ADDIS ABABA UNIVERSITY

COLLEGE OF HEALTH SCIENCE

DEPARTEMENT OF NURSING AND MIDWIFERY

ASSESSMENT OF OPTIMAL BREAST FEEDING PRACTICE AND ITS ASSOCIATED FACTORS AMONG MOTHERS OF CHILDREN AGED LESS THAN TWO YEARS IN DALE WOREDA, SIDAMA ZONE

BY

MISRAK GETNET (MSc Candidate)

ADVISOR

Sr. ZURYIASH MENGISTU (RN, MSc)

A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES OF ADDIS ABABA UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE IN MATERNITY AND REPRODUCTIVE HEALTH NURSING

JUNE, 2012

ADDIS ABABA, ETHIOPIA

APPROVED BY THE BOARD OF EXAMINATION

THIS THESIS BY **MISRAK GETNET BEYENE** IS ACCEPTED IN ITS PRESENT FORM BY THE BOARD OF EXAMINERS AS SATISFAYING THESIS REQUIRMENET FOR THE DEGREE OF MASTERS OF SCIENCE IN MATERNITY AND REPRODUCTIVE HEALTH NURSING.

INTERNAL EXAMINER:

________________ ___________________ _________________

FULL NAME RANK SIGNATURE and DATE

RESERACH ADVISOR/SUPERVISOR:

_________________ ___________________ _________________

FULL NAME RANK SIGNATURE and DATE

Acknowledgment

First of all I would like to thank **GOD** and **HIS MOTHER ST. VIRGIN MARRY** for helping me throughout my way to do this research.

I would like to express my gratitude and special thanks to Sr. Zuryiash Mengistu (RN,MSc) for her valuable support in advising, commenting this study starting from the initial stage to the end.

My heartfelt thanks also extends to Nigatu Regassa(Associate Professor, PHD, Vice president for business and Development, Hawassa university) for his valuable comments and material support throughout the research process.

I would also want to thank to Ato Fekadu Aga(RN,MSc), Yohannes Mehretie**,**Balew Arega,Amha Admasse(MPH), for their valuable comments.

My appreciation also extends to Addis Ababa University, Department of Nursing And Midwifery for giving me this chance and funding the research.

I would also like to thank my parent's Gata and Taba, and the whole family, which could be impossible to accomplish the study without their holistic support.

Last but not least I wish to thank all Dale woreda health extension workers, data collectors, supervisors, study participants and all my friends who supported me in all my efforts to accomplish the study.

Table of Contents

Acknowledgment I
Table of Contents II
List of Tables IV
List of Figures V
List of Acronyms VI
Abstract VIII
1. Introduction 1
1.1 Background 1
1.2 Statement of the problem 3
1.3. Significance of the study 5
2. Review of literature 7
3. Conceptual framework and variable specification 23
4. Objective 24
4.1 Genera Objective 24
4.2. Specific objective 24
5. Methodology 25
5.1. Study Area 25
5.2. Study Design 25
5.3. Study period: 25
5.4. Source population and study subjects 25
5.5. Sample size determination 26
5.6. Sampling Procedure 27
5.7. Data collection procedure 29
5.8. Variable Specification: 29
5.8.1. Dependent Variables: 29
5.8.2. Independent Variables: 30
5.9. Operational definition 30
5.10. Data processing and analysis 31
5.11. Data quality assurance 31

5.12. Ethical considerations 32
5.13. Dissemination of Findings 32
6. Results 35
6.1. Socio-demographic characteristics of the respondents 35
7. Discussion 50
8. Strengths and limitations of the study 53
8.1. Strength 53
8.2. Limitations 53
9. Conclusion 54
10. Recommendations 55
11. References 56
12. Annexes 61
12.1 Questionnaire (Amharic and English version) 61
12.2. Bibliography 74
12.3. Declaration 78

List of Tables

TABLE 1: FREQUENCY DISTRIBUTION OF SELECTED SOCIODEMOGRAPHIC CHARACTERISTICS AMONG MOTHER CHILD PAIRED SUBJECT GROUPS OF THE STUDY; DALE WOREDA, SIDAMA ZONE MARCH 2012. 36

TABLE 2: FREQUENCY DISTRIBUTION OF HEALTH SERVICE RELATED VARIABLES AMONG MOTHER-CHILD PAIRED SUBJECT GROUPS OF THE STUDY; DALE WOREDA,SIDAMA ZONE MARCH 2012. 38

TABLE 3: DISTRIBUTION OF MOTHERS BY THEIR BREASTFEEDING EXPERIENCES, AMONG MOTHER-CHILD PAIRED SUBJECT GROUPS OF THE STUDY; DALE WOREDA, SIDAMA ZONE, MARCH 2012. 40

TABLE 4: BIVARIATE AND MULTIVARIATE LOGISTIC REGRESSION ANALYSIS OF INITIATION OF BREAST FEEDING PRACTICE, AMONG CHILDREN AGED 0-23 MONTHS, WITH SELECTED SOCIO-DEMOGRAPHIC AND HEALTH SERVICE RELATED VARIABLES IN DALE WOREDA, SIDAMA ZONE, MARCH 2012. 42

TABLE 5: BIVARIATE AND MULTIVARIATE LOGISTIC REGRESSION ANALYSIS OF EXCLUSIVE BREAST FEEDING PRACTICE AT 6 MONTHS OF AGE, WITH SELECTED SOCIO-DEMOGRAPHIC AND HEALTH SERVICE RELATED VARIABLES DALE WOREDA,SIDAMA ZONE, MARCH 2012. 44

TABLE 6: BIVARIATE AND MULTIVARIATE LOGISTIC REGRESSION ANALYSIS OF COMPLEMENTARY FEEDING PRACTICE AT 6 MONTHS OF AGE, AMONG CHILDREN AGED 6-23 MONTHS, WITH SELECTED SOCIO-DEMOGRAPHIC AND HEALTH SERVICE RELATED VARIABLES DALE WOREDA,SIDAMA ZONE MARCH 2012. 46

TABLE 7: BIVARIATE AND MULTIVARIATE LOGISTIC REGRESSION ANALYSIS OF COMPLEMENTARY FEEDING PRACTICE AT 6 MONTHS OF AGE, AMONG CHILDREN AGED 0-23 MONTHS, WITH SELECTED SOCIO-DEMOGRAPHIC AND HEALTH SERVICE RELATED VARIABLES DALE WOREDA,SIDAMA ZONE MARCH ,2012. 48

List of Figures

FIGURE 1: SCHEMATIC PRESENTATION OF THE SAMPLING PROCEDURE 28

FIGURE 2: PIE CHART OF OPTIMAL BREAST FEEDING PRACTICE, DALE WOREDA,SIDAMA ZONE,MARCH,2012. 49

List of Acronyms

AAU	Addis Ababa University
AIDS	Acquired Immune Deficiency Virus Syndrome
ANC	Antenatal care
AOR	Adjusted Odds Ratio
BF	Breast Feeding
BSc	Bachelor of Science
COR	Crude Odds Ratio
EBF	Exclusive Breast Feeding
EBFR	Exclusive Breast Feeding Rates
EDHS	Ethiopian Demographic and Health Survey
HIV	Human Immune Deficiency Virus
IMCI	Integrated Management of Childhood Illness
IRB	Institutional Review Board
IYCF	Infant and Young Children Feeding
MDG	Millennium Development Goal
MSc	Masters of Science
NGOs	Non Governmental Organizations
PBF	Predominant Breast Feeding
PNC	Postnatal Care
SNNPR	Southern Nations Nationalities and Peoples Region
UNICEF	United Nations Children's Fund
WHO	World Health Organization

Abstract

Background: Poor breastfeeding and complementary feeding practices, together with high rates of morbidity from infectious diseases are the prime proximate causes of malnutrition in the first two years of life.

Objective: To assess optimal breast feeding practice and its associated factors in Dale woreda, Sidama zone, Southern Nations Nationalities and Peoples Regional State.

Method: Community based quantitative cross sectional study was done to assess optimal breast feeding practice and its associated factors. A total of 634 mother-infant pairs were selected using multistage cluster sampling technique from the kebles then census was conducted to get the sampling frame for selecting mother- infant pairs by simple random sampling technique. The study subjects in each kebles were selected using population proportion to size.

This study was conducted in Dale woreda, which is one among the 10 woredas in Sidama zone, Southern Nations Nationalities and People's Region (SNNPR) from February to March 2012.

Data collection was made using a house-to-house visit, and household was used as a target unit, and kebeles as blocks. The raw data was entered, cleaned and analyzed using statistical software SPSS version 16.0.

Result

The prevalence of initiation of breast feeding within one hour, exclusive breast feeding at 6 month and complimentary feeding timely at the age of 6 months was **517(83.7%),474(87.1%)** and 504(88,9%) respectively.

Initiation of breast feeding practice had a statistically significant negative association with ownership of living place **(P=0.42, CI, (0.16, 0.97)).**

Exclusive breast feeding practice had statistically significant positive association with ownership of living place **(AOR=3.50(1.26, 10.2))** and employment status (AOR=2.94, (1.24, 6.98)) and it had statistical negative relationship with maternal age.

Complimentary breast feeding practice had a statistical positive relationship with PNC follow up **(AOR=2.25(1.49, 3.37))** and ANC follow up **(AOR=1.61(1.07, 2.42)).**

Conclusion

Breastfeeding is a common practice in the woreda. This is an encouraging practice in this study area.

Employed mothers were found to have less practice of optimal breastfeeding as compared to those who stayed at home and mothers who are dependent have less practice of optimal breast feeding than mothers who live in their house.

Recommendation

Working mothers should be encouraged by institutions and co-workers to promote optimal breastfeeding practice by arranging working hours, baby friendly initiative at work places.

Further studies are proposed to ascertain effective intervention in the study area and the region at large.

1. Introduction

1.1 Background

Breastfeeding is a natural phenomenon having numerous benefits to the infants, mothers, and society. This has culminated in a publication by the World Health Organization (WHO) recommending that infants up to 6 months of age should be exclusively breastfed (1).

Benefits of breastfeeding to the child include: a decrease of the incidence and/or severity of infectious diseases such as diarrhoea, respiratory tract infection, otitis media and urinary tract infection; decreased incidence of types 1 and 2 diabetes mellitus, stimulates their immune systems ,overweight, obesity, asthma and improves response to vaccinations (2,3).

Breastfeeding is the perfect way to provide the best food, having all the balanced nutritional contents, for a baby's first six months of life. It is a form of nutrition that demarcates no socioeconomic boundaries and provides the same nutritional content to all children all over the world. Breastfeeding creates a special bond between mother and baby and offers unique interaction and stimulation that—along with the balance of protein and energy and micronutrients—helps growth and development and gives a sense of well-being and security.

Breastfeeding also benefits the mother's health by helping the uterus to contract soon after delivery, thus reducing chances of postpartum bleeding, an earlier return to pre-

pregnancy weight, delayed resumption of ovulation (which results in increased child spacing), and a possibly reduced risk of ovarian and breast cancers (4,5,6).

Timely initiation of breastfeeding is defined as putting the newborn to the breast within one hour of birth.

Exclusive breastfeeding (EBF) has been defined by WHO as the situation where 'the infant has received only breast milk from his/her mother or a wet nurse, or expressed breast milk and no other liquids, or solids, with the exception of drops or syrups consisting of vitamins, minerals supplements, or medicines. EBF is adequate in quality as well as quantity in terms of energy, protein, nutrients, water etc. For an infant's need less than six months of age, the previous recommendation of EBF for four months was changed to 6 months based on accumulative evidence based research by WHO (7; 8).

Appropriate complementary feeding promotes growth and prevents stunting among children between 6 and 24 months of age. Infants are particularly vulnerable to malnutrition and infection during the transition period when complementary feeding begins (17).

According to 2011 EDHS, Fifty-two percent of infants started breastfeeding within one hour of birth, and 80 percent, within the first day and initiation of breast feeding was and highest in the SNNP (67 percent) (40).

1.2 Statement of the problem

Poor breastfeeding practices are widespread. It is estimated that sub-optimal breastfeeding, especially non-exclusive breastfeeding in the first 6 months of life, results in 1.4 million deaths and 10% of the disease burden in children younger than 5 years of age (13) .

Approximately one-fourth to one-half of infant deaths in developing countries occurs in the first week of life. A recent study in Ghana found that timely initiation of breastfeeding—within the first hour of birth—could prevent up to 22 percent of neonatal deaths (15; 16). Early initiation provides newborns with high levels of antibodies, vitamin A, and other protective factors through colostrum, the sticky, yellow-white early milk. Skin-to-skin contact during breastfeeding stabilizes the baby's temperature, respiratory rate, and blood sugar level (15). The first two years of life are critical stages for a child's growth and development. Any damage caused by nutritional deficiencies during this period could lead to impaired cognitive development, compromised educational achievement and low economic productivity (9).

Poor breastfeeding and complementary feeding practices, together with high rates of morbidity from infectious diseases are the prime proximate causes of malnutrition in the first two years of life (10) .Approximately 4 million newborns die annually, the majority in developing countries; one-third of these deaths are due to infections (11).The 4th Millennium Development Goal aims to achieve a two thirds reduction in global under-five deaths by 2015 of which 38% occur in newborns. Inappropriate breast feeding

significantly increases the risk of all cause mortality as compared to appropriate breast feeding practices (12).

Infants less than six months who are not breast fed are estimated to have greater than fivefold increased risk of morbidity and mortality from diarrheal and pneumonia as compared to infants who are exclusively breast fed (11).

Mixed feeding is the most dangerous method, because formula feeding can irritate the lining of the baby's stomach, making it easier for the HIV in breast milk to get in and cause an infection. There is more chance of opportunistic infection also. In a South African study of HIV positive women and their babies, 36 percent of babies who received mixed feeding were reported infected compared to about 25 percent of those who were exclusively breast-fed and 19.5 percent of formula fed babies (12). Exclusive and continued breastfeeding has been well established as one of the most important interventions to reduce post neonatal and child mortality (14).

Ethiopia has one of the highest infant mortality rates in the world and inappropriate neonatal feeding is a primary factor (17).

In resource poor countries, where the negative impact of HIV/AIDS is high, exclusive breastfeeding for the first six months has greater benefit than mixed feeding or formula feeding for the prevention of mother to child transmission of HIV. Despite its demonstrated benefits, EBF prevalence and duration in many countries including Ethiopia are lower than the international recommendation of exclusive breastfeeding for the first six months of life.

Based on studies done in Ethiopia, breastfeeding is nearly universal but the proportion of exclusively breastfed children up to 6 months is less than the optimal recommendations. The low prevalence of EBF in most developing countries including Ethiopia is attributed to various maternal and child factors such as place of residence, sex and age of the child, mother working outside home, maternal age and educational level, access to mass media and economical status (7).

According to Linkages report on timely initiation of breastfeeding among mothers with infants under 12 months of age in Southern Nations Nationalities and Peoples Region (SNNPR) showed 45% and 50 % in 2003/2004 and 2006 respectively (18). But which is an indicator of more study and still action should be taken to increase initiation and exclusive breast feeding in the region.

The purpose of this study was to asses optimal breast feeding practice and associated factors among mothers of children aged less than two years in Dale Woreda, Sidama Zone SNNPR.

1.3. Significance of the study

The impact of early initiation of and exclusive breastfeeding on infant mortality and its economic advantages are well known.

Different interventions like breast feeding promotions have been given at health institutions and at the community level by community health extension workers and other health care providers. However, these efforts are not based on systematic evidence on the level of existing practice which might be due to the paucity of data from studies on timely

initiation, exclusive breast feeding, complimentary feeding and continuing breast feeding up to 2 years.

Therefore, this study tried to

1. Assess associated factors affecting optimal breast feeding practice and would have a significant input in the formulation of appropriate strategies.
2. It would help health care providers to promote early initiation, exclusive, complimentary and continuing breast feeding up to two years based on a research finding.
3. It would provide policy makers and Non Governmental Organizations with relevant information for future planning and interventions.
4. The research input would initiate further research.

2. Review of literature

Optimal breastfeeding of infants under two years of age has the greatest potential impact on child survival of all preventive interventions, with the potential to prevent 1.4 million deaths in children under five in the developing world (46). Breastfed children have at least six times greater chance of survival in the early months than non-breastfed children. Breastfeeding drastically reduces deaths from acute respiratory infection and diarrhoea, two major child killers, as well as from other infectious diseases (19).

Exclusive breastfeeding, preceded by timely initiation and appropriate complementary feeding practices are universally accepted as essential elements for the satisfactory growth and development of infants and for prevention of childhood illness.

Timely initiation of breastfeeding is not only the easiest, cost effective and most successful intervention; it also tops the table of life-saving interventions for the health of the newborn. Twenty two percent of neonatal deaths could be prevented, if all infants are put to the breast within the first hour of birth (8, 20).

World Health Organization (WHO) and United Nations Children's Fund (UNICEF) recommend that all mothers should breastfeed their children exclusively for the first 6 months and thereafter they should continue to breastfeed for as long as the mother and child wish, and both appropriate and sufficient weaning food should be added after six months of life. WHO estimates that worldwide only 35% of children between birth and their fifth month are breastfed exclusively (7, 21).The benefits of breastfeeding for infant

nutrition, development, reduced morbidity and mortality, and prevention of long-term chronic diseases are now widely recognized (4,5,6).

The lower risk of mortality is primarily due to reductions in deaths caused by infectious diseases (22) and is most evident in infants who receive only breast milk (exclusive breastfeeding) during the first 6 months. Recent evidence indicates that early initiation of breastfeeding and exclusive breastfeeding are both linked with substantially lower neonatal mortality (17, 23).

WHO and other organizations recommend delaying for at least the first hour routine newborn care procedures that separate mother and baby such as bathing and weighing. This will allow mother and newborn uninterrupted skin-to-skin contact until the first breastfeed (24).

Despite these recommendations, only 39 % of newborns in the developing world are put to the breast within one hour of birth, and only 37 % of infants less than six months of age are exclusively breastfed (10).

The major determinants related not to start breastfeeding initiation early and exclusive breast feeding include a number of risk factors that can be classified into three overall clusters: sociodemographic factors, economic, and service related factors. Each of these in turn is briefly reviewed below.

Sociodemographic Factors

Sociodemographic factors affect timey intention and excusive breast feeding either directly or indirectly. In a study done in Goba town on determinant factors of timely initiation of breast feeding, it was significantly associated with place of residence, institutional delivery, post natal advice on breast feeding and educational status (20).

In a study done in University of Nigeria on Factors associated with exclusive breastfeeding among mothers, Women who had fewer children had higher EBFRs but a statistically significant difference was noted between those with 1 - 2 or 3 - 4 children, and those with ≥5 children. Mothers ≤25years or ≥36years had lower EBFRs in comparison with those in between these ages. Higher maternal education apparently favours better EBF performance, especially among women with at least secondary school education (47).

In a study done in Ethiopia on Determinants of exclusive breastfeeding practices only 3 factors were retained as determinant factors (marital status, wealth index, and child age) for EBF. As stated on the study, women who are not currently married were two times more likely to breastfeed their child exclusively than those married. Infants less than two months of age were five times more likely to be on EBF than infant aged four to six months. Likewise women in the wealth index ranking middle and above were two times more likely to EBF than the reference category(7).

Economic status

The relationship between socioeconomic status and early initiation of breastfeeding is not entirely clear. Studies carried out in India suggest that low socioeconomic status may be related to delayed initiation of breastfeeding.

However, other studies have found that socioeconomic factors related to the mother's background inhibited neither breastfeeding initiation nor maternal knowledge about the benefits of breast feeding.

But on a study done in Sweden on Perinatal and socioeconomic determinants of breastfeeding duration in very preterm infants being adversely exposed to any of the Socio economical factors (maternal education, unemployment benefit, social welfare and equivalent disposable income in the household) was significantly associated with earlier weaning up to 6 months of infants' postnatal age (25).

Regional and national studies in Ireland consistently demonstrate that mothers who initiate breast-feeding are more likely to be from a higher socio-economic background, well-educated, married, older and non-smokers.Breast-feeding exposure, such as having friends or family with previous breast-feeding experience and having breast-fed previous children have also been reported as important determinants. And besides this breast feeding is seen as embarrassing with recent data indicating 31% of mothers choose not to instantiate breast feeding (26).

Being a young mother, a primipara, or both are risk factors significantly associated with delayed initiation of breastfeeding. The mother's nutritional status, particularly in regard to chronic malnutrition, was not likely to be associated with suboptimal breastfeeding

practices, as shown by practices documented in a number of poor countries (e.g., Bangladesh, Zaire, and Gambia) where the majority of women, including those who are malnourished and poor, practice extended breastfeeding up to 2 years (27).

Service related factors: Antenatal care (ANC), Post Natal Care (PNC) and place of delivery.

In general, attending antenatal visits, especially during the prenatal period, is typically regarded as a critical and positive factor for a pregnant woman with regard to her adoption of optimal infant feeding practices.

On a descriptive study done in India on Antenatal counselling of breastfeeding the awareness of health information related to various aspects of breastfeeding among the mothers in both "counselled" group and "not counselled" group, in the "counselled" group 87% were aware that breastfeeding should be initiated immediately after birth and 78% knew that exclusive breastfeeding should be continued for 6 months while in the "not counselled" group, only 19% and 22% were aware of the same, respectively(28) .

However, even in the "counselled" group awareness with regard to correct breastfeeding technique and concept of continuing breastfeeding during illness in the baby was no different from those in the "not counselled" group (28).

Postnatal Care is another important programme of safe motherhood. It is a crucial service for both the mother and child to treat complications arising from the delivery, as well as to provide the mother with important information and also the right time where early initiation of breastfeeding and provision of colostrum practice is to be promoted.

In a cross sectional study in Goba town Mothers who were counselled/advised on breastfeeding on postnatal were about 52% more likely to initiate breastfeeding within the first hour of delivery (20).On the same study mothers who delivered in health institutions were twice as likely to initiate breastfeeding as compared to those delivered at their home.

Potential links between early initiation and exclusive breastfeeding and lower neonatal mortality

Approximately 86 percent of global neonatal deaths are due to three main causes (10):

• Severe infections: sepsis/pneumonia, tetanus, and diarrhea (36 percent)

• Asphyxia (23 percent)

• Preterm birth (27 percent)

In very high mortality settings where the neonatal mortality rate is above 45 per 1000 live births, infection contributes to almost half of all neonatal deaths (10).

Early initiation of exclusive breastfeeding may reduce neonatal mortality through the following biological pathways.

Provides immune factors present in colostrum

Beginning breastfeeding immediately after birth ensures that the newborn receives the "first milk" (colostrum), the baby's first "immunization". Colostrum protects the newborn from illness by providing a number of immune factors, as well as anti-microbial and anti-inflammatory agents (10; 17; 29).

Protects against exposure to infectious pathogens

Early introduction of breast milk as the exclusive food prevents ingestion of infectious pathogens that can cause gastrointestinal damage.

Prelacteal feeds such as water, other liquids, or ritual foods are often a source of pathogens. Unclean water mixed with infant formula powder puts the newborn at high risk of infection.

Invasive microorganisms may also be present in the formula powder itself, which can contribute to neonatal sepsis (10; 30) .

Promotes optimal maturation of the gut and immune system

Early ingestion of breast milk provides nutrients that promote maturation of the intestines and immune system and protect against infectious pathogens. Early gut "priming" is particularly crucial for preterm infants. Research shows that early feeding with non-human milk proteins may severely disrupt this important gut priming (10; 31).

Helps protect against hypothermia

Early breast feeding especially if accompanied by skin-to-skin contact with the mother, helps to keep the baby warm and has the potential to prevent hypothermia-related morbidity and mortality. Newborn infants are particularly at risk for hypothermia during the first 12 hours after birth, mainly because of heat loss from the evaporation of amniotic fluid in the immediate post-birth period. Exposure to cold and hypothermia is a well-known risk factor for neonatal morbidity and mortality, including an increased risk of pneumonia and sepsis in newborns and young infants (10).

Facilitates sustained breastfeeding

Early suckling is associated with successful establishment and maintenance of breastfeeding throughout infancy, (10) which can contribute to a lower risk of mortality beyond the first few days of life.

Early initiation of breastfeeding is beneficial to both mother and child. For the mother, breastfeeding immediately after delivery will facilitate placental expulsion and uterine contraction, reducing the risk of postpartum haemorrhage. Immediate initiation will help to establish milk flow and prevent breast engorgement. Early initiation is also critical to the infant. The early breast milk, colostrums, is rich in nutrients and anti-infective agents, providing protection to the infant entering a world of pathogens. initiation of breastfeeding within the first hour can help prevent neonatal deaths caused by infections such as sepsis, pneumonia, and diarrhoea and may also prevent additional hypothermia-related deaths, especially in preterm and low birth weight infants in developing countries (10).

Time to breastfeeding initiation is one of the commonly reported independent predictors of exclusive breastfeeding in many communities. Over the years, UNICEF has promoted breastfeeding initiation within half an hour of childbirth as an important strategy to reduce perinatal and infant morbidities and mortality, and by extension to support the attainment of Millennium Development Goal 4: reduce child mortality. Other predictors of breastfeeding initiation include educational level, parity, age, socioeconomic status and ethnicity (32).

Realizing the importance of timely initiation of breastfeeding, the Ethiopian government had developed infant and young child feeding guidelines giving appropriate emphasis to

key messages on timely initiation of breastfeeding in 2004 (17).Since then, different interventions like breast feeding promotions have been given at health institutions and at the community level by community health extension workers and other health care providers. However, these efforts are not based on systematic evidence on the level of existing practice which might be due to the paucity of data from studies on timely initiation (20).

In the early 1970s, the prevalence of BF declined in the world. After 1990, the BF initiation rates have increased, while exclusive BF (EBF) rates have shown little or no increase. In 2001, the World Health Organisation suggested that EBF should be continued until six months in developed and developing countries (6).

The most important determinant of early initiation of breast-feeding was place of delivery. Children born at home and at Ministry of Health health canters are significantly more likely than children born at private hospitals to initiate breast-feeding early. The most important determinant of exclusive breast-feeding was whether or not the mother worked outside the home. After controlling for infant's age and sex and mother's ethnicity, women who did not work outside the home were 3.2 times as likely to exclusively breast-feed as were women who worked outside the home. Lack of exclusive breast-feeding was often associated with giving a bottle (33).

A prospective study done among 492 mothers in Gujarat, India, in 2009 prevalence rate of exclusive breastfeeding by 6 months was 62%. According to this there is no

association between parental education, living conditions, and cultural habits of population and mother's employment with exclusive breastfeeding.

This study showed no significant association between birth weight with initiation and continuation of exclusive breastfeeding and between breastfeeding pattern and variables, classically considered as supportive for breastfeeding such as number of antenatal visits, mothers receiving postnatal breastfeeding advice, previous breastfeeding duration in multiparous, start of breastfeeding after birth (34).

Breastfeeding is said to be on decline, and there is a trend toward bottle feeding in both urban and rural areas. This probably is affected not only by knowledge on breastfeeding but also by factors such as education, occupation, and socioeconomic status of the parents.

The percentages of infants younger than 6 months old who were exclusively breastfed in 2000–2007 were 38% worldwide, 23% in West/Central Africa, 39% in Eastern/Southern Africa, 44% in South Asia, 26% in Middle East/North Africa, and 43% in East Asia/Pacific (35).

On a research done in a Baby-Friendly Hospital on Factors associated with breastfeeding initiation time in Turkey, Of the 577 cases, 35.2% initiated breastfeeding within the first hour while 72.8% initiated breastfeeding within the first two hours after birth. However, this initiation in normal births within the first half an hour, and the first, second and third hours in the postpartum period were 16.8%, 51.2%, 81.4%, and 91.4%, respectively (36).

In a study done in Singapore Breast Feeding was maintained at a high level, more than 92% for the first 12 months of life. Rate of EBF declined with age. The EBF rate at 0 months was 82%, but it sharply declined to 44% at one month. Through 1–5 months, 42%–44% of the Infants were exclusively breastfed. On this study significant factors influencing EBF were infants' gender, birth order, number of children, family income, parents' education and employment, mode of delivery, initiation of BF within one hour after birth, and on demand BF during the day and night, did not show any statistical difference with EBF. Their infants were EBF for one month, two months and 11 months, respectively (6).

In Guatemala a research was done on Determinants of optimal breast-feeding among 777 women (332 program communities and 445 control communities) in 2002. Of the women who were exclusively breast-feeding according to 24-hour recall, only 53% of them practiced exclusive breast-feeding for the full 7 days preceding the interview.

On this study factors that influenced early initiation of breast-feeding and exclusive breast-feeding, in program communities, mothers who worked outside the home were significantly less likely than mothers who did not work away from home to exclusively breast-feed.

Likewise, in control communities, mothers who worked outside the home were significantly less likely than mothers who did not work away from home to exclusively breast-feed (9% vs. 25%, respectively).

Place of delivery was the factor most closely associated with early initiation. The child's age and the mother working outside the home were significantly associated with exclusive breast-feeding, though the age of the child appears not to be an important determinant of exclusive breastfeeding in program communities.

Place of delivery and whether the mother lived in a program community were the only significant predictors of early initiation of breast feeding. Those who gave birth at home or at a health centre were more likely than mothers giving birth at a private hospital to initiate breast-feeding in the first hour (33) .

In a Descriptive Cross-Sectional Study on Breast Feeding Practices and Newborn Care in Rural Areas of India among 100 women, most of the mothers initiated breastfeeding (97%) and the other 3% were not able to initiate due to separation from mother (2%) or due to advice from the mother-in-law (1%). A total of 44% of the mothers initiated breastfeeding within 30 minutes with home delivery and 38% with Caesarean section (37).

In Eastern Uganda on Low adherence to exclusive breastfeeding the majority initiated breastfeeding during the first day, and within the third day nearly everybody had tried breastfeeding. Prelacteal feeding was given to 57.1% of the infants within the first three days, and water based liquids were the most common.

The main reason the mothers reported for giving prelacteal feeds was that they had to wait until the milk started flowing. Other reasons for giving prelacteals had to do with the baby being hungry, cleaning of the baby's throat, her own pain and exhaustion after delivery, traditions and advice from health staff (38).

Ethiopia has developed National Infant and Young Child Feeding Guidelines with the objectives of achieving optimal breastfeeding. For the implementation, many health extension workers have been trained to provide community level breastfeeding promotion and in-service training has been given to promote breastfeeding at the health facility level.

Despite all these interventions, the basic and easiest indicator of optimal breastfeeding (i.e. timely initiation of breastfeeding exclusive breast feeding) remains at a near average.

In Ethiopia, Breastfeeding is a universal practice with 96 percent of children breastfed at some point in time. However, a very large proportion of women do not practice optimal breastfeeding. About one third of babies do not receive breastfeeding within one hour of birth and only one in three infants are exclusively breastfed for 6 months. According to the DHS 2005, exclusive breast-feeding rate in children 0-5 months was 45% and only 70% of babies were given breast milk within an hour of birth. Furthermore only 45% received the first milk and almost a third received a pre-lacteal feed (39).

In 2009 a survey was done using Ethiopian Demographic Health Survey on Determinants of exclusive breastfeeding practices in Ethiopia.

According to the study , the proportion of women who practiced EBF and predominant breast-feeding (PBF) were 49.0% and 19% respectively making the overall rate of full breast feedings (both EBF and PBF) 68.2%. The proportion of women who gave pre-lacteal feeding within the first three days of life and used bottle-feeding were 13% and

28.5% respectively. Encouragingly, the percentage of women who had never breast-fed was only 0.6%. EBF was associated significantly with maternal educational level, current marital status, child age, and economical status. But no association was observed regarding maternal age, place of residence, current employment of women, and access to mass media, attending antenatal care, and sex of the child (39).

But even if it is not to mean that it is adequate according to the new Ethiopian Demographic and Health Survey 2011, exclusively breastfed children under 6 months (aged 0-5 months) increases to 52 percent compared to EDHS 2005. In addition to breast milk, 19 percent of infants under 6 months are given plain water only, while 14 percent are given milk other than breast milk and 4 percent are given non-milk liquids and juice. Furthermore, 10 percent of infants under 6 months are given complementary foods. By age 6-9 months, 51 percent of infants are given complementary foods. Sixteen percent of infants under 6 months are fed using a bottle with a nipple, a practice that is discouraged because of the risk of illness to the child (40).

In a recent study on Determinants of timely initiation of breastfeeding among mothers in Goba Woreda in 2011, timely initiation of breastfeeding was associated with place of residence, institutional delivery, postnatal advice on breast feeding and educational status. Among the obstetric and health service related factors, place of delivery and post natal information or advice on breastfeeding were significantly associated with timely initiation of breastfeeding (20).

On a research done on assessment of knowledge, attitude & practice among mothers about VCT and feeding of infants born to HIV positive women in Jimma town among 643 lactating mothers only 13.4% feed exclusively (41).

In Dabat woreda in a comparative study on community IMCI interventions on child health care 60% of the children in the intervention areas were put on the breast within an hour compared to 15% of the children in the non- intervention areas, indicating the better opportunity for children in the intervention areas for continued breast feeding and better Psychosocial development(42).

In a study In Tigray on Feeding profile and diarrheal morbidity among infants of 7-12 months the prevalence of exclusive breast-feeding was (41.8%).on this study Exclusive breast feeding practice was associated with spouse's occupation, that the practice of exclusive-breast feeding was lower among mothers whose spouses were nongovernmental employees (and it was also lower among mothers whose spouses were unemployed compared to mothers whose spouses were governmental employed (44).

Linkages report on timely initiation of breastfeeding among mothers with infants under 12 months of age in the region showed 45% and 50 % in 2003/2004 and 2006 respectively (18).

A research done in Aleta Wondo on Knowledge About Obstetric Danger Signs Among Pregnant Women 458 of 812 fed exclusively(44).

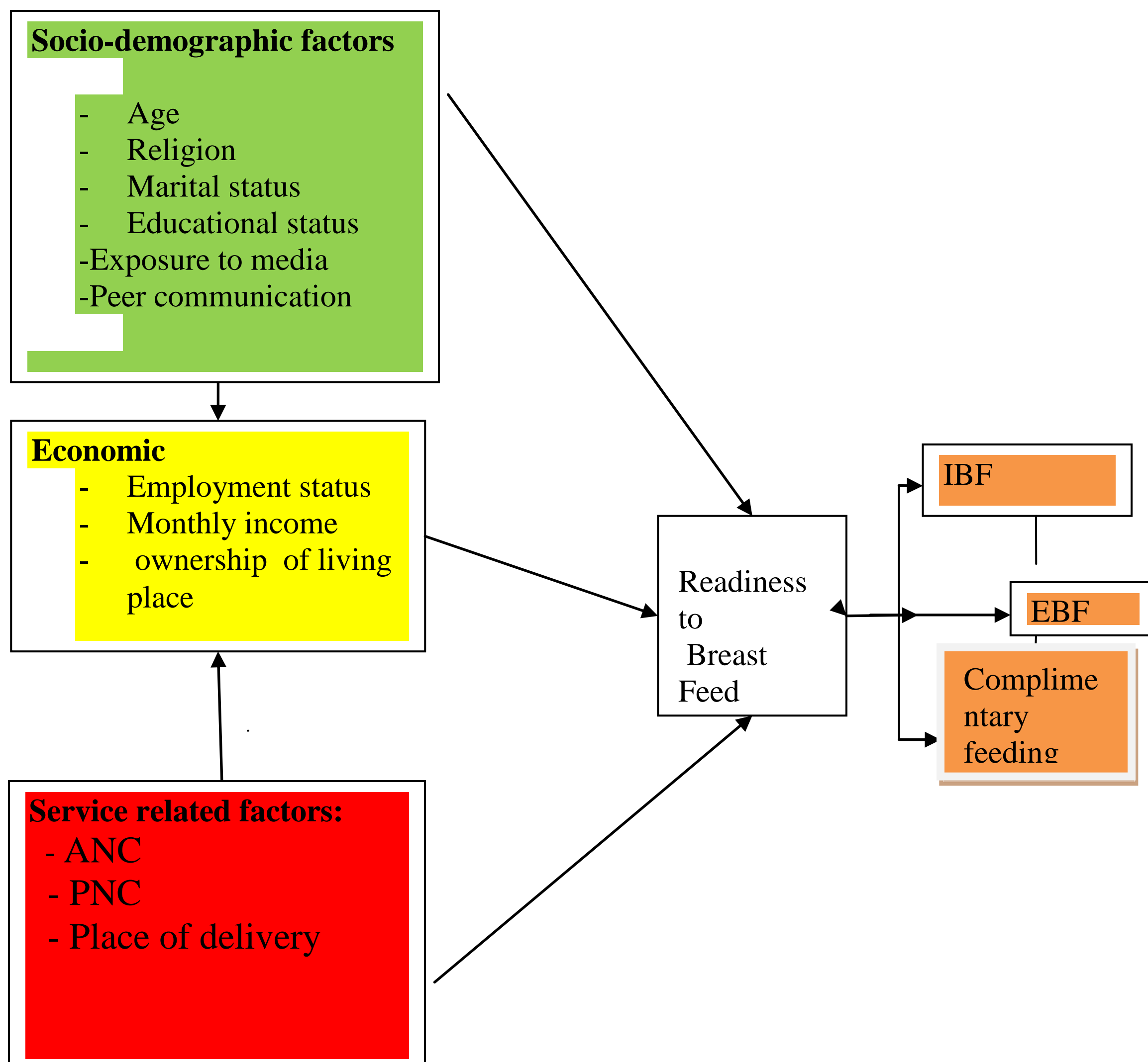
Finally, the benefits of breastfeeding for infant nutrition, development, reduced morbidity and mortality, and prevention of long-term chronic diseases are now widely recognized. The lower risk of mortality is primarily due to reductions in deaths caused by infectious diseases and is most evident in infants who receive only breast milk (exclusive breastfeeding) during the first 6 months. Early initiation of breastfeeding provides additional benefits.

Breastfeeding practice is a vital component of Primary Health Care. However there is no study conducted in Dale Woreda to asses optimal breast feeding practice and and its associated factors.

Therefore this study will have a significant input in the formulation of appropriate strategies in order to promote optimal infant/child feeding practice.

3. Conceptual framework and variable specification

To evaluate associated factors of early initiation of breast feeding, exclusive breast feeding practices and complimentary feeding with continued breast feeding among mothers of reproductive age, the following variables will be considered in this study.



Source: Developed by the author based on literature review (2012)

4. Objective

4.1 Genera Objective

-To assess optimal breast feeding practice and its associated factors among mothers of children aged 0-23 months in Sidama zone,Dale woreda, SNNPR.

4.2. Specific objective

1. To determine the prevalence of early initiation of, exclusive breast feeding and complimentary feeding practice.
2. To identify factors affecting early initiation of, exclusive breastfeeding and complimentary feeding practice.

5. Methodology

5.1. Study Area

This study was conducted in Dale woreda , which is one among the 10 woredas in Sidama zone,(SNNPR). Dale woreda is located in the south central part of Ethiopia. The total area of the woreda is 302.12 km^2 with total population size of 260,767 (female 132,679 and male 128,088). Its population density estimated to be 736 persons per km^2 and average the land holding is 0.6 hectares per person. The woreda has 36 kebeles and 2,087women headed and 34189 male headed household. The neighboring Woreds located around Dale are Boricha and Shebedino in the north and north west Loka Abaya woreda in the west, Aleta wondo wereda in the south, and Wonosho Wereda in the east and north east.

Dale is located at latitude 6^0 44" north and 38^0 28" east and above sea level 1174-3072m altitude. The distance from the capital city of the regional government seat, Hawassa, is 45 km and 320 from the capital city of the country, Addis Ababa.

5.2. Study Design

A descriptive cross sectional study was conducted in Dale woreda community to assess the optimal breast feeding practice and its associated factors.

5.3. Study period:

- From February 2012 to March 2012

5.4. Source population and study subjects

- Source of population
  - All mothers having children less than 2 years in the woreda.

- Study subjects

➢ The study subjects were mothers of children aged 0-23 months.

- Exclusion criteria

➢ Children less than two years of age, without biological mothers will be excluded from the study.

5.5. Sample size determination

The sample size (n) required for the study was calculated using the formula to estimate a single population proportion assuming an expected prevalence for timely initiation and exclusive breast feeding of 52.4% with a finite population correction.

$$n = \frac{z^2\alpha/2p(1-p)}{\omega^2}$$

Where n= required sample size

Zα/2 = critical value for normal distribution at 95% confidence interval which equals to 1.96 (Z value at alpha=0.05).

P= Established prevalence based on the study Determinants of timely initiation of breastfeeding among mothers in Goba Woreda, South East Ethiopia: A cross sectional study (20).

ω = an absolute precision.

D=design effect.

Assumptions: With the assumptions of 95% Confidence interval, 5% desired precision, prevalence 52.4 % (P=0.524), and design effect for the three stage sampling (D=1.5)

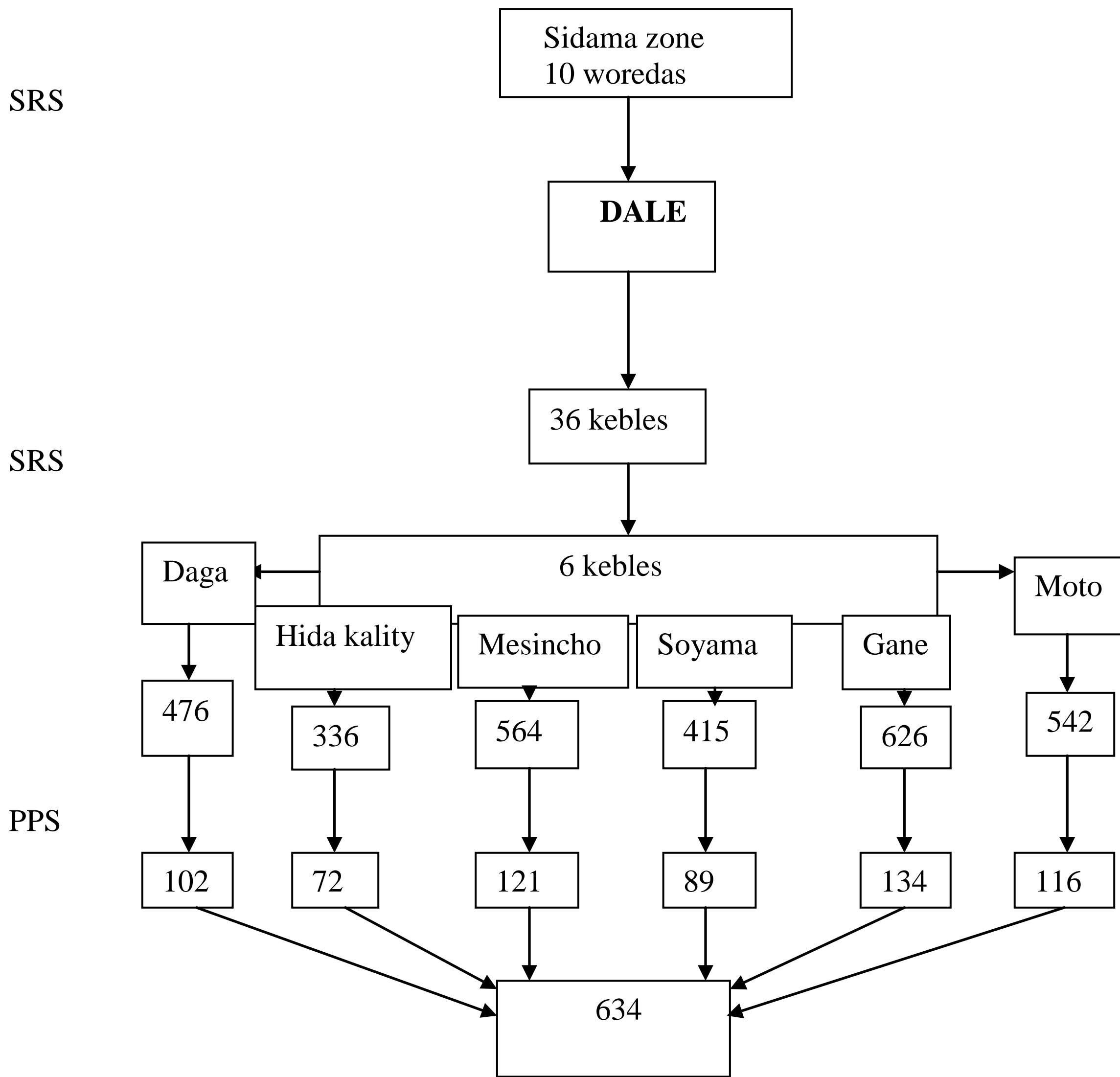
was applied. The formula yields n=576, adding 10% contingency for non response, the required sample size was 634 mothers of 0-23 months of age.

5.6. Sampling Procedure

A three stage sampling technique was used in sampling the study subjects. Out of ten woredas of sidama zone, Dale woreda was selected by simple random sampling method.

All the 36 kebles in the woreda were included in the sampling frame and out of the them, 6 kebels(Hida kality,Dagia,Mesincho,Soyama,Gane and Moto) were randomly selected using the simple random sampling method. Then census was done to get the total number of mothers with their less than two years age children, the total number of children less than two years of age were 2,960. It was from these target population that the required sample size was taken according to the size of the sample frame in each Keble (fig.1).

To get the individual sample units (subjects) at household level, the center of each keble was located and to start the first house a lottery method was used. Once the direction was located using the lottery method, then it was started from the first household, which was immediately found from that direction and systematically continued by jumping every five house unit to get next sample from the household.



Key:

SRS Simple Random sampling system

PPS Proportionate to Population Size

Figure 1: schematic presentation of the sampling procedure

5.7. Data collection procedure

Structured questionnaire was developed in such a way that all the variables to be assessed were included. Questionnaires was developed first in English then translated to Amharic version. The questionnaires were pre-tested before the actual data collection is begun. In fact, some information using the created variables was not fully addressed by the respondents during the time of pre-testing. Therefore, appropriate amendments of the questionnaire were made before the actual data collection started. Mean while, a close follow-up was made whether the questionnaires were appropriately filled by the trained interviewers during the house-to-house survey.

Finally, eligible target groups were selected from each selected house units according the set criteria. One eligible, child aged less than two years and who have mother at the time of survey, from each household was selected and if eligible child was not found a replacement technique was used, just replaced from the consecutive households in the same direction. An interesting issue in the data collection period was, all the selected mother-child study subjects according the set criteria were volunteers and participated in the study.

5.8. Variable Specification:

5.8.1. Dependent Variables:

- Early initiation of breast feeding,
- Exclusive breast feeding and
- Complimentary feeding practice with continuing breast feeding.

5.8.2. Independent Variables:

- ***Socio-demographic variables:*** religion, educational status, ethnicity, parity, mother's age, marital status, sex of child, and birth weight of child
- ***Media***: radio and news paper
- ***Economic variables*****:** work status, and ownership of living place.
- ***Service Related variables:*** ANC, PNC and Place of delivery.

5.9. Operational definition

Good optimal breastfeeding practice: When the study subjects have practiced initiation of breast feeding, exclusive breastfeeding, started complementary food at six months post delivery and currently breastfeeding their children for greater than six months.

Exclusive breast feeding: the situation where 'the infant has received only breast milk from his/her mother, or expressed breast milk and no other liquids, or solids, with the exception of drops or syrups consisting of vitamins, minerals supplements, or medicines.

Initiation of breast feeding: putting the newborn to the breast within one hour of birth.

Antenatal care (ANC): when women visit health institutes at least once during their pregnancy.

Ownership living place: a woman who do have their own home / which is not rented from others.

5.10. Data processing and analysis

The raw data was entered, cleaned and analyzed using statistical software SPSS version 16.0. Data cleaning was performed to check for accuracy, consistency, missed values and variables to fix errors.

Frequency of each variable was calculated by univariant analysis. Bivareite analysis with odds ratio with 95% confidence interval to ascertain association between independent and multiple logistic analysis was used to determine association and manage confounding factors .Frequencies, cross tabulation used to check for missed values and variables.

5.11. Data quality assurance

To maximize reliability and validity of the variables in the study, special attention was given to the construction of the questionnaire that was the wording of the questions, flow of alternatives and related issues was carefully examined during the designing of the questionnaire.

Appropriate design and sampling procedures was also carefully considered to maintain the quality of the study.

Selection of data collectors, training of the interviewers and pre-testing of the designed questionnaire was seriously undertaken in order to maintain the quality of the study. A mandatory and routine procedure during the data collection time was continuous supervision and/or follow up of the data collectors.

Pre-test Was conducted to check the accuracy and validity of the questionnaire prior to the actual study period using 5% of the questionnaire in Tulla kebele .One day training was given to the data collectors and the supervisor on the objective ,relevance of the

study, confidentiality of information, respondent's right and informed consent. The principle investigator and the supervisor made frequent checks on the data collection process to ensure the completeness and consistencies of the gathered information and errors found during the process were corrected.

5.12. Ethical considerations

Ethical clearance was obtained from Department of Nursing and Midwifery, Institutional Review Board. At the locality necessary arrangements was made concerning this issue. Letters were written first from Department of Nursing and Midwifery, Institutional Review Board to the Zonal Administrative Office. Then sidama Zone Administrative Office wrote a letter to the Municipality, and again, individual letters were written for each respective kebele in order to get co-operation, participation and let them know ahead of time about the research work. At the time of data collection, the purpose of the study was explained to the study subjects and a verbal consent was taken from the participants to confirm whether they are willing to participate.

Data was collected only after full informed verbal consent is obtained. Confidentiality of the information was maintained by excluding names as identification in the questionnaire and keeping their privacy during.

5.13. Dissemination of Findings

High priority will be given to the timely dissemination of the study findings to the relevant organizations and stakeholders. The plan of diffusion of the thesis result includes presentation at Addis Ababa University. The report paper will also be disseminated to ministry of education and ministry of health and other concerned government and

nongovernment organizations. Attempts will also be made for publication in national/regional scientific journals and onion dissemination.

6. Results

6.1. Socio-demographic characteristics of the respondents

A total of 634 mothers with children less than 2 years of age voluntarily responded, making the response rate 100%. The mean (+ Standard deviation) age of the mothers was nearly 26 years (5.04). The age range of mothers considered in the study was 15-49 years, which is a childbearing age range. Out of the total study subjects, 29 (4.1%) were young mothers aged 15- 19 years, while 55(8.7%) were aged 35 and above years. The majority of children 219 (34.5%) were between 6-15 months. The maximum and minimum numbers of children were found in between 6-11and 18-23 months of age. The mean (+ standard deviation) age of the children was nearly 13 months (6.31).

In this study Christians were 96.5% of the study subjects.

Four major Ethnic groups were identified of which, sidama constitutes the larger proportion (57.4%), followed by wolayita (14.4%). Among the study subjects (77.1%) have attended formal education.

44.2 percent of the respondents had 2-4 children at the time of the study.

Table 1: Frequency distribution of selected sociodemographic characteristics among mother child paired subject groups of the study; Dale woreda, Sidama Zone March 2012.

Variables	Number(634)	Percent(100)
Age of mothers (years)		
15 -19	26	4.1
20- 24	210	33.1
25- 29	223	35.2
30- 34	120	18.9
>35	55	8.7
Age of child in months		
0 -5	90	33.1
6-11	219	35.2
12-17	134	18.9
18-23	191	8.7
Sex of child		
Male	317	50
Female	317	50
Birth weight of child		
<2.5 kg	6	0.9
>2.5 kg	268	42.3
Do not know	360	56.8
Marital Status		
Single	8	1.3
Married	611	96.4
Divorced	9	1.4
Widowed	6	9.0
Educational status		
Attended no formal school	145	22.9
Attended formal school	489	77.1
Ethnicity		
Sidama	364	57.4
wolayita	91	14.4
Amara	68	10.7
Oromo	37	5.8
Others	74	11.7
Religion		
Christian	612	96.5
Muslims	22	3.5
Frequency of listening to radio		
Almost every day	296	46.7
At least once a fortnight	60	9.5
Less than once a week	41	6.5
Not at all	237	37.4
Frequency of reading news paper		
Almost every day	32	5
At least once a fortnight	62	9.8
Less than once a week	99	15.6
Not at all	441	69.6
Household monthly Income		
0-500	87	13.7
501-1000	73	11.5
1001-1500	19	3.0
1501-2000	23	3.6
>2000	36	5.7
Didn't know	396	62.5
Parity		
1	240	37.9
2-4	280	44.2
5+	114	18.0
Alive children		
1	249	39.3
2-4	292	46.1
5+	93	14.7

Utilization of Maternal Health Services

In this study respondents have an average of two alive children. 270(46.6%) of the respondents said that they have visited health institution for ANC while majority (66.1%) reported visiting health institution for PNC for the index child. More than half (56.3%) of the mothers were delivered their children at home, while 29.2% ,were delivered at governmental hospital, 10.7% in governmental health centre and5.2% at Private/NGO clinics (Table 2).

Regarding the source of information and support to breastfeed, 159 (21.5%) reported receiving from health workers, 139 (21.9%) from husbands/partners, 55 (8.7%), from mothers, 182(28.7%) grandmothers, 184 (29.0%) from friend/neighbours, 67 (10.6%) from mass media and 73 (11.5%) from nobody.

Table 2: Frequency distribution of health service related variables among mother-child paired subject groups of the study; Dale woreda,Sidama Zone March 2012.

VARIABLES	NUMBER(634)	PERCENT (100%)
ANC follow-up		
Yes	270	42.6
No	364	57.4
PNC Follow-up		
Yes	419	66.1
No	215	33.9
Place of birth of the index child		
Home	357	56.3
Government Hospital	185	29.2
Government Health Centre	68	10.7
Private Health Centre	24	3.8
Assistance during delivery		
Health professional	286	45.1
Traditional birth attendant	324	51.1
No one	24	3.8
Health education on breastfeeding		
Yes	507	80.0
No	127	20.0

Breastfeeding Experiences

About 517(87.3%) of mothers put their newborns to their breast within one hour of birth, while 101(16.3%) respondents initiated late after one hour (Table 3).

Out of 634 infants <24 months of age, 593(93.5%) received colostrum with in the first 3 days after delivery, while 41(6.5%) did receive pre-lacteal fluids. At the time of survey 598(94.3%) mothers were breastfeeding.

Out of 544 mothers with children of six months 474 (87.1%) were currently breastfeeding exclusively.

About 94.3% respondents were currently breastfeeding. Among those who were currently breastfeeding, 504 (88.9%) have started complementary feeding timely at the age of 6 months post delivery (Table 3).

Table 3: Distribution of mothers by their breastfeeding experiences, among mother-child paired subject groups of the study; Dale woreda, Sidama Zone, March 2012.

VARIABLES	NUMBER	PERCENT (%)
Prelacial feeding received(n=64)		
Water/sugar solution	44	68.8
Cow/formula milk	14	21.9
Amessa	6	9.3
Total	**64**	**100**
Initiation of breast-feeding (n = 618)		
Within 1 hr	517	83.7
After 1 hr	101	16.3
Total	**618**	**100.0**
Colostrum fed (n=634)		
Yes	593	93.5
No	41	6.5
Total	**634**	**100.0**
Exclusive breast-feeding at 6 months (n=544)		
Yes	474	87.1
no	70	12.9
Total	**544**	**100.0**
Complimentary breast feeding practice(n=567)		
At 6 month	504	88.9
Before 6 month	63	11.1
Total	**567**	**100.0**
Still breast feeding(n=634)		
Yes	598	94.3
No	36	5.7
Total	**634**	**100.0**
Bottle feeding(n=634)		
Yes	169	26.7
No	465	73.3
Total	**634**	**100**

• **Initiation of breast-feeding**

About 618 (97.5%) of the mothers initiated breast-feeding for their children within 24 hours after birth, out of whom 517 (83.7%) started immediately within one hour, while 101 (16.3%) of them started breast-feeding late after 1 hour after birth. 191 (87.2%) of mothers aged 25-29 years have initiated breast-feeding for their children early within 1hours after birth which is almost similar with those mothers aged 35 and above years, 48(87.3%) (Table 4) .

After an adjustment has made using logistic regression, Initiation of breast-feeding had significant negative relationship with ownership of living place. Mothers living in a rented house were found to have late initiation of breast feeding (AOR=**0.39, 95%CI=0.16, 0.97**) than mothers which live in their own house (Table 4).

Table 4: Bivariate and multivariate logistic regression analysis of initiation of breast feeding practice, among children aged 0-23 months, with selected socio-demographic and health service related variables in Dale Woreda, Sidama Zone, March 2012.

Characteristics	Initiation of breast feeding n = 618			
	Within 1 hr N (%)	After 1 hr N (%)	COR(CI)	AOR(CI)
Mother's age				
15-19	17(70.8%)	7(29.2%)	1	1
20-24	163(79.5%)	42(20.5%)	0.63(0.24,1.60)	0.63(0.23,1.74)
25-29	191(87.2%)	28(12.8%)	0.360(0.136,0.935)	0.48(0.16,1.43)
30-34	98(85.2%)	17(14.8%)	0.421(0.152,1.168)	0.74(0.22,2.5)
35 and above	48(87.3%)	7(12.7%)	0.354(0.108,1.158)	0.73(0.17,3.18)
Educational status of the mother				
illiterate	14(9.8%)	129(90.2%)	1	1
Read and write	4(16.7%)	20(83.3%)	1.84(0.55,6.16)	1.14(0.32,4.12)
Primary(1-8)	34(13.4%)	220(86.6%)	1.42(0.74,2.75)	0.855(0.40,1.82)
>Secondary(9+)	49(24.9%)	148(75.1%)	3.05(1.61,5.78)	1.47(0.66,3.27)
Ownership of living place				
Owner	30(29.7%)	334(64.6%)	1	1
Rented	61(60.4%)	158(30%)	4.29(2.67,6.92)	**0.39(0.16,0.97)***
Dependent	10(9.9%)	25(4.8%)	4.45(1.95,10.14)	0.82(0.36,1.88)
Parity				
1	57(24.5%)	176(75.5%)	4.25(1.95,9.26)	0.706(0.39,1.28)
2-4	36(13.2%)	236(86.8%)	2.00(0.90,4.46)	0.55(0.19,1.62)
More than 5	8(7.1%)	105(92.9%)	1	1
ANC follow up				
Yes	58(22%)	206(78%)	2.04(1.32,3.14)	1.10(0.64,1.89)
No	43(12.1%)	311(87.9%)	1.00	1
PNC follow up				
Yes	76(18.5%)	335(81.5%)	1.65(1.02,2.69)	0.75(0.46,1.23)
No	25(12.1%)	182(87.9%)	1	1
Place of birth				
Outside Health Facility	36(10.3%)	312(89.7%)	1	1
Health facilities	65(24.1%)	205(75.9%)	2.75(1.76,428)	1.253(0.69,2.25)

Significant at *p=0.42

• **Exclusive breast-feeding**

From 15-19 age group mothers practiced exclusive breastfeeding as compared to other age groups (Table 5).

After an adjustment has made using logistic regression, exclusive breastfeeding was associated significantly with ownership of the living house and employment status. Those women who live in their own house feed breast exclusively more likely **(AOR=3.58 ((1.26, 10.15))** than those who were dependent, and mothers who are unemployed practice exclusive breast feeding more likely **(AOR=2.94(1.24, 6.98))** than the employed. And this study shows a statistically significant negative relationship between exclusive breast feeding practice and mother's age. 30-34 age group mothers were found to have less practice of exclusive breast feeding **(AOR=0.09(0.01, 0.85))** than mothers of 15-19 age group (Table 5).

Table 5: Bivariate and multivariate logistic regression analysis of exclusive breast feeding practice at 6 months of age, with selected socio-demographic and health service related variables Dale woreda,sidama zone, March 2012.

Characteristics	Exclusive breast feeding(n = 544)at 6 month			
	Yes (%)	No (%)	COR(CI)	AOR(CI)
Mother's age				
15-19	23(95.8%)	1(4.2%)	1	1
20-24	148(85.5%)	25(14.4%)	0.26(0.03,1.99)	0.19(0.02,1.54)
25-29	174(88.8%)	22(11.2%)	0.34(0.04,2.67)	0.16(0.01,1.37)
30-34	86(84.3%)	16(15.7%)	0.23(0.03,1.86)	**0.09(0.01,0.85)***
35 and above	43(87.8%)	6(12.2%)	0.31(0.04,2.75)	0.11(0.01,1.16)
Ethnicity				
Sidama	292(91.5%)	27(8.5%)	1	1
Amhara	48(80.0%)	12(20.0%)	0.37(0.17,0.78)	1.39(0.63,3.09)
Oromo	26(86.7%)	4(13.3%)	0.60(0.19,1.85)	1.16(0.44,3.08)
Wolayita	57(76.0%)	18(24.0%)	0.29(0.15,0.57)	2.2(1.08,4.62)
Others	51(85.0%)	9(15.0%)	0.52(0.23,1.18)	0.871(0.373,2.035)
Educational status of the mother				
Illiterate	114(91.2%)	11(8.8%)	2.28(1.09,4.73)	0.99(0.36,2.76)
Read and write	16(76.2%)	5(23.8%)	0.70(0.24,2.06)	0.44(0.12,1.57)
Primary(1-8)	203(89.8%)	23(10.2%)	1.94(1.09,3.47)	0.96(0.42,2.21)
Secondary and above(9+)	141(80.8%)	31(18.0%)	1	1
Ownership of living place				
Owner	306(93.0%)	23(7.0%)	4.84(1.94,12.06)	**3.58(1.26,10.15)****
Rented	146(78.9%)	39(21.1%)	1.36(0.56,3.29)	1.317(0.509,3.408)
Dependent	22(73.3%)	8(26.7%)	1	1
Employment status				
Employed	49(72.1%)	19(25.9%)	1	1
Private business	39(84.8%)	7(15.2%)	2.16(0.82,5.66)	2.649(0.89,7.88)
unemployed	314(90.8%)	32(9.2%)	3.81(2.00,7.23)	**2.94(1.24,6.98)*****
Student	20(87.0%)	3(13.0%)	2.56(0.69,9.72)	3.14(0.77,12.83)
daily laborer(house maid	52(85.2%)	9(14.8%)	2.24(0.93,5.42)	3.07(0.99,9.49)
Parity				
1	169(81.9%)	38(18.4%)	1	1
2-4	212(89.5%)	25(10.5%)	1.91(1.11,3.28)	2.01(1.00,4.03)
More than 5	93(93.0%)	7(7.0%)	2.98(1.28,6.95)	2.46(0.74,8.19)
Place of birth				
Outside Health Facility	284(91.3%)	27(8.7%)	2.38(1.42,3.98)	0.23(0.03,1.71)
Health facilities	190(81.5%)	43(18.5%)	1	1
Post natal care follow up				
Yes	324(86.6%)	50(13.4%)	1	1
No	150(88.2%)	20(11.8%)	1.16(0.66,2.01)	0.68(0.35,1.31)

Significant at *p=0.038, **p=0.015, ***p=0.014

Complementary feeding practice

Accordingly mothers of children age 6-23 months were asked if they started complementary feeding at 6 months of child age or not. Around 504 (88.9%) have started complementary feeding timely at the age of 6 months post delivery, while 11.1% have started before 6 months of age.

This study shows a statistically significant relationship of complementary feeding practice with PNC follow up and ANC follow up. Mothers who visited health institution for postnatal care practiced complementary feeding **2.25** more likely than mothers who did not attend postnatal care **(AOR= (2.25(1.49, 3.37))** and mothers who visited health institution for Antenatal care practiced complementary feeding **1.61** more likely than mothers who did not attend Antenatal care(AOR= **1.61(1.07,2.42))** (Table 6).

Table 6: Bivariate and multivariate logistic regression analysis of complementary feeding practice at 6 months of age, among children aged 6-23 months, with selected socio-demographic and health service related variables Dale woreda,Sidama Zone March 2012.

Characteristics	Complimentary feeding practice (n = 567)			
	Before 6 month	at 6 month	COR(CI)	AOR(CI)
Employment status				
employed	4(5.7%)	66(94.3%)	1	1
private business	5(10.9%)	41(89.1%)	2.01(0.51,7.93)	0.71(0.30,1.64)
unemployed	42(11.5%)	322(88.5%)	2.15(0.75,6.23)	0.97(0.51,1.83)
student	0(0.0%)	22(100%)	0.000(-)	1.73(0.45,6.65)
daily laborer and house maid	12(18.5%)	53(81.5%)	3.74(1.14,12.26)	0.78(0.35,1.75)
ANC follow up				
Yes	29(12.4%)	205(87.6%)	1	1
No	34(10.2%)	299(89.8%)	1.24(0.76,2.11)	**1.61(1.07,2.42)***
PNC follow up				
Yes	30(7.9%)	352(92.1%)	0.39(0.231, 0.67)	**2.25(1.49,3.37)****
No	33(17.8%)	152(82.2%)	2.55(1.50,4.33)1	1

Significant at *p=0.020, **p= 0.000

Optimal Breast Feeding Practice

Optimal breastfeeding practice criteria is included in the Strategy for Children Survival in Ethiopia, as exclusive breast feeding practice for the first six months, timely complementary feeding at the age of 6 months and continue breastfeeding at least 2 years(17). Having these criteria mothers in this study are categorized as having good practice if they practice the above feeding pattern optimally, and those who did not, as having poor practice.

Based on this assumption 390 (62.0%) have good practice while 239 (38.0%) mothers have poor practice about breast feeding. The study shows a statistically significant relationship between optimal breastfeeding practice and occupational status and ownership of living place. Unemployed respondents were found to have practice of optimal breastfeeding more likely (AOR= **2.05(1.19,3.48**)) than mothers who were employed and mothers who live in their own home were found to have practice of optimal breast feeding more likely (AOR=**2.67(1.25,5.72))** than who were dependent .

Table 7: Bivariate and multivariate logistic regression analysis of complementary feeding practice at 6 months of age, among children aged 0-23 months, with selected socio-demographic and health service related variables Dale woreda,Sidama Zone March ,2012.

Optimal breastfeeding practice (n=546)				
Variables	Good **N (%)**	Poor **N (%)**	**Crude OR (95%CI)**	**Adjusted OR (95%CI)**
Mother's age				
15-19	14(56.0%)	11(44.0%)	1	1
20-24	117(55.7%)	93(44.3%)	0.99(0.43,2.28)	0.99(0.41,2.45)
25-29	150(67.6%)	72(32.4%)	1.64(0.71,3.78)	1.57(0.64,3.87)
30-34	71(60.7%)	46(39.3%)	1.21(0.51,2.90)	0.97(0.38,2.50)
35 and above	38(69.1%)	17(30.9%)	1.76(0.66 , 4.66)	1.33(0.47,3.78)
Ethnicity				
Sidama	264(73.1%)	97(26.9%)	1	1
Amhara	35(52.2%)	32(47.8%)	0.40(0.24,0.69)	0.81(0.44,1.49)
Oromo	17(45.9%)	20(54.1%)	0.31(0.16,0.62)	0.75(0.34,1.65)
Wolayita	40(44.0%)	51(56.0%)	0.28(0.18,0.46)	0.58(0.32,1.06)
Others	34(46.6%)	39(53.4%)	0.32(0.19,0.54)	0.65(0.35,1.18)
Employment status				
Employed	34(42.5%)	46(57.5%)	1	1
Private Business	28(50.9%)	27(49.1%)	1.40(0.70,2.79)	1.37(0.66,2.86)
Unemployed	268(67.3%)	130(32.7%)	2.79(1.71,4.55)	**2.05(1.19,3.48)***
Student	14(56.0%)	11(44.0%)	1.72(0.69,4.26)	2.29(0.88,6.01)
Daily Laborer And House Maid	46(64.8%)	25(35.2%)	2.49(1.29,4.80)	2.95(1.44,6.06)
Ownership of living house				
Owner	274(73.9%)	97(26.1%)	3.53(1.76,7.09)	**2.67(1.25,5.72)****
Rented	100(45.0%)	122(55.0%)	1.03(0.50,2.08)	1.11(0.53,2.34)
Dependent	16(44.4%)	20(55.6%)	1	1
Antenatal care				
yes	257(61.6%)	160(38.4%)	1	1
no	133(62.7%)	79(37.3%)	0.472(0.340,0.656)	1.38(0.95,2.02)

Significant at *p=0.003, **p=0.011

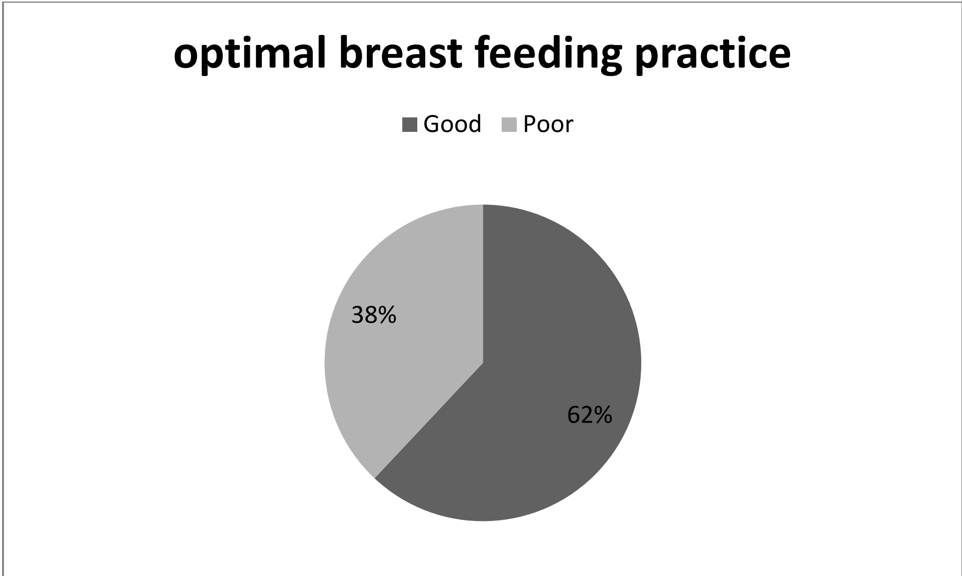


Figure 2: pie chart of optimal breast feeding practice, Dale Woreda,Sidama zone,March,2012.

7. Discussion

In this study prevalence of initation of breast feeding within an hour of birth is 517(83.7%). This finding is consistent with EDHS 2011 finding of Oromia region and EDHS 2005 finding of Afar region where 83.6% and 86.4% of the respondents started breast feeding within one hour of birth respectively. But this Findings is higher when compared with the study findings of EDHS 2011in SNNP, Dire Dawa,Somali, Amhara, 67 %, 66 %,40%and 38% respectively and 52.4% of Bale Goba(20).it is also higher than the study done in western Nepal and rural Vietnam where mothers initiate breast feeding within an hour was (73.6%)and (72.7%) respectively(49,50). This is may be due to health extension workers and other health professionals give health education on early initiation of breast feeding on that area. Initiation of breast feeding practice was negatively associated with ownership of living place; respondents who live in a rented house initiate breast feeding within an hour less likely (AOR=**0.39(0.16, 0.97)**) than the respondents who live in their own house. This study is not consistent with a study done in Goba where timey initiation of breast feeding was significantly associated with place of residence, institutional delivery, postnatal advice on breast feeding and educational status of the mother (20).

The possible reason why respondents do not breast feed their new born within an hour of birth is illness of the mother after delivery, inadequate breast milk and mothers who give birth for the first time do not know they should start breast feeding immediately after delivery.

Pre-lacteal feed was given by as many as 10.1% of the mothers. The fluids given were Water/sugar solution, Cow/formula milk, and Amessa(a tradition fluid to treat stomach ache).

Bottle-feeding is discouraged at any age. It is usually associated with increased risk of illness, and especially diarrhoeal disease, because of the difficulty in sterilizing the nipples properly. But this study reviled 26.7% of the children are feeding bottle which a large number compared to its risk.

On this study 87.1 % mothers were breastfeeding for to 6 months of age. This finding is higher than the study done in Cambodia where 51.3% of the respondents feed exclusively for 6 months(33). Exclusive breast feeding is positively associated with ownership of living place and employment status .Respondents that live in their house feed exclusively 3.85 times than the dependents and unemployed respondents feed exclusively 2.94 times than the employed respondents. This study is consistent with the study done in Ghana where house ownership is positively associated with exclusive breast feeding (48) .But in a study done in Ghana 24 hour recall was used to obtain the information, which could overestimate the exclusive breast feeding rate.

This study reviled a negative association between exclusive breast feeding and age of the mother where mothers 30-34 practice exclusive breast feeding less likely (0.09(0.01, 0.85)) than mothers 15-19.

Study subjects who have visited health institution for postnatal care during their last birth, practiced exclusive breastfeeding significantly more than mothers who did not attend it, (AOR=**2.38(1.37, 4.13**)). This could be that health workers are promoting exclusive breastfeeding practice by informing postnatal mothers starting immediate postnatal and throughout their postnatal follow up.

EBF was associated significantly with maternal current employment status and ownership of living house and negatively with maternal age. But no association was observed regarding sex of the child, age of child, place of delivery, child age, attending antenatal care, and postnatal care.

UNICEF and WHO recommend the introduction of solid food to infants around age 6 months because by that age breast milk alone is no longer adequate to maintain a child's optimal growth. In the transition to introducing the child to the family diet, in addition to breastfeeding, children age six months and older should be fed small quantities of solid and semi-solid foods frequently throughout the day. During this transition period (age 6-23 months), the prevalence of malnutrition increases substantially in many countries because of an increase in infections and poor feeding practices.

The prevalence of optimal breast feeding practice is 62.0%. This finding could be due to the availability of skilled health extension workers, government service providers and NGOs who work on IYCF program might intensively promoting optimal breastfeeding practice in this woreda.

8. Strengths and limitations of the study

8.1. Strength

- Large sample size of mothers was involved in the study.
- The probability sampling method has minimized the selection bias.
- Validity was ensured by the use of pre testing and well-structured questionnaire with daily check up of filled questionnaires.
- Utilization of appropriate statistical analysis method played a role in minimizing Confounding factors.

8.2. Limitations

- Asking a mother about time of initiation and exclusive breast feeding after 23 months has a potential recall bias.
- As interviewers had background information of the study areas, interviewer's bias could occur. This was minimized by training and supervision during data collection period.
- Respondents may not tell what they actually are practicing rather they may tell what they heard from mass media about proper practice of breast feeding.

9. Conclusion

- Breastfeeding is a common practice in the woreda. This is an encouraging practice in this study area.

- This finding revealed that mothers who attend postnatal care practice complimentary feeding as compared to those mothers who do not have postnatal care.

- According to this study, the optimal practice of breast-feeding among mothers who participate in the study is influenced by employment status and ownership of living place. The state of being unemployed and having ownership of living place were found to be more beneficial to have optimal breast-feeding practice. On the other hand, mothers who have attended antenatal clinic and health education about breast-feeding, were found to be more likely of having satisfactory knowledge about the benefits of breast-feeding.

10. Recommendations

Based on the conclusions of this study the following recommendations are forwarded.

1. Relevant stakeholders should be involved in a package intervention which could include training of service providers at health facility and community level and making breastfeeding counselling important part of services such as ANC, delivery, PNC and Family planning.

2. Employed mothers should be encouraged by institutions and co-workers to promote optimal breastfeeding practice by arranging working hours, baby friendly initiative at work places.

3. In order to obtain more information from the study subjects it was good if a qualitative data collection approach were considered besides the quantitative method of data collection.

4. Further studies are proposed to ascertain effective intervention in the study area and the region at large.

11. References

1. **WHO.** Early Initiation Of Breastfeeding: The Key To Survival And Beyond. WHO, 2010.

2. **Bungum, S. G. J. Clark & T. J.** The Benefits Of Breastfeeding: An Introduction For Health Educators.*Californian Journal Of Health Promotion*, 2003, 1. (3): 158-163.

3. **Hygiene, The Newyork City Department Of Health And Mental.** Encouraging And Supporting Breastfeeding. *City Health Information*, 2009, Vols. 28:1-8.

4. **EYL Leung,And Et Al.** Practice Of Breastfeeding And Factors**.** *Hong Kong : Department Of Community And Family Medicine, School Of Public Health, Facultyof Medicine,The Chinese University Of Hong Kong* , 2006, Vol. 12.

5. **Karachi,Pakistan : Zahra Shaheen Premaniet Al..** Experiances Of Women On Resons In Initiating And Maintaing Breast Feeding, 2011.

6. **Koosha A, Hashemifesharaki R, Mousavinasab N.** Breast-Feeding Patterns And Factors Determining Exclusive Breast-Feeding. *Singapore Med J, 2008*, Vol. 49.

7. **Tewodros Alemayehu, And Et Al.** Determinants Of Exclusive Breastfeeding Practices. *Ethiop.J.Health Dev*., 2009, Vol. 23.

8. **Elizabeth Jean Baker, And Et Al**. Early Initiation Of And Exclusive Breastfeeding *.International Centre For Diarrhoeal Disease Research, Bangladesh*, 2006, Vol. 24.

9.**Elizabeth W Kimani-Murage And Et Al** .Patterns And Determinants Of Breastfeeding And Complementary Feeding Practices In Urban Informal Settlements, Nairobi Kenya. *BMC Public Health*, 2011, Vol. 11:396.

10. **Alive & Thrive** .Impact Of Early Initiation Of Exclusive Breastfeeding On Newborn Deaths**.**. *Alive And Thirive Nourishe.Nurture.Grow*, 2010.

11. **WHO.** Exclusive Breastfeeding For Six Months Best For Babies Everywhere. WHO, 2011 .

12. **KE, Elizabeth.** Feeding Of Young Infants And Children In Exceptionally Difficult Circumstances. *Breastfeeding Month Special.* 2008, Vol. 11.

13. . **Maheswari Ekambaram, And Et El.** Knowledge, Attitiude And Practice Of Breastfeeding Among Postnatal. *Jawaharlal Institute Of Postgraduate Medical Education And Research*, 2010, Vol. 14.

14. **Luke C And Et Al.** Breast-Feeding Patterns, Time To Initiation,And Mortality Risk Among Newborns. Katmandu, Nepal . *American Society For Nutrition*, 2008., Vol. 138.

15. **Project, LINKAGES.** Washington,DC : LINKAGES, 2006.

16 **.WHO.** Opportunities For Africa's Newborns. The Partener Ship For Maternal,New Born And Child Health, 2006.

17. **Federal Ministry Of Health, Family Health Department, Ethiopia.** National Strategy For Infant And Young Child Feeding. Addis Ababa .*Ethiopian National Strategy On Infant And Young Child Feeding,* **2004**.

18. **LINKAGES/Ethiopia.** 2003-2006.

19. **WHO.** *Lancet ,* 2000.

20. **Tesfaye Setegn, And Et Al** Determinants Of Timely Initiation Of Breastfeeding Goba Woreda, South East . *Biomed Central Ltd*., 2011, Vol. 11.

21. **Patel A, Badhoniya N. Dibley D**. Breast Feeding & Infant Feeding Practices In India**.**. *India 2008*, Vol. 12.

22. **WHO Collaborative Group.** Effect Of Breastfeeding On Infant And Childmortality Due To Infectious Diseases In Less Developed Countries: A Pooledanalysis. *Lancet* 2000; 355:451-455.

23. **Edmond KM, And Et Al.** Delayed Breastfeeding Initiation Increases Risk Of Neonatal Mortality. *S.N* 28, 2010, Vol. 117.

24. **Hubner, Camila Chaparro And Et Al**.Essential Delivery Care Practices For Maternal And Newborn Health And Nutrition. 2007

25. **Flacking R , And Et Al.** Socioeconomic Determinants Of Breastfeeding Duration In Verypreterm Infants.**.** *Sweden Journal Of Breast Feeding*. 2007, Vol. 96.

26. **Kearney And Et Al.** Breastfeeding Practices In Ireland. *Nutrition Society*, 67. Vol. 4.

27. **Naoko Horii,And Et Al.** Determinants Of Delayed Initiation Of Breastfeeding. *International Nutrition Foundation*., 2011, Vol. 32.

28. **Gunasekaran Dhandapany, And Et Al.** Antenatal Counseling On Breastfeeding – Is It Adequate?**.** *Biomed Centralpublic Health International Breastfeeding Journal* 2008 , Vol. 3.

29. **Linkages Report.** *Exclusive Breastfeeding:The Only Water Source Young Infants Need.* 2004.

30. **Leong, Dr Tan Kok.** Factors Associated With Non-Exclusive Breastfeeding Among 4-Week Post-Partum Mothers In Klang District., Peninsularmalaysia *: S.N.,* 2009, Vol. 15.

31. **Weiss And Et Al .** Early Nutrition And Immunity – Progress And Perspectives. *British Journal Of Nutrition*. 2011, Vol. 9.

32. **Imran O Morhasonand And Et Al.** Social Support During Childbirth As A Catalyst For Early Breastfeeding. *International Breastfeeding Journal*. 2009, Vol. 4.

33 **.Kirk Dearden, And Et Al.** Determinants Of Optimal Breast-Feeding. *Guatemala : S.N.* 2002, Vol. 12.

34. **Chudasama RK And Et Al.** Prevalence Of Exclusive Breastfeeding And Its Determinants In First 6 Months Of Lif*e. Health Allied Scs*. 2009, Vol. 8.

35. **Abdel-Hady El-Gilany And Et Al.** ,Exclusive Breastfeeding In Al-Hassa. Saudi Arabia : *Mary Ann Liebert, Inc*. 2011, Vol. 6. DOI: 10.1089/Bfm.2010.0085.

36.**, Baby-Friendly Hospital.** Factors Associated With Breastfeeding Initiation Time In A Ankara, Turkey. *The Turkish Journal Of Pediatrics*. 2010, Vol. 52.

37. **Madhu K, And Et Al.** Breast Feeding Practices And Newborn Care In Rural Areas. , Indi . *S.N.,* 2009, Vol. 34 .

38. **Engebretsen And Et Al.** Low Adherence To Exclusive Breastfeeding In Eastern Uganda Acommunity- Based Cross-Sectional Study Comparing Dietary Recallsince Birth With 24-Hour Recall. *Biomed. Central Public Health*. 2007, Vol. 7.

39. **Central Statistical Authority of Ethiopia And ORC Macro**; Ethiopia Demographic And Health Survey. 2005, Ethiopia And Calverton, Maryland, USA.

40. **Ethiopia Demographic And Health Survey**. **Agency, Central Statistical.** Addis Ababa : MEASURE DHS, ICF Macro Calverton, Maryland, USA, 2011.

41. **Hailu, Chernet.** Assessment Of Knowledge, Attitude & Practice Among Assessment Of Knowledge, Attitude & Practice Amongpositive Women. Jimma : Unpublished, 2005.

42. **W/Giorgis, Tigist G/Sellasie.** The Effect Of Community Imci Interventions On Child Health Care Indabat Woreda.**.** In Dabat Woreda,Amhara National Regional : Unpublished, 2008.

43. **DEYESSA, NEGUSSIE.** *"Feeding Profile And Diarrhea Morbidity Among Infants Of 7-12months" . Adua Town, Tigray, North Ethiopia* : Unpublished, 2006.

44. **Mesay Hailu_Et Al.** *Knowledge About Obstetric Danger Signs Among Preg-Nant Women.* Aleta Wondo District, Sidama Zone *: S.N.* 2010, Vol. 20.

45. **Debra Hector _ Et Al.** Factors Affecting Breastfeeding Pratices Applying A Conceptual Framework. Vol. 16.

46.WHO-Lancet 2008

47. **U O Uchendu,_Et Al**: Factors Associated With Exclusive Breastfeeding Among Mothers Seen At The University Of Nigeria Teaching Hospital. SA Journal Of Child Health. May 2009 Vol. 3 No. 1

48.BA Aidam_Et Al:Factors Associated With Exclusive Breast Feeding.*Europian Journal Of Clinical Nutrion*. 2005,59,789-796.

49.Ts Chandrashekhar _et al.Breast-feeding initiation and determinants of exclusive breast-feeding – a questionnaire survey in an urban population of western Nepal. *Public Health Nutrition*, July 2006.10(2), 192–197

50. Breast-feeding initiation and exclusive breast-feeding in ruralVietnam. *Public Health Nutrition.* January 2004,7(6), 795–799

12. Annexes

12.1 Questionnaire (Amharic and English version)

Information sheet for study subjects (English and Amharic version)

You are kindly invited to participate in this study, which involves all mothers with their under 2 children in Dale Woreda Sidama zone. The aim of this study is to assess optimal breast feeding practice among Its Associated Factors among Mothers of Children Aged 0-23 Months.

Promoting early initiation of breastfeeding within 1 hour of birth and exclusive breastfeeding up to 6 months of age in early infancy are regarded as crucial components of child survival strategies. There for after the finding of this research different interventions like breast feeding promotions will be given at health institutions and at the community level by community health extension workers and other health care providers.

a. Purpose: The purpose of this study therefore to asses optimal breast feeding practice and associated factors among mothers of children aged less than two years in Dale Woreda, Sidama Zone SNNPR thereby different interventions like breast feeding promotions will be given at health institutions and at the community level by community health extension workers and other health care providers.

b. Duration: The duration of this study is from February 2012 to March 2012.

c. Procedures to be carried on: it takes only 30 minutes for interviewing.

d. Risk and discomfort: there will no be any risk and discomfort associated during the interview.

e. Expected benefits: You will not get special and direct benefit from this study. However, the finding of this survey will be useful for all community in the future to understand use of breast feeding practice.

g. Confidentiality: All your personal information collected for the purpose of the present study will be kept confidential.

h. Compensation: No compensation will be provided by participating in this study.

g. Termination of the study: Participation in the study is voluntary, and refusal to participate involves no penalty or loss of benefits to which you are otherwise entitled. The study participants have a right to

- Keep hold information
- Decline to cooperate in the study

I would also like to inform you that this study will be approved by Department research and ethical Review Committee and approved by Department of Nursing and Midwifery College of health science, Addis Ababa University, if you have any question about the right of the study participant the address is:

Addis Ababa University

College of Health Science

Office of Associate Dean, Postgraduate Programs and Research

P.O. Box 9086. Addis Ababa, Ethiopia

Tel. 251-011-551-28-765

If you have question about the study the address of the principal investigator is:

Misrak Getnet

Department of Nursing and Midwifery

College of Health Hcience, Addis Ababa University

P.O. Box. 9086, Addis Ababa, Ethiopia

Tel: 0913251864

College Of Health Science, Department Of Nursing And Midwifery, Addis Ababa University

Survey questionnaire to assess the breastfeeding practice among mothers of 0-2 years in Dale woreda ,sidama zone ,SNNPR.

Consent Form

My name is ___________________________________.We are interviewing mothers of 0-2 years to assess the practice of breastfeeding. I am going to ask you some questions that are very important for the programmers in infant/child feeding service to plan improved intervention. Your name will not be written in this form and the information you give is kept confidential. If you do not want to answer, all or some of the questions you do have the right to do so. However, your willingness and support to answer all of the questions would be appreciated and thank you for your response.

Would you participate in responding to questions in this questionnaire?

Yes__________________ No____________________

Name and signature of interviewer who sought consent____________________

QUESTIONNAIRE FOR ASSESSING THE BREAST FEEDING PRACTICE IN DALE WOREDA, SIDAMA ZONE

Section-1: Socio-Demographic characteristics of all eligible mothers

	Questions and filters	Response coding categories	Skip to
101	What is your age? (Completed In Years)	___________________	
102	What is your marital status?	Single_________________ 1 Married-------------------------2 Divorced______________ 3 Widowed _____________ 4 Other(specify)__________ 99	
103	What is your current educational status	Illiterate______________________1 Read and write_____________ 2 Primary level(1-6)__________ 3 Secondary level(9-12)_________4 Collage level and above________ 5	
104	What is your religion	Orthodox____________ 1 Muslim______________ 2 Protestant_____________3 Catholic_____________ 4 Other_______________ 5	
105	What is your Ethnicity	Amhara_________________1 Oromo________________ 2 Guragi_________________3 Tigray_________________4 Other (specify)_________ 99	
106	What is the average monthly income of the house hold?(in birr) ***Probe for approximate Number***	________________________ Don't know……….99	
107	What is your current Occupational status?	Government employee________ 1 Non-governmental employee___ 2 Private sector________________3 Business women_____________ 4 House wife__________________5 Daily laborer________________ 6 House maid _________________7 Student_____________________8 Jobless_____________________ 9 Other(Specify)______________ 99	
108	What is the ownership of your house	Owned____________________ 1 Rented____________________ 2 Dependent_________________ 3 Other____________________ 99	
109	How frequently read news paper?	Almost every day------------------- 1 At least once a fortnight------------ 2 Less than once a week ------------- 3 Not at all -------------------------- 4	
110	How frequently listen to a radio?	Almost every day--------------------1 At least once a fortnight-------------2 Less than once a week--------------3 Not at all-------------------------------4	

SECTION-2: CORE QUESTIONS ON THE MATERNITY EXPERIENCES OF THE YOUNGEST CHILD

S.No	Questions & filters	Code categories	Skip
201	How many children are born alive?	No. Children born alive……	
202	How many children do you have now?	Number of children……..	
203	Sex of the child	1.female 2.male	
204	Birth weight of the child	[ ] Do not know----------------99	
205	Have you attended antenatal clinic in any health facility at least once while you were pregnant with the last child?	Yes……………………….1 No……..………………...2 Don't know……………..7	
206	Where did you give birth to the last child?	Own home……….……………1 Gov'tal health facility………..2 Non gov'tal health facility……3 Private clinic----------------------4 Other (specify)……....…..……99	
207	Who assisted with the delivery of the last child? Any one else? ∗ **PROBE FOR THE TYPE OF PERSON & RECORD ALL PERSON ASSISTING.**	Health professional…….……1 Trained traditional birth attendant………………… 2 Untrained traditional birth attendant…………………… 3 Relatives/friends/neighbours--.4 Other (specify)…..….....………..…..….99	
208	Have you attended postnatal clinic in any health facility after you gave birth to the last child?	Yes……………………….1 No……..………………...2 Don't know……………..7	
209	Have you ever been informed/advised about breastfeeding while you were pregnant or in the period after delivery of the last child?	Yes…………….………….1 No…………………………..2 Don't know…………………7	

SECTION- 3: BASIC INFORMATION ABOUT BREAST- FEEDING

S.No	Questions & filters	Code categories	Skip
301	Have you ever breast-fed the youngest child?	Yes……………….…….1 No…………………...2	
302	How soon after birth did you first put the child to the breast? * **IF LESS THAN ONE HOUR, RECORD ''00''HOURS** **IF LESS THAN 24 HOURS, RECORD HOURS** **OTHERWISE, RECORD DAYS**	Immediately…....……00 Hours……………..… Days………..………. Don't know……….…99	
303	If the anseer for the above question is above 1 hour What do you feed to your child within one hour?	1. water 2. cow milk 3. breast milk 4. butter 5. 'tena adam' 6. Others	
304	If the anseer for the above question is above 1 hour,what is the reason for not feeding breast within 1 hour?	1.• illness of mother 2.knowledge deficit 3.illness of child 4.do not want to feed 5. others------------	
305	Within the first three days after delivery, before your milk began flowing regularly, did you feed the child the fluid that came from your breasts?	Yes……………………..1 No………..……………2 Don't know…………...99`	
306	Is the child t feeding only breast-milk since birth?	Yes……………………..1 No………..……………2	
307	What was your reason for not feeding exclusively?	1.• illness of mother 2.knowledge deficit 3.illness of child 4.do not want to feed 5. others------------	
308	Are you still breast-feeding the child?	Yes……………...…….1 No……………………2	
309	If the child hasn't fed any thing except breast-milk since now, When do you plan to start additional diet? * **RECORD COMPLETE MONTHS** * **THIS QUESTION BELONGS ONLY TO A CHILD** **WHO IS ON BREAST-FEEDING (CURRENTLY** **BREAST-FEEDING)**	No of complete months-------	
310	Totally for how many months did you feed the child breast milk only ? * **IF LESS THAN ONE MONTH, RECORD '00'** **MONTHS**	Months…..……… Don't know……….99	
311	-When you were pregnant or in the period after delivery of the last child ,have you ever been informed /advised about breast feeding?	Yes_______________1 No_______________ 2 Don't know_______ 99	
312	Do you feed bottle	Yes_______________1 No_______________ 2	

312	Do you feed bottle	Yes_______________1 No_______________ 2	
313	Who ever gave you help or advice how to start and continue breast feeding your child? *Read the response	Yes No Health worker_______ 1 2 Husband__________ 1 2 Own/husband's mother_______ 1 2 Grand mother_______ 1 2 Friends/Neighbors __ 1 2 Mass media______ 1 2 None______________ 1 2 Other(specify)______________ 99	

Thank you.

<u>የጥናቱ ተሳታፊዎች የመረጃ ቅጽ</u>

በቅድሚያ በዚህ ጥናት እንዲሳተፉ ስንል በአክብሮት ጥያቂያችንን እያቀረብን ጥናቱ በዳሌ ወረዳ ያሉ ጡት የሚያጠቡ ከሁለት አመት በታች ልጅ ያላቸውን እናቶች ያካትታል፡፡

ሀ. **<u>የጥናቱ ዓላማ፡-</u>** የጥናቱ ዋና አላማ • • እናቶች በጡት ማጥባት ላይ ያላቸውን ልምድ ለማዎቅ ነው፡፡

ለ. **<u>የሚፈጀዉ ግዜ</u>** ይህ ጥናት ከየካቲት 2004 እስከ መጋቢት 2004 ባለው ጊዜ ውስጥ ይጠናቀቃል

ሐ. **የመረጃ አወሳሰድ ሄደት፡-** በዚህ ጥናት ለሚሳተፉ እናቶች ቃለመጠይቅ ይደረግላቸዋል፡፡

መ. **<u>ሊደርስ የሚል አደጋ</u>**፡- በዚህ ጥናት ውስጥ አደጋ የሚያደርስ ድርጊት የለም፡፡

ሠ. **<u>የሚገኝበት ጥቅም</u>**፡- በዚህ ጥናት ቃለ መጠይቅ ለሚደረግላቸው እናቶችልዩና ቀጥተኛ የሚባል ጥቅም የለውም፡፡ረ.**<u>ሚስጥራዊነት</u>**፡- የማንኛውም የጥናቱ ተሳታፊ መረጃ በሚስጥራዊነት ይያዛል፡፡ የእያንዳንዱን ግለሰብ መረጃ ከዋናው ተመራማሪና ከአማካሪዎቸቹ በስተቀር ማንም ሊያገኝ አይችልም፡፡

ሰ.**<u>ፈቃደኝነትን ስለማቋረጥ</u>** በዚህ ጥናት ውስጥ የመሳተፍ መብትዎ ሙሉ በሙለ በፈቃደኝነት ላይ የተመሰረተ ነዉ፡፡በጥናቱ ለመሳተፍ ፈቃደኛ መሆን ወይም ራስዎን ማግለል ይችላሉ፡፡

አድራሻ ማወቅ ካስፈለግዎ፡-

አዲስ አበባ ዩኒቨርሲቲ

የድህር ምረቃ ፕሮግራምና ምርምር የተባባሪ ዲን ቢሮ

የመ.ሳ.ቁ. 9086 አዲስ አበባ

ስልክ.251-011-551-28-765

የዋናው ተመራማሪ አድራሻ ፤

ምስራቅ ጌትነት

የነርሲንግና ሚድዋይፈሪ ትምህርት ክፍል

ጤና ሳይንስ ኮሌጅ፤አዲስ አበባ ዩኒቨርሲቲ

የመ.ሳ.ቁ. 9086 አዲስ አበባ

ሞባይል ፡ 0913251864

በዳሌ ወረዳ ሲዳማ ዞን፡ከ 0-2 ዓመት ዕድሜ ሕጻን ያሏቸዉ እናቶች ጡት የማጥባት ልምድ ለማወቅ

የተዘጋጀ ቃለ መጠይቅ፡-

¾Óለሰብ ¾ስምምነት ö ርም

¬ ት እህቴ/እናቴ

ጤና ይስጥልኝ፣ስሜ ____________________ይባላል፡፡ ይህ መጠይቅ በ፡ አዲስ፡አበባ ¿ኒቨርስቲ ለሚካሄድ ጥናት. ፡ አስፈላጊ መረጽ ለመሰብሰብ የተዘጋጀ ነው፡፡ በዚህ መረጃ ፡ ስብሰባ ላÃ ¾ሚሳተñ ከሁለት ዓመት በተችታየሆኑ ህጻናት ያሏቸው አናቶች ናቸው፡፡የጥናቱ ዋና ዓላማ እናቶች• በጡት ማጥባት ላይ ያላቸውን ልምድ፡ ለማወቅ ነው፡፡ስለዚህ ፡ይህን መረጃ ፡ ለመሰብሰብ የሚጠቅሙ ጥያቄዎችን ፡ እÖÃቀ- ለታሁ፡፡• እርስ- ¾ሚሰጡት መልስ ጡት ለሚጠቡት ህጻናት ለሚካሄደው ¾ማሻሻÁ ý ርÓራም Öቃሚ እርምጃ ለመውሰድ ከፍተኛ ፡አስተዋጽኦ ፡ አለው፡፡በመጠይቁም የእርስ- ስም ፡ አይጠቀስም፣የሚሰጡትም ምላሽ ለጥናቱ ብቻ ይሆናል ጥያቄው በሙሉ መተው ወይም በከፊል መመለስ ወÃም በð ለቶ ጊዜ ማቋረጥ መብትዎ ነው፡፡ በፈቃደኝነት ለጥያቄው ለሚሰጡት ምላሽ ድጋፍ በቅትሚÁ ምስጋና እናቀርባለን፡፡

ተጠያቂዋ ለጥያቄው ምላሽ ለመስጠት መስማማቸውን በባዶቦው ላይ የኤክስ ምልክት በማስቀመዓ Áረፉ ÓÖ፡፣

1፡ እስማማለሁ **_____________** ( )

2፡አልስማማም_____________ ( )

ኻርማ_____________________

በዳሌ ወረዳ ሲዳማ ዞን፡ከ 0-2 ዓመት ዕድሜ ሕጻን ያሏቸዉ እናቶች ጡት የማጥባት ልምድ ለማወቅ

የተዘጋጀ ቃለ መጠይቅ፡-

ክፍል አንድ፡-የ ግልና የ አካባቢ ሁኔ ታ መረጃዎች

ክፍል ሁለት፡ ስለመጨረሻው ህጻን ልጅዎ የሚጠየቁ መሰረታዊ ጥያቄዎች

ተ.ቁ	ጥያቄዎች	መለያ	ዝለሉ ወደ ተ.ቁ
201	ስንት ልጅ በህይዎት ወልደዋል?	☐	
202	አሁን ስንት ልጅ በህይዎት አለዎት?	☐	
203	የልጅዎ ጾታ ምንድን ነዉ?	1. ወንድ 2. ሴት	
204	ልጅዎ ሲዎለድ ስንት ኪሎ ነበር?	☐ አላዉቅም-----------------------------99	
205	የልጅዎ እድሜ ስንት ነው? (እባክዎ የልደት ካርድ መኖሩን ካረጋገጡ ከስር ባለው ☐ ሳጥን ምልክት ያድርጉ ::	ወራት ☐	
206	ይህን ልጅዎን አርግዘዉ በነበረበት ቅድመ ወሊድ ምርመራ አድርገዉ ነበር ?	1. አዎን 2. የለም	
207	የመጨረሻውን ህጻን ልጅዎን የወለዱት የት ነው?	በቤት ውስጥ_____________ 1 በመንግስት ሆስፒታል_______2 በመሬግስት ጤና ጣቢያ_____3 ¾Óል Ö¸ና ድርጅት________4 ሌላ ÁÖቀስ----------------- 99	
208	የመጨረሻዉን ልጅዎን ሲወልዱ ያዋለደዎ ማን ነበር?	የጤና ባለሙያ __________ _1 የሰለጠነ የልምድ :አዋላጅ___2 ያልሰለጠነ የልምድ : አዋላጅ...3 ቤተ² መት፣ጓÅኛ፣ጎረቤት-------4 ሌላ ÃÖቀስ----------------------99	
209	የመጨረሻዉን ሕጻን ልጅዎ ከወለÆ በኋላ ¾ስ›ህረ ወሊት የጤና ምርመራ በማንኛ¬ ም የጤና ድረጅት ክትትል : አድረገው ያውቃሉ?	አዎ____________________1 ¾ለም-----------------------------2	

ክፍል ሁለት: ስለመጨረሻው ህጻን ልጅዎ የሚጠየቁ መሰረታዊ ጥያቄዎች

ተ.ቁ	ጥያቄዎች	መለያ	ዝለሉ ወደ ተ.ቁ
201	ስንት ልጅ በህይዎት ወልደዋል?	☐	
202	አሁን ስንት ልጅ በህይዎት አለዎት?	☐	
203	እድሜያቸው ከ24 ወራት/ ሁለት ዓመት በታች የሆኑ ህጻናት ልጆች አሉዎትን?	*1. አዎ* *2. የሉኝም*	
204	የልጅዎ ጾታ ምንድን ነዉ?	1. ወንድ 2. ሴት	
205	ልጅዎ ሲዎለድ ስንት ኪሎ ነበር?	☐ አላዉቅም------------------------------99	
206	የልጅዎ እድሜ ስንት ነው? (እባክዎ የልደት ካርድ መኖሩን ካረጋገጡ ከስር ባለው ሳጥን ምልክት ☐ ርጉ ::	☐ ወራት	
207	ይህን ልጅዎን አርግዘዉ በነበረበት ወቅት የተከሰተብዎ የጤና ችግር ነበርን?	1. አዎን 2. የለም	
208	የመጨረሻውን ህጻን ልጅዎን የወለዱት የት ነው?	በቤት ውስጥ_____________ **1** በመንግስት ሆስፒታል_______**2** በመሬግስት ጤና ጣቢያ_____**3** ⅜Óል Ö፣ና ድርጅት________**4** ሌላ ÁÖቀስ----------------- **99**	
209	የመጨረሻዉን ልጅዎን ሲወልዱ ያዋለደዎ ማን ነበር?	የጤና ባለሙያ __________ _1 የሰለጠነ የልምድ :አዋላጅ___2 ያልሰለጠነ የልምድ : አዋላጅ...3 ቤተ² መት፣ጃÅኛ፣ጎረቤት-------4 ሌላ ÃÖቀስ----------------------99	
210	የመጨረሻዉን ሕጻን ልጅዎ ከወለÆ በኋላ የድህረ ወሊድ የጤና ምርመራ በማንኛ¬ ም የጤና ድረጅት ክትትል : አድረገው ያውቃሉ?	አዎ_____________________1 ⅜ለም------------------------------**2**	

ክፍል ሦስት፡ ስለጡት ማጥባት የሚጠየቁ መሰረታዊ ጥያቄዎች

ተራ ቁጥር	ጥያቄዎች	³⁄₄መልስ መለÅ ቁጓሮ መÅብ	ዓ Åቂዎች ³⁄₄መ´ ለÅመÅብ
301	የመጨረሻ ልጅዎትን ጡት አጥብተዉት ያዉቃሉ?	1. አዎን 2. አይደለም	
302	ከተዎለደ በስንት ሰዓት ዉስጥ ጡቶ አጠቡት?	ሰዓት ☐ አላዉቅም ----------------------------------99	
303	የጥያቄ 302 መልስ ከ1 ሰዓት በላይ ከሆነ ልጅዎ ልክ እንደተወለደ ያጠጡት ምን ነበር?	7. ውሃ 8. የላም ወተት 9. የእናት ጡት ወተት 10. የተቀቀሉ ቅጠላቅጠሎች 11. ቅቤ 12. ውሃና ጨናአዳም 13. ሌሎች ካሉ ይግለጹ	
304	የጥያቄ 302 መልስ ከ1 ሰዓት በላይ ከሆነ በ 1 ሰዓት ዉስጥ ያላጠቡበት ምክንያት ም ን ነበር?	1.• ታምሜ ስለነበር 2.እዉቀቱ ስላልነበረኝ 3.ልጁ ጤነኛ ስላልነበረ 4.ማጥባት ስላልፈለግኩ 5. ሌላ ይጠቀስ-------------	
305	ልጅዎን የመጀመሪያውን የጡትዎን ወተት (እንገር) በሶስት ቀን ዉስጥ መግበዋልን?	1. አዎን 2. አይደለም	
306	ልጅዎ ስድስት ወር እስኪሆነዉ ያጠቡት ጡት ብቻ ነዉ?	1. አዎን 2. አልሰጠሁም ⟶ 307	
307	የጥያቄ 305 መልስ አዎነ ከሆነ ተጨማሪ ምግቦች/መጠጦች (ውሃን ጨምሮ) የጀመሩበት ምክንያት ምንድን ነበር?	1. ጡት ለማጥባት ጊዜ አለማግኘት 2. እዉቀት ስላልነበረኝ 3. ልጁ ጤነኛ ስላልነበረ 4. ማጥባት ስላልፈለግኩ 5. ሌላ ይጠቀስ------------------------	
308	ከእናት ጡት ወተት በተጨማሪ ለልጅዎ ተጨማሪ ምግብ መስጠት የጀመሩት ልጅዎ እድሜው ስንት ሲሆን ነበር?	☐ ወራት በኋላ	
309	ለልጆች ተጨማሪ ምግቦች ለመስጠት ትክክለኛው እድሜ መቼ ነው ብለው ያስባሉ?	ወራት ☐ በኋላ	
310	ልጁ በአሁኑ ጊዜ የእናትጡት ወተት እየጠባ ነውን?	1. አዎ 2. አይደለም	
311	ልጅዎን ስንት ኣመት እስኪሆነዉ ለማጥባት አቅደ ዋል?	ወራት ☐	
312	ልጅዎን ጡጦ ያጠባሉን?	1. አዎ 2. አላጠባም	
313	ህጻኑ ከተወለደ እስከዛሬ ድረስ የተመገበዉ የምግብ ዓይነት ምንድን ነዉ? ይህ ጥያቄ ከ 6 ወር በላይ ለሆነ ህጻን ጡት በመጥባት ላይ ላለች••እናት ይጠይቁ	አዎ የለም ምንም ፡ አልተመገበም1 2 ዉሃ/ሻÃ_____________ 1 2 ³⁄₄ ሃሬ ስኳር/ፊ ዉ ð ሳሽ 1 2 የላም ወተት_________ 1 2 ³⁄₄ሙቅ • አህል________ _ 1 2 የቆርቆሮ ወተት______ 1 2 የአ ዋቂ ምግብ________ 1 2 ሌላ ÃÖቀስ --------------------	

አመሰግናለሁ፡፡

12.2. Bibliography

Curriculum Vitae of Advisor

I. **Identification:-**

Name	Zuritash Mengistu (0911866550)
Sex	Female
Birth Date	18/05/62
Birth Place	Werreillu (Wollo)
Language	Amharic and English
Religion	Orthodox Thewahdo
Marital status	Married
Nationality	Ethiopian

II. Education:-

Educational level	School	Year
1.MSc Nursing	Addis Ababa University	1999 ___ 2001 E.C
2. BSc Nursing	Jimma University	1993 ____ 1995 E.C
3. Diploma in Nursing	Asmara School of Nursing	1980 ____ 1982 E.C
4. Junior and High School	Werreilu Senor Secondary School	1974 _____ 1979 E.C
5. Elementary School	Ediget Behbret Elementary School	1968 _____ 1973 E.C

III. **Work Experience**:- Six year Bati Health Center as practitioner and head Nurse.

- One year Asella Hospital as practitioner and head Nurse.
- Four years Asella School of Nursing as a Tutor.
- Six year Centralize School of Nursing as assistance lecturer and lecturer

IV**. Training:-** Training methodology for two month under Ministry Health

-Training of Trainers on HIV/AIDS Counseling

V. Other Skills :-Computer literacy

VI**. Research:-** Utilization of Traditional Medicine among people living in Jimma

Town

-Adherence to Antiretroviral Treatment and its determinants Among

People Living with HIV/AIDS in Addis Ababa Ethiopia

-Trauma scoring and its Outcome Measure Among Patients With Trauma Icident Attended by

Tikur Anbessa and Yekatit 12Hospital

Testimonies Reference :-Ato Asrat Demisse (Head of Centralized School of Nursing Medical

Faculty. Addis Ababa University) Tel. 157116

Address:- Centralized School of Nursing , Medical Faculty, Addis Ababa University.

Curriculum Vitae of Principal Investigator

Misrak Getnet Beyene

Present Address: Addis Ababa, Ethiopia

Email: misrakg81@gmail.com

Phone: Mobile: 0913251864

Personal Details

Sex: Female

Date of Birth: 25th February 1987

Place of birth: South Gonder, Ethiopia

Marital status: Single**.**

Citizenship: Ethiopian

Education: BSc in Nursing,Msc candidate in Maternal and Reproductive Health

Current Academic Rank: Graduate Assistance II, Hawassa University, Ethiopia.

Language Proficiency: Amharic (Excellent)

English (Very Good)

Work Adress: Hawassa University**,**Department Of Nursing And Midwifery,

Educational level	**School**	**Year**
1. BSc degree in Nursing	Hawassa University	1999-2001E.C
2. High school and preparatory school	Comboni S.S.S,hawassa	1995 - 1998E.C
3. Primary school (7 and 8)	Adventisit primary and secondary S ,hawassa	1993-1994E.C
4. Primary school(1-6)	Mabi Abo primary and secondary school ,S.Gonder	1986-1991E.C

Employment History (Wolaita Sodo University)

One year teaching experience

Additional short term training received

Date/Duration	Certificate received	Place(offering organization)
January,2010 G.C	Adult and pediatric ART training for two weeks	Tsehay international

Awards and Distinctions

- Was a distinction student at BSc. level training, CGPA of (3.44),

References

Dr. Nigatu Regassa,Hawassa University, Institute of Environment, Gender and Development, P.o.box 5, Awassa, SNNPR, Ethiopia.,Tel-0916580263 e-mail: **negyon@yahoo.com**

12.3. Declaration

I the undersigned declare that this thesis is my original work and has not been presented for a degree in this or any other university and that all sources of materials used for this thesis have been duly acknowledged.

Name: Misrak Getnet

Signature: _____________

Place: Addis Ababa University

Date of submission________________________________

This thesis has been submitted for examination with my approval as the university advisor.

Name of the advisor	**Signature**
Sr,Zuryiash Mengistu (RN, BSc., MSc.)	____________