of the respondents had two under-five children, and the rest, 552(79%), of the respondents had only one under-five child each. Furthermore, the age of the children of the mothers interviewed ranged from three to 23 months, with the mean and standard deviation of 11.46 and 6.376 months, respectively. Gender wise, 352(49.79%) of the children were males while the rest 50.21% were females. Moreover, 180(25.5%) of the children were first born for their mothers while the second, the third

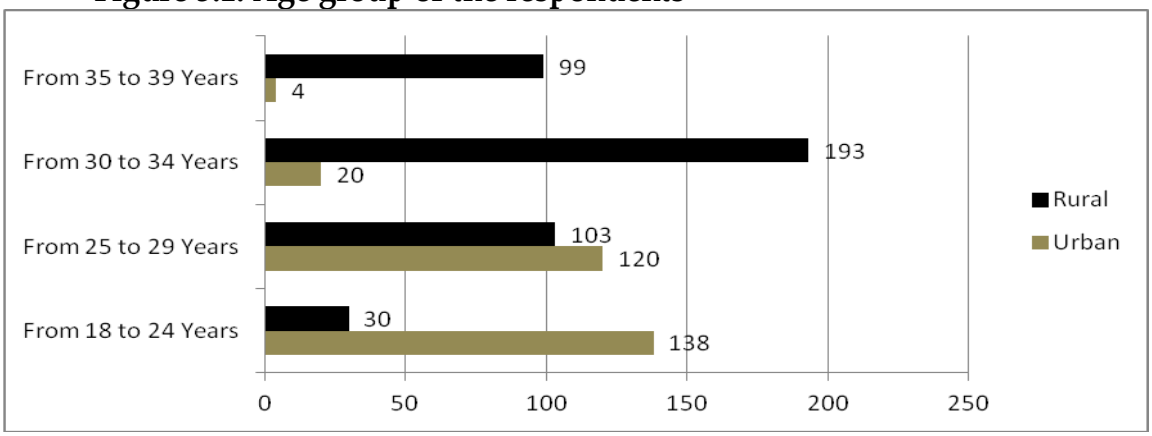
and fourth birth order accounting 17.1%, 37.9%, and 19.5%, respectively. This finding is similar with the findings of other studies in Ethiopia that showed the larger family size and its adverse effect on the nutritional outcome and wellbeing of under-five children (Abate and Belachew, 2017; Dessalegn et al., 2012; Setegn et al., 2012).

3.2 Mothers' age and child feeding practices

Mother's age is a significant demographic variable that influences the physical and emotional maturity of mothers in taking care of their children (Andrew and Harvey, 2011; Aubel, 2012; Cassidy, 2015; Letourneau et al., 2004). In this study, the minimum and maximum age ranges were set based on the responses from the survey. Accordingly, the age of the respondents ranged between 18 and 39 years (*Figure 3.1*) with an average and a standard deviation of 28.41 and 5.205 years, respectively. In terms of the age category, 223(31.5%) of the respondents were between 25 and 29 while 231(30.1%) were between 30 and 34 years.

Disaggregated in terms of their residence, the majority of urban mothers were younger than their rural counterparts and out of 168 mothers less than 25 years, 130(94%), were from urban areas while 292(92%) of rural mothers had given birth between the ages 30 and 40 years. In addition, the mean age of the mothers in urban (25 years, SD= 4.122) is lower than the mean age of rural mother (30.6 years, SD= 4.246) that does not go with previous studies which indicated that rural women marry and bear children at younger ages compared to urban women (EDHS, 2016). In line with these findings, it is possible to conclude that there were significant associations between age groups and places of residence (χ^2 =281.44, DF=3; CI= 95%; D= 0.701). The finding also indicates the implications of physical and physiological maturity with respect to mothering and related childcare practices (Aubel, 2001; Guled et al., 2016; Reddy and Teshome, 2016).

Figure 3.1: Age group of the respondents



Source: Fieldwork, 2015

Based on the components of recommended child-feeding practices mentioned earlier, the findings revealed that the respondent's age is in complex relationship with the indicators of the child-feeding practices. For example, the time of initiation of breastfeeding is associated with the age group of mothers (χ^2=7.683, DF=3, D= 0.2, CI=95%), and older women were more likely to initiate breastfeeding early and to breastfeed longer years while young women were more likely to breastfeed frequently within 24 hours of the day (r=.162, CI=95%; P-Value <0.001). This is partly because older mothers were more likely to have childcare experience and had received health education on childcare practices that include the benefits of early breastfeeding initiation for the sustenance of exclusive breastfeeding and supply of breast milk. The findings of other studies in developing countries also support this relationship (Abuyaet al., 2012; Fouts et al., 2012; Kedir et al., 2016).

The frequency of breastfeeding also depended on the age of the child (r=-.228, CI=95%, P value <0.001) and the age of the initiation of complementary feeding (r=.194, P<0.01, CI=95%). Correspondingly, the daily frequency of breastfeeding decreased as the age of the child increased and as the age of initiation of breastfeeding decreased. In other words, the increase in child's age predicted the introduction of complementary foods, which indirectly contributed to the decrease in frequency of breastfeeding. Masresha et al (2013) also reported a similar finding, and according to the study, Ethiopian mothers of

older than 18 years are 87% less likely to feed their child below the minimum food frequency and diversity.

Table 3.2: Child's age of introduction of complementary feeding and frequency of breastfeeding in a day

		Breast feeding frequency in 24 hours	Age of initiation of complementary feeding (in months)
Breast feeding frequency in 24 hours	Pearson Correlation	1	.378**
	Sig. (2-tailed)		.000
	N	704	629
The age of initiation of complementary feeding (in months)	Pearson Correlation	.378**	1
	Sig. (2-tailed)	.000	
	N	629	631

**. Correlation is significant at the 0.01 level (2-tailed).

As the above table presents, the early the child starts complementary feeding, the less is frequent breastfeeding, which may bring higher probability of stunting. Similar to the finding presented above, the study in Ethiopia by Masresha et al. (2013) reported that children who start complementary feeding earlier are 3.2 more likely to be stunted because of the negative impact of complementary feeding on breastfeeding frequency and duration. In addition to the quantitative data presented in Table 3.2 above, the finding from qualitative data of this study revealed the reasons why the younger mothers delayed the initiation of breastfeeding. According to the interview with a nurse from Sebeta Health Center, mothers who have given birth for the first time face more difficulty of initiating breastfeeding than those who had experience in breastfeeding. Comparatively, younger mothers tended to spend longer time with their infants for close follow-ups, and this contributed to frequent breastfeeding both during the day and in the night times. A mother, who gave birth for the first time, aged 27 and living in Tafki Town, expressed the following experience in breastfeeding and the care she takes in order to keep her child safe:

> *I check repeatedly that if the child is okay even when he sleeps unusually for longer time. I wake him up and check that he is okay in between hours. On the way, I also breastfeed him and, to your surprise, I do not put the light off, to ensure that my child is well.*

Similar with the above verbatim, the statistical tests indicated the influence of mothers' age on their confidence and experience in childcare practices. According to the finding, the older the mothers were, the higher the number of their children (r=.313, CI=95%; P-Value <0.001) and the lower they are influenced by other persons, including women and partners. Similarly, children with higher birth order were more likely to be put to breast more immediately than other groups even if the relationship was not statistically significant (r=.036, P<0.342, CI=95%). In addition, mothers with higher number of children had greater probability of early initiation of breastfeeding and breastfeeding for longer time (Odd Ratio (OR) =1.7, P-Value<0.05). Furthermore, experienced mothers felt more confident to ensure children's wellbeing, except the adverse impact of previous experiences and resistance to accept new ideas. The following quotation from an in-depth interview with a 27-years-old mother of two children living in Tafki Town shows the influence of previous experience on mothers' child-feeding behavior:

> *The first thing seems awkward until you develop some experience and get confidence in yourself. That is true in mothering too. My first child was almost like a trial period in everything-breastfeeding, bathing and all other cares.… My breast could not flow smoothly until the third day, and I gave the baby formula milk just to keep him trying until my breast milk was mature to flow smoothly. For the second child, that was not a problem, and no breast pain compared to the first child. The second child is stronger and getting more care. Experience matters more than what you read or hear from someone.*

The cumulative responses from qualitative and quantitative data also showed that younger mothers tended to breastfeed more on demand, in response to the infant's' cues, and that helped to empty both breasts and encouraged further breast milk production. As Table 3.3 depicts, out of 168 mothers whose ages are less than 25 years, 75% of them breastfed on demand. Yet, the majority (37.86%) mothers within the age category of 30-34 breastfed only when it is convenient for them. The Chi-square test also showed the associations between the timing of breastfeeding and mothers age group due to the cumulative effect of birth experience and social maturity (χ^2=120.325, DF=6, CI=95%, D= 0.383, P-Value <0.001). Furthermore, the multi-nominal regression showed that the odd of

breastfeeding on demand was 5.4 for mothers between 18 and 24 years compared to mothers between 35 and 39 years (OR= 5.4, CI= 95%, P<0.001).

Table 3.3: Ways of Breastfeeding by Age Group of the Mothers

		When do you Breastfeed?			Total
		On demand (%)	Scheduled (%)	When convenient for me (%)	
Age group of the respondents	18 to 24 Years	126 (75)	5 (2.97)	37 (22.02)	168 (100)
	25 to 29 Years	116 (52.01)	7 (3.1)	98 (44.34)	223 (100)
	30 to 34 Years	51(23.94)	0	162 (76.05)	213 (100)
	35 to 39 Years	39 (37.86)	1 (0.97)	62 (60.19)	103 (100)
Total		**332 (46.95)**	**13 (1.83)**	**359 (50.78)**	**707 (100)**

Source: Fieldwork, 2015

Compared to the age of the respondents, the non-parametric correlation showed a positive yet weak relationship between the mothers' age and the number of children for rural respondents (r=0.303, P<0.01) while the relationship was found even weaker and inverse for urban mothers (r=-0.26, P<0.01). Nevertheless, the Ethiopian health and demographic studies over the last decades (EDHS, 2000; 2005; 2011; 2016) showed an increase in median age at first marriage among women's between ages 25 and 29. Similarly, the study indicated a decline in percent of women marring before age 18 whiles it is still high in the percentage (63% in 2011 and 58% in 2016). Furthermore, the median age at which an Ethiopian woman bears her first child is 19.2 years, and urban women aged 25-49 begin childbearing 2.7 years later than peers of the same age in rural areas (21.6 versus 18.9 years). Similarly, 13% of women between 15 and 19 years give birth to their first child, and teenagers in rural areas are three times more likely to have begun childbearing than their urban peers (EDHS, 2016: 81-82).

Early age child bearing and shorter birth interval predict larger fertility rate (Cassidy, 2015). Similarly, a study shows that an Ethiopian woman bears an average of 4.6 children in her lifetime, and rural women have 2.9 more children than urban women (5.2 vs. 2.3 children) while women between 15 and 35 years tend to have multiple under-five children (EDHS, 2016:77). According to the current study, average family sizes are higher for rural households (6.67 vs. 5.45) with a statistically significant difference (t= 10.492, F= 152.202, P < 0.001) and mothers with many children have lesser time to spend

with their children (r= -.256, P< 0.01). Accordingly, the number of under-five children in the family with respect to feeding implies the mothers' workload to prepare food and diminishing share of vital resources for childcare – time, food and finance (Das and Sahoo, 2011).

This shows the synergy among the components of HEP (FMOH, 2015), specifically the relationship between trends in family planning and the implementation of recommended child feeding practices. Family planning enables mothers to breastfeed for longer time (EDHS, 2016:103) in the context of a wider belief that pregnant mothers should not breastfeed (Dessalegn et al., 2012; Mutuli et al., 2016; Netsanet et al., 2016). Family planning also ensures the wellbeing of children by providing basic care for those who are born with sufficient space in time and resources (Reddy and Teshome, 2016). Furthermore, smaller family size gives mothers the opportunity to participate in economic activities that empower them in their livelihoods and to earn income for better nutrition and health of their families in general and children in particular (Ball, 2010;Tigist et al., 2016).

3.3 Mothers' Educational Level and Child Feeding Practices

3.3.1 Mothers' educational level and breastfeeding practices

The educational level of mothers significantly influences their child-feeding practice since education promotes healthy lifestyle and leads to more rational thinking and decision-making patterns (Dessalegn and Shikur, 2013; Lochner 2011; Mackenbach et al., 2008; Setwart et al,2013). It affects their occupation and income, which brings complex outcomes on their child-feeding decisions (Cutler et al., 2006). Furthermore, studies by Abay et al. (2013), Imdad et al. (2011) and Wachs (2008) extensively addressed the effects of mothers' educational level on their breastfeeding practices. According to their studies, while illiteracy limits mothers' knowledge and confidence in the practice of the child-feeding recommendations, higher educational level also creates better opportunity for mothers' formal employment that reduces the time mothers would spend on childcare activities. Similarly, this study showed a significant effect of mothers' level of education

on their knowledge about breastfeeding practices (P<0.005, CI=95) and an F-test was used to analyze the difference between urban and rural mothers on the four-scaled ranks of formal educational level.

Table 3.4: Mothers' Knowledge about importance of breastfeeding by their educational level

Items to measure Mothers' knowledge about breastfeeding	Variations	Sum of Squares	Df	Mean Square	F	Sig.
Newborn children should be put to breast immediately after birth (within an hour)	Between Groups	31.083	4	7.771	31.620	.000
	Within Groups	172.521	703	.246		
	Total	203.604	707			
Feeding newborn with colostrums protects the infant from diseases	Between Groups	107.832	4	26.958	34.703	.000
	Within Groups	545.331	703	.777		
	Total	653.163	707			
Breast milk alone is sufficient for child for the first 6 months	Between Groups	126.187	4	31.547	51.787	.000
	Within Groups	427.635	703	.609		
	Total	553.822	707			
The frequency of breastfeeding should increase when the child is sick	Between Groups	49.787	4	12.447	34.343	.000
	Within Groups	254.420	703	.362		
	Total	304.207	707			

Source: Fieldwork, 2015

Table 3.4 indicates a significant variation in knowledge about the benefit of early initiation of breastfeeding among mothers with different education levels (F= 42.62, DF= 4, CI=95%). In the same way, education level is positively correlated with mothers' knowledge about the nutritional and health benefits of feeding colostrums (r=.299, α=0.01, F= 34.703, DF = 4, CI=95%; r= .385, α=0.01) and exclusive breastfeeding (Spearman's nonparametric correlation (r) =.243, α = 0.01). Similarly, in both urban and rural contexts, mothers' education level was positively correlated with their households' average monthly income; mothers with higher education are more likely to be able to find "good" jobs with better wages. Unlike the breastfeeding experience, mothers with better education level have better performed in preparing and feeding diversified complementary feeding. This was supported by their knowledge and income to purchase and combine balanced foodstuffs.

Table 3.5: Mothers' Education Level and their Household Income

		Educational Level of the respondents	Average HH's Monthly income (in birr)
Educational Level of the respondents	Pearson Correlation	1	.648**
	Sig. (2-tailed)		.000
	N	707	707
Average HH's Monthly income (in birr)	Pearson Correlation	.648**	1
	Sig. (2-tailed)	.000	
	N	707	707

** Correlation is significant at the 0.01 level (2-tailed).

In addition, education influences one's outlook and decision-making marking a significant indicator of women's status (EDHS, 2016). In line with this, the survey indicated a significant positive association between the educational level of the respondents and their husbands (χ^2=709.34, DF =9, D= 0.736, CI=95%, p<0.001). According to the survey, the majority (61.8%) of the mothers completed grades 1-8 compared with 42.6% of the fathers. On the other hand, the percent of fathers in secondary level (grades 9-12) was high (23.6%) compared to that of mothers (17.4%). Similarly, 16.7% of the fathers and 11.8% of the mothers joined tertiary level education, and illiteracy was high among husbands living in rural areas. For example, out of 120 husbands who could not read and write, seven (5.8%) were living in urban areas while 94.2% were living in rural settings. Similarly, of 122 respondents who joined secondary school, 104(85.2%), were living in urban areas and none of the respondents who had certificate and above were living in rural areas.

Table 3.6: Educational status of respondents and their husband

Residence			Educational Status of the respondent				Total
			Can't read and write	Grades 1-8	Grade 9-12	Certificate and above	
Urban	Educational Status the respondent's husband	Can't read and write	4	3	0	0	7
		Grades 1-8	2	33	1	1	37
		Grade 9-12	1	40	81	2	124
		Certificate and above	4	8	22	80	114
	Total		11	84	104	83	282
Rural	Educational Status the respondent's husband	Can't read and write	31	82	0		113
		Grades 1-8	20	230	12		262
		Grade 9-12	1	36	5		42
		Certificate and above	0	2	1		3
	Total		52	350	18		420
Total	Educational Status the respondent's husband	Can't read and write	35	85	0	0	120
		Grades 1-8	22	263	13	1	299
		Grade 9-12	2	76	86	2	166
		Certificate and above	4	10	23	80	117
	Total		63	434	122	83	702

Source: Survey, 2015

Similarly, though the result of the statistical test was not statistically significant ($p < 0.05$), the findings from focus group discussions with mothers and senior women indicated positive roles of education to determine the number of children a woman could have in her fertility age. Education would also enable the mother to have healthier and better-nourished children. This was because both formal education and non-formal training give women knowledge, self-confidence and practical skills in addition to helping to delay marriage and childbearing to a time that is healthier for them and their babies. In the same way, this study indicated that formally employed mothers are more likely to have higher educational level and are receptive of the child-feeding recommendations while exclusive breastfeeding decreases with the shorter maternal leave.

3.3.2 Mothers' education level and complementary feeding practices

With regard to complementary feeding, education acted as an enabling factor; mothers with better educational status tended to feed their children frequently and with diversified food. On the other hand, education created better opportunity for employment out of the home that decreased the likelihood of frequent breastfeeding. Conversely, mothers with better education were more likely to earn better income that enabled them to feed the child with diversified complementary food. This also implies that education created better mothers' knowledge about the benefit of diversified food. According to the F- test, mothers with higher education level were more likely to seek information on recommended child-feeding practices from health professionals ($F=57.695$, $df=2$, $P<0.005$). Consequently, even if educational level acted negatively on breastfeeding frequencies (Spearman's rho = -.201), it contributed positively on the initiation ($\chi^2=158$, DF= 20) and diversity of complementary feeding ($F=22$, $DF=4$, CI=95%). Nevertheless, the key informant from Sebeta-Awas *Woreda* office of Women and Child Affairs explained the effect of higher level of mothers' education on exclusive breastfeeding practices:

> *Higher educational status enables mothers to have better opportunity for formal employment, which may make exclusive breastfeeding difficult. Given the pressing need of observance of work rules, formally employed mothers and mothers working at a distance from their home have no other option than scheduling breastfeeding and introducing formula milk shortly before their return to work.*

The influence of mothers' educational status on child-feeding practices are also found significant in non-parametric correlation test though mediated by employment condition and earning as the result of the employment. Measured at the ordinal level, mothers' educational status (X1) was correlated with the major components of recommended child-feeding practices. The components tested against education included:

- initiation of breastfeeding after delivery (X2);
- frequency of breastfeeding during the day (X3);
- frequency of breastfeeding during the night (X4);

- frequency of meals in a day (X5);
- mothers' autonomy to decide on expenditure on child food (X6);
- mothers' autonomy to take the child to health institution (X7);
- frequency of complementary feeding in a day (X8); and
- Planned time of weaning (X9)

Consequently, the result of the statistical analysis indicated that four out of the selected eight variables have significant relationship with mothers' educational status. The following table presents the results of correlation tests and their statistical significance.

Table 3.7: Mothers' education level and recommended child feeding practices

S.N	Correlation between mothers education level (X_1) and	Correlation Coefficient	Sig. (2-tailed)
1	Time of initiation of breastfeeding (X_2)	r_{12}= 0.47	0.21
2	Frequency of breastfeeding during the day (X_3)	r_{13}=-0.201	0.000*
3	Frequency of breastfeeding in 24 hours (X_4)	r_{14}=0.065	0.085
4	Frequency of meals in a day (X_5)	r_{15}= 0.495	0.000*
5	Mothers' autonomy to decide on expenditure on items to prepare food for children(X_6)	r_{16}= 0.073	0.051
6	Mothers' autonomy to take the child to health institution for treatment and consulting feeding related issues (X_7)	r_{17}= 0.153	0.000*
7	Diversity of complementary food in a day (X_8)	r_{18}= 0.166	0.000*
8	Current or anticipated time of weaning (X_9)	r_{19}= 0.196	0.317

* Correlation is significant at the 0.01 level (2-tailed).

Source: Fieldwork, 2015

In view of this (Table 3.7), some of the effects of mothers' educational status are direct in terms of improving mothers' knowledge and practice of child feeding with overall better autonomy and health-seeking behaviors. On the other hand, mothers' educational level operates as an intervening variable since it affects their employment opportunity and income. In the analysis, therefore, the relationship indicated negative correlations between mothers' education level and the frequency of child feeding. This result corresponds with the findings of studies by Desalegn et al. (2013) who reported the positive influence of mothers' educational status on the knowledge and frequency of

breastfeeding. Nevertheless, the effect of education on mothers' knowledge and practice of recommended child-feeding practices should be interpreted carefully. This is because, mothers may also acquire the knowledge from several sources, such as mass media, family members, peers and health services (Gijsbers et al., 2007; Mutuli et al., 2016; Monterrosa et al., 2012).

3.4 Households' economic status, mothers' working condition and child feeding practices

Economic status of households and individuals has a bidirectional relationship with their nutritional status, since lack of money may prevent families from buying quality foods for their children (Monterrosa et al., 2012; Hampshire et al., 2009). In other words, individuals in the upper social status generally enjoy better access to healthcare plus nutrition, and they often live longer (Irwin et al., 2006). Nevertheless, recommended child-feeding practices have complex relationships with the socioeconomic status and livelihoods of mothers and their household members. For example, in contexts where households have limited access to water and sanitation services, exclusive breastfeeding is highly important since it protects infants from the possible infection resulting from poor water and hygiene while complementary feeding after the period of exclusive breastfeeding needs households' better economic status.

On the other hand, the readily availability of modernity intensified early introduction of bottle-feeding. Among urban mothers, for example, the finding of this study indicated that 27.27% of urban mothers who initiated complementary feeding earlier have given formula milk while only one mother out of the 422 rural mothers who initiated complementary feeding gave formula milk as the first complementary food. For instance, cattle milk was the most common first complementary food for rural mothers (94%) followed by soft porridge and gruel prepared from homemade grains and legumes (5%) while formula milk (27.27%) and factory-processed foods, such as *Cerfam*[16], were common among the urban mothers (43%). Statistical test also indicated the significant

[16] The trade name for one of the semi-processed cereals, fruits, vitamins and other micronutrients

associations between mothers place of residence and feeding diverse complementary foods (χ^2=375.473, DF=3, CI=95%, p<.001).

Table 3.8: Types of Complementary Foods by Mothers' Residence

		Residence of the respondent		Total
		Urban	Rural	
What were the first complementary foods you gave for the child?	Gruel	14 (6.7%)	19 (4.5%)	33(5.2%)
	Soft porridge	90 (43%)	5 (1.2%)	95 (15%)
	Cattle milk	48 (23%)	397 (94%)	445 (70.5)
	Formula milk	57 (27.27)	1 (0.2%)	58 (9.2%)
Total		209 (100%)	422 (100%)	631 (100%)

Source: Survey, 2015

According to Table 3.8 above, formula milk is more common in urban setting while cattle milk was the first complementary food for the rural children. Similarly, the current percentage of mothers who introduced formula milk (9.2%) is fivefold when compared to the EDHS (2016) report on the percentage of mothers who have given formula milk as the first food (1.7%). More so, the difference between the percentage of children consuming infant formula in this study and the EDHS reports may be due to the increasing urbanization and urban-rural linkage in the study area. Better employment opportunity for young mothers, especially in factories and informal business sectors, might have also contributed for the difference in the reports (Forster and McLachlan, 2010; Kerr et al, 2007). Furthermore, the respondents perceive formula milk as the domain of urban life and among mothers with better economic status and educational level (EDHS, 2016).

Similarly, this study also indicated the common place of infant formula for urban and formally employed or mothers with breast pain. Nevertheless, infant formula is costly compared to breastfeeding or cattle-milk expenses. For example, a 24-year-old case respondent who had experienced breast problem emphasized the economic burden of formula even if other studies suggested the common belief that infant formula serves as a symbol of modernity in some developing countries (Abuya, et al., 2012; Desalegn, et al., 2013). She also narrated the attempts made to treat the breast problem both by biomedical and traditional ways as follows:

My breast could not secret sufficient amount of breast milk; that was not adequate even in the first week of the infant's life. I have visited 'better' hospitals to get medication. However, that was not successful. My mother has also tried many traditional treatments, like massaging the breast using warm water and encouraging me to take traditional foods believed to facilitate breast milk secretion. Nevertheless, all these have failed. Finally, one of the nurses advised me the possibility of serving the infant with formula milk. Therefore, I began feeding the child with infant formula.... After about four months of the infant's age, I started giving semi-solid food. ... Infant formula has double problems. In addition to its nutritional inferiority to breast milk, it is also costly in monetary terms. For example, for the first four months, the average cost for the infant formula ranges between 1200 and 1600 Ethiopian Birr per month. If my breast had sufficient breast milk, it means that I could have saved this amount of Birr for some other household consumption.

Other than revealing the economic burden of infant formula, the above case respondent noted the lower income among the majority of the respondents in the study area. According to the result of the survey, the average monthly income of the households ranged from birr 500 to 7000; the mean was 2771.63 for urban and 1156.72 Birr for rural areas, respectively, with standard deviations of 1400.322 and 547.292 Birr in the stated order. When grouped based on their income, 256(60.2%) of rural respondents earned less than 1000 Birr while the percentage for urban households was relatively low (12.2%). Contrary to this, only 3(0.7%) of the rural respondents reported an estimated income of greater than 2000 Birr while the percent is 65.95% for the urban households.

Following this, the t-test result showed a significant difference in average monthly income between urban and rural respondents ($t = 21.439$, $DF=705$, $P<0.001$, CI= 95%). The implication of lower standard deviation for rural households showed more homogeneity in their average income level compared to urban households that registered both minimum and maximum average monthly income. This shows the prevalence of different livelihood experiences and the existence of abject poverty in both urban and rural areas. The precaution in comparing the income of urban household with that of rural households is that low income in rural area is not necessarily be associated with low quality of living since some of the resources available in kind can also support child-feeding in the rural settings.

More than the effect of income on child wellbeing, food insecurity is at emergency levels in Ethiopia for around 5 million people that cause hunger and malnutrition.

Although food insecurity and malnutrition have become policy priorities in Ethiopia, the factors mediating the relationship between these two challenges need further clarification to specifically target at reducing child mortality and morbidity (Masresha et al., 2013; Taye, 2008). Taking food security as an additional indicator of households' socioeconomic statuses, a significant number (76.2%) of the households reported that they did not face food shortage in the recent one year. However, 67% of rural households reported that they did not face food shortage within the last one year while the percentage is significantly higher for the urban households (90%).

Similarly, although ownership of livestock was common for a significant number (42%) of rural households, animals were more often raised for selling than for household consumption. Some mothers mentioned receiving food from their relatives such as grandmothers, who were farmers. In connection with a key informant interviewee, the program coordinator of Alive & Thrive Ethiopia, their organization prioritized poverty and food security as the major problems as identified in the investigation of factors affecting child-feeding practices. The above case study also augmented a similar finding (*see* Section 3.1). In the case study, the respondent was struggling with the widespread poverty in urban areas, that minimized the time and efforts the mother gave for the childcare practices. The case also noted the decreasing access to the social and financial support due to the divorce marital status and birth out of marital relationship. Nevertheless, researches in food secured *woredas* of Ethiopia indicated complex combinations of socio-cultural, economic and demographic factors in child nutritional status than food security (Beka et al., 2009; Desalegn et al., 2013).

The lower income and food insecurity contexts of the households in the study revealed the opportunity cost they absorbed in recommended child-feeding practices. In order to withstand the economic burden from increasing costs of life, and to meet the basic needs of family members with special regards for children, households in the study area devised diverse livelihood complements. As indicated in Chapter 1, the transitory aspect of the study area was significant as the result of expanding industrialization and concomitant urbanization because of proximity to Addis Ababa. Flanagan (2010)

explained such trends as affecting overall life experiences and "*occupational change and migration appeared strongly interrelated, particularly when employment was expanding in modern sectors within large cities, drawing rural labor surpluses*" (p.178). As a result, the industrialization facilitated dividing private sphere from paid work and by bringing remarkable changes in family systems and gender roles (Bassin et al., 1994). These in turn assigned men the role of economic providers and made women responsible for childcare and family nurture although the experience in the study area also showed women employment in formal job categories (Na et al., 2015).

According to the data from Sebeta- Awas Office of Labor and Social Affairs, the common job categories offering job-opportunities for young women in the *woreda* include hotel industry, flower companies, construction, textile industries, and informal businesses such as petty trading. One of the case respondents from Korke rural *kebele* illuminated the changing occupation and gender roles because of socio-economic dependence of rural household on adjacent urban centers as follows:

> *We live on agriculture and rural based economy such as rearing animals. We also trade small items to generate additional income that supplements our livelihoods and enables us to buy items that we do not produce. We also use the income for family expenses of medication, education and buy items that make us lead better life. For example, the income we generated from the non-agricultural activities served us to buy different electrical appliances such as radio, tape-recorders as well as solar equipment for light, and charging torches and cell phone. Specifically, I am engaged in small trading such as selling dairy and poultry products in Merkato[17], Sebeta and Alemgena. I also sell vegetables such as cabbage and spices which we produce and that I buy from other households who are not interested to go to the market.*
>
> *My husband also works carpentry during off-seasons of farming in adjacent towns such as Alemgena and Sebeta. Unless we supplement our income with such nonagricultural activities, we are highly vulnerable to the increasing costs of agricultural inputs and household expenses. You know, the land size per household is decreasing; our parents have granted small land size and it continues decreasing for the next generation. … Unless we send our children to school, we have nothing to inherit, as we have no land to share for them. … As the result, we shouldered the household workloads and childcare responsibilities to keep the children attend their school. ...*
>
> *When I go to the market, my husband looks after the child. He also feeds the child when I am engaged in other household chores. We feel equally responsible for childcare issues, and we share roles by understanding each other. For example, I buy additional food*

[17] Merkato is the largest open market in Ethiopia

items such as macaroni, pastini and rani[18] for the child when I return from the market and the husband does the same when he gets some money. Concerning the recommended child-feeding practices, we are confused somehow; we could not practice it even if we thought that it prevents children from disease and poor physical and mental development.

From the above case, it is evident that rural households were in transition partly because of their proximity to the urban centers, and the interdependence between rural and urban economy has resulted change in their livelihood and socio-cultural experience. Similarly, the result of the survey showed that 72.2% of the mothers were engaged in some income-generating activities while the rest 27.8% were dependent on their husbands' income. In terms of their residence, 67.3% of urban and 58.8% of rural mothers mentioned some economic activities including farming, formal employment and running their own business that redefined the dominant gender roles pertaining to childcare. Consequently, the fathers were in transition and supported their wives in child-feeding practices. Nevertheless, the tone in which the case respondent reported the level of share between mothers and fathers seemed exaggerated. According to in-depth interviews with fathers, though the fathers' engagement in child-feeding practices is increasing over time, the dimension of commitment was different for that of the mothers; "exactly equally responsible" is yet to achieve.

Similar to the case presented above, households in the study area reported the broader social and economic circumstances that compelled them to diversify their livelihood strategies. According to the in-depth interviews conducted with mothers from urban and rural areas, the increasing cost of living was challenging their efforts of childcare practices in these contexts. A 36-year-old mother, who raised five children living in one of the rural *kebeles*, Geja-Gadamba, noted the burden she was facing from the current market forces and how she was benefiting from diverse agricultural practices and its sustained effect on the livelihood of her family as follows:

Our life is becoming miserable from time to time and now difficult to get even basic needs by relying on agriculture alone. … Life is really a struggle, and it is more difficult to raise children in this condition, demanding working here and there to raise the children and to help the husbands in supplementing the income of the household.

[18] Trade names for common food stuffs that mothers usually cook for their children in most urban areas

Due to the rising cost of life, husbands were also migrating to nearby urban centers that increased mother's workload and that adversely affected the attention they were supposed to give to child-feeding practices. A 33-year-old mother, who gave birth to four, and whose youngest child was 4 months, living in Geja-Gadamba rural *kebele,* expressed this as follows:

> *I trade the spices and vegetables in Merkato, travel there at least three days a week. My husband also works in Sebeta, any kind of unskilled labor activity, just to supplement the income I generate from the petty trading.… Rearing children would have been impossible had there been no such runs. … The eldest daughter, who is only seven years old, shoulders the responsibility of caring for the youngest child during my absence.*

Formally employed mothers also reported diversification of income to withstand the pressure from increasing urban living cost. For example, one of the interviewed mothers, age 27, a public servant and a mother of two children noted her effort to diversify the income of the household by baking *injera (Ethiopian traditional food)* and selling for hotels to supplement her salary. She described the case as follows:

> *Both of us are public servants. The net monthly salary I am paid is about 2000 Ethiopian Birr, and that of my husband is about 3200. Nevertheless, this is not enough to live up to the expectation for our three children and for the rest of the family members, having to pay house rent and school fees. Therefore, working as public servant, I also sell 'injera' for hotels daily. This enabled me to earn more; in addition to serving my family with the 'injera', I also earn more than my monthly salary within two weeks. … In terms of childcare, nevertheless, working here and there is very tough. Sometimes, I stay in the kitchen until midnight so that I will deliver the 'injera' to the hotels early in the morning. This decreased the time I have to spend with my child, and thus I breastfed him less frequently.*

In addition, participants of focus group discussions with working mothers listed determinant factors for exclusive breastfeeding: office facility to pump the breast milk, distance between the home and the working area, transportation accessibility plus availability and affordability of day care services. A 32-year-old mother of the child whose youngest child was 4 months, and teaching in Sebeta high school, narrated her experience on day care to keep the mother-worker balance as follows:

> *At the end of the second month after birth, I gave the infant formula milk so that the babysitter can feed the child. …. Even if it was less costly, the day care center enabled me to work without divided heart between childcare and dispensing my job responsibilities. ... I opted for daycare for two reasons; first, the baby sitters were more experienced in keeping*

the hygiene and diet of the infants than maidservants. Second, it relieved the maidservant from other burdens so that she focuses on other household chores.

Similarly, in the FGDs held with working mothers, the participants identified the difference in job autonomy and their bargaining power as a significant factor in their childcare practices. Likewise, an in-depth interview conducted with a 33-year-old mother of three children, who was working as a public servant in Sebeta Town over the last ten years, has noted the effect work environment on the practice of exclusive breastfeeding as follows:

Some offices and immediate bosses are cooperative and support mothers' attempts to exclusive breastfeeding, and they may tolerate lack of punctuality on working hours for these breastfeeding mothers.

Nevertheless, private companies were not free to allow mothers to breastfeed during the break time, unlike some public servants and international Non-Governmental Organizations [NGOs]. The respondent in the case study also compared her experiences in mothering in the public and private working environments. To give some background about the case respondent, she is 37-year-olld and gave birth to three children, the first and the second children 8 and 5 years old, respectively while the youngest child was one and half years old at the time of the interview. In terms of education and work experience, the respondent graduated with a degree in accounting, and worked as accountant for five years in Sebeta, before she joined a private bank in 2012. She had an aggregated experience of 8 years in both public and private organizations. Similarly, her husband was a degree graduate working as an accountant in one of the local non-governmental organizations located in Addis Ababa. On the issue of child-feeding experiences, the case respondent noted factors that affect breastfeeding practices of formally employed mothers. She also compared the working conditions of the organizations she had worked in and the role of supports from the work staffs in the practice of exclusive breastfeeding as follows:

I gave birth to the first two children when I was working in government office. ... I could stay at home for four months during the neonatal period, taking additional one-month leave after the three months maternal leave. Since the work office was very near to my home, I could breastfeed in-between the working hours and during tea breaks. Then, I was able to breastfeed exclusively for the first 5 months. For the third child, however, the new

office challenged me, and I compromised exclusive breastfeeding as the result. Even if I joined the new office because of its better salary, the service providing nature of the office forced me to stay on the counters, and the administration was not tolerant of any deviations from the personnel policies. … The organization does not transfer the unused antenatal leave to postnatal period and, the maternal leave rule is forward– one month before giving birth and two months after giving birth. Furthermore, the transport service is very poor to breastfeed in-between the working hours. ... That forced me to give starters' infant formula, just at the beginning of the third month of the infant's age.

The above case respondent depicted the effect of working condition, urban infrastructure and services on exclusive breastfeeding, and the different dimensions through which institution and workmates could support for the practice of exclusive breastfeeding. The informant also looked at the challenges that breastfeeding women at work face in their effort to be both "good mothers" and "good workers." Similarly, according to a nurse working in the Pediatrics Department of Tafki Health Center, health workers themselves introduce foods other than breast milk before the recommended time, partly due to such inconveniences related to exclusive breastfeeding and working outside of home. In view of this, the interviews with the nutrition expert of Oromia Health Bureau and that of Federal Ministry of Health underlined the admissibility of shorter maternal leave as the barrier for exclusive breastfeeding.

According to the survey, 631(89.2%) of the mothers included in the survey gave complementary foods, and 360(57%) of them mentioned that the perception of insufficiency of breast milk and return to work were their major reasons for non-exclusive breastfeeding. Similarly, out of the 56 formally employed mothers who introduced complementary food before the recommended time, 42(75%), mentioned return to work as the first factor for their early introduction of complementary foods. On the other hand, no mother engaged in farming mentioned return to work as a reason for early introduction of complementary foods, but breast milk insufficiency instead. Similarly, the result of Chi-square test indicated the associations between mothers' employment conditions and their breastfeeding experience that showed the dominance of non-exclusive breastfeeding among mothers working in out-door activities (χ^2=254.75, D= 0.812, DF=4, P<0.001).

The influence of working condition on infant feeding was also mediated by the availability of other caretakers, the amount earned and mothers' decision-making power on resource utilization. This informs the mothers to introduce complementary foods by comparing the risk they absorb and the burden of unemployment on family wellbeing. Following this, mothers in these rural communities execute domestic and agricultural activities, and were less likely to breastfeed exclusively due to lack of extended time with their children as the result. Asked about their activities in their ordinary day, rural mothers listed the following activities: they clean the house, wash clothes, bath and feed their children, cook food for children and the rest of the family members, fetch water and accomplish other tasks including engagement in off-farm activities to diversify the sources of their income. Consequently, mothers consider exclusive breastfeeding and cooking separate meals for children time-consuming. According to a key-informant health extension worker from Awash Balo rural *kebele,* there is no separate pot for children; and mothers feed the children with the food that is prepared for adults but less of the spicy stew. She further noted lack of practical assistance from men as a factor constraining mothers' attempt of recommended child-feeding practices as follows:

> *Mothers face real tensions in shouldering household chores yet exercise recommended complementary feeding. ... Because the family burden is too heavy and they usually do not have practical assistance from their husbands, they feed their children with whatever they have at home.*

In general, the qualitative data confirmed the claim that mothers who work outside of their home devote little time for childcare compared to those who stayed at home or had flexible work schedules. According to the result of the survey, full-time employed mothers were more likely to introduce complementary foods earlier (Spearman correlation coefficient (r) = .093, CI=95%) and were less frequent in breastfeeding (F=177.23, DF= 4, CI=95%) compared to unemployed or part-time employed mothers. Nevertheless, the influence of mother's employment condition on the duration of breastfeeding was not significant for urban mothers, and they breastfed generally shorter than their rural counterparts (F=1.807; CI=95%). Yet, findings in studies conducted in rural contexts of Ethiopia did not show the influence of working conditions in mothers'

breastfeeding duration except the decreasing frequency per day (Dessalegn et al., 2012; Kedir et al., 2016).

3.5 Conclusions

This chapter examined the influence of mothers' socioeconomic and demographic factors such as age, education, working condition and the economic condition of the households on women's autonomy related to child-feeding decisions. Accordingly, the finding of the study showed that older women were more likely to practice exclusive breastfeeding than younger mothers were. This is in contrast to the common expectation that young mothers are receptive of child-feeding recommendation while older women tend to stick to customary practices and rely more on their child rearing experience than the 'cold hearted' advices of health expertise.

Furthermore, the finding of this study showed that older mothers were better prepared to provide "proper" childcare practices. Accordingly, older mothers experience lower likelihood of breast pain, introduce diversified complementary foods on time, and have better autonomy due to their relatively stable marital relationships. On the other hand, age was positively co-varied with higher parity; as the age increases, it is more likely to have older siblings who share household chores that give mothers an extended time to care for younger children. Similarly, adolescent mothers were less likely to breastfeed, and senior women in the community influence younger mothers than health workers do. Previous studies in Ethiopia also reported the responsibility and authority of senior mothers to control and supervise the younger mothers on issues pertaining to pregnancy and childcare (Desalegn and Shikur, 2013; Selamawit, 2015; Rogers et al., 2011).

Similar with age, the role of education level of mothers on recommended child-feeding practices was complex, and it crosscuts all other socioeconomic and demographic factors. Accordingly, mothers with better educational level tended to pursue healthy life style and childcare practices, and were more likely to engage in outdoor employment that predicted lower duration of exclusive breastfeeding but better complementary feeding.

Similarly, the qualitative data indicated the positive influence of mothers' education level with their ability to comprehend health education for better child-feeding practices and active role in family decisions about purchasing nutritious food for the diet of younger children.

In addition, there is a strong link between maternal education, households' economic status, and child-feeding practices. Accordingly, the finding confirms that women with better educational status tend to get higher paying jobs; to get married to men with higher education and higher income; to have less family size; and to share idea with women of better educational level. All of these have a positive influence on child health and survival. The study also showed the synergetic linkages between mothers' educational level and other socioeconomic and demographic factors on recommended child-feeding practices. Nevertheless, the finding is contrary to the result reported by Setegn (2012), who reported no significant association between maternal educational status and exclusive breastfeeding.

Studies consistently reported that individual and structural factors determined the frequency of breastfeeding. According to the findings, most of the mothers in Ethiopia practice breastfeeding, which coincides with other studies in Ethiopia (Ali et al., 2011; Dessalegn et al., 2012; EDHS, 2016; Setegn et al., 2012). Similarly, the livelihood and economic conditions of the households in the current study showed the significant influences on their child-feeding practices. Accordingly, there were significant differences in average monthly income between urban and rural respondents, and rural households were economically poor and rural women were in challenging livelihood experiences to meet the recommended child-feeding practices. Even if the mothers liked to breastfeed as much as the child wanted, the frequency of breastfeeding overlapped with the introduction of complementary feeding and the mothers' availability at home. Consequently, the workload of mothers in and out of home affected the frequency of breastfeeding.

Similarly, the attempts of urban households to secure and diversify their livelihood portfolios had desperately affected mothers' time and resource expenditures

on childcare practices. Similarly, mothers who had better autonomy due to earning their own income from petty trading or engagement in formal employment were better in the frequency and diversity of complementary feeding, although shorter maternal leave and erratic water and energy supply were the major obstacles for the urban households. On the other hand, as the survey result indicated no formally employed mother living in rural setting (Table 3.1), the legal guarantee of maternity leave has less effect in improving the practice of exclusive breastfeeding among rural households. Rather, the customary seclusion of neonatal mother, which is also known as "traditional maternity leave," has better support on exclusive breast-feeding (*See* Chapter 5 for the detailed discussion). For rural mothers working on farm field, it was relatively conducive to exclusive breastfeeding compared to urban mothers engaged in outdoor activities. Similar conclusions were made by other studies in Ethiopia (e.g. Abay et al., 2013), suggesting longer maternal leave for working mothers. Likewise, previous studies conducted in rural Ethiopia (for example, Beka et al. (2009), Bahire et al. (2015)) also reported a similar effect of mothers' workload on their child-feeding practices. Compared with Setegn (2012), this study was partly similar, reporting strong association of mothers' age and employment status with the practice of exclusive breastfeeding. In addition, the binary logistic regression also showed that unemployed mothers were more likely to breastfed exclusively than others were.

To cope up with the escalating cost of life, rural households who raised animals sold the products to buy food items such as coffee and oil-food necessary for the households. Some households also sold quality food to earn more money rather than using it for household consumption. The overall implication of poverty on child-feeding practices was significant, which also indicated the role of men in childcare and feeding practices. According to the study, both rural and urban households consume less meat, fruits and vegetables due to least accessibility, availability and affordability. In addition, households consume meat only on special occasions such as holydays and special festivities like wedding. This limited the dietary diversity of child food and resulted in the dominance of grains and legumes as the staple complementary foods for children.

CHAPTER FOUR: MOTHERS' KNOWLEDGE AND ATTITUDES ABOUT RECOMMENDED CHILD FEEDING PRACTICES

Knowledge, attitude, and practice of mothers on child feeding are key factors for optimal nutritional status and health and growth of children (Guled et al., 2016). In effect to address these issues, different actors were engaged in promoting "proper" child feeding. One of these actors is mass media (Robinson and Robinson, 2010). For example, the Ethiopian Broadcasting Corporation (EBC), formerly known as Ethiopian Television (ETV), showed a minute's television spot[19] sponsored by the FDRE Ministry of Health and "Alive and Thrive-Ethiopia," one of the International NGOs working in Ethiopia. The spot is casted in the context of Ethiopian rural household, and contained the overall message about mothers' lack of knowledge about recommended complementary feeding and fathers' support to realize the recommended complementary feeding. Below is the story presented in the spot:

> *The husband returned from a market having bought some foodstuffs. In front of his house, he saw his son feeding the oxen with little grass. The father told the son that what he was feeding the oxen was not sufficient, and instructed the son to mix the barley with hay so that the oxen will be full. While he was to enter the home, he found his wife cooking food with which her youngest child was to be fed. Simultaneously, he heard the youngest child crying in the house from the background. He asked the mother why the child was crying, and she responded that she did not know the reason. However, the husband told her that the child was crying because he was hungry like the oxen were.*
>
> *In the meantime, the husband observed the porridge his wife was preparing for the youngest child, and criticized his wife that she did not know what kinds of foods make the child stronger and healthier. According to his observation, she was preparing watery porridge that is not nutritious. Following this, he requested his wife to make the porridge thicker and composed of varieties of food such as egg, butter green leaves and vegetables. The wife told her husband that she was afraid that thick porridge may be difficult to swallow and may choke the child. The husband told her that nothing would be wrong, and encouraged her not to worry about any problem if the child is fed with little amount.*
>
> *The mother regretted for her "ignorance" and now pledged that she recognized why her child has been crying-he has been crying because he was hungry. Lastly, she underlined that knowing was good for all, and vowed that she would prepare nutritious food from various foodstuffs so that her child would grow healthier and stronger. In the meantime, the father held up the child and told her "as the ox ploughs better when it is full, the child will also be healthier and stronger when he is fed with nutritious food." At*

[19] Source: https://www.youtube.com/watch?v=AJncJ3j3ZBk, accessed on January 5, 2016

the end, the parents jointly expressed that proper feeding in the first two years ensures proper mental and physical development of their child.

With similar message narrated above, Alive and Thrive-Ethiopia has sponsored child-feeding promotion organized young Ethiopian singer celebrities. This promotion also presents components of the recommendations and the importance of males' supports in creating healthy and productive future generation. The promotion imposed moral obligation on parents to feed their children, and condemned the customary beliefs about child feeding practices. The following is the excerpt of the song written in English and was broadcast by public and private media such as the Ethiopian Broadcasting Corporation (EBC), the Fana Broadcasting Corporation (FBC) and YouTube[20]:

Who does not want to enjoy his harvest and kiss his child?
Who does not want to eat what he has grown?
A child will grow into adult if the foundation is well built.
Feed the child very well, don't say her luck will help her grow,
Or that her stomach cannot handle it.
For mental and physical growth, colostrums for the newborn's health.
For the first six months, mother milk is all what he needs.
Mixing a variety of foods, from different grains and milk,
From meat and eggs, from fruits and vegetables.
Let's not distinguish between the father and mother,
Let's feed him so that we can celebrate the hope,
A child's health is the country's health,
Let him grow to be a light for generations,
Let generation bloom because of our vigilance,
Grow life with his mother's breast; a child's health is the country's health,
That is the child, that is a light for generations,
Don't say it is the mother's duty alone; a child is also the father's duty.
The blessing is for all, when she is fed and grows well,
Let's feed her so we can celebrate the hope.

Although the media promotion does not seem based on research in Ethiopia (Abate and Belachew, 2017; Desalegn et al., 2013; Kesetebirhan, 2013), the above promotions targeted working to change the beliefs and knowledge about the existing misconceptions as well as gender roles in child-feeding practices that remained priories in recommended complementary feeding. Furthermore, the promotion linked the benefits

[20] https://www.youtube.com/watch?v=iL15wfdvp4, Accessed on March 5, 2015

of recommended child-feeding practices to future individual wellbeing and national prosperity.

Concurrent to the Theory of Planned Behavior (Ajzen, 2002), the promotions assumed the importance of knowledge and attitude in the practices of recommended child feeding. First, they underlined that most of the mothers lack knowledge about how to feed their children, and that fathers significantly influence mothers through advisory, emotional and material supports. Second, the promotions assumed men's better access to information. In addition, the promotion showed fathers' tendencies to try new ideas and practices and mothers' hesitation to attempt new practices for the fear that it may cause problem to their children (e.g. fear of choke). On the other hand, the mother indicated workload as one of the barriers for proper child-feeding practices (e.g. the child was crying while she was cooking the food outside). Finally, the promotions assumed the power of media in re-socializing parents with the child-feeding recommendations.

4.1 Mothers' knowledge and sources of knowledge about recommended child feeding practices

4.1.1 Mothers' knowledge about recommended child feeding practices

Suboptimal child-feeding practice is not only due to lack of food and supplementing resources but also due to lack of knowledge about the recommended child-feeding practices (Desalegn and Shikur, 2013; UNICEF, 2003). With a similar background, the government of Ethiopia deployed two health extension workers in each *kebele* who communicate nutrition education message on the benefits of proper feeding for mothers and children in the first 1000 days since pregnancy (Kesetebirhan, 2013). Accordingly, this study indicated the fact that mothers rationalized their child-feeding decision based on comprehended knowledge infused from the information they received from their elders, peers, mass media and healthcare workers. Interestingly, the mothers appreciated the indigenous knowledge and the experience from themselves or community elders than scientific explanations by "inexperienced health experts." The saying, "*Intalli haadha miixuu gorsite,*" meaning "the daughter advised her mother about

how to labor," best expresses the belief about the incompetency of younger health experts over the older and experienced mothers. On the other hand, mothers also felt easy to talk with females because they assumed female health workers understand them. One of the mothers expressed this concept with a proverb, '*Kan keetiin qabi mucaakoo naa qabi'* literary translated as "take care of my child as you take care of yours." This indicates the reverence for senior mothers who have "reliable" experience on childcare.

There was common knowledge and belief about the special attention for pregnant mothers. In view of this, almost all (99%) of the survey participants reached consensus that poor feeding during pregnancy affects mothers' health and that of her unborn child. Nevertheless, the custom of "family food" discouraged mothers to prepare special food in quality and quantity during pregnancy. For example, a health extension worker from Awash rural *kebele* presented that one of the reasons for reluctance of pregnant women to have a separate dish is the custom of family food as follows:

> *Pregnant women have to take special food in quality as well as to have one additional meal than the usual. However, it is not considered appropriate behavior for a woman to eat alone; it is almost a taboo for a woman to eat the food that other family members are not sharing. …. During the fasting period, for example, pregnant women consume the same food with other family members because they fear eating alone or they lack time to prepare a separate dish.*

Similarly, an interview with a health extension worker working in Gadamaba rural *kebele* revealed the wider belief about selection of food items during pregnancy. The interviewed participant further elaborated categories of foods that are acceptable in the community and the misconception about food during pregnancy as follows:

> *Senior women advise the pregnant mothers to consume nutritious foods only in moderate amount. They believe that consumption of much sweet and protein foods such as meat and egg makes the baby grow too big in the womb, which may lead to difficult and longer labor. … In addition, drinks that contain coca and caffeine are not recommended since they are believed to negatively affect the bone development of the fetus. … Rather, mothers are advised to take fruits to prevent anemia during pregnancy.*

The focus group discussants also expressed the medication power of food and the responsibilities of senior women in assuring sufficient food. According to the discussions in both male and female categories, post-delivery dietary practices are aimed to replace the blood lost during delivery and encourage sufficient production of breast milk. In both

urban and rural areas, the mother of the pregnant women or any other elder, close relative woman otherwise, was responsible to supervise the pregnancy and post-delivery care practices. Furthermore, senior mothers or grandmothers encourage the "new" mother to take porridge with butter and mutton as well as the traditionally home-prepared food "*shamita*"[21] to stimulate breast milk secretion. This belief allows the neo-natal mother to have varieties of nutritious food. Related to this, an in-depth interview with a mother of three children, aged 34, living in Bonde *kebele*, showed the cultural reasons for delayed initiation of breastfeeding as:

> *It is unlikely that a mother puts her newborn to breast within the first hours after delivery. This is because of the custom of cleaning, and she can only initiate breastfeeding when she eats some hot foods that are believed to help her restore her energy and activate breast milk flow. The mother is expected to breastfeed when she is able to eat what is called "qiinccee obbaatii,"- meaning "the porridge after the successful removal of the placenta."*

Furthermore, the knowledge and practice of exclusive breastfeeding for the first six months was not well articulated but surrounded by different misconceptions and myths. According to the ideas during FGDs and in-depth interviews, respondents misunderstood exclusive breastfeeding as feeding a child with breast milk and water or any other milk without any form of solid food." The data revealed that most of the mothers did not consider liquid items such as water, tea, milk and herbal infusions as avoidable food items in the first six months of the infant's life but as traditional medicines recommended during infant's illness. Since "*nyaata*" the Afan Oromo equivalent for "food," considers masticating as a criterion of food, liquids such as water and milk are not usually considered as "food." Furthermore, water is also considered a universal liquid and source of life for any living thing. A response in an in-depth interview held with a 35-year mother from Bonde *kebele* showed the misconception of exclusive breastfeeding as follows:

> *I was taught that no food should be given before six months, and breast milk alone is sufficient during this period. ... Accepting the advice, I did not give any food until the child older than sixth months, except water and boiled milk. ...Breast milk is so salty that*

[21] *Shamita* is a cultural food composed of varieties of grains and beans and is prepared in the form of gruel. It is fermented for at least two weeks and is culturally served for neonatal mothers with the support and advices of elder mothers in the community.

infants may surely feel thirsty of water. To prevent the potential illness from water, however, I either give the infant the bottled water or boil it thoroughly and keep its safety so that the infant will not acquire diarrhea.

Similarly, these misconceptions forced the introduction of water and other liquids in the first three days of the infant's life. The discussions and interviews on the issue with mothers and senior women revealed that there was a pervasive belief among the community that the colostrums was not "normal" milk and the smooth flow of matured milk starts only after three days. Therefore, according to some mothers, "the child could not survive unless she/he is given some additional food in the first three days, until the 'normal' breast milk flows smoothly" (an in-depth interview with a mother age 37, Awash rural *kebele*).

In the same way, while 42% of the respondents surveyed were aware that pre-lacteal feeding would expose infants to infection, the rest 58% were not sure about the danger of prelacteal feeding. Furthermore, 70% of the respondents gave one or more of liquids such as water, milk, tea or fresh butter in the first three months of the infant's life due to different beliefs. The focus group discussants mentioned that some of these beliefs include the views that makes the child to have good voice, makes the child patient, smoothens esophagus and clears the digestive tract. In the qualitative interview and focus group discussion, it was also understood that the majority of the mothers lacked knowledge about exclusive breastfeeding for they understood "food" as non-water liquids and semi-solid/solid items. A 37-year-old mother of five children, the youngest 7 months old and living in Awash Town, succinctly described this as follows:

There is a saying in Oromo culture that infants would say: 'haatikoo waan hundumaa naaf beektee dheebuukoo naaf wallaalte', which literally means, 'my mother understands every of my emotion except my being thirsty'- to explain that infants feel thirsty because the breast milk is too sweet. It is also believed that water prevents constipation. ... I gave water to the child even when he is about one month.

Key informants also listed the common reasons mothers give to the importance of prelacteal feeding. Some of these beliefs included keeping the mouth and throat of the infant moist, clearing the bowl of the infant, small size of mother's' breast to secrete sufficient amount of breasts milk and cleaning the stomach of the infant as well as preventing from possible constipation.

With regard to complementary feeding, 220(31.2%) of the respondents mentioned the proper age of introduction of complementary feeding. Furthermore, 42.5% of the respondents explained the frequency and composition of recommended complementary feeding, mentioning at least four categories of food that were to be given for these children in addition to continued breastfeeding. Focus group discussants also included the categories of food they thought important for the proper growth and development of children in the free lists of food items considered important for children. Milk, egg and home-fortified foods prepared from varieties of grains and legumes were the most important and frequent foods listed during the three focus group sessions conducted with mothers of children of age greater than six months. Mothers from urban areas included foods such as formula milk and semi-processed foods such as pasta, macaroni, *Bebyluck, Rani*, and *Endomin* in the free-listing exercise.

In the interviews too, the researcher asked the mothers if they knew when to give their children the first complementary food. Likewise, they argued that the appropriate age to start complementary feeding is at about five months on average. On the other hand, the survey result showed that 88.3% of the mothers believed that children have natural cues such as body development and movement as indicators of the time of introduction of complementary foods. In this regard, the qualitative study revealed that mothers consider the eruption of teeth, starting to walk, or the child's putting his/her finger or other items in to his/her mouth as the signs that indicate the child wanted complementary food. In line with this, a 37-years-old mother of three children and living in Awash rural *kebele* cited her experience as the most convincing indicator about the appropriate time of introducing complementary foods as follows:

> *Children have a natural instinct and show some gestures when they need additional food; and an experienced mother will respond to that need which usually occurs when the infant is about three months old. … Furthermore, a mother may be tempted to give complementary foods when a baby cries or salivates for food when someone eats food.*

In terms of the knowledge about the nutritional value of foodstuffs, mothers discussed that children should not eat the same foods every day, and they emphasized the importance of diversified diet with different tastes. They also indicated the

relationship between the occurrence of diseases and the availability of money. The response by a 31-years-old mother from Awash Town - a mother of three children - elaborated this as follows:

> *If you do not give the child what you should give him, he may be sick. If the child eats the same food every day, your child will become unhealthy. However, you have to get sufficient income to feed your child with what health workers advise, and it is only possible if you have sufficient money.*

The above verbatim indicates the other misconception about sources of nutritional foods. According to the respondent, those food items identified as nutritious are unreachable due to the poverty condition of households. Nevertheless, a health extension worker highlighted the abundance of locally available food groups with similar nutritional content at relatively lower price. In order to elaborate the relationship between mothers' knowledge and their practices of recommended child feeding, the researcher constructed five questions, assigning "1" for correct response and "0" for incorrect response. Consequently, those mothers who scored 0-2, 2.1-3.4 and 3.5-5 were categorized as having low, medium and high knowledge about recommended child feeding, respectively. The questions were: (1) the time of initiation of breastfeeding, (2) the meaning of exclusive breastfeeding, (3) frequency and method of breastfeeding, (4) time of introduction of complementary feeding and (5) variety and frequency of complementary feeding (EDHS, 2011).

In addition to the general child-feeding practices, the researcher asked the respondents on issues related to their knowledge about complementary feeding. The questions included the appropriate age of introduction of water and other liquids as well as when and how frequent to feed their child with at least four of the seven recommended food groups in the last 24 hours. These groups of food include: (1) grains, roots and tubers; (2) legumes and nuts; (3) dairy products; (4) flesh foods; (5) eggs; (6) vitamin A rich fruits and vegetables; and (7) other fruits and vegetables.

Knowledge about complementary food was assessed by assigning scores of "1" for knowing the recommended age and frequencies of these foods and "0" for not knowing the time and frequencies of these foods based on whether the child was receiving breast

milk or not. Consequently, 483(68.3%) of the respondents mentioned that colostrumcolostrums feeding was enriched with important nutrients for infant growth and development. Moreover, only 142(20.08%) of the respondents explained the proper concept of exclusive breastfeeding. Nevertheless, urban mothers had higher score on knowledge about complementary feeding, and the chi-square test indicated the association between knowledge and the performance of the recommendations (χ^2= 31.546, DF =1, P<0.001, D= 0.479, CI= 95%). This is similar to the studies in other parts of Ethiopia where mothers' knowledge of recommended child feeding is relatively low despite the wide health education through HEP and media. The studies also ranked lack of knowledge as the second important factor for low adherence of recommended child-feeding practices next to poverty (Guled et al., 2016; Kennedy et al., 2016). The Theory of Planned Behavior also laid the importance of mothers' knowledge and attitude in influencing the behavior that is in turn influenced by the subjective norms expressed through cultural beliefs (Ajzen, 2002).

Table 4.1: Knowledge and Practice of Child Feeding Recommendations

		Knowledge about Proper Child Feeding Recommendations			**Total**
		Low (%)	Medium (%)	High (%)	
Child feeding according to the recommendation	No	286 (44.13)	322 (49.69)	40 (6.17)	648 (100)
	Yes	13 (22.03)	41(69.49)	5 (8.47)	59 (100)
Total		**299 (42.29)**	**363 (51.34)**	**45 (6.36)**	**707 (100)**

Source: Own survey, 2015

On the other hand, the age, education level and socioeconomic factors such as marital and employment conditions were significant determinants of knowledge and practice of recommended child-feeding practices. Accordingly, initiation of breastfeeding within the first hour was found dependent on mother's age, parity and experience as well as the type and place of delivery (χ^2 =52.18, df=4, CI=95%, D= 0.555 P<0.001). Furthermore, when educational status and age are co-varied, older and better-educated mothers were more likely to initiate breastfeeding early and breastfeed for longer time (χ^2 =340.464, DF=41, D= 0.429, P value<0.001). Similarly, younger mothers were less likely to initiate breastfeeding early because they had no basic information about the benefit of

early initiation of breastfeeding (11%), and others delayed the initiation due to the hectic moment after delivery (88%). Still, others delayed the initiation of breastfeeding because the baby was not crying (hungry) (3%), the baby was weak after delivery (3.5%), the mother was not encouraged to feed the newborn (2%), the mother could not breastfeed because the delivery was through operation (2%) and maternal illness was encountered (1.5%). Furthermore, Table 4.2 indicates significant associations between mothers' educational status and their knowledge of recommended child-feeding practices.

Table 4.2: Knowledge about Proper Child Feeding Practices by educational level of the respondents

		Level of Knowledge about Recommended Child Feeding Practices			Total (%)
		Low (%)	Medium (%)	High (%)	
Educational Status of the respondent	Can't Read and Write	35(53.8)	29 (44.6)	1 (1.5)	65 (100)
	Grade 1-8	250 (57.2)	180 (41.2)	7(1.6)	437 (100)
	Grade 9-12	11 (9)	110 (90.1)	1(0.8)	122 (100)
	Certificate and above	3(3.6)	44 (53)	36(43.4)	83 (100)
Total		**299(42.3)**	**363 (51.3)**	**45(6.4)**	**707 (100)**

Soured: Fieldwork, 2015

As indicated in Table 4.2 above, mothers' education improved their knowledge about the recommended child-feeding, and the influence was highly significant for those mothers who reached at least secondary school (grade 9 and above). Similarly, when mothers with 'high' level of knowledge about child-feeding practices were excluded from the statistical tests to control the effect of outliers in scaling the level of knowledge, the association was positive and significant (χ^2 =350.351, DF=5, P<0.001, R= 0.71, CI=95%). Following this, it is safe to conclude that working and more educated mothers tend to introduce complementary feeding earlier, and they are more likely to have better knowledge and better economic capacity to feed their children with balanced food. Furthermore, although mothers exhibited good knowledge of the basic child-feeding recommendations, their accounts of the most suitable complementary foods were not in line with contemporary nutrition knowledge. Similarly, healthcare workers perceived

mothers' inadequate knowledge of child feeding as the main determinants of poor practices.

4.1.2 Mothers' Sources of Information about recommended child feeding practices

Exposure to mass media increases the knowledge, awareness of new ideas and social changes that affect individuals' health seeking behaviors (EDHS, 2016; Robinson Robinson; 2010). According to the data from the survey, 87.4% of the respondents had access to information on child-feeding recommendations at least from one of the media, and the percentage was greater than the national average reported by the 2016 EDHS (74%). Nevertheless, the surveyed respondents were more likely to listen to the radio (83.3%) than to watch television (33.4%) or read magazines (7.4%). Women under the age of 25 were more likely than older women to be exposed to the mass media (Odd Ratio (OR) =4.2, CI=95%, $\alpha<0.001$) primarily because their level of education was higher ($\chi^2=345.115$, DF =9, OR= 0.429, CI=95%, $\alpha<0.001$). There was also a wide gap in exposure to mass media by place of residence, education and wealth. For example, the proportion of women who read newspaper at least once a week was higher among urban residents (18.4%), women with more than secondary education (57.8%) and women in the wealthiest quintile (62.6%).

Table 4.3: Access to Media on recommended child feeding practices

Media as a source of recommended child feeding practices	**Urban**			**Rural**			**Total**		
	Yes (N, %)	**No** (N, %)	**Total** (N, %)	**Yes** (N, %)	**No** (N, %)	**Total** (N, %)	**Yes** (N, %)	**No** (N, %)	**Total** (N, %)
Radio	238(84.4)	44(15.6)	282(100)	351(82.6)	74(17.4)	425(100)	589(83.3)	118(16.7)	707(100)
Television.	231(81.9)	51(18.1)	282(100)	5 (1.2)	420(98.8)	425(100)	236(33.4)	471(66.6)	707(100)
Magazine	52(18.4)	230(81.6)	282(100)	0	425 (100)	425(100)	52 (7.4)	655(92.6)	707(100)

Source: Survey, 2015

Similarly, exposure to each of the specified media sources has increased since 2005. For example, the proportion of women aged 15-49 years who listen to the radio at least once a week increased from 16 % in 2005 to 22% in 2011, while the proportion among men in similar age group increased from 31% to 38% (EDHS, 2005; 2011). Nevertheless, the 2016 EDHS report indicated the relative decrease in access to media-the proportion of women who listened to radio at least once a week declined from 22% in 2011 to 17% in 2016 while it decreased from 38% to 29% for men in the same period. Because of the low literacy level for women, printed media was less likely while surprisingly 12% of men and 4% of women in the reproductive age visited internet in the past 12 months (EDHS, 2016:36). Similar to the studies by Ali et al (2011) and Abate and Belachew (2017), these agents were reported as significant communicators of recommended child feeding practices in Ethiopia next to senior mothers and partners.

Analyzing the relative importance of these media, radio was found to be the most effective agent in the promotion of recommended child-feeding practices as it is the most accessible mass media for the rural areas (Ali et al., 2011; Cole-Lewis and Kershaw, 2010; Imdad et al., 2011). According to the current study, 57% of the respondents (75% rural and 61% rural) had functional radios, and rural households had more access to radio than other forms of media compared to the urban population (χ^2= 12.316, DF= 1, OR= 0.527, CI= 95%, p<0.001). Furthermore, about 83% of the survey respondents had heard promotions on child-feeding practices from local radio stations. To test the influence of radio in changing the child-feeding behavioral intentions of mothers (Ajzen, 2002), the non-parametric correlation showed a positive relationship between mothers' hearing child-feeding recommendation from radio and their actual intention to practice the recommendations (r= 0.733, CI= 95%, p< 0.01). For example, mothers who heard breastfeeding promotion from radio were more likely to put their children to breast within the first one hour (OR= 1.9; CI=95%, P<0.0), and the odds of optimal complementary feeding was 5.2 (CI=95%, P<0.001) for mothers who had received information from radio. The following table (Table 4.4) shows the correlation coefficients

of mothers who have access to radio messages and their intention to practice the recommended child feeding.

Table 4.4: Access to radio and recommended child feeding practices

Recommended Child Feeding Practices	Spearman's Correlation	Significance level
Putting the child to breast within the first hour after birth	0.148	0.003
Colostrums feeding	0.733	0.0001
Optimal frequency of breastfeeding in 24 hours	0.09	0.0001
Timely initiation of complementary feeding	0.331	0.0001
Diversified and optimum frequency of complementary feeding	0.097	0.01

Source: Fieldwork, 2015

As indicated in the above table, radio has a positive and strong correlation with mothers' intention to feed the child with colostrums (.733) and mild positive correlation with timely initiation of complementary feeding (.33). Similarly, the table indicates almost no or very weak relationship between the radio message and changing mothers' behavior about the frequency of breastfeeding and diversity of complementary feeding. The lower influence of radio on the frequency of breastfeeding and frequency and diversity of complementary feeding do not agree with the findings of similar studies conducted in Ethiopia (Abay et al., 2013; Desalegn et al., 2013; Tigist et al., 2016). This is most likely because the respondents in this study site had better access to information from various sources compared to respondents in studies elsewhere in Ethiopia; and the structural factors like employment condition and poverty determine child feeding more than lack of information.

On the other hand, due to lower access to electric power and affordability of television in rural Ethiopia (EDHS, 2016), only 1% of the respondents from rural reported having television and watching promotions about recommended child-feeding practices compared to the urban respondents (81%). The association was statistically significant (χ^2 =300.702, DF=1, P<0.005). Yet, the power of printed media was low in changing the behavioral intention of both urban and rural respondents. On the other hand, only one informant mentioned internet as a supplementary source of information about recommended child-feeding practices (χ^2 =84.590, DF=1, P<0.005). Concurrent with the

findings from the survey, a 37-year-old mother noted the importance of radio as an agent of health education. According to her, local radio broadcast in Afan Oromo informs farmers about agricultural and health issues. She further explained the dependence of rural households on radio as follows:

> *We do not have televisions in our homes, though some people do in urban areas. … We get most of the information on child feeding and health matters through Oromia Radio and F.M Radio stations, which are very common in this community…. We listen to the radio when we are cooking, sweeping, or doing other activities.*

Furthermore, the trend in health service utilization has also improved mothers' access to information on recommended child-feeding practices. According to the in-depth interview with mothers, health extension workers advise pregnant mothers to attend antenatal and postnatal cares at health facilities and the survey came up with the same result. According to the survey, 64.7% (58% rural and 96% urban) of the respondents attended the minimum frequency (four visits) of ANC. Furthermore, the survey indicated that public health centers in both urban and rural areas served 85% of the mothers attending ANC service while the rest 15% attended the service in private and NGO health facilities. Nevertheless, only 13% of these mothers got breastfeeding counseling at the health facilities during their ANC visits, and 9% of them planned their future child-feeding practices due to the information they received during ANC visits. According to the data, mothers who received child-feeding counseling during the ANC visits were 1.46 times more likely to practice exclusive breastfeeding, and the difference was statistically significant (CI=95%, $P<0.001$). A-31- year old mother from rural *kebele* who had three children explained the earnest support by health workers as follows:

> *The health center staffs provide information on the care and feeding practice for pregnant women and the child, early from the time the women visit the facility. ... They also tell as how to feed the child and monitor his growth when we go to the health center for vaccination and family planning services.*

The above informant articulated the communication between health workers and mothers in pre and postnatal services on recommended child-feeding practices. Yet, the informants complained about the insufficiency of such brief services to change the customary practices. In most cases, mothers reported inconsistent pieces of advice by health workers. For example, according to a key-informant nurse working in Sebeta

Health Center, mothers acquired distorted meanings of exclusive breastfeeding. Similarly, some of the mothers told the researcher that, by the age of 4 months, their children had already started taking one or more of liquids and/or herbal medicines. The informant further illustrated the understanding she had on the factory foods as:

> *Mothers tell us their detailed concerns on child-feeding progress. Nevertheless, either a significant number of them had misunderstood the concept of exclusive breastfeeding or friends misadvised them about the benefit of particular food for the health of the infant. The other misconception was that, mothers think that any foods, including formula milk, which they buy from pharmacy or drugstore, are safe.*

Similarly, focus group discussant mothers indicated inconsistent pieces of advice by health staffs regarding child-feeding recommendations, for example, about exclusive breastfeeding. They also mentioned that short stays at health centers (six hours or less for normal delivery) made it difficult for nurses to provide the necessary health education about child-feeding practices.

Information from mothers' social network support groups also influenced mothers' perception and knowledge about pregnancy and consecutive childcare practices. In the discussions with mothers on issues they considered important during their pregnancy, they mentioned experienced mothers as sources of information about the foods they had to refrain from eating to avoid complications during delivery. After delivery, nevertheless, senior mothers advised the new mothers to increase the consumption of nutritious food to restore the blood lost during delivery and to produce sufficient and quality breast milk for the child. The information from in-depth interview and FGDs also indicated that pregnant and lactating mothers mainly rely on traditional knowledge received from friends, elder mothers, traditional birth attendants as well as religious leaders on what to eat during pregnancy and after delivery. Ali et al (2011) and Guled et al (2016) also reported similar findings on the influence of grandmothers in reproductive and childcare issues in Ethiopia. Similarly, the role of health extension improved mothers' access to health information in in the rural contexts where health facilities are still fewer compared to the urban healthcare services (Alemu et al., 2017; Dessalegn and Shikur, 2013; Kesetebirhan, 2013; Setegn et al., 2012).

4.2 Mothers' beliefs about and attitude towards child feeding recommendations

Limited knowledge and unfavorable attitude towards recommended child-feeding practices are few of the factors predisposing children to malnutrition, while other factors such as household food insecurity, inadequate health and sanitation services also worsened the problem (Guled et al., , 2016). Several factors are responsible for the changing knowledge, attitude and beliefs about child-feeding practices; the major factors include health education through health, media and women empowerment (Stoecker and Yewelsew, 2014). This section analyzed mothers' beliefs and attitudes towards recommended child-feeding practices.

Breastfeeding is a universal practice among Ethiopian mothers and it has multiple meanings and benefits to childcare and wellbeing (EDHS, 2016). Furthermore, a typical Ethiopian mother believes that breastfeeding is a courtesy of nature that strengthens the physical and spiritual bonding between a mother and her child (Alemu et al., 2017; Dessalegn et al., 2012). This belief leads to the behavioral and practical engagements that require mothers to budget their material resources and time in the way that benefits their child. The quote in an in-depth interview with a mother of three children, age 31 and form Awash rural *kebele,* summarized the ideas as follows:

> *Being a mother is a responsibility that no other person, be it a father or a close relative, can shoulder or feel the same. … Nature has given a mother a critical opportunity to decide on the future of her baby. ….. If you care responsibly, your baby will grow healthy and stronger. That is why a mother should strive to be a good mom and put her child first. … My child comes first, no work or no private comfort.*

In addition, cultural beliefs about the perception of a healthy child motivate mothers to introduce complementary foods earlier than the recommended time. For example, the respondents described a typical healthy baby as 'a plump and with less recurrent disease.' In effect, an interviewed mother expressed that breast milk alone is not sufficient for full growth of a child. A 35-year-old mother of three children from Korke rural *kebele* summarized the ideas as follows:

> *The child will be scrawny if not given foods such as milk and egg…. They may not able to resist or cannot revive from illness if not given customary foods such as fenugreek combined with tea and lemon.*

The mothers also believed that the quality of their breast milk depended on the food they eat determined by the availability of and access to such quality foods. The survey report indicated that only 2% of the respondents did not know the actual relationship between the food consumed and the quality of breast milk while the rest 98% believed that there was a direct positive relationship between the quality of breast milk produced and the food consumed by the mothers. Simialrly a mother of four children, age 37, noted that the dietary diversity and quantity of food mothers eat has a significant effect on the quality and quantity of breast milk mothers produce, which also affects the health status of the mother and her child. She further explained the close relationship between the food and the health status of children as follows:

> *The quality and quantity of foods mothers take affects the growth of their children. This is because, if you eat nutritious food, you also produce quality breast milk that makes the child bigger and stronger. If you do not eat good food, however, you produce watery breast milk that does not help the child grow. In addition, if you do not have enough food, both the mother and the child fall ill.*

Similarly, focus group discussants expressed that poor mothers could not afford those foods that are the most important sources of quality breast milk and subsequently tended to introduce complementary foods earlier. Moreover, health workers explained that the maintenance of the quantity of breast milk production depend on the removal of milk on regular basis since excessive and prolonged accumulations impede blood flow through the mammary capillaries that in turn reduce the supply of nutrients and stimulatory responses. A nurse working in Tafki Health Center, with the experience of three years in the delivery wards, explained the idea as follows:

> *Some mothers breastfeed so that the child does not sleep hungry; they breastfeed even when they have not eaten anything themselves. ... That is why you find breastfeeding mothers losing weight and the baby losing weight, too.*

Though associating breast size to the amount and quality of breast milk it produces is scientifically irrelevant (Avishai, 2007), mothers also believe that breast size matters in the production of breast milk. A 31-year-old mother from Awash Town explained this as follows:

> *Even if I was determined to breastfeed exclusively as recommended, I could not produce sufficient milk for the growing child, for my breasts are too small. … To improve the*

breast milk production, I tried many actions such as taking hot foods like porridge, gruel and tea. Some also advised me to drink more 'tella' (local bear) to stimulate more breast milk. That was also unsuccessful.

Although respondents believed that the quality of breast milk depends on the quality of foods mothers take, scientific evidences indicate that the quality and quantity of food mothers take does not affect the quality and quantity of their breast milk. According to Nikniaz et al. (2009) and Ogechi and Irene (2013), the body of a breastfeeding mother draws on its own resources until they are exhausted, and the quality of breast milk remains the same even among mothers with moderate malnutrition.

The general belief about the universality of water for human kind indirectly confirms the inadequacy of breast milk. According to the in-depth interview and focus group discussions with mothers, water has, no hurt and children feel thirsty as adults do. For example, a senior woman, age 57 and living in Korke rural *kebele,* mentioned the belief that children need water earlier than the recommended time. She further explained child-feeding recommendation as a "new instruction" that is ideal and has no use. The following is part of her response:

In our time, there was no concept of exclusive breastfeeding, and this is a new instruction from health extension workers who advise mothers that the child should be breastfed this and that way. … In reality, however, I doubt that even those who admit practicing exclusive breastfeeding are genuine. … At least, the child has to have small amount of water to quench his thirst.

In addition, the society believes that some foods and herbal infusions have medicinal effects. Thus, elder mothers use these foods for the health benefits of the child. Following this, a 35-year-old mother from Korke *kebele*, explained the use of some herbs as follows:

Whenever my child feels unhealthy, my mother-in-law prepares a traditional medicine composed of different herbs and fruits such as lemon juice and 'tenadam' (rue) with tea. She also feeds the infant with fenugreek or linseed water to avoid abdominal cramps and prevent diarrhea.

Responses from qualitative study also indicated that feeding practices during and after a child falls sick depends on mothers' perception of the cause and the remedies associated with the illness. The most common childhood illness listed during focus group

discussions with mothers from rural *kebeles* were diarrhea, cough, cold, inflamed tonsil and digestive problems. Because of various beliefs, mothers give the infants less complementary food for fear that the food may increase the intensity of diarrhea. In addition, fenugreek is included in the foods to eradicate the germs that cause the disease and help the infants recover soon. For cough and colds, frequent breastfeeding and hot gruel are given to make the child feel better. Moreover, tea and cow milk boiled with some herbs like "tenadam" (rue) and lemon are the common traditional treatments for such illnesses while abdominal cramps and digestive problems are treated with "*abish*" (scientific name *Trigonella foenum*). The following table (Table 4.5) summarizes the common beliefs about the causes of childhood illness and the remedial actions taken to recover from these illnesses.

Table 4.5: Mothers' Health Seeking Behavior and Feeding Practices during Child's illness

Type of the illness	Perceived causes of the illness	Remedial Actions to prevent and recover from the illness
Diarrhea	Feeding "spoiled breast milk" (colostrums) Poor hygiene of child and mother. Sanitation in preparing and feeding the child Sickness during teeth eruption	Avoidance of colostrums, less liquids (including breast milk), Oral Rehydrated Salt (ORS), sanitation and hygiene
Cough	Poor hygiene and sanitation, physical contact or sharing utensils with individuals with cough	Breast milk, liquids made up of mixtures of tea, *Teanadam* (rue), and lemon.
Colds	Cold environment, exposure to winds,	Syrup, buying drugs from the drug store, taking to health facility
Inflamed tonsil	Cold drinks, cough, fever, "*budaa*" (evil eye)	Avoiding exposure to winds or alien individuals, infusions of tea, lemon, *tenadam,* herbs and *Qundeberber,* Modern medications if not cured,
Digestive problems	Dehydration Warms Loose appetite	Administrating *abish* (scientific name *Trigonella foenum*), homemade or semi-processed bought from market

Source: Fieldwork, 2015

The other cultural belief associated with weaning is the onset of new pregnancy. According to the in-depth interviews held with health extension workers, neonatal mothers were encouraged to start family planning services on the sixth week after birth

to prevent the onset of new pregnancy that also extends the time of weaning. The result of the survey also supported the claims that shorter period of onset of the next pregnancy significantly affected the recommended child-feeding, and that urban mothers had a shorter period between the last birth and the next pregnancy than that of mothers in rural areas (13.3 and 16.2 months, respectively).. Furthermore, an in-depth interview with a 28-years-old mother of three children, living in Geja-Gadmaba rural *kebele,* indicated the belief that a mother should stop breastfeeding the moment she knew that she is pregnant. She noted her experience as follows:

> *I came to know that I am pregnant when the first child was only one year. As soon as I knew that I am pregnant, I told my mother about the pregnancy and she took away the child to her home to wean him. … She warned me that if I continue breastfeeding while pregnant, the breastfed child would face frequent diarrhea and the unborn will also become skinny and underweight. … On top my mother's advice, the morning sickness due to the onset of new pregnancy also made me accept her decision without reservation.*

Given the fact that breastfeeding is also a skill that needs to be learned (Rampel and Rampel, 2011), health workers usually advice mothers about techniques of breastfeeding. Yet, mothers complain the inadequacy of such advice and lack of skill and time on the part of the health workers to deal with the specific challenges that mothers want for help. This clash between myth and reality leads to both lack of confidence and the assumption of sole responsibility by the mother for the success of the breastfeeding experience. The connection between breastfeeding and motherhood explains why women often feel failure as mothers when they cannot breastfeed.

Among many of Ethiopian communities, there is a widely held perception that a big baby is a sign of health (Ali et al., 2011; Guled et al., 2016). This belief is particularly prevalent among women who are less educated, and comparatively well educated women appear to understand the sufficiency of breastfeeding and the irrelevance of breast size to the quantity and quality of breast milk. Furthermore, educated women are more confident in standing against the pressure of their friends or relatives while lack of such confidence will lead to the introduction of formula as a supplement to breast milk or a change to formula only. According to the survey, 90.2% of the interviewed mothers introduced complementary foods earlier than the recommended time. The main reasons

were the belief about insufficiency of breast milk (56.9%), mothers' sickness (20.5%), child refusing breast due to sickness (14.4%) and mothers' resuming formal work (8.2%). Yet, longer breastfeeding intervals due to mothers' working outside their home plus problems in transport services and breastfeeding facilities decreased the quantity of breast milk. This makes breastfeeding insufficiency structural than biological. Similarly, studies indicated the unintended consequence of advice by health workers and the structural nature of child feeding (Forster and McLachlan, 2010; Reppeyoung and Noonan, 2012).

The other customary belief related to child-feeding practice is the custom of "family meal." As presented in Chapter Three, 71.7% (53.2% of urban and 84% of rural) mothers were followers of Ethiopian Orthodox Christian Religion in which the majority of these sampled women consider fasting as a norm. Consequently, the symbolic nature of "family meal" made the mothers share the same food prepared during fasting seasons, bringing unintended consequence on recommended child-feeding practices. Therefore, women who are followers of Orthodox and Catholic Christian religion do not eat these animal-sourced foods due to either unavailability or because of cultural norms related to sharing food. A 28-year-old mother explained the implication of fasting for recommended child-feeding practices as follows:

> *There are several periods of fasting in a year, the longest being "fasika tsom" (the eight weeks' fasting just before Easter). During these periods of fasting, all animal source foods are avoided. In addition, eating foods is typically delayed until noon or later except for children and sick adults. Though lactating or pregnant mothers are not expected to fast, they do not prepare non-fasting foods that other family members do not share.*

According to focus group discussions, unavailability of animal-sourced foods and fear of contaminations are also determinant factors that made lactating and pregnant mothers consume the same food with the rest of fasting family members during the fasting seasons. The supply of meat during fasting seasons is limited due to the custom that slaughtering during fasting period would make the Christian butchers discriminated and lose their fasting Christian customers even during non-fasting seasons. Furthermore, the limited number of cooking utensils made mothers in fear of contamination during simultaneous preparation of fasting and non-fasting foods. This is also another dimension of poverty in limiting diversified complementary foods. Similarly, Muslims do

not eat or drink anything between sunrise and sunset during the month of Ramadan, the fasting month of Islam. According to the focus group discussants, even though both Orthodox Christian and Islam religions exempt children as well as pregnant and lactating mothers from fasting, the exempted groups do not eat the recommended foods due to the unavailability of the foods or due to the custom of "family meal."

Similar to the wider beliefs, attitude also mediates the translation of these beliefs into the implementation of recommended child-feeding practices. Attitude in this sense refers to enduring and general evaluation related to an object or a concept (Ajzen, 2002) that is influenced by personal and circumstantial factors (MacKean and Spragins, 2012; Forster and McLachlan, 2010). Following this, the researcher constructed 20 items rated in three scales to measure mothers' attitudes towards the recommendation.

Food not only provides nutrients but also defines one's identity and social relationships (Adejumobi, 2007;Beardsworth and Keil, 2002; Goody, 1982). This is also reflected in the study in which mothers generally consider food as a substance of nutritional value that is allowed or forbidden for some age groups or for some persons in specific health and cultural contexts. For example, pregnant and lactating women were advised to have additional food in some cases, but still some food items are exempted from the list to maintain the health of the mother and that of her child. Accordingly, the survey participants expressed their level of agreement to the statements forwarded. Table 4.6 and Table 4.7 present some of the motehrs' attitudes towards the recoemndations.

Table 4.6: Attitudes toward additional food for pregnant and lactating mothers

		Residence of the respondent		Total
		Urban (N, (%))	Rural (N, (%))	(N, (%))
Pregnant women should eat more foods (in quantity and variety) than non-pregnant	Agree	278 (98.6)	424 (99.7)	702 (99.3)
	Don't know	0 (0)	1 (0.3)	1(.001)
	Disagree	4 (1.4)	0 (0)	4 (.005)
Total		**282 (100)**	**425 (100)**	**707 (100)**
Lactating women should eat more foods (in quantity and variety) than non-lactating	Agree	281 (99.6)	425 (100)	706 (99.8)
	Don't know	0 (0)	0 (0)	0
	Disagree	1 (0.4)	0 (0)	1 (0.2)
Total		**282 (100)**	**425 (100)**	**707 (100)**

Source: Fieldwork, 2015

Table 4.6 indicates that almost all of the respondents agreed on the importance of additional food for pregnant and lactating women. Some of the respondents raised the scientific justification of the importance of balanced diet for healthy growth of the fetus and the healthy functioning of the mother. Nerveless, rural mothers were more likely to believe that pregnant women need additional food than urban mothers were (OR= 1.5, p< 0.05). Furthermore, when they were probed to discuss the concept of balanced diet, 27% of them mentioned the complete package of balanced diet and its sources; namely, proteins, carbohydrates, vitamins and minerals. This change went with the health extensions' intervention over the last decade (Kesetebirhan, 2013; MoFED, 2010). In terms of the actual feeding behaviors, yet, the survey showed lack of balanced diet due to different barriers. Accordingly, the majority (67%) of the respondents listed economic forces (poverty) as the major barriers to get the balanced diet while 33% of them listed unavailability in the vicinity and lack of proper plan to prepare these foods.

The researcher also asked mothers if they agreed with the statement that lactating women should eat more food (in quantity and variety) than non-lactating women should. In effect, mothers in both urban and rural contexts agreed to the statement, and 97% of the respondents stressed that the quality and quantity of breast milk was highly dependent on the quality and amount of foods they eat. Specifically, senior women advised women in neonatal period to eat hot foods such as barley porridge mashed with spicy foods and dairy products that facilitate breast milk secretion and replace the blood and energy lost during delivery.

The expression, "*Qomoon nyaatuu fi qomoon sagadu hin badu,*" literally translated as "Perish not the clan that eat and the clan that worship," indicates the customary belief food and its effect on health. The custom further signifies the need for food for neonatal mother as "*Deessuun hammi dhaqnaa qoonqoodha,*' which remarks the strong need for balanced food for the neonatal mother. The community also wishes strength for the neonatal mother as '*Siree cabsii ka'i*', literally translated as 'be strong enough to break your bed.' Consistent to this belief, the interview with health extension workers indicated that fathers strive to provide selected food items for successful breastfeeding and believe that

their children's strength depends on the quality of milk the mother could provide. Similar to the men, mothers also believed that the quality of their breast milk depends on the food they eat, which in turn is related to the availability and access to such quality foods. Similarly, the survey report indicated that 98% of the respondents believed that the quality and quantity of food mothers eat had a direct relationship with the quality and quantity of breast milk they produce. As to what quality foods were, some (35%) of them could list out combinations of foods providing carbohydrates, protein, vitamins and minerals while the rest 65% were not able to list, and for them quality food means those food items such as egg, meat and dairy products.

Table 4.7: Attitude toward recommended child feeding practices by residence category

Statements	Attitude	Residence		Total	Chi-Square Tests			
		Urban (282)	Rural (425)	(707)	χ2	LR*	DF**	Sign
Newborn children should be put to breast immediately after birth	Agree	278	350	628	44.981	57.007	1	.000
	Don't know	4	75	79				
	Disagree	0	0	0				
Feeding newborn a colostrums will protect the infant from diseases	Agree	267	216	483	150.686	176.890	2	.000
	Don't know	6	95	101				
	Disagree	9	114	123				
Pre-lacteal feeding introduces food infection	Agree	179	118	297	133.693	144.997	2	.000
	Don't know	36	233	269				
	Disagree	67	74	141				
Breast milk alone is sufficient for child in the first 6 months of the infant's age	Agree	124	18	142	175.226	184.607	2	.000
	Don't know	13	78	91				
	Disagree	145	329	474				
The frequency of breastfeeding should increase when the child is ill	Agree	97	418	515	350.659	393.663	2	.000
	Don't know	126	6	132				
	Disagree	59	1	60				

Source: Fieldwork, 2015 *LR =Likelihood Ratio ** DF= Degree of freedom

The result of the survey indicated the normative nature of breastfeeding in Ethiopian culture as almost all (98%) of the interviewed mothers initiated breastfeeding. Yet, a significant number of the respondents had unfavorable attitudes towards exclusive

breastfeeding, and only 37.6% (44% urban and 33.4% rural) agreed to the normative statement that breast milk alone is sufficient for the first six months of the infant's age. On the other hand, the unfavorable attitude towards expressed breastfeeding was the underlying factor that discouraged workers to breastfeed exclusively. A 31-year-old mother working in one of the public offices in Sebeta, for example, elaborated the idea as:

> *I was not feeling comfortable with expressed breastfeeding though I tried it for weeks. ... My mother-in-law was also rejecting the idea of expressed breastfeeding. She commented that expressed breast milk is neither customary nor safe for children for it is easily spoiled if it stays out of breast. We believe if direct breastfeeding is not possible, it is better to give formula or diluted cattle milk under strict supervision of the hygiene of the bottle-feeding.*

The unfavorable attitude towards the sufficiency of breast milk alone for the first six and expressed breastfeeding as an alternative when direct breastfeeding is not feasible that caused the mothers to introduce infant formula or cattle milk before the recommended time. This is similar in other cultures too, that influence the percentages of exclusive breastfeeding. For example, according to Daglas and Antoniou (2012), various beliefs prevailing in Pakistan and Bangladesh indicate the sensitivity of mother's milk to the powers of evil. In these countries, if a baby is sick or cries too much, doctors examine the quality of the mother's milk; that recognizes the scientific basis of "insufficient milk syndrome." One of the common reasons for mothers' reluctance to accept expressed breastfeeding was their concern for hygiene and its safety for children. While health professionals affirm that properly stored expressed breast milk is safe, still some mothers were not confident about it. A health extension worker form Geja-Gadamba, rural *kebele* expressed this as follows:

> *I neither thought nor tried expressing my breast milk, and I do not like it either. Fortunately, my office was quite near to my home and I always went home during tea break to breastfeed my child. Nevertheless, I never thought that the expressed breast milk remains safe when stored at room temperature. I feared it might have caused some sickness to my child.*

Consequently, unfavorable attitudes towards expressed breastfeeding have aggravated the effect of shorter maternal leave to introduce complementary feeding earlier than the recommended time. A mother, who was a nurse by profession, mentioned the unrealistic nature of exclusive breastfeeding for working mothers,

specifically for those who are compelled to travel longer distance to breastfeed their child in-between the working hours. According to this respondent, her knowledge on recommended child feeding was not practical due to the shorter maternal leave and her option next to breast milk was infant formula. She further explained the case as follows:

> *I usually educate others about the benefits of exclusive breastfeeding for the first six months. However, I could not practice it for myself. I could not feed the child exclusively even for three months... I started giving infant formula in the beginning of the second month so that the child adapts it.*

Some mothers also noted that expressed breastfeeding is disrespect for human being in that it involves expressing the dignified human being like cattle. As indicated in the focus group discussion and in-depth interviews with working mothers, exclusive breastfeeding for six months was nearly impossible. This was mainly because they spent prolonged periods away from their infants, and they were not comfortable with expressing breast milk. The underlying perceptions for the attitude, however, were the diverging views with regard to cultural acceptability, morality and safety of expressing breast milk. For some, expressing breast milk was inhumane, and it was reducing mother-child relationship to materialistic interaction. According to the discussants, breastfeeding was not only feeding a child with nutrients in the breast milk but also sharing love and feeling. Therefore, feeding a child with expressed breast milk using bottle or some other utensils was considered as decreasing the essence and value of mother-child relationships.

Table 4.8: Brest milk insufficiency syndrome and the age of the child

			Some mothers do not produce sufficient milk	Age of the mother (in years)
Spearman's rho	Some mothers do not produce sufficient milk	Correlation Coefficient	1.000	-.451**
		Sig. (2-tailed)	.	.000
		N	201	201
	Age of the mother (in years)	Correlation coefficient	-.451**	1.000
		Sig. (2-tailed)	.000	.
		N	201	201

**Correlation is significant at the 0.01 level (2-tailed).

Source: Fieldwork, 2015

On the other hand, the breast milk insufficiency has some scientific justification. According to the respondents, it is logical to accept the fact that the decreasing trend of

breast milk quality and the increasing energy and protein requirement of child as the child grows is in continuum. Therefore, the concept of "six month" is not absolute 180 days and this can be less or more days as child's adaptation to the complementary food takes days or months. For example, excluding the opinion of mothers whose children are greater than six months, Spearman's correlation result showed a negative relationship between "breast milk insufficiency syndrome" and the age of the mother, and there was a general claim that 'breast milk insufficiency syndrome' led to early introduction of complementary foods. As it is evident from Table 4.8, the older the mother, the higher she tends to develop confidence about the sufficiency of breastfeeding for the first six months of the infant's life. The fact that younger mothers are more likely to be influenced by the Western value, which sexualizes breasts, and to believe that breastfeeding changes the shape and size of their breasts was further augmented the correlation (Daglas and Antoniou, 2012). Furthermore, younger mothers tend to breastfeed less frequently due to the higher likelihood of breast pain that also encourages them to introduce complementary foods earlier with the pretext of insufficiency of breast milk alone for proper growth of their infants (Flower et al., 2008). Furthermore, the more the mother experiences breastfeeding, the more she develops the breastfeeding skill and the easier she believes in the benefits of exclusive breastfeeding (Andrew and Harvey, 2011). On the other hand, young mothers consider exclusive breastfeeding as a time-consuming and that restricts their economic and social needs since it confines them to home (MacKean and Spragins, 2012).

4. 3 Conclusion

The main objective of this chapter was to analyze how mothers understand and feel about the recommended child-feeding practices and how they strive to implement it. The chapter was based on the Theory of Planned Behavior that presumes the significant influence of mothers' prior knowledge and attitude on child-feeding decisions. Following this, the findings of the study draw on the premises discussed in the theoretical review of the study that agrees with Swell's (1992) suggestion of social structures. According to Swell (1992), social structure is defined as mutually sustaining cultural complexes and sets of resources that empower, constrain social action and tend to be reproduced by that action. In other words, the "good motherhood" ideology enlisted expectations that require mothers to focus entirely on childcare responsibilities. Yet, such a commitment is neither fair nor possible for mothers engaged in outdoor activities with several cultural and institutional obligations.

Mothers acquire enriched knowledge about childcare and feeding practices from generations. In Oromo society, like in other Ethiopian societies, oral tradition is the main channel of knowledge transmission from one generation to the next, and elders are the source of such knowledge and wisdom. Due to the influence of this older generation over the younger, recommended child feeding practice is adapted to the customary childcare that prevails over the recommendation when the recommendation does not agree with the advice of the senior mothers. Moreover, mothers rarely questioned the utility of the customary child-feeding practices, and its continuity to stand time dynamics and raising generations including the current mothers, explained its legitimacy. Different legendry narrations and idiomatic expressions suppress the idea of younger generations and persuade them to accept the legitimacy of these traditions. One of this idiomatic expressions implying accepting the conclusive idea of the older generation is, "*Intalli haadha miixuu gorsite*" meaning, "the daughter advised her mother how to labor," to magnify the superiority of experience and indigenous knowledge on fertility and childcare issues over the scientific teachings.

The findings indicated that mothers' misunderstandings about the meanings of recommended child-feeding practices came from the infusions of experts' explanations with the customary beliefs. Similarly, the attitude towards these recommendations remarked the importance of cultural beliefs that have made significant variations in child-feeding practices. In addition, other factors related to infrastructure and employment condition mattered. Though most mothers heard the concept of exclusive breastfeeding, significant percentage of them gave their infants one or more of liquid and semi-solid foods such as formula milk, cattle's milk, gruel or tea. The major reason for the introduction of complementary foods include employment outside of home, insufficiency of breast milk and the perception about the physical developments and gestures that the infants showed.

The source of information about recommended child-feeding practices varied between urban and rural mothers. While the majority of urban mothers received information about the basics of child-feeding practices from media and health workers, rural mothers relied on information from the health extension workers, friends and volunteer health promoters selected from the community. In cases where the respondents exhibited better knowledge about the importance and components of recommended child-feeding practices, this study found out remarkable mismatch between the knowledge and the practice due to various reasons. Furthermore, the finding revealed the pervasiveness of beliefs and cultural norms in contextualizing the recommendations by health workers. In general, mothers translated the knowledge on recommended child feeding into practice based on numerous factors. Some of these factors included the dominant childbearing ideology and their discourses about the recommendations, their ability to implement dictates of experts and their cultural and class backgrounds, their aspirations for their children, and their own experiences of being mothers. Similar studies in Ethiopia (for example Abay et al., 2013; Dessalegn and Shikur 2013; Guled et al., 2016; Kennedy et al., 2016; Netsanet et al., 2016) showed the influence of negative attitude towards recommended child-feeding practices leading to high rate of "suboptimal" feeding practices.

CHAPTER FIVE: THE "SIGNIFICANT OTHERS" IN CHILD FEEDING PRACTICES— THE CASE OF MEN AND SENIOR WOMEN

The idea of 'significant others' is derived from the theoretical orientations of symbolic interactionism, and it refers to those influential people with whom an individual interacts and who are members of a primary social group (Longres, 2000). Accordingly, significant others influence the construction of self-identity derived from perceived membership in a relevant social group (Ritzer, 2011). In this study, the phrase 'significant others" refers to intimate partners and experienced women who exert substantial influence on mothers' infant feeding choices through material and emotional support. Similarly, studies by Britton et al. (2007), Fouts and Brookshire (2009), and Rempel and Rempel (2011), underlined the cumulative effects of the different forms of support from professionals, friends and kins like fathers and grandmothers that exert powerful influences in the protection of health related behaviors. Significant others influence child-feeding practices due to the familial nature of childcare (Avery and Magnus, 2011) that intertwines motherhood with that of gender roles and the sociocultural status of adult women (M. Na et al., 2015). For example, the Ethiopian Ministry of Health (MoH, 2004:3) acknowledges the influence of significant others and the role of different actors in the practice of breastfeeding as follow:

> *Virtually, all mothers can breastfeed if they have accurate information and support from their families, their communities and the healthcare system. They should also have access to skilled practical help from, for example, trained health workers, and lay and peer counselors. The information and practical supports from these family and community members help to build mothers' confidence, improve feeding techniques and prevent or resolve breastfeeding problems.*

The above quotation introduces the official recognition of the roles of various agents and structures in supporting mothers to breastfeed successfully. Men and senior mothers are indirectly referred to in the verbatim, as they are the ones to support mothers, having better information and experience in family and community contexts. The quotation also indicates the assumption behind HEP and systems supporting mothers in providing information and practical support. The supports include prevention and remedial action to facilitate breastfeeding. In this respect, the chapter presents the

influence of significant others, specifically men and senior women. The chapter consists of three sub-sections. The first sub-section discusses the different forms of influence and the factors that determine the roles of males in recommended child-feeding practices. The second section discusses the roles of senior women as advisors and culture custodians as well as the social networks and resources supporting recommended child-feeding practices. The final section concludes the main findings presented in the chapter.

5.1 The Role of Men in Child Feeding Practices

Child-feeding practice depends on the contribution of family members (Avery and Magnus, 2011; Rempel and Rempel, 2004). Yet, studies on the roles of family members, especially males, in influencing mothers' behavior about child-feeding practices are either scanty or superficial (Slemawit et al., 2016). In addition, only few studies (for example, Neander and Engstrom, 2009; Lowenstein et al., 2013) looked into the role of fathers in child-feeding practices but on children with specific and serious health problems. The following sub-sections focus on the roles of men as the 'significant others' in Ethiopian household contexts.

5.1.1 Men's knowledge and attitude towards recommended child feeding practices

Feminist oriented researches describe the ways in which mothers experience parenting (Arendell, 2000). As the result, the hegemonic ideology of what constitutes 'good mother' and is rooted in the heart of patriarchal structures defines and confines women to their roles as mothers (M. Na et al., 2015). In tandem with this notion, the interviewed men held the view that breastfeeding is the norm. For example, a 46-year-old man from Awash Town noted the expectations and norms related to motherhood and the roles of men in the community as follows:

> *Unless there is special medical attention, every mother should breastfeed and if she is not willing to breastfeed, she should not give birth to a child. Loving a child is, first and for most, expressed through breastfeeding. … As a mother should breastfeed her child, the husband should also support both souls in providing food and sufficient care and protections as well.*

The above quotation agrees with the assumptions that underlie the biomedical recommendations yet attacked from feminist oriented studies. One of the assumptions underlying the quotation is the biological base of mother-child attachment that demands every mother to breastfeed except under special medical conditions. According to the theoretical perspectives discussed in Chapter 2, the quotation highlights the functionalist perspective that explains mothers' expectation to breastfeed as the result of mothers' biological ability to produce breast milk. Furthermore, the quotation remarks the cultural expectation of mothers to breastfeed due to its symbol of being a mother.

On the other hand, feminist-oriented studies criticized the assumptions of breastfeeding as natural and normative. According to the feminist perspective, biomedical perspective promoted breastfeeding as natural, cozy— without significant physical and economic pains on the breastfeeding women. According to these studies, functionalist oriented explanation about breastfeeding and childcare failed to understand the pain women experience during breastfeeding. Similarly, feminists criticized exclusive breastfeeding as the other domain confining women to reproductive domain since breastfeeding and related childcare limit mothers' freedom to participate in paid labor markets. Laws (2000), Lee (2007) and Rudizik (2015) further elaborate the ways in which patriarchal structure assigned childcare role to women and provisional roles to men to limit the opportunity of women in the socially and economically dynamic contemporary world.

Men's knowledge about child-feeding practices serves as an impetus for the support they provide towards their spouses (Rampel and Rampel, 2011). In effect, this study showed the inconsistency of information about the recommended child feeding. Furthermore, none of the interviewed men reported attending any educational sessions conducted by health workers on the issue. Rather, media and friends were the most cited sources of information on the issue. Following this, the interviewed men had no specific details about the components and benefits as well as the adverse effects of poor child-feeding practices. A 43-year old man from Sebeta Town, who works as public servant and had experience of raising two children in the last 10 years of his marriage, explained the

source of information about the benefits of exclusive breastfeeding. His wife is also a public servant, and she is aware of the recommended child-feeding practices. He presented the sources of information and his opinion about child feeding as follows:

> *I watched TV shows that taught about the benefits of exclusive breastfeeding and the problems with mixed feeding for the infants who are less than six months of age. I also browsed internet on the issue. Nevertheless, it seems difficult to operate strictly within the frameworks of the barriers such as working condition and widespread avoidance of feeding children with expressed breast milk.*

As the informant has noted, media promotions have positive roles in engaging men in feeding practices. Similarly, an interview with a program manager of Alive and Thrive- Ethiopia showed the significance of radio and television promotions specific to Ethiopian languages and cultures in mounting fathers' engagement in recommended child-feeding practices. According to the informant, the media promotions that employed agrarian analogies have enhanced farmers' knowledge and their roles in diversified complementary feeding. In these spots, fathers were urging their wives to save animal source foods and prepare enriched complementary foods for their younger children. For example, an in-depth interview held with a 38-year-old man in Awash rural *kebele* suggested the relevance of radio promotion in engaging men in recommended child-feeding practices as follows:

> *I heard a drama-like promotion from Ethiopian Radio in which the father uses an analogy of feeding oxen to feeding children with diverse foodstuffs so that the children will be stronger and healthier. … I have also heard a farmer teaching the significance of balanced food comparing with the benefit of rotating crops for the fertility of soil as well as growth and productivity of the crops…. The radio message broadcasting men should minimize extravagant consumption such as drinking alcohol and invest on their child food instead has also impressed me.*

According to the above quotation, media are the major source of information for males on recommended child-feeding practices. On the other hand, men focus group discussants considered health education by health extension workers on recommended child-feeding practices as relevant only for mothers. Rather, the discussants enlightened their better attachment to agricultural extension workers. This suggests the gender-specific division of labor considering men as resource providers while the women assume the childcare responsibilities. Sharing this perspective, a 39year-old informant from

Awash Ballo rural *kebele* explained the gender aspect of advice from health extension workers as follows:

> *My major role in the household is to produce foods and inputs for the mother so that she feeds the child and the whole family. …Usually, I give the mother money so that she buys whatever food she thinks is useful for the growth of the child… I know health extension workers communicate with her and she tells me many new ideas about how to feed children. … Except few encounters on kebele meetings, I did not hear much about child-feeding recommendations from health extension workers.*

Due to such self-discrimination of men from dialogues on the recommended child-feeding practices, men lacked information about the time of initiation as well as the frequency of breastfeeding. In addition, there are wider misconceptions about exclusive breastfeeding. In view of this, an interview with health extension worker revealed the common dilemma about the efficacy of recommended child feeding in the community she was working. Similarly, the men stressed the influence of financial poverty on mothers' ability to produce quality and quantity breast milk. According to a 36-year-old father from Korke rural *kebele,* lactating mothers need additional food to produce sufficient quantity of foods that otherwise necessitate early introduction of complementary food. He further noted the effect of breastfeeding on lactating mothers in food insecure households as follows:

> *Some women do not have enough breast milk due to lack of balanced food. In most cases, they eat almost the same type of food available at home. That is why at times you find breastfeeding mothers losing weight and the baby losing weight too. Lack of food reduces the quality and quantity of breast milk, which also reduces children's immunity against diseases.*

The above verbatim indicates lack of knowledge on the adequacy of exclusive breastfeeding. Similar to the misconception common among the mothers, as discussed in Chapter 4, the interviewed men in both urban and rural contexts equated the quality of breast milk with the quantity and quality of food mothers feed themselves. They particularly mentioned that some women did not produce enough milk, or nutritionally adequate milk, because they did not consume enough food themselves. They also noted that without good diet, the breastfeeding mother's health would suffer.

Overall, the information men acquired from media and friends about recommended child feeding appears insufficient and shallow. When the findings in this

subsection were compared to similar issues somewhere else, men sought information less from qualified health workers (Datta et al., 2012), and mothers were misled by the silence of partners, which could come from the limited knowledge about recommended child-feeding practices (Stettler el al., 2011).

5.1.2 Men's support in recommended child feeding practices

Changes in broader social and economic spheres such as women's involvement in the job market have liberalized the dominant mother-centered childcare roles. The change also encouraged men's involvement in childcare and other domestic activities (Sullivan et al., 2006). As the result, paid mid-servants and daycare facilities are sharing some of the childcare responsibilities previously assumed by mothers while the changes also increased men's involvement in the childcare activities (Na, 2015). Similar to these claims, one of the interviewed men, age 39 and living in Korke *kebele*, narrated changes in the fathering role compared to his previous experience, and explained his perception as follows:

> *In former days, like when we were children, childcare is mainly the responsibility of mothers and elder daughters, and neighbors may look after your child when you go to market or somewhere else. … Fathers were required only to supply the household with resources such as food and money. ... They spend most of their time working on fields and only come home at night, and may play with children if children did not sleep, just to make the mothers free to prepare meals for the family members. …Now, things have changed; each household has a difficulty of getting someone who looks after his child when mothers could not able to do for different reason. That is why the support from fathers has become crucial to raise a child.*

In general, gender dimensions of being "breadwinner" and provider determined the roles of men in child-feeding practices. In the context of collective culture (Aubel, 2012), men had a general view that childcare practices were the responsibility of parents and the community members. In that way, even if there was no detailed information about what each parent was to provide, the nature of childcare and feeding practices were generally the role of parents. In view of this, a 51-years-old grandfather, who raised five children in the extended family, suggested that Oromo culture obliges men to secure their children's wellbeing. In the interview, the informant also indicated the existence of

authority of elders to secure child wellbeing through better feeding and healthcare endeavors. In view of this, Thuita et al. (2015) explain the preference of men to involve in breastfeeding as a function of cultural norm that assigns the major responsibility of childcare to mothers and the supplementing practices to men and female relatives. In other instances, men's role in child-feeding practices was indirect— men influence decision of mothers through allocating resources required for optimal child-feeding practices.

Studies indicate the positive roles of men's practical and emotional supports in breastfeeding initiation and duration. Meedya et al (2010), for example, underline the positive correlations between mother's attitude about breastfeeding and her partner's support and encouragement. Such supports were the results of intimate relationships that require the commitments of the individuals (Selamawit, 2016).

Various factors motivated men to engage in child-feeding responsibilities. According to the FGDs conducted with men, men greatly consider themselves accountable for providing food for their families to ensure that their children are growing well. This matches with the findings by Rampel and Rampel (2011) that showed the immense delight from child feeding in parenting. In addition, aspiring to see their children get better future motivated the men to care about child feeding early from the onset of their wives' pregnancy. According to in-depth interviews with men, overwhelmed by seeing fatter and stronger child, men usually encourage mothers to take nutritious foods so that they produce quality breast milk. The men also want to introduce complementary foods when they feel that breast milk is inadequate.

The summary of the FGDs with men also explained that the primary role of men in child feeding included supporting, encouraging and valuing breastfeeding as well as sharing household works so that mothers will have ample time to concentrate on child-feeding. Based on similar a discussion on the role of men in child feeding, Selamawit et al (2016) developed a model illustrating the extent of fathers' involvement in child-feeding practice. According to the model, there are three categories of fathers with regard to their engagement in child-feeding practices— the traditional, fathers in transition, and modern

fathers. Similarly, most of the issues raised in the FGDs with men from rural areas overlapped with the category of traditional fathers who were not involved directly in childcare activities. Since the majority of Ethiopian men considered child-feeding practices as the domain of mothers, they considered any involvement in childcare as 'helping mothers'. In line with this idea, a 39-year-old male informant from Sebeta Town explained his practical and emotional support for his wife during pregnancy as follows:

> *The pregnancy messed up all her behaviors and she lost appetite as a result. To encourage her to have at least some food so that she and the fetus become healthy, I used to buy varieties of food and fruits. ... Eventually, she developed anemia since she was not eating enough.*

On the other hand, men's engagement beyond provisional role in child-feeding practices increased as the age of the child increased, specifically in complementary feeding activities. According to an in-depth interview with a 38-years-old father living in Tafki Town, he was engaged in cooking food and preparing the older child for the nursery school while the mother care for the youngest child. He further noted lack of experience as the major impending factor for fathers to focus on children of youngest age. He further narrated that:

> *It is not comfortable for men to carry infants of few months since they are too small to hold. Sometimes, novice mothers also found difficult to hold the infants of few weeks age, especially to bath, massage, and change clothes. … I think a man can feed a child who is one or more years old than he does for infants of few months.*

Men also mentioned the effect of working condition on their level of engagement in child feeding practices. This is availability of mothers at home for longer time compared to men that facilitated women's better understanding of the need and behavior of children. Conversely, men are less available at home due to their engagement in "out-of-home" responsibilities that decreased their involvement in childcare activities. Similarly, the chi-square test applied to investigate the association between gender roles and the working condition of women showed mothers' largest share of domestic activity and men's increasing domestic share in urban contexts (*see* Table 5.1).

Table 5.1: Child Feeding and related roles of household members

		Residence		Total (N=707)	Statistical test		
		Urban (N=282)	Rural (N=425)		χ^2	Df	Sig
Does cook food	Mother	207	422	629	115.883	1	.000
	Female children/other house hold members	75	3	78			
Does fetch water	Mother	206	183	389	82.450	2	.000
	Father	11	2	13			
	Female children/other house hold members	65	240	305			
Mainly wash clothes	Mother	204	96	300	190.836	2	.000
	Father	11	4	15			
	Female children/other house hold members	67	325	392			
Mainly responsible for child feeding	Mother	241	425		65.595	1	.000
	Female children/other house hold members	41	0				
Usually buy food items	Mother	267	353	620	21.218	1	.000
	Female children/other house hold members	15	72	87			

Source: Survey, 2015

As presented in the table above (Table 5.1), mothers and female children were responsible for the majority of household and childcare activities and men were involved in some of the activities like fetching water and washing clothes. Though fetching water is a significant burden for rural mothers as they have to walk longer distances by carrying water themselves or using pack animals, fetching water in urban context involves an ideal responsibility that does not take such longer time and distance as rural men do. Further investigation indicates that urban males are more likely to share the childcare responsibilities (OR= 1.305, P= 0.01). For example, the result of the survey indicated that the average hours that a father was separated from the home in a day was higher (N= 67=, mean= 10, SD= 1.5 hour) than the average hours mothers were separated from their child due to employment (N=67, mean=7.26 hours, SD=1.82 hours). This decreases men's probability to understand the cues and specific behaviors infants' seek during feeding. Similarly, an in-depth interview with a-39-year old father living in Korke rural *kebele*

considered his livelihood as a factor inhibiting the support he could have provided in child-feeding responsibilities. He further explained this as follows:

> *I spend most of my time on the field and could not engage myself in household activities as the result. However, whenever I am available at home, I help my wife caring for the child so that she prepares food for the child and for the rest of the family as well. … I think she is better in understanding the feeling of the infant and avails what she thinks is important for she spends longer time with the child.*

Comparatively, self-employed men are better in arranging flexible work schedules to support mothers in child-feeding practices than formally employed and casual workers. The illustrations extracted from an interview held with a 39-year-old father living in Sebeta Town explained how working condition affects fathers' support as follows:

> *I work in Addis Ababa in one of the private firms. Since there is high traffic congestion on the way to office, I have to take taxi as early as 6:00 a.m. so that I have to be on duty at 8:00 a.m. As I return from the office after 5:30 p.m., I face the same transportation problem, and I reach home sometimes at 7:30 p.m., if I am lucky to get taxi immediately. When I arrive at home, my wife accomplishes all the home chores, and I am just there for sleep. … That makes the whole day hectic and there is no time to support her even if I am willing. The only chance I have to support her on my full potential is on weekends, if there is no competing social obligation that makes me out of home.*

The above quote indicates the effects of limited infrastructure and transport services on child-feeding practices. In the popular expectation that men should provide the household with the finance and materials needed to sustain the family, mothers do not blame the men for their inability to involve in childcare practices. Furthermore, men balance the barriers such as those mentioned in the above quotation with mothers' domestic responsibilities though employed mothers also face the same urban problems in addition to the domestic responsibilities.

The roles of men in child feeding, however, change based on the household composition and mothers' health status. While the number of children under five years justifies additional burden to prepare food and provide holistic care for the dependents, the number of adult and passionate household members, including men, showed increase in the probability of mothers to give better attention to child-feeding and caring roles. Men also reported a reasonable difference in the role men play in childcare practices in

different circumstances. A public servant, a 38-yearsold man, who was a father of two and living in Tafki, noted that the responsibility of fathers in childcare and feeding increases when special attention of men is imperatively needed:

> *Under normal condition, my wife prepares food and keeps the hygiene of the children. However, when she is not able to work due to sickness, I take an annual leave and stay with the child and the mother for care, including preparing food, bathing the child and cleaning the house. … I also take her to the clinic and ensure that she the treatment when she is unable to go to the clinic on her own due to the illness. I also do the same when the child is sick and the mother could not take the child to health facility.*

On the other hand, because of increasing mothers' involvement in employment out of home, men in urban areas reported sharing household activities such as washing clothes, bathing and cooking foods (Aubel, 2004; Cassidy, 2015; Pelto and Klemesu, 2011). The availability of easy-to-prepare food items and machines for cooking and laundry services encouraged men's involvements in these domestic chores. One of the interviewed men, age-39 and living in Sebeta Town, narrated his experience as follows:

> *Currently, it is easy to prepare foods for the family while the mother concentrates on preparing the food for the child. Since some of the food items are semi-prepared and can be picked from supermarkets, for example foods such as pasta, macaroni, rice and 'mitin shiro' (semi processed beans and spices), it is quite possible to support the mother in preparing dishes and relieving her from some domestic burdens.*

Men also delivered informational support due to their better access to wider networks and resources providing information on child-feeding practices. The following is a quote by a father of three children, age 38, and working as a civil servant in Sebeta Town, that noted the role fathers play in sharing relevant information on child-feeding practices to their partners:

> *We discuss on issues that we feel important for the health of our child, for example, about the steps mothers have to follow during breastfeeding and appropriate position during breastfeeding. I also told her the appropriate combination of balanced food that is appropriate to the child's age.*

In short, men play differing roles in different contexts. For example, breadwinning may be of paramount importance in some families while others value direct care and emotional support. Since fathers spend much less time with their children than do mothers, many fathers assume essentially no responsibility for the child-feeding (Selamwit, 2016). Yet, in families with employed mothers, men's engagement and

accessibility for child feeding is higher than in families with unemployed mothers. Even when both mothers and fathers are employed, many fathers assume little responsibility for childcare.

Men affect child-feeding practices indirectly through their effects on other people and social circumstances. For example, economic support of the family constitutes an indirect but important way in which men contribute to the feeding and health of their children. A second important indirect source of influence stems from the men's role as a source of emotional and instrumental support to mothers who involve in the direct care of children. Men can also affect the quality of family interaction by involving in childcare related housework that eases the mothers' workloads.

Economic conditions forced parents to find for employment, and women continue to emphasize the need for fathers to be family breadwinners. Institutional practices also affect paternal involvement. Thus, while the pressures of work have a significant effect on parental involvement, the effects are somewhat different for men and women. Yet, paternity leave is the most frequently discussed means of enhancing paternal involvement in child-feeding practices. Like the workplace, institutions such as childcare centers have made little effort to engage men in child-feeding practices.

5.2 The role of senior women in recommended child feeding practices

The universalistic family orientations in non-Western cultures value the wisdom and experiences of senior women[22] in fertility and childcare. Furthermore, senior women communicate these values to younger mothers through different socialization processes and social networks (Aubel, 2012; Aubel and Rychtarik, 2015). Accordingly, although the biological mother played a central role of adequately feeding her child, elderly women, especially maternal and paternal grandmothers, are more or less intimately involved in monitoring the well-being of the child in African traditions (Maposa and Rusinga, 2012). Yet, partner's relationship with mothers and senior women remains important in

[22] Senior women, in this sense, include grandmothers and women who used to assist younger mothers as traditional birth attendants.

realizing the advice and supervision of senior mothers over fertility and childcare issues (Aubel, 2004; Letourneau et al., 2004).

Before discussing the details about the role of senior women in child-feeding practices, it is beneficial to look at the extensive interview on the role of senior mothers on recommended child-feeding practices. The case respondent is living in one of the rural *kebeles* around Melka Awash Town, about 15 kilometers to southeast from Sebeta Town. She was about 60 years old. In the compound she was living, there were three homesteads in a row. Her house was the middle, the others being those of her sons. She was living with her youngest son, who was married to a woman from Akaki *woreda*, a neighboring *woreda* to the east and at about an average of two hours walking distance. In the compound, there were cattle, sheep and goats in a separate house, and chickens were moving here and there. The main stay of the households was agriculture and two of the youngest sons divided her previous farmland for themselves. Currently, she was living with the supports from her sons and daughters, and her youngest son was acting as the head of the household. The following is her account on the roles she was playing as a grandmother with regard to childcare and related practices:

> *Life itself is a school; it teaches you a lot, and you experience good and bad. Therefore, we teach our grandchildren what life has taught us, we passed through happiness and unforgettable sorrows, death and life, and our forefathers and mothers have thought us what life had taught them, and we are living with their wisdom and blessing. For this purpose, we pray to our Waaqa (God) so that He gives long life for our sons and daughters so that they experience the same wisdom that they will pass to the future generation. ... Until they give birth to one or more children, the young mothers hardly know about pregnancy and raising children. There are foods that a pregnant mother should take or avoid. … It is forbidden to eat egg and the meat of goat and chicken. In addition to these foods, the mother should also avoid foods that make the fetus bigger. It is advised that the mother have to eat dairy products, gruel and porridge that enable her to get sufficient strength to manage the laborious childcare and family management issues. She will also have quantity and quality breast milk. Meat of young sheep is also good for her strength, and the child will benefit from whatever the mother eats. … The mother should eat now and then, and husbands should strive to provide their wives with these foods, especially during the first two months. Mothers should also strive to take these foods, for if she failed to eat the foods during these two months, she would be weak and threatened by diseases that last for her lifetime. ....*

As the above case respondent mentioned, elders ensure the cohesion and survival of families and communities in the Oromo culture. The community generally views the elders as resources who play crucial roles in socializing younger generations, passing on indigenous knowledge and ensuring the stability and survival of their societies. They also serve as models, advisors and supervisors of younger generations. Furthermore, the case explained the influence of living arrangements in diffusing the responsibilities of childcare and feeding practices among different kin groups, for example, the mother or the mother-in-law of the new mother, and those changes over time. Gibson and Mace (2005) also reported the functional roles of grandmothers' support in Ethiopia. According to the study, such involvement of grandmother's childcare practices is part of the selective adaptation of older generations in human evolution that engages the elders in reproductive processes when they cannot bear child themselves. Aubel (2012) reported similar finding accentuating the influence of grandmothers on mothers' decisions on child and reproductive health issues.

In tandem with the findings of Gibson and Mace (2005) in the Ethiopian context, the case respondent listed ranges of activities that grandmothers had supported the new mothers, which also depended on the experience of the mother and the age of the child. Following this, in addition to child-feeding, maternal grandmothers concentrated on instructing as well as supervising the basic skills and procedures a new mother has to follow in childcare activities. While grandmothers perform these activities during the seclusion period of mothers, they also execute other household activities such as collecting firewood and water. In an in-depth interview with a senior mother, the informant noted that when a mother gives birth at her own home, other senior women perform the early care and advisory practices during the seclusion period. Nonetheless, the maternal grandmother invites the new mother to her home after few weeks for further care and support activities.

The above case represents the dominant culture of the Oromo that frames social relationship based on gender and age hierarchy. For example, the renowned Gada

system[23] defines members' status based on age that expresses the holistic spheres of Oromo society. Similarly, the Oromo society assigns authority to women through *Siinqee*[24]— *that* gives an authority for older women over the younger mothers (Kuwe, 1997).The *siinqee* also gives senior women the responsibility and authority to oversee the observance of cultural norms in maternal and child health issues. According to an in-depth interview with a 57-year-old senior man who was also a community leader from Geja- Gadamba, *siinqee* is structurally compatible with the age-based Gada system with multifaceted philosophy that safeguards not only the right and privileges of women, but also the well-being of the family as a whole. He further explained the cultural orientation of age grading and *siinqee* institution for childcare practices and its current dynamism as follows:

> *The "Siinqee" gives older women the hierarchy of authority and the younger should respect the older. The older women have to respect the younger and there are patterns of behaviors expected from both senior and younger mothers. Since the community takes care of the child, children are obliged to follow the directions given by the older members of the community. …. This relationship, nevertheless, is becoming weak due to diversity and modernity decreasing reliance of the younger generation on indigenous traditions.*

As the above quotation points out, the *Siinqee* institution creates the relationships through the lineage influencing family relationships and dynamics. Similarly, the case study, the in-depth interview and the focus group participants elaborated the communal responsibility of parenting and the legitimate power of the senior women over the

[23] **Gada system** is an indigenous governance system of Oromo that guides the life course of individuals and regulates political, economic and religious activities of the members. It also serves as a mechanism of socialization, education, religious expression, peace maintenance and social cohesion and promotes the principles of equity and freedom. It incorporates pivotal Oromo institutions such as **Moggaasaa** (naturalization), **gudifachaa** (adoption), **araara** (conflict resolution), **gumaa** (reparation), **rakkoo** (marriage law), **Waaqeffannaa** (Oromo religion) and **Siinqee** (institution to safeguard women's right). It is registered by UNESCO as an intangible cultural heritage of the Oromo society in September 2016 (https://ich.unesco.org/en/RL/gada-system-an-indigenous-democratic-socio-political-system-of-the-oromo-01164, visited on 21 May 2017).

[24] **Siinqee** is an institution that safeguards women's right and as the result, serve as symbol of Oromo women that enable them exercise their political power and align altogether for their common interest. According to Kuwe (1997), *siinqee* serve as a balancing system for Gada system that excludes women and Siinqee excludes men from their system. As the rite of passage, therefore, an Oromo woman is awarded. *Siinqee (a culturally authoritative stick)* by her mother on the day of her marriage during blessing that symbolizes the tie between the older and younger mothers, and it is a symbol of honor in the society. …*Ulumaa* is a cultural seclusion period for a neonatal women and she holds *Siinqee* whenever she is out of home with the belief that the blessing in the S*iinqee* protects the secluded mother form the evil spirits.

younger especially through the *Atete* institution. Considering the same idea, a 57-year-old senior woman from Geja-Gadamba extensively discussed the cultural significance of *Atete* in Oromo cultural institution as follows:

> *'Atete' is an Oromo institution that involves thanks giving and fertility aspects of the Oromo women. … It has cultural and ritual grounds through which the senior women pray for fertility and the elder women bless women in the childbearing to have children. ... These ceremonies are believed to protect the mother and the child from evil spirits.*

The above quotation vividly indicates that the institution of *Atete* is rooted in the belief that God takes part in the creation of the baby. This belief raises the act of procreation above the level of the profane and gives to it sacramental significance. Furthermore, the rituals are rooted in the belief that some physical and mystical dangers surround newly born babies. Such rituals are also common in other sub-African countries, for example, Shone of Zimbabwe (Maposa and Rusinga, 2011). According to the ethnographic study by Maposa and Rusinga (2011), "The feeding of a baby is strictly monitored not so much to prevent the passing of bacteria to the baby through contaminated food but also to avoid bewitching" (p.206).

In terms of the receptivity of mothers, focus group discussion participants agreed that mothers receive information on child-feeding practices both from health workers and from senior mothers. Nevertheless, the ideas from senior women were more persuasive than the ideas from younger friends and health workers because of the confidence the mothers had acquired from experienced community members. According to one of the interviewed health extension workers working in Awash *kebele*, mothers were receptive of the idea by grandmothers than the recommendation by health workers. She explained the idea further as follows:

> *The younger mothers attend health educations and community conversations about child health in general and about recommended child feeding practices altogether with experienced women. On the surface, they seem receptive of the idea we recommend. Once they are back to home, however, senior women influence them more.*

Nevertheless, some senior women doubt the relevance of the recommended child-feeding practices, particularly about the danger of pre-lacteal feeding and the importance of exclusive breastfeeding. For example, a 61-year-old senior woman who also raised four

grandchildren and was living in Awash rural *kebele* expressed her vigilance about the experience she had acquired against the recommended child-feeding practices as follows:

> *Infants may need some time to be mature enough to eat foods like meat, that has to be given when the infant is two years or older. Yet, some drinks or foods are better given earlier than the time health extension workers are teaching us. These foods are not as bad as the teachings by health extension workers. There was no problem when we gave our children water and milk when the infant is a month old. Giving butter and "sunqoo" (abish)" was also a custom and caused no hurt so far. … The teaching is simply a fear developed from lack of experience.*

Though there are criticisms towards contemporary child-feeding recommendations like the case presented above, the precarious nature of neonatal period made the support by senior women substantial for the psychological and physical wellbeing of the mother and her offspring. According to an in-depth interview with a 27-years-old mother, who gave birth for the first time and was living in rural Gadamba *kebele*, the support of senior women was highly important in the early weeks of the neonatal period, especially for the novice mothers. According to the informant, mothers with child rearing experience manage the care during the neo-natal period while mothers with no experience highly depend on senior mothers. In rural settings where the mother lives within the extended family, grandmothers take the leading responsibility to advice and support these mothers. The informant also noted the support from grandmothers as follows:

> *It would not be possible for the novice mother to provide proper care for her infant without support from someone with better knowledge and experience. My mother, for example, was a source of information on changes that occurred on my health during the pregnancy, and she was the first mentor during delivery. She used to bath and massage the infant in the early weeks of the infant's age until I acquire basic skills about it.*

In urban settings where grandmothers are not within the reach of mothers, other senior mothers in the existing social network take similar authorities and responsibilities. On the other hand, some respondents expressed that reliance on senior women in childcare and feeding practices was due to the fear of a risk that would be assumed by younger mothers. A key informant from Tafki Town, who was also a trained nurse working as health extension worker, noted that the support from senior mothers is necessarily to avoid the risk associated with lack of experience. She further elaborated the

reasons why young mothers relied on the advice and supervision of senior women even when the advice was conflicting with what health workers recommended:

> *Infants are so sensitive that little mistakes may result in lasting problems. Therefore, experienced women, usually the grandmothers, take the responsibility of directing the inexperienced mothers. In addition, younger mothers are expected to respect and learn from the senior women by observing them and through the advice senior women provide.*

According to the in-depth interview and the focus group discussions with senior women, infants need close supervision in the first four weeks. Consequently, senior women are responsible to advise and support the neonatal mothers during this period. The protection is through confining the neonatal mothers that creates better opportunity for the senior women to inculcate the cultural values in the daily routines of the new mothers. Yet, the influence decreases in subsequent pregnancies since the mothers get experiences from previous partum periods. According to the in-depth interview with a 47-year-old senior woman from rural *kebele* surrounding Tafki, senior mothers involve in spiritual practices that serve as a rite of passage for neonatal period that also ensure the wellbeing of the mother and that of the infant. The following is part of the explanation given by the informant:

> *It is a custom that neonatal mothers are secluded at home at least for six weeks to prevent them from the "dhayicha" (cold air causing illness). If she tries to go out of home here and there before these days, she may acquire lasting illness. As a result, she has to stay at home until her body becomes strong and until she is capable of resisting the diseases. … For the infant too, it is better if the mother stays at home until the infant is taken to 'hammachiisaa[25]'. ... New mothers attract special attention from senior mothers, as they do not know how to care the newborn, and that may result in health complications.*

Taking care of the infants and the mother in neonatal period was also a crucial support by grandmothers. Especially in case where the facilities are far and alternative transport system are not readily available, grandmothers carry the infants and encourage the mothers to take up modern medications. A 53-year-old grandmother from Geja-Gadmaba rural *kebele* explained the issue further as follows:

[25] ***Hammachissaa*** is an indigenous and customary practice similar to Christian's baptism. In the ***hammachiisaa*** ceremony, the baby is taken to a person who is possessed by the spirit of ***ayyana*** **(**Oromo equivalent for divine sprit). In the ceremony, a person hugs the baby and gives the baby a proper name signifying the concern and major issues related to the time when the baby is born. Until the baby is taken to ***hammaciisaa,*** the mother is not allowed to shake the hands with or greet people because of the belief that the baby might die, became disable or face problems as the consequence of the mothers' act. It also implies the belief that the children are holy (Nardos and Morrow, 2015).

During the first months after delivery, when mothers are not able to carry the infants, we help them in taking the infants to health facilities. Sometimes, the mother may also get sick and in this case, too, if the child cannot leave behind when the mother goes to clinic, we accompany the mothers, carrying the infants along with them.

Senior women have also listed the practical support they provide for neonatal mothers. According to the in-depth interview with the senior mothers and the health extension workers, senior women spend hours in fetching water from distant areas and taking grains to grinding mills as well. As it was the case for males, senior women also provide intensified cares when a child is ill. According to the in-depth interviews with mothers, senior women diagnose and provide homecare when infants fall sick. Yet, they refer the infants to traditional healers or modern healthcare institutions for further medication. For example, a 35-year-old mother, who had three children and was living in Korke rural *kebele,* explained the role of her mother when the infant falls sick as follows:

The common symptoms for the sickness of the child include fever, refusing to be breastfed or continual cry. I call my mother when I notice these symptoms and if she thinks it is common cold, she mixes some herbs with tea, lemon and "tenadam". If the infant is not getting better, we take the infant to individuals who are better in such treatment. If that also does not make the child better, we take her/him to the nearest health post or health center.

Mothers receive different types of supports directly or indirectly from their social networks and community organizations. The mothers use social networks that arrange mutual aid and help young mothers to acquire skills about culturally appropriate childcare practices. As discussed in Chapter 4, the common community organizations connecting mothers of different age groups include *iqqub, iddir* and health development army. In the last case, health extension workers select model households from the members of the health development army based on common criteria they have set. In the process, these model women encourage the novice mothers to adopt the child feeding recommendations that they have been practicing. In urban contexts where grandmothers could not reach for young mothers, senior mothers in the neighborhood assume the legitimate authority to advise young mothers on maternal and child issues. The importance of such support was quite credible for mothers who bear children in their early ages. According to an interview with a health extension worker who was working

in Tafki rural *kebele*, young mothers are in crucial need of support from senior women, which also legitimizes the authority of the latter on pregnancy and childcare issues. The following is the account from the interview with the health extension worker:

> *Mothers who bear children for the first time are highly dependent on older mothers for practical and emotional support in childcare. As these mothers acquire knowledge and skill through experiences, the influence of elder mothers becomes minimal, and the mothers themselves start to supervise other younger mothers.*

Studies in developing countries (for example Aubel (2012), Mutuli et al. (2016)) also arrived at similar a conclusion that young mothers were reluctant to accept advice from other groups, including men and health professionals, if they find that the message is contrary to the pieces of advice from the senior women. Similarly, Matinga (2002) and Maposa & Rusinga (2012) found out that grandmothers in African were considered wise and experienced, and therefore, were given the title of "guardians of the tradition." This brings cultural legitimacy for senior women in their exercising authority over the younger mothers. Nevertheless, senior women also act as change agents. For example, a grandmother from Bonde rural *kebele* expressed her usual assistance for her daughter –in-law as follows:

> *In the past, when women delivered babies at home, there were many problems such as difficulty to stop bleeding and delay of 'oofkaltii' (placenta). Now, we are accepting the new way of dealing with delivery since health extension workers have trained us to refer the pregnant mothers to health institutions in demand for pregnancy check-ups and delivery. ... I am doing the same for my daughter-in-law who is living with me.*

Overall, mothers consider the knowledge from senior mothers as viable and practical for the wellbeing of their children and families. On the other hand, the inconsistent messages by health workers on recommended child-feeding practices decreased mothers' confidence on biomedical health information and amplified the community's trust on senior mothers.

5.3 Conclusion

Based on the social-ecological framework discussed in the preceding chapters, child feeding practice is a sociocultural endeavor determined by supports from families, friends and neighbors who are known as "significant others," and primarily influence mothers through offering advice, providing resources and sharing domestic activities. Accordingly, the collective cultural orientations of the non-Western societies have contributed clear role differentiations based on gender and age, that also developed mutual interdependence between mothers and other family members through developing sets of beliefs, attitudes and expectations. Therefore, this study boldly suggests the importance of family support in sustaining 'proper' child-feeding practices, and the positive roles of men, senior women, and health professionals to reassure the practice of child-feeding recommendations.

In tandem with studies in some developing countries (Andrew and Harvey, 2011; Datta et al., 2012; Rempel and Rempel, 2011), this study analyzed men's general knowledge about the nutritional, emotional, social as well as economic benefits of breastfeeding for the child, the mother and the family in general. According to this study, men believed that breastfeeding is a norm and superior to formula milk. Furthermore, men have no or little information about the meaning and benefits of exclusive breastfeeding and ways to foster complementary feeding practices. Similarly, they were more likely to encourage early introduction of complementary food with the intention of having a healthy, smart and strong child.

Furthermore, men influenced child-feeding practices through different dimensions, most importantly as managers of household resources and decision makers on family health issues. Furthermore, in urban contexts and few cases in rural households, men supported mothers in sharing housework burdens such as fetching water, chopping firewood, bathing children as well as cooking foods. In line with this, there was a relative variation among men in their knowledge and support for recommended child-feeding practices based on their socio-economic condition such as age, educational status, living area, access to media and their livelihood condition.

Accordingly, the younger, the educated and males in urban areas tended more to accept the recommended child-feeding practices. Moreover, employment conditions, marital stability, family size and compositions, and the dominance of nuclear family structure in urban area increased men's involvement in recommended child-feeding practices. It was likely that men in a stable relationship feel safer and more at ease with the changes that occur in a couple's life after the birth of a child and are receptive of child-feeding recommendations.

Nevertheless, in extended family system where grandparents directly influenced mothers' child-feeding decisions, men involve in child-feeding mainly playing provisional roles. Yet, their actual care increases where there are multiple younger children, and when mothers could not provide sufficient care. Mothers' expectation toward men's support also influences the involvements of men in child-feeding decisions. Owing to the patriarchal gender relationship in Ethiopian contexts, most of the mothers did not consider that men are capable of providing practical child-feeding support other than providing resources for the households.

Senior mothers also assumed multiple roles regarding resource management, supervision and advising younger mothers. They hold a powerful position within the extended family systems due to their experience and status in the culture. Their wisdom is accepted and respected to secure the health and nutrition of mothers and children in the community. At aggregate level, senior women maintain the identity of the family through socialization process and provide a buffer that stands between the present and the next generations. They also provide an anchor of stability and an expression of family continuity for those mothers who have given birth for the first time. Senior women also play important roles in building connections between the past, the present and the future and in shaping family identity and history. Studies in other African societies also identified senior mothers as the primary source of information regarding nutrition and pregnancy through family or social network systems (Aubel 2011; Fouts et al., 2012; Palmquist, 2015).

At critical times like pregnancy and childbirth, senior mothers also play an authoritative role and greatly influence women's practices supported by both cultural and religious values. In the custom of seclusion acting as traditional maternity leave, women stay with their mothers and remain at home for extended time after birth, receiving advice and care from the latter. Similarly, senior women promote family cohesion and transmit knowledge and wisdom about child-feeding practices over generations. For example, in Oromo culture, women's position in the wider sociocultural arena was institutionalized through "*Atete*" and "*Siinqee*" traditions that attached motherhood to the cultural and spiritual roles. Accordingly, decisions regarding the health and wellbeing of children were the efforts of parents and extended family members that also involved elderly women in urban neighborhoods.

Moreover, senior women have won the confidence among the young mothers on feeding and decision making related to sick children. Accordingly, mothers selectively assimilated the recommendations of biomedical experts with the customs they adopted from the preceding generation. This goes with the pragmatic philosophy that evaluates the usability of facts and realities to their context than universal and abstract knowledge "out there." Taking parenting as the process and outcome of socialization, "significant others" served as reference groups of negotiation between culturally acceptable practices and "new' biomedical child-feeding recommendations. Similarly, Gibson and Mace (2005) emphasize the significant role of senior women for successful assimilation of the recommended child-feeding practices with their experience. In tandem with this study, Gibson and Mace (2005) suggest the active role of grandmothers in adopting recommended child-feeding practices within the bounds of their experience and socialization. Furthermore, the study indicated the significance of shared decision during childhood illness and delivery complications that boomed the dedications of senior women in identifying the causes and referring the issues to traditional healers or modern health workers. Black et al. (2013) also indicated that this health-seeking behavior continues until the children become adults.

Over all, the relative influence of senior women was partly related to the living arrangements across multi-generational families where patrilineal grandmothers endorse a significant influence on child-feeding practices. Nevertheless, the sphere and level of influence decrease in the subsequent pregnancies since mothers benefit from the support and advice they already received during the preceding pregnancies. Nevertheless, the advice of grandmothers regarding child feeding was not always in line with the recommendations by health workers.

Numerous challenges deterred the potential of these "significant others" in securing recommended child-feeding practices. Other than poverty and limited availability of diverse foodstuffs, one of these barriers was the pervasive sociocultural context in relation to sex-based division of roles that preoccupy men with material and financial provisions and the senior women as "guardians of the tradition." According to the finding, there is a cultural consensus that men are the providers of family needs, and childcare is the responsibility of mothers. It is only a recent recognition that media started mobilizing men and senior women to engage in childcare and integrate the cultural values that promote social networks and mutual support mechanisms.

CHAPTER SIX: FACILITATORS AND BARRIERS OF RECOMMENDED CHILD FEEDING PRACTICES

The socioeconomic and cultural contexts of the households influence child-feeding practices; some of these factors facilitate the practice of the recommendations while others act as barriers. For example, the role of collective cultural orientations in the context of universally practiced norm of breastfeeding facilitates the initiation and duration of breastfeeding. Still more, despite complaints on the duration of maternity leave, the legal entitlement of maternity leave serves as inertia for the continuation of breastfeeding for formally employed mothers. Healthcare programs and strategies as well as health education by media also encourage mothers, partners and community members to understand and implement the recommended child-feeding practices. Yet, customary beliefs, poverty and inadequacy of the healthcare system were the major problems barring the implementation of the recommendation.

This chapter is organized in three sections. The first section discusses the facilitators of recommended child-feeding practices such as the cultural values and norms as well as the indigenous knowledge and beliefs. The section also discusses the child-feeding support resources that include polices, programs and packages working on child health and nutrition in the context of the families and the community under study. The second section presents the barriers in the practice of recommended child-feeding practices that include mothers' lack of knowledge, poverty, the influence of culture custodians as well as patterns and burdens of responsibility mothers have to shoulder in their households. The final section concludes the major findings.

6.1 Facilitators of recommended child feeding practices

6.1.1 Indigenous knowledge, beliefs and practices

Similar to EDHS (2016) which reported that 97% of Ethiopian mothers ever breastfed, this study found out that breastfeeding is a universal practice in the study area; almost 98% of the surveyed mothers put the child to breast, and 91% were breastfeeding at the time of the study. Similarly, the norm of breastfeeding for a mother is explained in

the etymology of the word "*harmee,*" the Afan Oromo equivalent of "mother," that is derived from the root word "*harma,*" the Afan Oromo equivalent for "breast." This shows that breastfeeding is closely tied to the idea of "mothering," that also identifies breast milk as the most appropriate and efficient food to nurture a child. According to the key informants and focus group discussants, a mother is expected to breastfeed her baby unless there is severe medical condition in which the mother is not capable of breastfeeding. Concurrent to this assertion, respondents reported that breastfeeding is a natural gift without monetary cost but with magnificent benefits for children. For example, an in-depth interview with a 29-year-old mother from Awash Town, who raised three children, recited the economic and nutritional benefits of breastfeeding as follows:

> *Breastfeeding is a natural gift, and it is common for all women, whether rich or poor. Therefore, all mothers are able to give their child sufficient food for some time, without any cost but with only some additional care for the breastfeeding mother.*

The respondents also underlined the use of breastfeeding beyond addressing the nutritional need of a child. According to ideas generated during focus group discussions with senior women, breast-feeding creates emotional bond between the mother and the breastfed child, is a symbol of care and concern, a status symbol for responsibility, a rite of passage for motherhood, and a tool for social control. A mother from Korke, age 43 and a mother of two children further elaborated the issue as follows:

> *Breastfeeding creates a sustainable bond between the mother and her child. As the result, the mother needs respect and love in response to the responsibility she took to raise her child, and an adult not respecting or supporting his/her mother is a deviant from the norm. ... For example, the Ethiopian idiomatic phrase "ye enat tut nekash," meaning, "the one who bites the breast of his mother," shows someone who harms the person who did favor for him/her.*

The FGDs also noted the controlling role of breastfeeding, that, a mother exposes her breast to the misbehaving person and curses the person if he/she is not conforming to her idea. Similarly, "*be tute yizhalehu*" literally translated as 'I beg you with my breast' is the common idiomatic expression by Ethiopian mothers used as a strong demand to conform to the demand of his/her mother by the authority vested in breastfeeding and motherhood.

Senior women transmit the indigenous knowledge and beliefs related to childcare practices to younger mothers through cultural ceremonies and social events. As it is common among other Ethiopian societies (Selmawit, 2015), there is a special ceremony that follows the birth of a child that enables novice mothers to acquire knowledge and skill related to childcare. In the ceremony, neighbors prepare special food from barely and *teff* flour with butter and special stew called *shamita* that a neonatal mother consumes until six weeks after birth. At the time of the visit, women give the neonatal mother the advice to breastfeed the infant frequently. The visitors also advice the mother how to keep the hygiene of the child, and how to treat if the mother or her baby feels ill. This trend is also common in other African societies (Fouts et al., 2012; Palmquist, 2015), acting as "traditional maternity" leave in which neonatal mothers are freed from other household chores and expected to nurture the newborn and build her body to resume the household responsibilities. Christening[26] and "*hammachiisaa*" are the end of such a confinement period in the followers of Christian and *Waaqeffata* religions, respectively. These periods create opportunities for the mother to acquire skills and experiences on "appropriate" feeding practices.

The culture of giving priority for children is also common in the study area. Maximizing the share of resources a mother would invest on feeding children, the norm that requires mothers to feed their children with the best available food in the household was common in both rural and urban households, reversing the previous trend that prioritizes husbands in the household food sharing order. Furthermore, there is a belief that associates the physique of a child with mother's childcare commitment and experiences. For example, one of the interviewed fathers, age 37 and from Awash Town explained the details as follows:

> *A good mother devotes herself for the health and wellbeing of her child. Nothing comes before her child; she feeds her child first and consumes only when she is sure that her child is full. She sacrifices everything, including her being through breastfeeding. You can*

[26] Christening is a religious ritual performed 40 days after the birth of a boy and 80 days after the birth of a girl, that marks the child's entry into the church, and its acceptance into the Christian community, the principles of which are to be taught to the child by those who the parents choose to be its godparents. This event is a marker of the end of confinement period (Tatek, 2008).

understand from the physical appearance of her child and children of good mother appear older than what they are. This depends on the mother's food preparation skill as well as her devotion for her childcare….Skinny children indicate that their mothers are not up to the expectation of mothering.

In addition to the "traditional maternity leave," the legal grantee of maternity and paternity leaves for parents working in formal organizations encourages intensive childcare and exclusive breastfeeding. Nevertheless, there are common complaints about short maternity leaves and lack of daycare facilities around their workstations that necessitates early introduction of complementary foods.

Traditional practices are also one of the barriers to recommended child-feeding practices. As it was discussed in the previous chapters, child-feeding takes place within the context of a family in which grandmothers often bring their own infant feeding practices and beliefs to their support of new mothers (MacKean, and Spragins, 2012). Furthermore, women frequently value the advice they get from their own mothers more so than from nurses or health extension workers. Similarly, in urban settings where grandmothers are far away, new mothers may rely heavily on information from peers, professionals and the media. On the other hand, the age and number of female teenagers influence the intensity of supports from partners and senior mothers. For example, focus group discussants and in-depth interviews showed the important roles teenage females play in child-feeding practices, especially in complementary feeding. The following is the idea from the in-depth interview with a 37-year-old mother from Awash rural *kebele*, whose eldest daughter was 12 years old while the youngest was 8 months old:

My older daughter is 12 years old, and has been attending grade 3. Yet, she dropped her education to support me in fetching water and collecting firewood during my last pregnancy period. She used to feed the youngest child even when the child was 4 months old.

Focus group discussions with mothers also revealed that female teenagers in rural setting take the next share of childcare responsibility and their role would be either directly by preparing food or by feeding the youngest children when the mother is busy or away from the home. Female adults also support mothers by fetching water, collecting firewood or going to market to buy food items. In some cases, female teenagers also participate in income generating activities to overcome seasonal food shortages. This is

also common in other Ethiopian communities and Tatek (2008) generally noted, "*Girls start to be helpful around the house at a younger age than boys. … Life is more burdensome for children in the countryside and girls tend to be given less time to study than boys" (pp. 95-6).*

Even though female children play a positive role in reducing mothers' household responsibility so that the later focus on recommended child-feeding practices, such trend perpetuates female illiteracy and disempowerment in future generations, putting the mothers in vicious circle of poverty and dependence leading them to lower social status. For example, in their case study of youth trajectories in Ethiopia, Nardos and Morrow (2015:7) stated the burden of female adults in poverty and food shortage contexts as *"Poverty affects young people's capacity to continue in formal schooling, and may push them into 'early adulthood' by encouraging them to undertake paid work, or to marry young (for girls)."*

In general, the indigenous experience about childcare in Ethiopia such as universal practice of breastfeeding, the bold social network, and common psychosocial support common in the collective culture, served as assets in the implementation of recommended child-feeding practices. For example, almost all of Ethiopian women breastfeed because they grow up seeing women breastfeed. On the other hand, the roles of women in modern societies are changing due to the tension between motherhood and other roles related to working outside of home. That also made the parenting of children a shared responsibility between women and partners as well as with extended family members.

6.1.2. Health care systems

The HEP of Ethiopia is built on the healthcare system pillar targeting the specific need of women and their family members (Kesetebirhan, 2013). According to the respondents, health extension workers are working collaboratively with mothers and babies in the context of their families and lives, providing support in a facilitating manner, focusing on strengths and providing individualized advice. For example, a health extension worker from Korke rural *kebele* described the role of educating women in their health seeking behaviors as follows:

If females are educated, they will be active in mobilizing household-based resources for better health status of the family as the whole. To ensure that the future mothers will not face health problems, we advise the family to send their female children to school.

The above quote indicates the positive role of empowering women to have wider access to information about the child-feeding recommendations and health resources. Nevertheless, the result of the survey indicated that young mothers were more likely to introduce non-breast milk liquids and foods due to their working conditions (r=.411, CI=95%).

On the other hand, in addition to health workers, community networks and peers significantly influenced mothers' child-feeding decisions. According to the survey, 48.9% (67% rural and 22% urban) of the mothers were members of at least one of the community-based organizations such as *iddir*[27], *iqqub*[28] or Health Development Army (HDA)[29] where they exchange ideas on childcare issues. In addition to the financial, labor and material mobilization to support pregnant and neonatal mothers, these community organizations shared information on recommended child-feeding practices. In these channels, experienced mothers serve as the agents of wisdom and skill for better childcare practices. A young mother from Tafki, age 29 and a mother of two children expressed the propelling nature of elders' advice on childcare as follows:

Experienced mothers tell us to do this and that in child-feeding practices. These were dictated from generations. They tell us what to do during breastfeeding and how, when and what to feed the child for better growth and developments. … Nurses also give us advice about recommended child-feeding *practices, which, sometimes, are not similar to the customary practices.*

Interviewed mothers also stated the influence of practical demonstration of preparing diversified food from locally available food items. Similarly, health extension

[27] ***Iddir*** is a community-based association made by a group of persons united by ties of family, friendship, or by living in the same district, or belonging to the same religious or ethnic groups. The main objectives of *iddir* is providing mutual aid and financial assistances in certain circumstances based on the principle of altruism and reciprocity (Muari, 1987).

[28] ***Iqqub*** is a rotating saving and credit association in which individuals agree to meet for a defined period in order to save and borrow together to finance household consumption, investments or a small-scale businesses.

[29] ***Health Development Army (HDA)*** refers to an organized movement of the community through participatory learning and action meetings. It is established through health development teams that comprise of up to 30 households residing in the same neighborhood. The health development team is further divided into smaller groups of six members, commonly referred as one-to-five networks. The leaders of health development teams are selected from model families and are trained by health extension workers on utilization of high impact maternal and newborn health services. HEWs also facilitate the HDA meetings with the support from *Kebele* leaders (MoH, 2013:4).

workers mentioned the positive role of the HEP in implementing the recommended child-feeding practices. For example, a health extension worker from Geja-Gadamba described the significant support by HEWs on recommended child-feeding practices as:

> *Most of the time, mothers prepare complementary food from teff, wheat, barley, maize and beans. To guide as experts, we use family guidebooks and demonstrate how mothers have to prepare the complementary food. For those mothers who cannot read and write, we have pictorial presentations that help mothers easily understand the recommended child-feeding practices.*

Furthermore, this study indicated a number of community programs that educate community members, especially mothers, about the importance of giving children nutritious food. Health workers also shared child-feeding guidelines to families and community leaders using health talks with health development army members during post and prenatal counseling sessions. One of the health extension workers from the rural *kebele* of Korke explained the role of these community-based organizations as follows:

> *We call for community meetings that create a stage for community conversation, role modeling on issues that promote support for infants and young child-feeding practices. Sometimes, when traditional leaders are addressing community meetings, we also give a health talk, especially on proper infant feeding. … We teach mothers how to take care of children and how to treat children when they become sick. We also monitor the sanitation and hygiene of the household and advise the mothers to keep the cooking area clean.*

As the above informant indicates, public meeting brings the issue of nutrition to the attention of the community members, and this was one of the strategies outlined in the National Nutrition Strategy (MoH, 2008). According to the strategy, engaging the community in nutrition is the key strategic direction in the implementation of the current health policy of Ethiopia.

Similarly, Kesetebirhan (2013) explained health extension program as "innovative *community based strategy to deliver preventive and promotive services and selected high impact curative interventions at community level"* (p. 3). Qualitative finding also showed the influence of health extension program on improving adherence of recommended child feeding. According to a key informant who was working in Sebeta Awas *woreda* as a senior officer in Mother and Child Health (MCH) Department, health extension workers were more effective in health education and behavioral changes as they helped mothers through practical demonstration about recommended child feeding.

Similarly, focus group discussions with the mothers and interviews with health workers identified an innovative approach that integrated the customary neonatal care to the modern health service. According to the respondents, households in the catchment area of the health center contribute shares of cereals to be stored at the nearby health center with which mothers accompanying the pregnant women will prepare and serve porridge and other cultural foods in the health facility according to the custom of the society. Furthermore, the Health Bureau of Oromia Region is working on baby friendly health facilities that include staffing pediatrics departments with experienced professionals and trainings and resources are facilitating discussions on child-feeding recommendations.

6.2 Barriers of recommended child feeding practices

Though various interventions were underway to improve the child-feeding practices in the study area, mothers were not exercising the recommendations to the expectations due to different barriers. Some of these barriers were lack of knowledge about the components of the recommendations, influence of culture custodians, poverty and mothers' social status.

6.2.1 Socio-cultural barriers

Though many studies reported that parents are aware of the benefits of breastfeeding for their children and mothers, the awareness is not sufficient on its own to support the initiation and continued duration of breastfeeding. For example, Andrew and Harvey (2011) discussed the need for balance between the promotion of the benefits of breastfeeding and the provision of practical information about the common challenges women experience in getting breastfeeding established.

Yet, the biomedical oriented approach and 'distanced' support by health workers was less influential compared with the 'practical' life senior women experienced and shared with their community members. For example, in the interview held with health extension workers, prelacteal feeding was common in the study area not due to lack of information from health workers on the dangers it could bring but due to the common

knowledge pool these mothers share with the senior mothers who can witness how the mothers themselves were brought up. Mothers also complained about the inadequacy of these pieces of advices, as the health workers do not address the specific needs the mothers worry about and the inconsistencies of messages delivered by health workers during neonatal and postnatal services. A 36-years-old mother of three children living in Tafki Town noted the customary practice about exclusive breastfeeding as follows:

> *For those who give birth at health institutions, nurses tell them not to give children water before six months. However, once back home, they do not respect that. Some start giving water from three months or even one month, and this has been practiced over generations.*

Another barrier to breastfeeding is the promotion and sale of formula milk in pharmacy and drugstores. This contributes to the development of a bottle-feeding culture and it has been shown to decrease the rates of exclusive breastfeeding. According to a 25-year-old mother from Sebeta Town, shelving of the infant formula in pharmacy along with other drugs confuses the reliability of the recommendations about exclusive breastfeeding. On the other hand, despite the demonstration on how to prepare diversified food by health extension workers, some women did not practice it because they think that children are too young to chew, or that the foods would cause some health problems. A 27-year-old mother from Gadamba stated a similar belief as:

> *Some foodstuffs like meat, fish, egg and honey are not given for young children due to some cultural reasons. ... Especially, the meat of goat is not given and eaten by most individuals, because it is believed it would cause teeth problem. ... Honey is believed to distort the utterance fluency of the child.*

A perception about breastfeeding in public places is also limiting the practice of exclusive breastfeeding. Although communities want to see their future children breastfed, women describe the embarrassment with breastfeeding in public that contributed to early introduction of complementary food if the mothers were out of home for employment or other social engagements. In addition, according to the focus group discussions with mothers and senior women, most of the mothers perceived that breastfeeding in public places expose the children and their mothers to "*budaa*" (evil eye) which may cause child sickness and breast pain. Furthermore, some religions, for example Islam religion, consider exposure of breast as indecent act. As the result, Muslim

mothers prefer bottle-feeding to breastfeeding in public places. Senior women also mentioned the emerging perception of young and urban mothers about breastfeeding and beauty. Similar studies have long been reported in Western countries (Latteier, 1998; Lupton, 1996; Ward et al., 2006) and are diffusing to non-Western cultures including Ethiopia (Laykewold et al., 2017; MacKean and Spraginsm, 2012).

On the other hand, many women describe breastfeeding as interfering with other household tasks as well as movement outside of the house. These issues link both to how time-consuming breastfeeding is and the difficulty often experienced around breastfeeding in front of others. Therefore, with the hostile attitude towards expressed breastfeeding, mothers tried to balance indoors and out-door responsibilities with their child-feeding needs through bottle-feeding. In addition, the ready availability of formula in urban society is a contributing factor to the adoption of bottle-feeding. The respondents listed the major reasons for the preference of bottle-feeding to feeding with cup or spoon. For example, the mothers assumed that bottle-feeding would be clean if washed daily and kept covered. This belief goes with the fear of contamination of open utensils. Mothers also prefer bottle-feeding because they think that fluid might be poured out at the time of feeding and that bottle-feeding is convenient to handle and feed the child. According to an in-depth interview with a 31-year-old mother of three siblings living in Awash rural *kebele,* bottle feeing is the most convenient way of feeding for mothers working outside. She further explained it as follows:

> *I gave foods like "mooqa" ("soup" in English) and cattle or canned milk with a bottle cover. If its hygiene is kept regularly, the bottle decreases the risk of contamination and is convenient to handle and feed the child. ... My teenage daughters can handle the bottle-feeding when I am not at home.*

The preference to bottle-feed is also the result of influences by grandparents or fathers who want to share child-feeding responsibilities and relive mothers from the hurdles of exclusive breastfeeding. For example, in an in-depth interview with a 32-year-old mother from Tafki Town, her husband initiated bottle-feeding to reduce the pain she was facing due to exclusive breastfeeding. She further explained the following:

> *Breastfeeding during night created sleep interruption that put me under extended tension and illness, which we, the mother and the father, finally came up with the idea of giving*

the formula milk as an additional food for the child so that I get breaks. His father used to support me in feeding the child during night and looked after the child when I fell asleep.

In addition to the barriers embedded in the culture and customs of gender relationships, shortage of infrastructure and services also affect the implementation of recommended child feeding practices. According to EDHS (2016:9), only 8% of rural households had access to electricity, and the coverage of clean water was 57% that consumed a large share of mothers' time in collecting firewood, fetching water that also reduces the time mothers have to prepare diversified complementary food. For example, out of the total sampled households during the survey, only 31% households had access to clean water, and when disaggregated in terms of their residence, 5% of them were from rural and 95% of them from urban areas. On the other hand, the majority (82.3%) of the households had access to the facility with strong associations between access to tap water and residential place (rural vs. urban) of the respondents (χ^2 = 218.058, DF =1, D= 0.625, CI=95%).

6.2.2 Economic barriers

Chapter 3 of this study discussed the socio-economic dimensions of recommended child feeding practices. The economic barriers were further emphasized in section 3.4 of the chapter. There, food production, working condition and poverty contexts of the households were identified as the major factors deterring recommended child-feeding practices. Yet, this sub-section elaborated the major economic barriers including decreasing land size for farming households and the increasing price of agricultural inputs in addition to poverty and access to market to buy food items.

As discussed in Chapter 3, the poverty contexts of households in most urban and rural households were one of the main barriers to frequent and diversified complementary feeding. Similar to the opinions of men, mothers also mentioned poverty as the major barrier to recommended child-feeding practices, which encapsulate the stronger support fathers could play in conformity to recommended child-feeding practices. However, the contexts and dimensions of poverty as a barrier were different in

urban and rural contexts. While men living in urban cited the escalating price of food items as the major barrier, men living in rural areas and those who live on agriculture as their major livelihood considered decreasing land size and productivity as their major concern. According to a 38-year-old man living in Tafki Town and working in the same town as a public servant, there was continuous increase in the price of food items that indirectly affected his investment on feeding. The informant had five children; the first child was 12 years old and the next four were 10, 7, 4 and 1 years old, respectively. According to his opinion, the prices for consumable items have been increasing over time, which also inflated the price of food for the children. He also compared the effects of such changes in child-feeding experiences as follows:

> *The price of food is unbearable and there is an increase every month. As the result, we decreased the quantity and quality of the food that we used to buy for the elder children … The quality and quantity of food for children and the family decreased as the price of food rose.*

Similar to the responses by the interviewed men, health workers also reported their experiences on food shortage and the effect of escalating food price on their child-feeding practices. For example, one of the key informants from Tafki Health Center articulated the changes over time in terms of food prices and the effect of this on his child-feeding behaviors as follows:

> *I experienced significant changes in the price of food and household expenses. Every time we shop something, there is an increase in the price. Sometimes, I think the past times are better for the poor and for public servants— you can buy something with what you earn since the price is lower and relatively stable. Therefore, it seems theoretical to advise a mother to prepare food from meat, egg and other fruits and vegetables on daily basis.*

Similarly, the increasing prices of agricultural inputs affected farmers' productivity and their child-feeding practices. A 38-years-old man from Korke–rural *kebele* explained the increasing poverty and inflating prices of agricultural inputs as one of the factors for poor child feeding practices as follows:

> *Our land is decreasing in its fertility. Therefore, additional agricultural inputs are becoming mandatory to maintain the productivity. This raised the production cost that decreases investment on family diet and child-feeding recommendations. In addition, the land holding is decreasing and there is recurrent change in weather condition that used to attack our harvest. … Even if I can raise cattle to feed the child with the dairy products, there is no land to graze them.... Therefore, things are becoming worst from day-to-day.*

The respondents also noted that the children in their communities are not getting varieties of foods mainly due to poverty. For example, families do not have the ability to buy various types of fruits, vegetables and cereals so that they can prepare food from *"bet yaferawun"* — what is available at hand. One of the informants in the in-depth interview, age 37, a mother of three children and living in Awash rural *kebele,* explained the issue as follows:

> *The health professionals told us many times that we have to prepare diversified complementary food from combinations of meat, egg, cabbage and fish. They also advise us to buy fruits for children so that they develop resistance to illness. However, we are not doing so because we cannot access these foods and cannot afford for these food varieties because of poverty.*

Similar to the responses from the interviewed mothers, men had ranked economic constraints as the major factor that limited their intention to feed their wives and children with diversified and sufficient food. According to a 39-year-old informant from Awash Ballo rural *kebele*, rural poverty is the major cause of child malnutrition as meat are occasional foods that are available only during holydays or special festivity like wedding, Christening or for distinguished guest or relative. According to the respondent, children in rural context have foods slightly different in taste from that of men without significant difference in variety. He further explained the mismatch between what he knows and what he actually practices regarding child feeding as:

> *I understand that whenever children are given food from various types, they will be healthy and are least affected by diseases…. However, poverty limited our desire to feed the children with food such as meat, egg, vegetables and fruits. … We feed them with the 'bet yaferawun'-the food that is available at home.*

Furthermore, discussions with mothers and males from rural *kebeles* indicated the seasonal food shortages due to changes in climate as a factor hindering mothers from preparing diversified complementary food. For instance, the key informant interview with officials from Sebeta Awas *Woreda* Health Office indicated the fact that two of the forty *kebeles* in Sebeta Awas *woreda* encountered short-lived drought that made the quantity of harvest below the annual need of the households in 2015. In tandem with this view, a 38-year-old informant from Bonde *kebele,* who had two children, stressed the

effect of poverty and food insecurity on breastfeeding mothers and their children as follows:

> *Food security is vital for mothers' successful nursing. Where there is no adequate food for household members, some mothers breastfeed so that the child does not sleep hungrily, which is the most embarrassing moments for men. …. Breastfeeding without having sufficient food makes the mothers weak and exposed to illness.*

Concurrent with the idea by the key informant interviewed, focus group discussions with mothers showed the changing child-feeding behaviors in response to increasing food prices. Household members also responded to the increasing prices of food and basic needs though diversifying their income sources. According to the in-depth interview with a mother from Korke rural *kebele*, she and her husband work non-farm activities in Alemgena and Sebeta towns, in addition to their agricultural activities during the farming seasons. The following is part of the interview:

> *I trade vegetables and firewood for urban dwellers. My husband also works off-farming activities in adjacent towns such as Alemgena and Sebeta. … The income we generate from these activities supplements the household to buy food items that we do not produce. It also enables us to pay for medical expenses and child food items such as pasta and macaroni. … We struggle with the increasing costs of food items by working day and night.*

In addition to shortages in the production of food items, recent researches from different parts of Ethiopia indicated the positive roles of access to market on diverse complementary foods. According to the studies, households located closer to markets have diets that are more diverse and less dependent on their own food production (Hoddinott, Headey and Dereje, 2015). Similarly, the average time it takes mothers to access small market to buy food items is relatively higher and takes up to a walking distance of an hour in rural areas. Accordingly, those who had better access to market are better in complementary feeding ($t= 4.823$, $df= 57.876$, $P< 0.001$). Furthermore, Sebeta, Awash and Tafki towns are the major market centers that take an average of two hours on foot in from the rural *kebeles.* The international aid agencies also reported the widespread food shortages in Ethiopia and its adverse effect on the nutrition and health status of children in Ethiopia (IFPRI, 2015; UNICEF, 2016; WHO, 2015). Yet, attributing sub-optimal child-feeding practices to poverty and food insufficiency indicated parents'

lack of knowledge and skill about the possibility of feeding children with locally available nutritious food.

The other means of adjusting to the changing food prices is shifting food preferences from a varied diet rich in micronutrients to one that is predominantly high-carbohydrate staples. This is because most staple foods are cheaper than fruits, vegetables and animal-sourced foods. Therefore, despite the significant improvements in health education and facility based counseling about recommended child-feeding practices, the percentage of breastfed children aged 6-23 months receiving foods four times a day is only 33, and those children getting four food groups in a day is less than 10%. This is not far from the Ethiopian health demographic reports over the last decades, and only little increase was seen between 2011 and 2016— an increase from 4% to 7% (EDHS, 2011; 2016).

The other challenge is further rooted in the working conditions of parents. For example, according to the response from sample mothers in this study, 318 of their partners were engaged in farming activities, and 227(71.38%) of the mothers had also reported engaging in similar farming activities while the rest engaged in self-employed activities such as petty trading. Furthermore, the survey data also showed that out of 87 men who were formally employed, 57(65.51%) were engaged in similar employment condition which limited the time the parents could spend on childcare and feeding practices. An in-depth interview with a 39-year-old married man having two children explained additional challenges when both parents are employed:

> *Both of us are public servants and go to office together. Therefore, we have meager time to share with our children. It is really a challenge to raise children having such rigid work schedule. …. Housemaids take the major responsibility to prepare food and take care of the hygiene of the children on working days. Both of us, however, spend weekends with our children, to compensate the time we lose due to the work on the weekdays.*

Datta et al. (2012) also note that even if both mothers and men share sincere concern for the wellbeing of infants, men's breadwinning responsibilities limited their potential care for the infants. Nevertheless, this finding is different from those reported in developed countries like Canada and Norway. According to Andrews and Knaak (2013), breastfeeding initiation and duration rates are higher for mothers with higher-status

occupations or higher levels of education in these countries. Nevertheless, other studies (for example, Nousiaine (2014), Hampshire et al. (2009), Abuya et al. (2012), Pelto and Armar-Klemesu (2011)) revealed better practices in breastfeeding among poor, rural and less educated mothers in developing countries, while complementary feeding was lower among these socioeconomic groups. This indicates the positive influence of significant others in developing countries on breastfeeding while the rate of adequate complementary feeding were relatively low (Gupta et al., 2012).

6.2.3 Healthcare system

The health policy of Ethiopia and its follow-up strategies and programs have made significant progresses in accessibility of preventive and curative healthcare services in both rural and urban Ethiopia (Kesetebirhan, 2013; UNICEF, 2016). The innovative HEP include mobilizing the community for health development using local resources and indigenous knowledge, and HEWs and volunteer health promoters take the lion's share in adapting the community to the recommended child-feeding practices. Furthermore, community-based organizations, civil associations and health development army laid the millstones for improving access and relevance of maternal and child health services in Ethiopia (FMOH, 2013; FMOH, 2015). Yet, hospital organizational factors described as being not helpful include rules that prevent the partner from staying with the new mother and baby, staff shortages, conflicting advice and information, the judgmental attitudes of some health professionals and unprofessional behaviors exhibited by health professionals. A specific issue related to hospital-based care is the lack of time nurses and midwives have to establish helpful relationships with new mothers that would enable the health workers to provide the kind of support that women require getting breastfeeding started. According to the focus group discussions with mothers, the way hospital wards are staffed prevented nurses and midwives from spending much time with individual women, and created huge challenges to provide sustainable care. This contributed to the various conflicting advice about exclusive breastfeeding.

Furthermore, given the importance of partner support to successful breastfeeding, lack of consideration of fathers' needs for informational and other kinds of support brings substantial change in the implementation of recommended child-feeding practices. For example, focus group discussions with mothers indicated the inconvenience of antenatal or postnatal sessions for males' participation and the health education are often done at times when it is difficult for husbands to participate because of workload. Similarly, literatures (for example Aubel, 2012; Forster and McLachlan, 2010; MacKean and Spragins, 2012) indicate that providing males with emotional, practical and physical supports is important to promote successful breastfeeding and enriches the experience for both the mother and the father.

Similarly, health extension workers complained that they could not focus on some of the packages including child nutrition because they are given additional responsibility to work as a *kebele* cabinet members. This made the health extension workers to be considered as a political appointee and challenged their legitimacy among fathers with a different political opinion. One of the health extension workers working in Geja-Gadamba *kebele* explained the issue as follows:

> *The health extension package contains many issues, sixteen components, that is very difficult to focus on simultaneously. On top of that, we are required to attend meeting and execute routine political activities that consume the time we should work on the implementation of the package. … Some also suspect us as political appointee and in case where the husbands hold a different political opinion from the ruling party.*

Furthermore, the national movement to improve child nutrition through programs and strategies focusing on children as well as lactating and pregnant women were fell short of coordination. Even if the national nutrition strategy indicates formations of national and regional committee that steered the implementation of recommended child-feeding practices, the interviewed key informants at zone and *woreda* levels indicated lack of sustainable structure at community level. Similar to the findings of Andrea Warren (2016), the major challenges the national nutrition program and strategies were facing fell into three categories; namely, lack of committed leadership, effective coordination across sectors and sustained engagement across a wide range of

stakeholders. Warren (2016:2) further indicated lack of coordination as a major barrier in Ethiopian nutrition intervention as follows:

> *Over the past two decades, the bureaus of health and agriculture achieved significant gains that have paved the way for further nutrition efforts. Zone and woreda actors' commitment to their work was clear, but existing challenges to multi-sectoral coordination, day-to-day operation, and vertical communication have the potential to create barriers to the establishment and implementation of nutrition sensitive programming.*

In general, three more themes can summarize the barriers in the implementation of recommended child-feeding practices, in addition to those discussed earlier- poverty, cultural beliefs related to prelacteal feeding and 'insufficient breastfeeding syndrome.' These include the growing bottle-feeding culture, women's concerns about body image and difficulty to integrate exclusive breastfeeding into modern living styles and livelihoods. Accordingly, restrictive attitudes toward breastfeeding in public and readily availability of infant formula contributed to the decreasing practice of exclusive breastfeeding. As the result, senior mothers criticize the younger generation's concern for their body image as the result of pregnancy and the related concern on the effect of breastfeeding on the size and shape of their breasts. Furthermore, increase in the coverage of institutional delivery was correlated with increase in Caesarean section delivery that also decreased timely initiation of breastfeeding and increased formula milk feeding. Though the survey component of this study did not collect data on the relationship between the way of delivery and time of initiation of breastfeeding, the in-depth interview with a mother indicated the effect of Caesarean section on her breastfeeding experience. The following is part of the interview:

> *Tafki Health Center has referred me to Gandhi Memorial Hospital located in Addis Ababa because the position of the fetus was inverted. When the time of expected delivery date was due, I went there and doctors advised me to undertake the operation. Accordingly, I delivered the child through operation, and I could not be active for two days due to the anesthesia administrated during the operation. As the result, I could not put the infant to the breast. Thus, my husband bought formula milk for the infant until I recovered from the pain of the operation and was able to breastfeed smoothly. The formula feeding started in this way.*

Similarly, EDHS reports indicated the positive correlation between institutional delivery and the Caesarean section means of delivery that increased introduction of

formula feeding. According to the studies, institutional deliveries increased from 5% in 2000 to 10% in 2011, and 26% in 2016 (EDHS, 2016:133). Similarly, the percentage of children delivered through Caesarean section increased from less than 1% in 2000 to less than 2% in 2011 and 5.1% (10.6% urban and 0.9% rural) in 2016 (EDHS, 2000: 120; 2011: 127; 2016:151). Though the EDHS (2016) did not calculated separately for urban areas surrounding Addis Ababa, the rate of women delivering through Caesarean section is an indicator for higher probability of women delivering through Caesarean section in the study area, 21.4% of births in Addis Ababa are through Caesarean section, and 13.5% were decided before the onset of labor pains. The percentage is high in urban areas and increases with the higher educational level and wealth of the mothers. Furthermore, income from both parents is becoming a necessity than ever to live a moderate life. As the result, women are agitated to be employed out of home that also created difficulty to integrate exclusive breastfeeding to the modern livelihood.

6.3 Conclusion

The government of Ethiopian is committed to harmonize a multi-sector approach to address malnutrition through mobilizing local resources and wisdoms. The National Nutrition Strategy and the National Nutrition Program are two of the policy instruments that aimed to stimulate the multi-sector approach, and HEP and community-based organizations connected these sectors to the local settings. In line with this, the National Nutrition Coordinating Body of Ethiopia renewed the national commitment to end hunger and under nutrition in Ethiopia by 2030— the ''Seqota declaration.'' Furthermore, the 1000-Day agenda promoted a multi-sector focus on preventing stunting from conception to a child's second birthday.

Access to maternal and child health services created synergy in the practice of recommended child-feeding practices. For example, institutional delivery and receiving infant feeding counseling were associated with a reduced likelihood of prelacteal feeding and increasing timely initiation of complementary feeding thereby longer duration of exclusive breastfeeding. On the other hand, the prelacteal feeding were associated with the beliefs evidenced by the statements "opened up the infants intestines and cleaned the

stomach of the dirty contents." Furthermore, prelacteal feeding is justified by insufficient production of breast milk caused by mothers' under nutrition, sickness. The influential individuals in this regard were children's grandmothers, traditional birth attendants and husbands.

Husbands support recommended child-feeding practices by becoming knowledgeable about breastfeeding and using this knowledge to encourage and assist mothers in breastfeeding, sharing housework and childcare to free mothers for frequent breastfeeding and preparing diverse complementary foods. Furthermore, males play major roles in the decision-making about household issues that affect many aspects of family including infant feeding practices. Similarly, female adolescents shouldered significant shares of household chores and child care responsibilities that also helped mothers to focus on recommended child-feeding practices.

According to the study, the unavailability of the mother due to work responsibilities influenced optimal breastfeeding as it brings shortages in the time mothers would stay at home for childcare and feeding responsibilities. Similarly, lack of knowledge about child feeding and the wider perception of "insufficiency of breast milk" by so many of the respondents agitated early introduction of complementary foods. Though unemployed mothers practiced exclusive breastfeeding better, employed mothers tended not to breastfeed their infant exclusively due to the alleged short period of maternity leave, lack of time, distance of the workplace from home, lack of private space for breastfeeding or expressing milk at the workplace, inflexible work schedule, absence of on site or near site childcare centers. The opinions of other people at work also influenced a woman's decision to keep breastfeeding, making workplace support very important. On the other hand, employed mothers and households in better socioeconomic conditions were better in complementary feeding than urban unemployed mothers and households in poverty.

Access to affordable nutritious foods was limited for households far from markets and primarily relied on their staple crops like *teff,* corn, *enset* and potatoes for household consumption. Some households held land that is not suited for growing array of more

nutritious crops. Animal products such as eggs or milk were too expensive as regular complementary foods. In addition, there are various diet restrictions and food taboos imposed on infant feeding. Health workers in general and health extension workers in particular encouraged mothers to practice the child-feeding recommendations through tailoring community-based networks and household resources, including males and senior women in the context of a universal practice of breastfeeding. Yet, there are numerous challenges identified in the process of implementing national multi-sector plans for nutrition. For example, nutrition was yet to prominently feature in the agriculture and social protection programming at zone and *woreda* levels. Notably, agriculture personnel were unclear as to their roles in promoting nutrition. Furthermore, the involvement of health extension workers in the political and administrative engagements limited their potential to increase supports on the implementation of recommended child-feeding practices. Similarly, limited number of staff, inconsistent advice and restrictive institutional procedures limited the supports health workers could provide in recommended child-feeding practices.

Similar studies in Ethiopia also identified various factors responsible for the discordance between the recommended child-feeding practices and the daily routines of Ethiopian mothers with regard to childcare and feeding decisions. For example, Netsanet Fentahun et al. (2016) noted that even though the Ethiopian government is working on disease preventive measures through health extension program, one of which is the implementation of recommended child-feeding practices, "*almost all of the children were suffering from preventive behavior or poor feeding practices (p.5-6).*" The study went on discussing the factors causing this discordance such as the presence of poor health services, poor sanitation and lack of commitment to address child nutrition. This study also identified the above stated factors as the structural factors adversely affecting the implementation of recommended child-feeding practices. Similarly, Abate and Belachew (2017) and Kennedy et al (2016) also came up with similar findings on the gender relationships and lower involvement of men in childcare responsibilities as additional barriers in the implementations of recommended child-feeding practices in Ethiopia.

CHAPTER SEVEN: CONCLUSIONS AND RECOMMENDATIONS

Recommended child feeding involves a complex web of behaviors involving the interactions among people including fathers, grandmothers and health workers. These interactions are responses emanating from meanings that people hold, conditioned by myths and beliefs about the vulnerability of babies to nature and evil spirit. Yet mothers play key roles in feeding children and ultimately in their nutritional outcome, except in situations like maternal death, teenage pregnancy and work responsibility that transfer such childcare responsibilities to siblings, grandmothers or other close relatives. On the other hand, in context where about 40% of children are in malnutrition, the Government of Ethiopia considered recommended child feeding as the panacea of the preventive strategies, and HEP is the instrumental tool for effective implementation of the recommendation. With the interception of cultural beliefs and customary practices in the child-feeding recommendations the "biomedical ideal" did not work; mixed feeding before six months is a norm; and diversified complementary feeding is rare. This is mainly due to poverty, lack of knowledge and beliefs like inadequacy of breast milk.

This chapter discusses the theoretical implication of the study and goes on concluding remarks with recommendation derived from the findings. Recalling the theoretical foundations of the study, the first section discusses the interactions among household and community members, and the way policy and strategies aligned with the recommendation are translated into practices. The second section concludes the major findings in line with the objectives of the study. Accordingly, the researcher identified four major themes influencing the implementation of recommended child-feeding practices— knowledge, decision- making processes, poverty context and work- patterns. Finally, the chapter draws the workable recommendations to improve the child-feeding practices and the roles of different actors in tracking the change.

7.1 Theoretical reflection of the study

Guided by socioecological model presented in the last section of Chapter 2, the findings of the study indicated vivid differences between the recommendation and practice of child feeding due to the dynamic interrelations among various personal,

familial, community and socio-cultural factors. Accordingly, mothers interpret the health education messages with the interaction at different levels. At a meso level, family settings and compositions affect the attitudes and behaviors of child-feeding practices while working conditions, customary beliefs, polices and support resources act at the macro level. For example, the influence of men as providers and senior women as advisors were structural patterns affecting the recognition and implementation of recommended child-feeding practices. Similarly, poverty and limited access to health resources including, energy and drinking water are the macro structures that increased mothers' domestic burdens.

The extent to which a mother exercise agency in recommended child feeding depends on the interaction between personal agency constituted by institutions and social relationships in material contexts and ideas. In this sense, personal agency refers to the ability of mothers to create and pursue the vital way for recommended child-feeding practices. Similarly, institutions represent the structures of opportunities and constraints embodied in *institutions* (tradition, rules and norms) and social *relationships* with other actors. At the individual level, symbolic interactionism explained the intentions and perceptions mothers develop about the recommended child-feeding practices within their socio-cultural and economic contexts. Such perceptions are the outcome of ideas framed within the cultural hierarchy, infused from family members, peers, senior mothers and health workers. For example, males indirectly influence child-feeding practices because mothers lack control of material and financial resources, and such influence may be pro or against the recommendation. Senior women also influence the younger and novice mothers by comparing their pragmatic evidence of customary child feeding against the "ideal" recommended child feeding practices. Following this, pertinent to the ideas by feminist perspective and Theory of Planned Behavior, child-feeding practices is consistent with cultural beliefs and gender roles constructed in specific historical circumstances though changing over time.

On the other hand, the HEP has utilized the Theory of Planned Behavior that integrates the individual to the broader social contexts in targeting behavioral changes.

As it may be recalled from Chapter 2, the theory is composed of attitude towards the behavior, social factor called subjective norm and the degree of perceived behavioral control. According to the theory, the more positive the attitude a respondent has towards the recommendation, thus the outcome of recommended child-feeding behavior. Following this principle, health workers and media have been working on the promotion of recommending child feeding. Accordingly, the recent demographic health survey of Ethiopia attribute decrease in the rate of malnutrition to interventions in behavioral change related to recommended child-feeding practices. Yet, this study indicated that behavioral changes alone could not improve the complementary feeding unless the underlying causes of malnutrition, such as poverty, women empowerment and economic status of the households are improving.

Furthermore, this study found the changing parenting in Ethiopia with the involvement of health workers in customizing recommended child- feeding practices, yet in complex responses to the recommendations. According to the respondents, in context of muted resistance of the child feeding recommendations, health care services during pregnancy follow-ups and post-natal checkups created channels between the mothers and the health workers to track the recommended child-feeding practices. On the other hand, due to the personal and structural challenges mothers have been experiencing, the recommendation and the surveillance of child-feeding practices health extension workers undertake induced fear and worry to some mothers, and brought distorted evidence about the amicability of the recommendation to the cultural beliefs and socio-economic contexts of Ethiopian mothers. Accordingly, concurrent with symbolic interactionism and Theory of Planned Behavior, the research has found out that mothers have adapted the child-feeding recommendations to their specific socio-cultural and economic contexts.

Therefore, this study concludes child-feeding practices as an arena where struggle, negotiation, and encounters take place among the actors— mothers, men, senior women and health workers. This supports the central tenet of the guiding theoretical framework with the concept of agency that refers to the ability of actors to operate or give meaningful action in their contexts. Accordingly, mothers were not passive recipients of

the recommendation but continuously redefined the message in relation to their socio-cultural and economic contexts.

Consequently, analyzing the agency of mothers in recommended child-feeding practices, this study found mothers' responses to the recommendations are mixed—adoption, rejection, and adaptation. In other words, the study has indicated that some of the mothers and other actors are convinced with the recommendations though they explained the various barriers to practice the recommendations. According to this view, modern ideas and proposals have "medicalized" the normal and natural reproductive and nursing roles, which were also commented by earlier studies in developed and developing countries (for example, Andrews and Knaak (2013), Avishai (2007)). These studies brought attention to the tensions that exist between the dominant discourse that frames breastfeeding as inherently pleasurable and convenient and mothers' actual breastfeeding experiences that explains breastfeeding as the one with high degree of physical labor, emotional intensity, and ambivalence.

7.2 Conclusions

Within two decades of the current economic and social policies, Ethiopia has made significant progress in availability and access to healthcare services. Yet, poverty level has not dropped to the expectation, and precarious working conditions adversely affected women's options to feed their children. Accordingly, mothers working on agriculture who spend longer time on the field and mothers in urban who stay away from their children due to out-door employment contexts. These factors remained barriers for exclusive breastfeeding, coupled with customary practices related to the amicability of feeding with colostrums, common pre-lacteal feeding and beliefs related to the insufficiency of breast milk. Moreover, healthcare institutional polices and work burden reduced the rates of recommended child-feeding practices.

The prevalence of discarding colostrums were associated with fail to attend ANC, delivery at home, lack of family support, the dominance of traditional birth attendance, inadequate nutritional knowledge and adherence of cultural practice. Complementary

foods consist mainly of cereals and the intake of animal-source foods was limited. Poverty was the main reason behind poor feeding practices that limited the choice of foods and time mothers had for childcare as they were burdened with other tasks. It is unlikely that mothers had time to prepare separate complementary foods for their children, and therefore younger children ate family foods.

Mothers' knowledge of infant and child feeding was a mixture of indigenous and contemporary knowledge. According to the study, mothers lack the knowledge and skill to prepare complementary foods using local ingredients. The study also indicated mothers' limited knowledge about exclusive breastfeeding and suitable foods for young children. Mothers in this study regarded gruel and porridge as healthy and best food for their children while the valuation of formula milk is significant although costly for rural population. Furthermore, some foods were avoided, with the thought that they are hard for small children to chew. Moreover, mothers rarely prepared separate foods for their children as the communities had strong custom of family meals and time constraints to prepare separate meals for their children.

On the other hand, mothers seemed to have a quite lot of power over child-feeding decisions on the household level. However, since fathers gave the money for food purchasing, they too had control over foods their children receive and older female generation tried to maintain the traditional ways of childcare. By analyzing the rationale behind mothers' food and feeding choices, mothers make many decisions based on child's development level and cues. Child's cry was believed to be caused by breast milk insufficiency, and it was a cue for mothers to start offering complementary foods. Child's development level such as the eruption of teeth and the ability to eat foods was referred to when mothers decided about appropriate foods. According to healthcare workers, the senior women try to maintain the traditional ways of childcare that encompass the indigenous knowledge with magnificent contribution in supporting mothers in enriching the modern childcare recommendations. Poverty seems to be the biggest barrier to recommended child-feeding practices by limiting households' access to high quality and nutritious foods. Although most of the households cultivated crops or rear livestock, the

availability of foods in the *woreda* does not entirely reflect the diet of young children. Families may prefer selling the food their produce to earn additional income rather than giving it to children. Furthermore, access and availability of healthcare was also a barrier that decreases the child-feeding counseling provision.

The distance to health facilities in rural setting was sometimes long, and professionals did not have enough time to advice mothers. Similarly, cultural beliefs greatly influenced the choices and decisions about child-feeding practices. For example, the belief about universal importance of water for human kind misguided the concept of exclusive breastfeeding and underlined the insufficiency of breast milk for the first six months of the infant's age. Similarly, beliefs related to colostrums feeding, pre-lacteal feeding and causes and remedies of childhood illness were the major factors affecting mothers' child' feeding decisions. Some senior mothers believe that colostrums cause some illness to infants. Instead, they recommend feeding fresh butter to smother and clear the digestive duct of the newborn, and administrations of some herbal infusions when the infant cry or feel abdominal cramps.

7.3 Recommendations

Based on the findings and discussions so far, the following recommendations are forwarded by highlighting some of the backgrounds from the study. Yet, the recommendations will be communicated to the mothers and interested stakeholders to bring the synergy of the resources and structures in improving child feeding practices of the study area.

1. One of the findings in this study is mothers' perception about the 'medicalization" of child feeding practices. With wider beliefs that breast milk alone is not sufficient and unfavorable attitude towards expressed breast milk, advices by health workers on recommended child feeding practices are not given sufficient attention, and senior mothers label the recommendation as "fictitious" problem compared to their experience and success in nurturing children through customary feeding practices. Equally important, majority of the respondents associated mothers' access to diverse

and nutritious food with the quality and quantity of breast milk they can provide for their infants. These issues call for the need of assimilating indigenous childcare knowledge to the healthcare and nutrition counseling. In this way, HEWs need further training on how to maximize local resources and indigenous child feeding philosophies aligned with the recommended child-feeding practices.

2. Since fathers control how money is spent, they indirectly control the diets of young children. Accordingly, health workers and health institutional policies are recommended to engage men in nutrition counseling during mothers' pregnancy follow-ups and postnatal checkups. This strengthens the material and moral support of men and collaborates with the efforts of health extension workers in promoting affordable and adequate complementary foods from commonly available resources. It also minimizes the domestic burden of mothers.
3. Teaching of influential cultural leaders, individuals who are source of wisdom and guidance, can play a critical role in shaping feeding practices and, subsequently, nutrition outcomes and child health. Yet, the challenge posed by the influence of culture custodians is unique and has to be addressed with care because individuals such as grandmothers are also caregivers themselves, have strong social networks and exercise significant collective influence on practices related to pregnancy, behavior of young women, and care of sick children.
4. Health extension workers talked of organizing group meetings in their communities and counseling during home visits on recommended child-feeding practices. However, they feel less confident that mothers follow their advices. These challenges include not getting enough food or the right types of food, and they doubt whether families can adopt these practices because they have limited income and lack the ability to get or buy these foods. Therefore, health extension workers are advised to focus on practical solutions that allow families to feed their children with locally available food. Furthermore, government and civil society organizations are advised to give special attention to mothers through targeting on poverty reduction in general and changing women's livelihood. This can be through employment

opportunities and micro-financing interventions in particular that leverage the practice of child feeding recommendations. Similarly, public and private institutions are advised to institutionalize paid breastfeeding breaks and childcare facilities around their workstations.

5. The health policy of Ethiopia has registered a good deal in the accessibility of health facilities and health workers in the community, especially health extension workers. Yet, the findings of this and other studies reported significant complaints on the quality of health services, both in curative and in prevention packages. Therefore, this study recommends further works on the quality of health services in general and maternal and child health services in particular. The study also enlighten the need for upgrading the knowledge and counseling skills on child feeding practices to address the specific needs mothers and other family members get challenging in the implementation of recommended child-feeding practices. Specific interventions on such issues include action-oriented trainings on nutrition for health workers and skills to work with communities of diverse sociocultural and religious backgrounds.
6. The community-based support for recommended child-feeding practices will be more efficient and sustainable if actors are linked the importance of nutrition for the health development and productivity of individuals at different ages and health statuses. Therefore, the result of this study suggests the inclusion of nutrition, specifically child nutrition issues in formal education and agriculture related profession trainings. This engages rural men in recommended child feeding practices through agricultural extension programs, and sustainably strengthens prevention strategies. Furthermore, the inclusion of nutrition-related courses in agriculture related professional trainings also encourage production and accessibility of nutritious foods that participants in this study complained as the major obstacle for the practice of child-feeding recommendations.

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ANNEXES

Annex 1: English Version of the Survey Questionnaire

Cluster Code ____ /_____HH Code: ____/____

Date of the interview _____/_____/_____Name of the interviewer: _____

MOTHERS AND THE "INVOLVED OTHERS" IN CHILD FEEDING PRACTICES: THE SOCIOCULTURAL CONTEXT OF IMPLEMENTING THE RECOMMENDED CHILD FEEDING PRACTICES IN SEBETA AWAS WOREDA, OROMIA REGIONETHIOPIA

Household Survey Questionnaire

INTRODUCTION AND CONSENT

Hello. My name is _____. Currently, I am collecting data on behalf of Fekadu Dereje, who is conducting research in partial fulfillments for the requirements for the degree of PHD in Sociology at Addis Ababa University. The study is about assessing determinants of child feeding practices. Hence, you may be requested to furnish information regarding your knowledge, attitude and practices of proper child feeding. You are selected as one of the study subjects by chance. In addition to its academic purpose, this research may help government and non-government organizations for program intervention aiming at improving child health.

I assure you that the information you give will not inflict any harm as far as the confidentiality is kept. The information will be taken only when you participate voluntarily. You have full right not to let your information consumed for this study and can stop me whenever you think it appropriate. Nevertheless, the information that would be taken will be quite useful for the study.

Usually, the interview may take 30-40 minutes. If you have any question or comment on the interview, you can contact FekaduDereje (Tel. No: 0911-92 23 64) or Addis Ababa University, Department of Sociology (Tel.No: 011-122 59 48). If you are willing to be interviewed, we can start.

S.N		Res
1.1	Age (in years)	
1.2.	Religion (1. Orthodox Christianity, 2.Protestant 3.Catholic 4.Muslim 5. Others (please specify) _____	
1.3.	Marital Status (1. Unmarried 2. Married 3.Cohabiting 4.Divorced 5.Widowed 6. Others (please specify) _____	
1.4.	Ethnicity (1.Oromo, 2.Amara, 3.Tigre, 4.Gurage, 5.Walayita 6.Others (Please specify) _____	
1.5.	Educational Status (1.Cannot read and write, 2.Informal education (read and write) ,3.Primery (Grade 1-8), 4.Secondary (grade 9-12), 5.Certficate and above	
1.6.	Occupation (1.Student, 2.Farmer, 3.Formally employed, 4.Run own business, 5.Daily laborer, 6.Unemployed, 8.Others (please specify) _____	
1.7.	Is your working areas is separated from your residential area? (1.Yes, 2.No)	
	1.7.1. If "Yes," how many days within a week?	
1.7.2. If "Yes," how many hours within a day?		
1.8	Average monthly income of the household (in birr)	

2. Respondent's HH Socio-economic and demographic Background

S.N		Male	Female	Total
2.1	Total number of persons living in the HH			
2.2.	Number of Under-Five children living in the HH			
2.3.	Number of children less than 24 months living in the HH			

3. Were you engaged in livestock production in the last one year? 1.Yes 2.No

If 'Yes' to the above question, please indicate the kinds and number of animals you produce.

	Livestock Type	**Quantity**
3.1	Cattle (oxen, cow,)	
3.2	Sheep	
3.3	Goat	
3.4	Chicken	
3.5	Pack animals (e.g. Horse, donkey, mule)	
3.6	Others (please specify) ……	

3.7 Is there any diary product that is produced only for child food? 1.Yes 2.No

4. Did your HH produce crop/vegetable during 2012/13 (last year)? 1. Yes 2.No

4.1 If 'Yes', is there any of these products reserved for child food? 1. Yes 2.No

4.2 If 'Yes' please specify? _____

_____

5 Did the HH face food shortage in the last one year? 1. Yes 2.No

5.1 If 'Yes', indicate how you tried to cope with the food shortage?

	Which strategy did you follow?	1.Yes	2. No
5.1.1	Rely on less preferred and less expensive food		
5.1.2	Sell livestock to buy food/grain		
5.1.3	Purchase food on credit		
5.1.4	Sell HH assets to buy food/grain		
5.1.5	Depend on wild food/fruits		
5.1.6	Consume seed stock held for the next season		
5.1.7	Borrow from friends or relatives		
5.1.8	Asked for grain/food gift from neighbors/relatives/friends		
5.1.9	Cut and sell trees/charcoal		
5.1.10	Worked on neighbor farms/nearby town to earn the income/food		
5.1.11	Limit portion size at mealtimes		
5.1.12	Reduce number of meals eaten in a day		
5.1.13	Send children to eat with neighbors		
5.1.14	Restrict consumption by adults in order for small children to eat		
5.1.15	Skip entire days without eating		

5.1.16 Others (Please specify) _____

6 Is there any difference in meal frequency and time due to age or/and gender differences? 1.Yes 2.No

6.1 If 'Yes' to the above question, indicate meal frequency and priority of service.

(**1. First served, 2. Served second, 3.Served third, 4.Simeltaneously served)**

	HH Members	**Food sufficient months**		**Food shortage months**	
		meals per day	Rank of serving	meals per day	Ra

6.1.1	Male adult					
6.1.2	Female adult					
6.1.3	Boys					
6.1.4	Girls					
6.1.5	Children(2-5 years)					
6.1.6	Children (6-24 months)					

*SO 2: To explore the **social values, norms and beliefs** that are affecting the childcare and feeding*

7.	In your community, is there any foodstuff that is not allowed for children of less than 2 years?	1.Yes 2.No
7.1	If 'Yes' what are these foodstuff? **[MULTIPLE RESPONSES POSSIBLE]** 6.Others (Please specify) _____ _____	1. Meat 2. Raw meat 3. Egg 4. Fish 5. Honey 6. Others (Please specify) ….
7.2	What are the reasons/justifications for the food restriction? PROBE FOR CULTURAL/RELIGIOUS BELIEFS AND PRACTICES THAT PROSCRIBES INFANTS AND CHILDREN FROM EATING SOME FOODS	_____ _____ _____ _____ _____ _____
8.	In your community, is there any custom of giving a newborn infant with foods/liquids in the first three days?	1.Yes 2.No
8.1	If 'Yes', what are these foods/drinks? 5. Others (Please specify) _____ _____	1. Water 2. Sugar and water 3. Milk 4. Butter 5. Others (Please specify) …
8.2	What are the cultural justifications for giving these foods/drinks? 5. Others (Please specify) _____ _____ _____	1. Newborn suffers from dehydration 2. Breast milk alone is not sufficient 3. Cleansing the gastrointestinal tract of the infant 4. Flushing the bladder of the infant 5. Others (Please specify) ….
9.	In your community, is there a custom of feeding newborn with colostrum?	1.Yes 2.No
9.1	If 'No' to the above question, why is the colostrum not given for the infant? *4. Others (Please specify)*_____ _____ _____	1. It is dirty and hence cause infect 2. It is not easy for digestion 3. It is not a tradition 4. Others (Please specify) …
10.	In your community, if a biological mother is unable to breastfeed her child due to her physical, mental or other problems, how is a newborn being fed?	1. Given other foods/liquids 2. Breastfeed by relatives 3. Wet nursing 4. Adopted by another family

5. Others (please specify) _____ _____ _____

5. Others (Please specify) …

11. Now you are going to ask types of decision a wife or a husband can make alone or jointly. Write the code corresponding to watch alternative in the column provided

Lak.	**Type of decision**	**Who decides?** (**1**.Can decide alone, **2** =Can decide with husband or male family member, **3** = Husband makes the decisi discussion with wife, **4** = Not involved in decision, 5 applicable)
11.1	Buying small food items, groceries. toiletries	
11.2	Buying clothing for yourself and your children	
11.3	Spending money that you yourself have earned	
11.4	Buying or selling major HH assets (e.g. land, livestock, crops)	
11.5	Expense for children's food	
11.6	Expenses for children's education	
11.7	Medical expenses for you and your children	
11.8	Taking child to health facility if she/he is sick	

12. The following questions are to assess GENDER-AGE specific roles in the community, which have influence and energy spent on CFPs by HH members. Write the codes corresponding to each alternative in the column

No	**Type of the HH activity**	**Who preforms** **[Note that multiple responses are possible]** (1. Wife, 2.Husband, 3.Adult male, 4.Adult female, 5. Employed 6.Others (please specify)…
11.1	Cooking food	
11.2	Fetching water	
11.3	Washing clothes	
11.4	Collecting firewood	
11.5	Cleaning HH surrounding	
11.5	Caring for children	
11.6	Feeding children	
11.7	Going to market to buy food items	

*SO3: To analyze households' **access to, and utilization of, health promoting resources and actors' reflexivity to these contexts** in child feeding practices*

[Please put 'X' mark in front of applicable response]

S.N	**Basic HH infrastructure**	**Available?**		**The Time it takes on foot.** *[Write **"00"** if it is not applicable*
		1=Yes	2.No	
12.1.	Hand-drained water			
12.2.	Developed spring water			
12.3	Bore hole water			
12.4	Village market			
12.5.	Central/big market			
12.6.	Fixed-line telecom services			
12.7.	Year-round road			

12.8.	Electric-power			'00'
12.9.	Health Post			
12.10.	Health Center			
12.11.	Government Hospital			
12.12.	Private/NGO clinic			
12.13.	Private/NGO hospital			
12.15.	First cycle Primary School (Grade 1-4)			
12.16.	Primary School(Grade 1-8)			
12.17	Secondary School (Grade 9-10)			

13	Is there functional radio in the HH?	1.Yes 2.No
13.1	If 'Yes' do you listen to the radio?	1.Yes 2.No
13.2	If 'Yes' have you ever heard issues on CFPs?	1.Yes 2.No
13.3	If 'Yes', what were the message? **[Multiple responses possible]** 5. *Others (Please specify)*_____ _____ ____	1. The benefits of colostrum feeding 2. Dangers of pre-lacteal feeding 3. Timing and variety of complementary feeding 4. Benefits of exclusive breastfeeding 5. Others (please specify)……
13.4	How do you rate the importance of the media to promote proper child feeding practices?	1. Excellent 2. Very good 3. Good 4. Poor 5. Very poor
14	Does the HH have a functional TV?	1.Yes 2.No
14.1	If 'Yes' do you watch the TV?	1.Yes 2.No
14.2	If 'Yes' have you ever watched issues on CFPs?	1.Yes 2.No
14.3	If 'Yes', what were the message? **[Multiple responses possible]** 5. *Others (Please specify)*_____ _____ _____	1. The benefits of colostrum feeding 2. Dangers of pre-lacteal feeding 3. Timing and variety of complementary feeding 4. Benefits of exclusive breastfeeding 5. Others (please specify)……
14.4	How do you evaluate the importance of the media to promote proper child feeding practices?	6. Excellent 7. Very good 8. Good 9. Poor 10. Very poor
15.	Do you read any magazine?	1. Yes 2.No
15.1	If 'Yes', have you ever read issues on CFPs?	1. Yes 2.No
15.2	If 'Yes', what were the message? **[Multiple responses possible]** 5. *Others (Please specify)*_____ _____ _____	1. The benefits of colostrum feeding 2. Dangers of pre-lacteal feeding 3. Timing and variety of complementary feeding 4. Benefits of exclusive breastfeeding

		5. Others (please specify)……	
15.3	How do you evaluate the importance of the media to promote proper child feeding practices?	1. Excellent 2. Very good 3. Good 4. Poor 5. Very poor	
16.	Do you think your drinking water is safe?	1 Yes 2.No	
16.1	If 'No', what do you do to purify it? 5.Others (Please specify) _____ _____ ____	1. Boling 2. Let it stand and settle 3. Using cloth as a strainer 4. Use purifying products 5. Others (please specify) …	
16.2	What is the source of information about the purification? 6. Others (Please specify) _____ _____ ____	1. Health Extension Workers 2. Volunteer Comm. Health Promoters (VCHPs) 3. Friends 4. Media (E.g. radio, TV) 5. Others (please specify) …	
17.	Does the HH have toilet facility?	1. Yes 2.No	
17.1	If 'Yes', what is the type of toile facility? ***3. Others (please specify) …. _____*** _____ __	1. Ventilated Improved Pit latrine 2. Pit latrine without slab/open pit 3. Others (please specify) ….	
17.2	If 'No', how do you dispose the youngest child's stool? ***3. Others (please specify ----------*** _____ _____	1. Use open land 2. Rinses into drain or ditch 3. Others (please specify) …	
18.	Do you wash your hand before feeding children?	1. No 2. Yes, sometimes 3. Yes, always	
19.1	If 'Yes', what materials do you use to wash your hands before feeding children? 5.Others (please specify) _____ _____ __	1. Water only 2. Water and soap 3. Water and ash *4.* Water and *'Ednode'* 5. Others (please specify) ….	
19.	Have you ever heard about Antenatal Care (ANC)?	1. Yes 2.No	
20.1	If 'Yes', did you follow ANC services during last pregnancy?	1. Yes 2.No	
20.2	If 'Yes', where did you follow the ANC? 7.Others (please specify) _____	1.Government Hospital 2.Private Hospital 3. Government Health Center 4.Private Clinic 5.Health Post	

	_____ ____	6.NGO's clinic 7. Others (please specify)
20.3	During the ANC, did you get counseling/information on proper CFP?	1. Yes 2.No
20.4	If 'Yes', what were the messages? 5. Others (please specify) _____ _____ _____	6. The benefits of colostrum feeding 7. Dangers of pre-lacteal feeding 8. Timing and variety of complementary feeding 9. Benefits of exclusive breastfeeding 10. Others (please specify)……
21.	Where did you delver your youngest child? *4.* Others (please specify) _____ _____ ____	1. In Health Facility 2. Own Home 3. Mothers/mother-in-law's home 4. Others (Please specify) ….
21.1	If you delivered in health facility, mention its type 7.Others (please specify) _____ _____ ____	1.Government Hospital 2.Private Hospital 3. Government Health Center 4.Private Clinic 5.Health Post 6.NGO's clinic 7. Others (please specify)
21.2	During the delivery, did you get counseling service on proper CFP?	1. Yes 2.No
21.3	If 'Yes, what were the messages? 5.Others (please specify _____ _____ _____	1. The benefits of colostrum feeding 2. Dangers of pre-lacteal feeding 3. Timing and variety of complementary feeding 4. Benefits of exclusive breastfeeding 5. Others (please specify)……

*<u>SO4:</u> To assess **community based supports** rendered to ensure proper feeding practices for children vulnerable to malnutrition related health problems*

20.	Are you a member of any community-based organization (CBOs)?	1. Yes 2.No
22.1	If 'Yes', mention the type of CBO. ***[Multiple responses are possible]*** *4. Others(Please specify)* _____ _____	1. *Iddir* 2. *Iqub* 3. Health Development Army/HDA. 4. Others (please specify) ….
22.2	If you are a member of *iddir,* is there any financial or material support for lactating women in need?	1. Yes 2.No
22.3	If 'Yes', is there any support given for children in shortage of food?	1. Yes 2.No

22.4	If you are a member of *Iqub*, is there any support arranged for children in shortage of food?	1. Yes 2.No
22.5	If you are a member of HDA. Do you have regular meeting?	1. Yes 2.No
22.6	If 'Yes' how frequent do you meet per month?	_____
22.7	Do you discuss about the indicators of proper CFP?	1. Yes 2.No
22.8	If 'Yes', what are the issues of your discussion? **[PROBE FOR *CFPs*]**	_____ _____ _____
22.9	Is there any technical support during your meeting?	1. Yes 2.No
22.10	If 'Yes', who provides you such supports? ***[Multiple Responses are Possible]*** *3.Others (Please specify)* _____ _____ _____	1. Health Extension Workers (HEALTH EXTENSION WORKERs) 2. Vulunteer Communuty Health Promoters (VCHPs) 3. Others (Please specify) …
22.11	Please mention the technical supports health extension workers provide you, if any. ***[Multiple Responses are Possible]*** *5.Others (Please specify*_____ _____ _____	1. Teaching the components and benefits of proper CFP 2. Practical demnostration of ways of preparing nutretious food for children 3. Screening children with malnutrition problem 4. Refferal linkage of children with malnutrution to higher health facilities or NGOs 5. Others (Please specify) …..
22.12	How do you perceive the sufficiency of supports by health extension workers on CFPs?	1. Excellent 2. Very Good 3. Good/Fair 4. Poor 5. Very Poor
22.13	If VCHPs provide you any technical supports, please mention them? ***[Multiple Responses are Possible]*** *5.Others (Please specify*_____ _____ _____	1. Teaching the components and benefits of proper CFP 2. Practical demnostration of ways of preparing nutretious food for children 3. Screening children with malnutrition problem 4. Refferal linkage of children with malnutrution to higher health facilities or NGOs 5. Others (Please specify) …..
22.14	How do you perceive the sufficiency of supports by health extension workers on CFPs?	1. Excellent 2. Very Good 3. Good/Fair 4. Poor

		5. Very Poor
23.	**[For those who engaged in agriculture]** Do agriculture development agents provide your HH with technical supports to enable you increase your productivity?	1.Yes 2.No
23.1	If 'Yes', have you ever been told the kinds of nutritious foods effective for proper child feeding?	1.Yes 2.No
23.2	If 'Yes', have you been advised how to cultivate these foods?	1.Yes 2.No
23.3	Have you cultivated these foods accordingly?	1.Yes 2.No
24.	Have you ever heard an NGO working on promoting proper child feeding in your community?	1.Yes 2.No
24.1	If 'Yes', what are the major services they provide with regard to child feeding practices? ***[Multiple responses possible]*** *4.Others (please specify)* _____ _____ _____	1. Train the whole community on proper child feeding practices 2. Screen HHs with poor child feeding practices to provide them material/financial supports to improve their child feeding practice 3. Provided fortified foods for those children with malnutrition problem 4. Others (Please specify) …
24.2	Have received any of the above services?	1.Yes 2.No
24.3	How do evaluate the sufficiency of supports by these NGOs in promoting proper child feeding practices?	1. Very sufficient 2. Sufficient 3. Modest 4. Insufficient 5. Very insufficient
25.	In general, how do you rate the level of proper infant and child feeding practices of your community?	1. Excellent 2. Very Good 3. Good 4. Poor 5. Very Poor 6. Don't Know
25.1	Would you give reason/s for your rating the level of proper infant and child feeding practices of your community?	_____ _____ _____

ATITUDE TWARDS CHILDCARE AND FEEDING PRACTICES

26. Please read the following statements for the respondents and put 'X' on the respondent's level of agreement in front of each statement.

	SATEMENTS	Strongly Agree(5)	Agree (4)	Don't know (3)	Disagree (2)	Strongly Disagree	SCORE
26.1	Pregnant women should eat more foods (in quantity and variety) than non-pregnant women						
26.2	Lactating women should eat more foods (in quantity and variety) than non-lactating women						
26.3	New born children has to be put to breast immediately						
26.4	Feeding newborn infants with colostrum protects them from disease and infection.						
26.5	Pre-lacteal feeding infects newborn infants						
26.6	Breast milk alone is enough for infants less than 6 months.						
26.7	Breastfed babies are healthier than formula-fed babies are.						
26.8	Breast milk increases maternal and child bonding.						
26.10	Mother should not breastfeed during her sickness.						
26.11	Children should feed more during their sickness.						
26.12	Mothers should not breastfeed their children in public places.						
26.13	Some mothers do not produce sufficient breast milk.						
26.14	Malnourished mothers could not produce sufficient and nutritious breast milk						
26.15	If a child less than six months looks at food, it means s/he is willing to eat and hence the food should be given for the child.						
26.16	If mothers of less than six months children are out of home, they have to provide the child with expressed breast milk.						
26.17	Breast milk is not good for a child when the mother became pregnant.						
26.18	The age of offering supplementary diet beside breast milk is 6 months.						
26.19	By the age of 6 months, children can eat every food that adults do.						
26.20	By the age of 2 years, breast milk is no more important for the child.						

Cross Cutting Issues: Child Feeding Practice as an Outcome Variable

27.	What is the age of your youngest child (in months)?	_____
28.	What is the sex of your youngest child?	1. Male 2. Female
29.	Are you currently breastfeeding?	1.Yes 2.No
29.1	If 'Yes' did you put the child to breast within the first 1 hour of birth?	1.Yes 2.No
29.2	Did you give colostrum to the child?	1. Yes 2. No
29.3	How often do you breastfeed your child during the day?	_____
29.4	How often do you breastfeed your child during the night?	_____
29.5	When do you breastfeed the child?	1. When the child cries

	4.Other (Please specify) _____ _____ _____	2. On schedule/regular time 3. On convenience 4. Other (Please specify
29.6	If you stopped breastfeeding, when did you stop?	_____ (months)
29.7	How did you wean the child? 3.*Others (please specify)* _____ _____ _____	1. Abruptly 2. Gradually 3. Others (please specify) …
29.8	Why did you stop breastfeeding? *6.Other (please specify)* _____ _____ _____	1. Onset of Pregnancy 2. Started Oral contraceptive 3. Felt it was time to stop 4. Inadequate breast milk 5. Maternal illness 6. Leaving home for work 7. Other (please specify) ….
29.9	What is the age of your youngest child (in months)?	
30	Have you started giving supplementary foods for your youngest child?	1.Yes 2.No
30.1	If 'Yes', what was his/her age (in months) when you gave him/her complementary food s?	_____months
30.2	Why did you start to give the child complementary foods? 5.*Other (please specify)* _____ _____	1. Breast milk was insufficient 2. The mother was sick 3. Child was sick 4. Mother left home for work 5. Other (please specify) …
30.3	What kinds of food did you give the child as complementary food? 5.*Other (please specify*) _____- _____ _____ _____	1. Gruel 2. Soft porridge 3. Cow's milk 4. Formula milk 5. Others (please specify)…
30.4	If you gave the child formula milk, what was the source of information? 5.*Other (please specify)* _____ _____ ___	1. Husband 2. Friends 3. Grandmother/mother in law 4. TV/Radio advertisements 5. Others (please specify)
30.5	How often did you feed the child per day with the complementary foods?	_____(times per day)
30.6	How did you feed the child with complementary foods? 5.*Others (please specify* _____	1. Spoon 2. Cup 3. Hand 4. Bottle 5. Others (please specify)…

	_____ _____		
31	Has your youngest child had diarrhea in the last two weeks	1. Yes 2. No	
31.1	If 'Yes', how much food/drink is given during diarrhea	1.Less than the normal time 2.Greater than the normal time 3. As usual	
31.2	If less than the normal time, why? 6.*Other (please specify)* _____ _____ ___	1. Fear that the disease will be sever 2. The child lost appetite 3. Told to do so 4. Others (please specify) ...	
31.3	Did you seek advice or treatment from someone else?	1. Yes 2. No	
31.4	If 'Yes' from whom did you seek information/advice? 5.*Other (please specify)* _____ _____ ___	1. Health professionals 2. VCHPs 3. Traditional Birth attendants 4. Traditional medical practitioners 5. Others (please specify) …	
31.5	If the child has received treatment during the last illness, how was the treatment done? 5.*Others (Please specify)* _____ _____ _____	1. Home treatment with over-counter pharmaceutical drugs 2. Home treatment with herbal medicine 3. Treatment by traditional healer 4. Treatment in health facility 5. Others (please specify)…	

*Specific Objective 5: To examine the **problems and prospects** of optimal child feeding practices*

32	In your opinion, do you think the concern about proper child feeding practice is improving?	1. Yes 2.No 3.Don't Know	
32.1	If 'Yes' what are the causes of this increasing concern? ***[Multiple responses possible]*** *7.Others (Please specify)* _____ _____ _____	1. Women's education 2. Males' increasing involvement in child feeding practices 3. Improve in HH's economic wellbeing 4. health extension workers are continuously working on it 5. Media (TV, Radio) information 6. Effects of community based networks and organization 7. Increasing NGOs' interventions in the area 8. Others (please specify) ….	

32.2	If 'No', what impedes the increasing of concerns about proper child feeding practices? ***[Multiple responses possible]*** *6.Others (Please specify)* _____ _____ _____	1. Depleting HH resources (e.g. land, cattle…) 2. Increasing food prices 3. Harmful traditional beliefs and practices 4. Weak information, education and communication channels 5. Low male's involvement in child feeding practices 6. Others (please specify) ….
33.	In your opinion, what are the existing opportunities to improve infant and young child feeding practices? PROBE FOR THE EMERGENCE OF CHILD-CENTERED FAMILIES AND EXPANDING INFRASTRUCTURES	_____ _____ _____ _____ _____
34	In your opinion, who should do what in order to promote proper infant and young child feeding practices? [PROBE TO LIST AND DISCUSS THE ROLE OF GOVERNMENT, NGOs, CBOs and HHs IN PROMOTING PROPER CHILD FEEDING PRACTICES]	_____ _____ _____ _____ _____ _____
35	Any idea you want to include/add.	_____ _____ _____

THANK YOU VERY MUCH!

Annex 2: Qualitative Data Collection Checklists

FGD outline (for female informants)

Name of the Interviewer: _____

Signature of the interviewer: _____

Address/location: Region: **Oromia**
Zone: **Finfinnee Surrounding Special Zone**
Woreda: **Sebeta-Awas**
Kebele _____
CODE (FGD group): _____
DATE/TIME: _____
NAME OF MODERATOR: _____
NAME OF RECORDER: _____
DURATION_____
Put background information about participants in the following table
List of participants (use code instead of names such as P1, P2, P3,)

Code	Sex	Age	Marital status	Place of residence	Education level	Place of birth	Occupation
P1							
P2							
P3							
P4							
P5							
P6							
P7							
P8							

- In your community, is it common to feed a newborn infant with colostrum? Could you explain the reason why it is common or not common? ***[Probe for the cultural views toward the importance of colostrum for newborn infants and the timing of giving colostrum if any]***
- Is there any liquid or semisolid foods given for newborn infants within the first three days? If yes, what are these foods? What are the benefits of these foods for the infant? What would happen if the infant were not given these foods? ***[Probe for the beliefs and practices towards pre-lacteal foods and the perceived benefits of giving pre-lacteal feeding for newborn infants]***
- Do you agree, "Breastfeeding a child without any additional foods or liquids for the first six months is sufficient for physical and mental development of an infant"?
- Why? ***[Probe for community's belief towards, and practices of, exclusive breastfeeding]***
- What is the proper age of an infant to eat additional foods? What kinds of foods are suitable for the infant just starting having complementary foods? Is there any gender differences on the kinds and amounts of foods consumed? [**Probe if there is any food that is consumed by male infants but not by female infants and vice versa.]**
- In your community, what is the role of males/fathers in childcare and feeding? ***[Probe for the age-sex division of labor and the involvement of males in child feeding]*** In your community, is it customary to follow Antenatal care (ANC)? If yes, is there any counseling concerning proper child feeding? If 'No', why?
- Where do most of the pregnant women deliver their child? Why? Is there any advice or counseling about child feeding by those who assist during delivery? ***[Probe for their preferences to deliver their child; whether they prefer delivering at home to health institutions; whether they prefer traditional birth attendants to trained health workers and whether they counsel how and what to feed a newborn infant]***
- In your community, who are the influential persons in directing childcare and feeding practices? How*?* ***[Probe for elders, TBAs, mothers, fathers, grand-parents, HEALTH EXTENSION WORKERs, VCHPs,***
- If a mother could not feed her newborn properly, is there any customary support by rendered neighbors or relatives to feed the infant? How? **[*Probe for the customary practices regarding 'wet nursing' or adoption if the mother is physical or emotionally incapable of breastfeeding. Or whether there is any social network that encourages transfer of material and financial resources among households in time of need, for example if the household is incapable of providing adequate care and*

food for infants and children]

- What is the role of health extension workers in promoting proper child feeding? Do you think they are bringing a difference? What are visible changes one can sense since they (HEALTH EXTENSION WORKERs) have brought with regard to proper child feeding practices? How do you rate the readiness of your community to work with health extension workers to improve the child feeding practices? Why? ***[Probe for the perception and adoption of the community about the proper infant and young child feeding practices promoted by HEALTH EXTENSION WORKERs***
- In your opinion are proper child feeding practices improving in your community? Why or why not? ***[Probe for dynamism related to increasing urbanization formal employment opportunity for males and females increasing commercialization of infant formula…]***
- Is there any barrier that impedes the promotion proper child feeding practices? If yes what are these? ***[Probe for harmful traditional practices accessibility issues to infrastructure and health services***
- What do you suggest to promote proper child feeding practices in your community? *[Probe for structural and infrastructural arrangements and community based innovative strategies*

KII GUIDELINE FOR **REGIONAL HEALTH OFFICIALS**

Date of the interview: _____
Duration of the interview: _____

Woreda: *Sebeta Awas, Oromia Region*

Kebele: _____

- Educational level and field of specialization: _____
- Number of service years at the current position: _____

1. Would you mention the strategic issues of IYCFP Strategy?
   [Probe for the need and pillars of the strategy in relation to national health policy and international Infant and young child feeding practices guidelines such as those recommended by WHO.]
2. What are the strategic key stakeholders assumed by the strategy? How do these stakeholders being integrated in implementing the strategy
   [Probe for the integration among ministries such as Ministry of Agriculture, ministry of Women, Children and Youth affairs, ministry of trade and local as well as international NGOs working programs/projects related to child health]
3. As one of the programs in Health Extension Package, what are GoE is striving to participate the community in promoting Infant and Young Child Feeding Practices. Do you think the program is bringing difference in terms of changing the long-standing beliefs and practices of childcare and feeding? What are the indicators for the improvement, if any?
4. Are there any updated manuals and refreshment trainings for frontline implementers of the strategy (HEALTH EXTENSION WORKERs)? Is there any contextualization of the national strategy to regional realities? Why?
5. What attempts are made to include the indigenous knowledge and practices into the guideline so as to contextualize the implementations of the strategy
6. What are the challenges faced so far in implementation of the strategy? What lessons are taken from the challenges? ***[Probe for adequacy and accessibility of health infrastructure to the community, institutional integration among different ministries and the institutional and human resource capacities to cascade the strategy]***
7. What do you suggest for further implementation of IYCF strategy? ***[Probe for institutional, infrastructural and community related issues].***

KII GUIDELINE FORWOREDA **HEALTH OFFICIALS**

Date of the interview: _____
Duration of the interview: _____

Woreda: *Sebeta Awas, Oromia Region*

Kebele: _____

- Educational level and field of specialization: _____
- Marital status: _____
- No of children (if any)_____
- Number of service years at the current position: _____

1. Who are the major stakeholders in IYCF practices in the *woreda*? What are the role of each stakeholder ***[Probe for CBOs, NGOs, volunteer individuals,.. working on IYCF practices in the Region/woreda]***
2. As one of the sub-package in Health Extension Package, what are your roles in implementing and coaching IYCF practices? ***[Probe for technical and supervisory roles they reform and the stacks involved in the process]***
3. How do you rate the level of proper child feeding in your region/*woreda?*
   [probe for the percentage of EBF, colostrum feeding, complementary feeding practices adequacy and its indicator, duration of breastfeeding, child-feeding during illness, …..]
4. Do you arrange updated manuals and refreshment trainings on IYCFPs?
   [Probe for the type and contents of trainings and workshops as well as experience sharing seminars in relation to IYCF practices in the past one or two years and the organizations involved in such activities]
5. What opportunities do you envisage in your localities in relation to IYFPs? ***[Probe for the community organization such as Health Development Army (HDA), VCHPs, NGOs, CBOs, local resources and knowledge/cultural norms and practices]***
6. What challenges did/do you face in implementing IYFPs? ***[Probe for technical assistances given at different levels, adequacy and accessibility of health infrastructure to the community, availability and relevance of manuals and strategies of IYCF practices, traditional beliefs and practices in the community,]***
7. What do you suggest to improve the implementation of IYCF program?
   [Probe for institutional, infrastructural and community related issues].

KII GUIDELINE FOR **REGIONAL AGRICULTURE BUREAU OFFICIALS**

Date of the interview: _____

Duration of the interview: _____

- Educational level and field of specialization: _____
- Number of service years at the current position: _____

1. What are the major policy pillars of agriculture development in Ethiopia? *[Probe for the governments' concerns HH food security, increase productivity and decrease rural poverty…]*
2. What are the major policy pillars of agricultural development strategy *[Probe for provision of agricultural inputs, extension services to increase the productivity, advisory and technical support to enhance variety of crop and animal production]*
3. Ministry of Health has developed Infant and Young Child Feeding Practices in 2004 and, as feeding is intimately dependent on the amount of agricultural production in countries such as Ethiopia that are based on agrarian economy, ***is there any department in your bureau that is closely concerned with integrating this IYCF to its policy guidance and implementation? If yes, how? If no, why?***
4. What ways do you suggest if you think that your bureau has to work with bureau of health with regard to increasing the production of fortified foods and advising the farmers to produce nutritionally enriched foods for infants and children?

KII GUIDELINE FOR**AGRICULTURAL DEVELOPMENT AGENTS**

Date of the interview: _____
Duration of the interview: _____

Woreda: *Sebeta Awas, Oromia Region*

Kebele [If applicable]: _____

- Educational level and field of specialization: _____
- Number of service years at the current position: _____

1. What are the major crops and vegetables that are produced in your *kebele?* What are the major livestock products in your *Kebele?* Are these products produced for market or for HH consumptions?
2. What is the percentage of food secured HHs in your *kebele?* Is there any significant food shortage in in your *kebele?* What are the indicators?
3. Do you give any technical or advisory support for HH on crops/vegetables nationally recommended for proper physical and mental development of infants and children? If yes, what is the response from the HHs?
4. What are the major livestock products in your *kebele?*
5. Is there any training given on how to integrate your technical and advisory supports to the implementation of proper infant and young child feeding strategy? If yes, how do you evaluate the adequacy of the integration?
6. In terms of their agricultural production, do you think the community substantially cares about cultivating the crops/vegetables that are nutritionally advised for child feeding?
7. What do you suggest to integrate your effort with that of health extension workers in implementing IYCF strategy?

KII GUIDELINE (for **NGOs working on Agriculture and /or Child Health and Nutrition)**

Date of the interview: _____

Duration of the interview: _____

Operation *Regions and Woreda*

Target Groups for the operations: _____
_____

1. What are the major program/project areas of your organization? *[Probe for the program/project components related to agriculture productivity and crops fortification, child health and nutrition issues]*
2. Do you know "Infant and Young Child Feeding Practices (IYCFPs) strategy enacted by Ethiopian Ministry of Health? If yes, are you working with any organization responsible for implementing the strategy? *[Probe for the close integration of GOs, NGOs and CBOs in smooth and effective implementations of IYCFPs]*.
3. If you are working with GoE on agriculture development at HH level, what are the major activities you contribute to the government's effort of rural development? Do you work on food fortification? Why yes/no? *[Probe for technology transfer and extension services they may provide]*.
4. If you are working with GoE on health aspects, what are your major concentration areas? What are you contributing to improve the nutritional stats and feeding practices of infants and young children of the *woreda? [Probe for their role in MCH specifically related to child nutrition and feeding practices]*.
5. What opportunities do you assume in implementing IYCFPs in the region/*woreda*? *[Probe for the policy contexts and institutional integrations among government bureaus and NGOs as well as CBOs and HHs dynamic response to these contexts]*.
6. What challenges did you face in implementing IYCFPs in the *woreda*?
7. What do you suggest for smooth implementation of IYCFP strategy in the *woreda*/region so that the nutrition and health status of children will be enhanced?

KII GUIDELINE HEALTH EXTENSION WORKERs

- Date of the interview: _____
- Duration of the interview: _____
- Woreda: *Sebeta Awas, Oromia Region* Kebele: _____
- Number of service years at the current position: _____

1. What are the major preventive and promotion services you deliver in relation to Mothers and Children Health (MCH)? *[Probe for ANC, PNC, Immunization, IYCF practices and other relevant packages in HEP]*
2. Who are the major stakeholders in Infant and Young Child Feeding Practices (IYCFPs) in the *woreda*? Could you mention the role of each? ***[Probe for CBOs, NGOs, volunteer individuals,.. working on IYCF practices in the woreda]***
3. As one of the package in HEPs, what are your roles in implementing IYCF practices? ***[Probe for functional activities they reform and the stacks involved in the process]***
4. How do you rate the level of proper child feeding in your *woreda* and *kebele?* ***[probe for the percentage of EBF, colostrum feeding, complementary feeding practices adequacy and its indicator, duration of breastfeeding, child-feeding during illness,***
5. Do you work with Agricultural Development Agents in relation to advising the HHs on cultivating nutritionally enriched crops/vegetables/livestock's? If yes, how? If no, why?
6. Do you have updated manuals and refreshment trainings on IYCFPs? If yes, in what time interval and by which organization? ***[Probe for the type and contents of trainings, workshops and experience sharing seminars in relation to IYCF practices in the past one or two years and the organizations involved in such activities]***
7. How do you rate the readiness of the community of the *woreda* to adopt the IYCFPs you are promoting? How do Voluntary Community Health Promoters (VCHPs) support your effort of promoting IYCFPs? Does the community welcome them? What opportunities do you envisage in your localities in relation to IYFPs? ***[Probe for the community organization such as Health Development Army (HDA), VCHPs, NGOs, CBOs, local resources and knowledge/cultural norms and practices]***
8. What challenges did/do you face in implementing IYFPs? ***[Probe for technical assistances given at different levels, adequacy and accessibility of health infrastructure to the community, availability and relevance of manuals and strategies of IYCF practices, traditional beliefs and practices in the community…]***
9. What do you suggest to improve the implementation of IYCF program? ***[Probe for institutional, infrastructural and community related issues].***

Annex 3: Afan Oromo version of the survey questionnaire

Cluster Code ____ /_____ HH Code: ____/____

Date of the interview _____/_____/*14* Name of the interviewer: _____

ACTORS AND STRUCTURES IN CHILD FEEDING PRACTICES: THE CASE OF SEBETA-AWAS *WOREDA*, OROMIA REGION

Household Survey Questionnaire

INTRODUCTION AND CONSENT

Attam jirtu? Ani _____n jedhama .Amma Yuuniversitii Finfinneetti barataa Sooshooloojii digirii 3ffaa (PhD) kan ta'ee Fiqaaduu Darajjeetiifan oddeeffannoo funaanaa jira. Qorannoon kun barumsa (akkaadaamii) qofaaf kan oolu yoo ta'u kan irratti xiyyeefatus waa'ee aadaa nyaataa fi kunuunsa daa'immanii Magaalaa fi Aanaa Sabbataa-Awaas ilaala. Qorannoon kun akakdamii dabalatee kanneen himaammataa fi sagantaalee kunuunsa da'immanii baasn waan garagauu waan danda'uuf fayyaa daa'immanii fooyyessuuf nii gumaacha.

Isin qorannoo kana keessatti akka hirmaattaniif carraan filatamtan. Oddeeffanoon isin kennitan kun icciitiin eegamuuf maqqanis ta'e teessoon keessan qoranoo kana keessati gonkuma hin barreefamu. Kanaaf sababa odeeffannoo kennitan kanaaf karaa kamiin illee dhiibbaan isinirra ga'u hin jiru. Itti dabalees, odeeffanoo kennuufis ta'e dhiisuuf mirga guutuu qabdu. Haata'u malee, odeefanoo kennuun keessan qorannoo kanaaf bu'aa guddaa fida.

Gaafannoo kana xumurruuf daqiiqaa 30-40 nu fudhachuu danda'a. Kanaaf, fedha keessan yoo ta'e, jalqabuu dandeenya. Yoo gaaffii yookin yaada akkasumas komee qabaattan Fiqaaduu Darajjee (Lak. Bil. 0911-92-23-64) YKN Yuuniversitii Finfinneetti Muummee Sooshooloojiitiif (Lak. Bil. 011-122 59 48) dhiyeessuu dandeessu. Jalqabuu dandeenyaa?

2. Respondents' Socio-economic Backgrounds

S.N		Ofii	A/Warra
1.1	Umurii (waggaan)		XXXX
1.2.	Amantaa (1.Ortodksii, 2.Protestaantii, 3.Kaatolikii, 4.Islaama, 5.Kan biraa (Ibsaa)		XXXX
1.3.	Haala Gaa'ilaa (1. Kan Hineerumne, 2.Heerumte, 3.Waliin jiraatu, 4.Wal hiikan, 5.Kan Abbaan warraa irraadu'e 6. Kan biraa (ibsaa) _____		XXXX
1.4.	Sabummaa (1.Oromoo, 2.Amaara, 3.Tigiree, 4.Guraage, 5.Walaayittya 6.Kan biraa (ibsaa)		XXXX
1.5.	Sadrkaa barumsaa (1.Bareessuus dubbisuus hin dana'u, 2.Barreessuuf dubisuu qofa danda'a , 3.Sadrkaa 1ffaa (Kutaa 1-8), 4.Sadrkaa 2ffaa (kutaa 9-12), 5.Sartifkeetii fi ol		
1.6.	Hojii (1.Barataa, 2.Qonnaan bulaa, 3.Hojii qaxarrii dhaabbataa, 4.Hojii dhuunfaa ofii, 5.Hojjetaa guyyaa, 6.Daldalaa, 7. Haadha warraa, 8.Kan biraa (Ibsaa)		
1.7.	Bakka hojii fi bakka jireenyaa (1.Adda ba'e, 2.Tokkoo)		
	1.7.1. Bayyina guyyaa hojii torbanitti bakka jireenyaa irraa adda batuu		
	1.7.2 Bayyina sa'atii guyaati mana-alaturtu		
1.8	Galii giddu-galeessa ji'atti madda hundumaarraa aragattu (Qarshiin)		

2. Haala Hawaas-Diingadee (Socio-Economic Condition)

S.N		Dhiira	Dhalaa	Walii gala
2.1	Baayyina namoota abbaa warraa			
2.2.	Baayyina daa'imman wagga 5 gadii			

2.3.	Baayyina daa'imman ji'a 24 gadii			

5. Beellada nii horsiituu? 1. Eeyyee 2.Lakkii

Deebiin keessan 'Eeyyee' yoo ta'e, gosaa fi baayyina beellada horsiiftanii ibsaa.

	Gosa beelldaa	**Baayyina**
3.1	Loon (sa'a, qotiyyoo)	
3.2	Hoolaa	
3.3	Re'ee	
3.4	Handaaqoo/luukkuu	
3.5	Horii fe'umsaa (FKN farad, harree, gaangee,…	
3.6	Kan biraa (ibsaa) ……	

3.7 Bu'aa beelladaa keessaa daa'imman qofaaf kan olkeessan jiraa? 1.Eeyyee 2.Lakkii

4. Maatiin keessan midhaan/kuduraa fi mudura nii oomishaa? 1.Eeyyee 2.Lakkii

6.1 Oomisha kana keessaa da'imman qofaaf kan oolu jiraa? 1.Eeyyee 2.Lakkii

6.2 'Eeyyee' yoo jettani, kamfa'i (Ibsaa)? _____
_____
_____

7 Maatii kana hanqiinni midhaan nyaataa quunnamee beekaa? 1.Eeyyee 2.Lakkii

5.1 'Eeyyee' yoo jettan, haala kamiin hanqina kana danada'amattan?

	Haala Ittiin hanqina nyaataa danamattan	1.Eeyyee	2.Lakkii
5.1.1	Midhaan gatiin isaa salphaa nyaachuun		
5.1.2	Loon gurguuruun midhaan bituu		
5.1.3	Qarshii liqeeffachuun midhaan bituu		
5.1.4	Qabeenya manaa gurguruun midhaan bituu		
5.1.5	Firii bosonaa nyaachuu		
5.1.6	Midhaan sanyiif keenye nyaachuun		
5.1.7	Midhaan hiriyaa YKN fira irraa liqeeffachuun		
5.1.8	Garagaarsa midhaanii hiriyaa YKN fira gaafachuun		
5.1.9	Biqilaa muruun YKN cilee gurguruun		
5.1.10	Ooyiruu ollaa /magaalaa dhiyoo dhaquun galii/nyaata argachuun		
5.1.11	Ga'ee/baayyina nyaataa hir'isuun		
5.1.12	Lakkoofsa nyaataa guyyaatti nyaatamu hir'isuun		
5.1.13	Daa'imman ollaadhaa akka nyaatan gochuun		
5.1.14	Nyaata ga'eessotaa hirrisuun da'imman akka nyaataniif dursa kennuu		
5.1.15	Guuyyaa guutuu nyaata malee ooluu		
5.1.16	Kan biraa (Ibsaa) _____		

8 Baayyiinni, gosi fi dur-duuba nyaataa saala fi umurii irratti hunda'aa? 1.Eeyyee 2.Lakkii

6.1 'Eeyyee' yoo jettetan akkataa duraa-duba soorataniin ka'aa.

(**1. Jalqaba sooramu, 2.Lammaffaa, 3.Sadaffaa, 4.Al-tokkicha sooramu)**

	Misseensa Maatii	**Ji'oota nyaati ga'aan jiru**		**Ji'oota hanqina nyaataa**	
		Baay'ina nyaataa guyyaatti	Sadarkaaa duraa-duuba soortan	Baay'ina nyaataa guyyaatti	Sadarkaaa duraa-duuba soortan
6.1.1	Gaa'eesota dhiiraa				
6.1.2	Ga'eessota dhalaa				
6.1.3	Ijoollota dhiiraa				
6.1.4	Ijoolota shamarranii				
6.1.5	Daa'ima Wagaa 2-5				

6.1.6	Daa'imman Ji'a 6-24				

*SO 2: To explore the **social values, norms and beliefs** that are affecting the childcare and feeding practices*

14.	Hawaasa keessan keessatti, nyaati daa'imni akka hin nyaanne dhorkaman jiruu?	1.Eeyyee 2.Lakkii
7.1	'Eeyyee' yoo jettan nyaata kam fa'i? **[DEEBII TOKKOO OL NII DANDAA'AMA]** 5.Kan biroo (Ibsaa) _____ _____	7. Foon walii galaan 8. Foon dheedhii 9. Buphaa/hanqaaquu 10. Qurxummii 11. Damma 12. Kan biroo (Ibsaa) ….
7.2	Sababni nyaati armaan olii dhorkamaniif maali? SABABAI AADAA, AMANTII, …YOO JIRAATE YAADA ISAANII HUBADHU	_____ _____ _____
15.	Aadaan/barsiifatni nyaata/dhugaatii da'immaniif guyyoota dhalootaa 3n jalqabaa keessatti kennaman jiruu?	1.Eeyyee 2.Lakkii
8.1	'Eyyee' joo jettan, gosti nyaata/dhugaatii kana maali? 4.Kan biraa (Ibsaa) _____ _____	1. Bishaan qofa 2. Bulbula shukkaaraa fi bishaanii 3. Aannan 4. Dhadhaa 5. Kan biraa (Ibsaa) …
8.2	Sababiin aadaa/barsiifata nyaata/dhugaatii kana da'imman kanaaf kennamu maali? 5.Kan biraa(Ibsaa) _____ _____	1. Da'imman kun bishaan dheebotu 2. Aannan harmaa qofti ga'aamiti 3. Garachaa da'imaa qulqulleessuuf 4. Afuuffeen da'imaa akka hojjetuuf 5. Kan biraa (Ibsaa)….
16.	Akka aadaa/barsiifata naannootti, silgi mucaaf nii kennamaa?	1.Eeyyee 2.Lakkii
9.1	'Lakkii' yoo ta'e, maallif hin kennamu? 6. Kan biraa(Ibsaa) _____ _____	1. Xurii waan ta'eefd ukkuba fida 2. Garracha daa'immaniitti ulfaata 3. Aadaa/ barsiifata keenya miti 4. Kan biraa (Ibsaa) …….
10.	Hawaasa keessan keessatti, haadhi daa'ima deessee sababa dhibeetiin daa'ima ishee hoossisu yoo dadhabde, daa'ima sana akkamiin sooru? 5.***Kan biraa (Ibsaa)*** _____ _____	1. Nyaata/dhugaatii biraa kennuufi 2. Harma firaa/hiriyaa hoosisu 3. Dubartii harma hoosistu qarshiin qacaru 4. Guuddifachaan nama biraaf kennu 5. Kan biraa(Ibsaa) …

17. Gaaffileen kanatti aanananii dhiyaatan, sadarkaa murteessumma haadhi/abbaan warraa qaban xiintaluuf dhiyaate. Haala kanaan lakkoofsa/kodii kenname tarree gaaffii fuladuratti barreessaa.

Lak.	**Gosa Murtii**	**Eenyutu Murteessa?** (**1**.Qofaa mutreessuun danda'a, **2** =Abbaa warraa YKN dhiira miseensa matii ta'ee wajjiin murteesssuu danada'a, **3** = Abbaa warraa haadha warraa wajjiin ergan mari'adhee booda murteessuu danda'a, **4** = Mutree keessatti hin hirmaadhu, **5** = Gaffaaiin kun hin ilaallatu)
10.1	Waan nyaata mattiif oolu bituu	
10.2	Uffaata offii fi daa'imman keessaniif bituu	
10.3	Qarshii ofii argattan dhimma feetaniif oolchuu	

10.4	Qabeenya kanneen akka mana, loon, midhaan bituu/gurguruu	
10.5	Baasii nyaata da'immanii	
10.6	Kaffaltii barnoota da'immanii	
10.7	Baasii fayyaa keessanii fi da'immanii	
10.8	Da'imman yoo dhibaman mana yaalaatti geessuu	

18. Gaaffileen kanatti aanananii dhiyaatan, haala qoodiinsa hojii misseensota maatii xiinxaluuf dhiyaate. Haala kanaan lakkoofsa/kodii kenname tarree gaaffii fuula duratti barreessaa.

No	**Gosa Hojii Mana Keessaa**	**Nama Hojjetu** **[Yaadachiisa: Deebii tokkoo ol kennuun nii danda'ama]** (1. Haadha Warraa, 2.Abbaa warraa, 3.Da'imman /ga'eessa dhiiraa, 4.Shammaran, 5.Hojjetaa qacarame, 6.Kan biraa (Ibsaa)…….
11.1	Nyaata bilcheessuu	
11.2	Bishaan waraabuu	
11.3	Uffata/ucuu miicuu	
11.4	Qoraan sassaabuu	
11.5	Manaa fi naannoo mana qulqulleessuu	
11.5	Da'immaniif kunuunsa gochuu	
11.6	Daa'immaniif nyaata kennuu	
11.7	Gabaa dhaquun nyaata maatiif bituu	

<u>SO</u>*3: To analyze households'* ***access to, and utilization of, health promoting resources and actors' reflexivity to these contexts*** *in child feeding practices*

19. Haala wantoota jireenya maatiif barbachisoo ta'an gaafachuu.
    [Deebii isaanii fuuldura gaaffii kennametti "X´barreessi].

Lak.	**Wantoota jiruuf jireenya maatiif barbaachisoo ta'an**	**Jiraa?**		**Lukaan yoo deemtan daqiiqaa meeqa isinitti fudata?** *[Gaaffichi isin hin ilaallatu yoo ta'e* ***"00"*** *barreessaa]*
		1=Eeyyee	2.Lakkii	
12.1.	Bishaan sararaa ('የpÿምp ዉሃ)			
12.2.	Burqituu bishaanii ofii baastan			
12.3	Bishaan boollaa			
12.4	Gabaa naannoo/safaraa			
12.5.	Gabaa giddu galeessaa/guddaa			
12.6.	Tajaajila silkii mobaailaa/daabbataa			
12.7.	Tajaaila karaa bonaaf ganna tajaailu			
12.8.	Tajajila human ibsaa			
12.9.	Kellaa fayyaa namaa			
12.10.	Giddu-galeessa fayyaa namaa			
12.11.	Hospitaala mootummaa			
12.12.	Kilinikaa dhuunfaa/miti-mootummaa			
12.13.	Hospitaala dhuunfaa/miti-mootummaa			
12.15.	Mana barumsaa kutaa 1-4			
12.16.	Mana barumsaa kutaa 1-8			

12.17	Mana barumsaa kutaa 9-10				
20.	Mana keessa raadiyoon hojjetu jiraa?			1.Eeyyee 2.Lakkii	
13.1	'Eeyyee' yoo jettan, raadiyoo kana nii dhaggeffattuu?			1.Eeyyee 2.Lakkii	
13.2	'Eeyyee' yoo jettan, sagantaa YKN beeksisa raadiyoo haala itti da'imman soorachisan dhageessanii beektuu?			1.Eeyyee 2.Lakkii	
13.3	Haala itti da'immaniif nyaata kennan ilaalchisee, ergaa maalfaa hubattan? **[Deebii tokkoo ol kennuun nii danad'ama]** 5. Kan biraa (Ibsaa)_____ _____			1. Faayidaa silga da'immaniif kennuu 2. Balaa nyaata/dhugaatii guyyaa 3n jalqabaatti da'immaniif kennun fidu 3. Yeroo fi gosa nyaata dabalataa da'immaniif kennamu 4. Fayidaa ji'a 6f harma qofa da'immaniif kennuu 5. Kan biraa (Ibsaa)……	
13.4	Ergaan haala da'immaniif nyaata kennan ilaalchisee darbe kun faayida-qabeessaa?			1. Baayyee faayida-qabeessa 2. Faayida qabeessa 3. Giddu-galeessaa 4. Fayidaa-qabeessa miti 5. Tasuma faayida-qabeessa miti	
21.	Mana keessan keessa Televiiginiin hojjetu jiraa?			1.Eeyyee 2.Lakkii	
14.1	'Eeyyee' yoo jettan, sagantaa TV nii hordoftuu?			1.Eeyyee 2.Lakkii	
14.2	'Eeyyee' yoo jettan, sagantaa YKN beeksisa TV haala itti da'imman soorachisan dhageessanii beektuu?			1.Eeyyee 2.Lakkii	
14.3	Waa'ee hala itti da'immaniif nyaata kennan ilaalchisee, ergaa maalfaa hubattan? **[Deebii tokkoo ol kennuun nii danad'ama]** 5. Kanbiraa(Ibsaa)_____ _____			1. Faayidaa silga da'immaniif kennuu 2. Balaa nyaata/dhugaatii guyyaa sadan jalqabaaf nyaata/dhugaatii kennun fidu 3. Yeroo fi gosa nyaata dabalataa da'immaniif kennamu 4. Fayidaa ji'a 6f harma qofa da'immaniif kennuu 5. Kan biraa (Ibsaa)……	
14.4	Ergaan waa'ee haala da'immaniif nyaata kennan ilaalchise darbe kun faayida qabeessaa?			1. Baayyee faayida qabeessa 2. Faayida qabeessa 3. Giddu galeessaa 4. Fayidaa qabeessa miti 5. Tasuma faayida qabeessa miti	
21.	Baruulee waa'ee nyaata daa'immanii iraatti barreeffame dubistanii beektuu?			1. Eeyyee 2.Lakkii	
15.1	'Eeyyee' Kan jettan yoo ta'e waa'ee da'imman soorachiisuu ilaalchisee ergaa akkamii argattan? **[Deebii tokkoo ol kennuun nii danad'ama]** 5. Kan biraa(Ibsaa)_____ _____			1. Faayidaa silga da'immaniif kennuu 2. Balaa nyaata/dhugaatii guyyaa 3n jalqabaatti da'immaniif kennuun fidu 3. Yeroo fi gosa nyaata dabalataa da'immaniif kennamu 4. Fayidaa ji'a 6f harma qofa da'immaniif kennuu	

		5. Kan biraa (Ibsaa)……	
15.2	Ergaan waa'ee haala da'immaniif nyaata kennan ilaalchise darbe kun faayida qabeessaa?	1. Baayyee faayida qabeessa 2. Faayida qabeessa 3. Giddu galeessa 4. Fayidaa qabeessa miti 5. Tasuma faayida qabeessa miti	
22.	Bishaan dugattii keessan qulqulludha jettanii yaaduu?	1 Eeyyee 2.Lakkii	
16.1	Lakkii kan jettan yoo ta'e, dhugaatiif akka ta'uutti maal gootu? 7.Kan biraa (Ibsaa) _____ _____ _____	1. Danfisuu 2. Ga'd teessisussn /ማጥለል/ 3. Ucctti gargaaramuun dhimbiibuu 4. Meeshaalee bishaan dhimbiiman gargaarmuu 5. Ommishoota kanneen akka 'bishaan garii' fi ጫሃ አጋር gargaaramuu 6. Kan biraa (Ibsaa)…..	
16.2	Odeeffannoo haala itti bishaan dhugaatiif ollchan kana eessaa argattan? 6. .Kan biraa (Ibsaa) _____ _____	1. Hojjetoota Eksteenshinii Fayyaa 2. Damaqsitoota Tola-Olltota Fayyaa Hawwassaa 3. Hiriyoota 4. Raadiyoo 5. Televiiginii 6. Kan biraa (Ibsaa)….	
23.	Mana fincaanii qabduu?	1. Eeyyee 2.Lakkii	
17.1	'Eeyye' yoo jettan, gosi mana finncaanichaa kami? ***3. Kan biraa (Ibsaa) …. _____*** **_____**	1. Ammayyaawa (bishanii fi foddaa qabu) 2. Boolla qotamee kan hojjetame 3. Kan biraa (Ibsaa) ….	
17.2	'Lakkii' yoo jettan, haala kamiin bobbaa baatu? ***3. Kan biraa (Ibsaa). _____*** **_____**	4. Dirree/lagatti garagaaramuun 1. Manatti kuufamee dirreetti baasuun 2. Kan biraa (Ibsaa) …….	
24.	Haal kammiin bobbaa daa'immanii baastu? 7. *Kan biraa (Ibsaa)*_____ - _____	1. Daa'imni mana fincaanii gargaaramu 2. Bobbaa mana fincaaniitti naquun 3. Bobbaa bakkee/boollati gatuun 4. Bakka kosii itti kuusanittin gatuun 5. Awwaluun 6. Bakkeetti gargaaramu 7. Kan biraa (Ibsaa) ……..	
25.	Da'immaniif nyaata kennu dura harka keessaan dhiqachuun baramaadhaa?	1. Lakkii 2. Eeyyee, darbee-darbee 3. Eeyyee, yeroo mara	
19.1	'Eeyyee' yoo jettan, maallin harka keessaan dhiqattu 5. Kan biraa (Ibsaa) _____ _____	1. Bishaan qofa 2. Bishaanii fi saamunaa 3. Bishaanii fi daaraa *4. Bishaanii fi andoodee* 5. Kan biraa (Ibsaa) ….	

26.	Wa'ee tajaajila da'umsa duraa dhageessanii beektuu ?	1. Eeyyee 2.Lakkii	
20.1	'Eeyyee' yoo ta'e, ulfa keessan dhiyoo kanatti hordoftanii?	1.Eeyyee 2.Lakkii	
20.2	'Eeyyee' yoo ta'e, eessatti hordoftani? 7. Kan biraa (Ibsaa) _____ _____	1.Hospitaala mootummaa 2.Hospitaala dhuunfaa 3. Buufata fayyaa moottummaa 4.Kilinika dhuunfaatti 5.Kellaa fayyaa 6.Kilinika Dhaabbilee Miti-mootumma 7. Kan biraa (Ibsaa) ….	
20.3	Yeroo tajaajila da'umsa duraa kana gorsa haala ittiin da'imaaniif nyaata kennitannif gorfamtanii?	1. Eeyyee 2.Lakkii	
20.4	'Eeyyee' yoo jettan, maal maal gorffamtan? 5. Kan biraa (Ibsaa) _____ _____	1. Faayidaa silga da'immaniif kennuu 2. Balaa nyaata/dhugaatii guyyaa 3n jalqabaatti daa'immaniif kennun fidu 3. Yeroo fi gosa nyaata dabalataa da'immaniif kennamu 4. Faayidaa ji'a 6f harma qofa hoosisuu 5. Kan biraa (Ibsaa)……	
27.	Da'ima keessan ishee xiqqishuu kana eessaatti deessan? *4.* Kan biraa (Ibsaa) _____ _____	1. Dhaabbilee fayyaa 2. Mana ofii 3. Mana haadha 4. Kan biraa (Ibsaa) ….	
21.1	'Dhaabillee fayyaa' yoo ta'e, gosti isaa kami? *6.* Kan biraa (Ibsaa) _____ _____	1. Hospitaala mootummaa 2.Hospitaala dhuunfaa 3. Buufata fayyaa moottummaa 4.Kilinika dhuunfaa 5.Kellaa fayyaa 6.Kilinika Dhaabbilee Miti-mootumma 7. Kan biraa (Ibsaa) ….	
21.2	Yeroo da'umsaa kanaa, gorsa haala ittiin da'imaaniif nyaata kennitan gorfamtanii?	1. Eeyyee 2.Lakkii	
21.3	'Eeyyee' yoo jettan, maal maal gorfamtani? 5. Kan biraa (Ibsaa) _____ _____	1. Faayidaa silga da'immaniif kennuu 2. Balaa nyaata/dhugaatii guyyaa 3n jalqabaatti daa'immaniif kennuun fidu 3. Yeroo fi gosa nyaata dabalataa da'immaniif kennamu 4. Fayidaa ji'a 6f harma qofa hoosisuu 5. Kan biraa (Ibsaa)……	

*SO4: To assess **community based supports** rendered to ensure proper feeding practices for children vulnerable to malnutrition related health problems*

28.	Isin missensa Ijaarsa hawaasaatii?	1. Eeyyee 2.Lakkii	
22.1	Yoo 'Eeyyee' ta'e, maalitti miseensaa taatani?	1. Afoosha	

	[Deebii tokkoo ol Kennuun nii dana'ama] *4.Kan biraa(Ibsaa)* _____ _____	2. *Iqqubii* 3. Raayyaa Missoma Fayyaa 4. Kan biraa (Ibsaa)...
22.2	Misseens Afooshaa you taatan, deggersi maallqaas ta'ee kanneen biro yeroo da'umsaa isnii kennamee?	1.Eeyyee 2.Lakkii
22.3	Daa'imman hanqina nyaataa qabaniif deggersi afoosha keessaniin kenamu jiraa?	1. Eeyyee 2.Lakkii
22.4	Misseens *iqqubii* yoo taatan, maatiwwan da'iimman dhiyootti godhatanniif deggeersi addaa kennamuuf jiraa?	1. Eeyyee 2.Lakkii
22.5	Missensa raayyaa misooma fayyaa yoo taatan, walga'ii idlee qabduu?	1 Eeyyee 2.Lakkii
22.6	Yoo kan qabdan ta'e, ji'atti al-meeqa walgeessu?	_____
22.7	Walga'ii Misseens Raayaa Misooma Fayyaa irratti wa'ee kunuunsa daa'immanii mari'attanii beektuu?	1. Eeyyee 2.Lakkii
22.8	'Eeyyee" kan jettan yoo ta'ee maal maal irratti mari'attu? (**IBSAA)**	_____ _____ _____
22.9	Yeroo mare kanaa deggeersi oggesotaa jiraa?	1. Eeyyee 2.Lakkii
22.10	Deggeersi kan kennamu yoo ta'e, eenyutu kenna? ***[Deebii tokkoo ol kennuun nii danda'ama]*** *3.Kan biraa (Ibsaa)* _____ _____	1. Hojjettoota Eksteenshinii Fayyaa(HEF) 2. Tola-ooltota Dadammaqina Fayaa Hawaasa (TDFH) 3. Kan biraa (Ibsaa) …
22.11	Deggersi HEF soorata fi kunuunsa da'immannii ilaalchisee kennaan maal fa'i?? ***[Deebii tokkoo ol kennuunn nii danda'ama]*** *5.Kan biraa (Ibsaa)* _____ _____	1. Waa'ee Soorata da'immanii fooyya'aa ta'e fi faayidaa isaa barsiisuu 2. Akkaataa soorata da'immanii fooya'e itti qopheessaan hojjettanii agarsiisuu 3. Daa'imman hirina nyaataa mudate adda baasanii kunuunsuu 4. Da'imman hir'inni nyaataa mudate gara mana yaalaa fooya'aa ta'e YKN gara dhaabilee mii-Mootummaatti erguu 5. Kan biraa (Ibsaa) …..
22.12	Deggersa HEFn waa'ee daa'imman sooruu fi kunuunsuu irratti isiniif kennan akkamiin madaaltu?	1. Baayyee garriidha 2. Gaariidha 3. Ga'aadha 4. Gad-aanaa dha 5. Baayyee gad-aanaadha
22.13	Soorata fi kuunuunsa da'iimmanii ilaalchisee ga'een TDFH maal fa'i? ***[Deebii tokkoo ol kennuun nii dandaa'ama]*** *4.Kan biraa (ibsaa)* _____ _____	1. Waa'ee soorata da'immanii fooyya'aa ta'e fi faayidaa isaa barsiisuu 2. Akkaataa soorata da'immanii fooya'aa itti qopheessaan hojjettanii agarsiisuu 3. Daa'imman hirina nyaataa mudate adda baasuu 4. Ga'umsa Soorata fi kuunuunsa da'immaniif kennamu madaaluu 5. Kan biraa (Ibsaa) ……
22.14	Deggersa TDFHn wa'ee da'imman sooruu fi kunuunsuu irratti isiniif kennan akkamiin madaaltu?	1. Baayyee garridha 2. Gaariidha 3. Ga'aadha 4. Gad-aanaa dha

		5. Baayyee gad-aanaa dha
22.15	Deggersa Caasaan Hawaasa wa'ee daa'imman sooruu fi kunuunsuu irratti isiniif kennan akkamiin madaaltu?	1. Baayyee garriidha 2. Gaariidha 3. Ga'aadha 4. Gad-aanaa dha 5. Baayyee gad-aanaa dha
29.	**[Hojii Qonnaa kan hojjetan qofaaf]** Hojjetoonni Misooma Qonnaa (HMQ) oomishaa fi oomishtummaa keessan fooyyessuuf deggersa ogumaa nii kennuu?	1.Eeyyee 2.Lakkii
23.1	Eeyyee' yoo jettan, midhaan soorata da'immaniif filatamu xiyyeeffanoon akka oomishatani gorfamtanii beektuu?	1. Eeyyee 2.Lakkii
23.1	'Eeyyee' yoo ta'e, midhaan kana oomishtanii?	1. Eeyyee 2.Lakkii
23.3	Deggersa HMQn wa'ee da'imman sooruu fi kunuunsuu irratti isiniif kennan akkamiin madaaltu?	1. Baayyee garridha 2. Gaariidha 3. Ga'aadha 4. Gad-aanaa dha 5. Baayyee gad-aanaadha
24.	Daabbilee Miti-mootummaa (DMM) wa'ee sorataa fi kunuunsa da'immannii irratti hojjetu dhageessanii beektuu?	1. Eeyyee 2.Lakkii
24.1	'Eeyyee' yoo jettan, DMM kun maal maal hojjeta? ***[Deebii tokkoo ol kennuun nii dandaa'ama]*** *4.* Kan biraa (ibsaa) _____ _____	1. Haala soorata fooya'aa da'imaaniif keenamu irratti hawaasaa leenjisuu 2. Maatiwwan da'imman sooruu fi kunuunsuu irratti hanqina qaban addaa baasuun deggersa keennuufii 3. Da'imman hirina nyaataa qaban adda baasuun nyaata dabalataa kennuufii 4. Kan biraa (ibsaa) …
24.2	Tajaajila kanaan olitti ibsamaniin tajaajilamtanii beektuu?	1. Eeyyee 2.Lakkii
24.3	Degersa DMM biroo irraa isiniif kennamu akkamiin madaaltu?	1. Baayyee ga'aadha 2. Ga'aadha 3. Giddu galeessa 4. Gad-aanaadha 5. Baayyee gad-aanaadha
25.	Akka walii galaatti, hawaasa keessan keessatti ga'umsa sooratаa fi kunuunsa da'immanii sadarkaa kamirra jira jettu?	1. Baayyee ba'eessa 2. Baayyee garriidha 3. Gariidha 4. Gad-aanaadha 5. Baayyee gad-aanaadha 6. Hin beeku
25.2	Sababa sadarkaa kennitanii ibsaa	_____ _____ _____

ILAALCHA SORATAA FI KUNUUNSA DA'IMMANII MADAALUU

27. Himmotni kanaa gaditti kennaman ilaalcha dhuunfaa namoonni gaafannoo kana keessaatti hirmaatan wa'ee sorataa fi kunuunsa daa'immanii irratti qaban madaaluuf kan dhiyaatee dha. Tarree himoota dhiyaate duratti yaada isaaniin kan wal-madaalu irratti 'X' barreessaa.

	HIMOOTA	Baayyen itti waliigala (5)	Waliin gala (4)	Hin beeku (3)	Itti walii hingalu (2)	Tasa itti walii hingalu (1)	SCORE
26.1	Dubartoonni ulfaa nyaata gosaanis ta'ee bayyinaan yeroo kaan caalaa nyaachuu qabu						
26.2	Dubartoonni hoosisan nyaata gosaanis ta'ee bayinaan kaan caalaa nyaachuu qabu						
26.3	Daa'iimni battaluma dhalateen harma hodhuu qaba						
26.4	Silga hoosisuun da'iman dhukuba irraa dhowa.						
26.5	Nyaata guyyaa 3n jalqabaatti da'immaniif kennuun daa'ima sana dhukkubaaf saaxila.						
26.6	Aannanni harma haadhaa hanga jia 6tti daa'imaaf nyaata gaa'aadha.						
26.7	Da'iimma harama hodhan kanneen aannan qorqorroo hodhaniirra jajjaboodha.						
26.8	Harmi haadhaa hariiroo haadhaa fi da'immanii daran cimsa						
26.9	Yoo hadhi dhibamtu (dhukkubsattu) da'imni harmashee hodhuu hin qabu.						
26.10	Daa'imman dhibaman (dhukubsatan) harma haadhaa yeroo kaan caalaa hodhuu qabu						
26.11	Haadhoonni da'imman bakka namni baayyeen jiraniitti hoosisuu hin qaban						
26.12	Haadhonni tokko tokko aannan harmaa ga'aa hin qaban						
26.13	Haadhonni nyaata ga'a hin arganne aannan harma ga'aa hin oomishan						
26.14	Daa'imman ji'a 6 gadii gara nyaataa/dhugaatii yoo ilaalan, fedhuu isaaniiti waan ta'eef nyaati kennamuufii qaba.						
26.15	Haadhonni daa'imman ji'a 6 gadii mana hin turan yoo ta'e daa'immaaf harma elmanii ka'uufii qabu.						
26.16	Anannni harmaa dubartoota ulfaa daa'immaniif garii miti						
26.17	Umurii ji'a 6tti daa'immaniif nyaatni dabalataa kennamuufii qaba.						
26.18	Ji'a 6tti daa'imman nyaata ga'eessonnni nyaatan kamiyyuu nyachuu nii danada'u.						
26.19	Daa'iimman waggaa 2 guutaniif harmi haadhaa faayidaa hinqabu.						
26.20	Yoo hadhi dhibamtu (dhukkubsattu) da'imni harmashee hodhuu hin qabu.						

Cross Cutting Issues: Child Feeding Practice as an Outcome Variable

27.	Umuriin da'ima ishee xiqoo meeqa (Ji'an)?	
28.	Saalli daa'ima ishee xiqoo maali?	1.Dhiira 2. Dhalaa
29.	Amma harma hoosisaa jirtuu?	1.Eeyyee 2.Lakkii
29.1	Daa'imm kana yeroo dhaloota isaatti dhalatee turtii yeroo hanagam keessaatti harma laattaniif (sa'attiin)	Sa'atii _____
29.2	Daa'imichaaf silga kennitanii?	1. Eeyyee 2.Lakkii
29.3	Malliif kennitanniifi/ dhowaattani? **(IBSAA)**	_____ _____
29.4	Yeroo guyyaa/ifaa harma si'a meeqa hoosiiistu?	_____
29.5	Yeroo halkanii harma si'a meeqa hoosistu?	_____
29.6	Harma yeroo kam hoosistu?	1. Yeroo da'imni boo'u

	4.Kan biraa (Ibsaa) _____ _____	2. Yeroo dhaabatta/beekamaa 3. Akkuma mijateetti 4. Kan biraa (Ibsaa)…..
29.7	Yoo amma harma hoosisaa hinjirtan ta'e, yoom harma guustan?	Ji'a_____
29.8	Yoo guustan haala kamiin ture? 3.*Kan biraa (Ibsaa)* _____ _____	1. Al-takkaa (akka tasaan) 2. Suuta suutan 3. Kan biraa (Ibsaa) …
29.9	Sababa maaliif ture kan guustan? *7.Kan biraa(Ibsaa)* _____ _____	1. Ulfa'uu 2. Kininii karoora maatii waan fudheef 3. Kana booda hoosisuun hin barbaachisu jedhee waanan yaadeef 4. Aannanni haram koo waan hir'ateef 5. Waan na dhukkubeef 6. Hojaa mana ala waanan jalqabeef 7. Kan biraa (Ibsaa) ….
30	Da'ima isa xiqoo kanaaf nyaata dabalataa kennuu jalqabdanii?	1.Eeyyee 2.Lakkii
30.1	Yoo 'Eeyyee' jettan, dhalatee ji'a meeqaffattti jalqabssisatn?	Ji'a _____ffaa
30.2	Sababa maaliif ture kan nyaata dabalataa jalqabssistan? 5. *Kan biraa(Ibsaa)* _____ _____	1. Aannan harmmatu ga'aa hin turre 2. Sababa dhukkuba haadhaaf 3. Dhibamuu/dhukkubsachhuu daa'imaa 4. Sababa hojii manaa-ala jalqabeef **5.** Kan biraa (Ibsaa) ….
30.3	Gossoota nyaataa akkami kennitaniifi? 5. *Kan biraa(Ibsaa)*_____ _____	1. Mooqa 2. Marqaa laafaa 3. Aannan loonii 4. Aannan warshaa/ qorqorroo 5. Kan biraa (Ibsaa)…..
30.5	Aannan warshaa kennituuf yoo ta'e, maddi odeefannoo faayidaa isaa maali? 5. *Kan biraa(Ibsaa)*_____ _____	1. Abbaa warraa 2. Hiryoota 3. Haadha/amaatii koo 4. TV/Raadiyoo 5. Kan biraa (Ibsaa) ….
30.5	Da'imichaaf guyyaatti ala meeqa nyaata dabalataa kennituuf	Guyyaatti ala _____
30.6	Nyaata dabalataa kana hala akkamiin soortu? *5.Kan biraa(Ibsaa)*_____ _____ _____	1. Fallaana 2. Kubbaayyaa 3. Harkaan 4. Xuuxxoo 5. Kan biraa (Ibsaa) …….
31	Torban lamaan darbe keessatti mucaan keessan gara-kaasaa dhukkubsatee?	1. Eeyye 2.Lakkii
31.1	'Eeyyee' joo jettan, harmas ta'e nyaata dabalataa amma kennitaniifi?	1.Kan duraa gad 2.Kan duraa oli 3. Akkuma duraaniitti
31.2	Yoo kan duraanii gadi ta'e maaliifi? *4.Kan biraa (Ibsaa)* _____	1. Dhukubatu itti ammaata jedhee sababan sodaasheefi 2. Jijjiiramuu fedhi nyaataa daa'imaa

	_____	3. Sababan gorfameefi 4. Kan biraa (Ibsaa) ...
31.3	Yoo da'imni dhukkubsate, gorsa/deggersa nama biraa barbaadduu?	1. Eeyyee 2.Lakkii
31.4	'Eeyyee' yoo jettan, eenyurraa degersa akkasii barbaaddu? 5.*Kan biraa(Ibsaa)* _____ _____	1. Ogeessota fayyaa 2. TDFH 3. Deesistoota aadaa 4. Oggeessota qoricha aadaa 5. Kan biraa (Ibsaa) …..
31.5	Yeroo dhibee, da'imni kun yaalameera yoo ta'e, eenyutu tajaaila fayyaa kana kennef? 5.*Kan biraa (ibsaa)* _____ _____	1. Missesi maatii qoricha faarmaasiidhaa bituun manatti yaalame 2. Manatti qoricha aadaan 3. Mana ogeessa qoricha aadaatti 4. Mana yaalaa ammayyatti 5. Kan biraa (Ibsaa)……

Rakkoowwanii *fi* ***Carraawwan*** *Haala soorata daa'immanii fooyyessuuf jiran/quunnaman*

32	Akka ilaalcha keessanniitti, da'imman haala garriin nyaata kennuun fooya'aa jiraa?	1. Eeyye 2.Lakkii 3.Hin beeu
32.1	"Eeyye" kan jettan yoo ta'e, sababni fooya'insa kanaa maali? ***[Deebii tokkoo ol deebisuun nii dandaa'ama]*** *7.Kan biraa(Ibsaa)* _____ _____	1. Dubartoota barsiisuu 2. Ga'een dhiirri daa'imman soorachissu keessatti qabu guddachaa dhufuu 3. Fooyya'insa haal diinagdee maatii 4. HEF wilitti fuffinsaan irratti hojjechuu 5. Odeeffanoo miidiyaa (FKN Raadiyoo, TV) 6. Caasaan hawaasaa babla'achuu 7. Guddachuu hirmaannaa DMM 8. Kan biraa (Ibsaa) ….
32.2	'Lakkii' yoo ta'e, maaliifi? ***[Deebii tokkoo ol deebisuun nii danda'ama]*** *7.Kab biraa(Ibsaa)* _____ _____	1. Qabeenyi maatii FKN lafa, loon xiqaach 2. Qaala'uu jireenyaa 3. Barmaatilee booddetti-hafoo 4. Kallattii odeeffanoo fayyaa dadhabaa ta'uu 5. Hirmaannaan dhiiraa da'immaniif nyaata kennuu keessatti xiqaachuu 6. Kan biraa (Ibsaa) ….
33.	Carraa gaggaariin daa'immanniif nyaata fooyya'ee kennisiisuu dandeessisu maal fa'i? [Jijjiirama dhufaa jiru, fkn da'immaniif dursa kennuu maatii, haala hu'uraalee misoomaa, … Ibsaa]	_____ _____ _____ _____
34	Haala ittiin daa'immaniif soorata kennaan callatti hawwasa keessaatti babl'isuuf maal gochhu wayyaa? *[Ga'eewwan mootummaa, hawaasaa fi dhaabilee fi caasawwaan addaa addaa ibsaa]*	_____ _____ _____ _____
35	Yaada dabalataa yoo qabaattan.	_____ _____

GALATOOMAA

Annex 4: Research Ethics Clearance Letter

BIIROO EEGUMSA FAYYAA OROMIYAA

OROMIA HEALTH BUREAU

የኦሮሚያ ጤና ጥበቃ ቢሮ

Lakk/Ref. No. BEFO/HBTSH/1-8/3627

Guyyaa /Date 18-5-07

W/E/F/Godina Adda Oromiyaa Naannawa Finfinneetiif

Finfinnee

Dhimmi: **Xalayaa deeggarsaa ilaala**

Akkuma beekamu Biiroon keenya ogeeyyii, dhaabbilee akkasumas namoota qorannoo gaggeessuuf piroppoozaala dhiyeeffatan piroppoozaala isaanii madaaluun akkanumas iddoo biraatti ilaalchisanii fudhatama argatee (approved) dhiyaateef, piroppoozaala isaanii ilaaludhaan waraqaa deeggarsaa ni-kenna. Haaluma kanaan mata-duree "**Actors and Structures in Child Feeding Practices: The case of Sebeta-Awwas Worewda, Oromia Region**" jedhurratti **barataa Diigrii 3^ffaa**, **barataa Fiqaaduu Darajjee** qorannoo godina keessan aanaa **Sabbataa-Awwaas** keessatti hojjachuuf piroppoozaalii isaanii Koree "Health Research Ethical Review Committee" Biiroo keenyaatti dhiyeeffataniiru.

Haaluma kanaan Koreen "Health Research Ethical Review Committee" Biiroo keenyaas piroppoozaala kana ilaaluun mirkaneesse qorannoon kun akka hojiirra oolu murteessee jira.
Waan kana ta'eef hojii qorannoo kanarratti deeggarsa barbaachisaa akka gootaniif jechaa, **barataa Fiqaaduu Darajjee** wayitii qorannoon kun qaaceffamee xumurame fiiriisaa Biiroo Eegumsa Fayyaa Oromiyaa fi iddoo qorannoon irratti adeemsifameef kooppii tokko tokko akka galii godhu garagalchaa xalayaa kanaatiin isaan beeksifna.

Anis, barataa Fiqaaduu Darajjee, qorataa kan ta'e, wayitii qorannoon kun qaaceffamee xumurame fiiriisaa kooppii tokko tokko Biiroo Eegumsa Fayyaa Oromiyaa fi iddoo qorannoon irratti adeemsifameef akka galii godhu mallattoo kiyyaan mirkaneessa.

Nagaa waajjin

Mallattoo
Maqaa Fiqaaduu Darajjee
Guyyaa **18/05/2007**
Lakk. Bilbilaa **0911922364**
G/G
Barata Fiqaaduu Darajjeetiif

Tuulamaa Guutaa
AHHH/Balaa Tasaa Fayyaa Hawaasaa
Qu'annoo fi Qorannoo
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ANNEX 5: Relationships between dependent and independent variables of the study