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**COLLEGE OF HEALTH SCIENCES**  
**SCHOOL OF PUBLIC HEALTH**

Assessment of Factors Associated with Exclusive Breastfeeding Practice  
of Employed and Unemployed Mother: A Community Based  
Comparative Cross Sectional Study Woldiya, Ethiopia 2014/15

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## **ABBREVIATIONS**

AAU	Addis Ababa university
AOR	Adjusted odds ratio
BF	Breastfeeding
CI	Confidence interval
COR	Crude odds ratio
CSA	Central statistics agency
EBF	Exclusive breastfeeding
EDHS	Ethiopian demographic and health survey
OBF	Optimum breastfeeding
OD	Odds ratio
SPH	School of public health
WHO	World health organization

## **ABSTRACT**

**Background:** The maternity leave given during the postpartum period is 2 month in Ethiopia therefore this may affect working mothers not to exclusively breastfeed for the first 6 month's recommended by World Health Organization. Available evidences showed 10-30% difference between employed and unemployed mothers in practice of exclusive breastfeeding.

**Objective:** To assess magnitude and factors that affects the practice of exclusive breastfeeding among employed and unemployed mothers in Woldiya town.

**Methodology:** A community based comparative cross-sectional study design was used from January to February 2015 in Woldiya town among 876 employed and unemployed mother. Simple random sampling technique was used. Data was entered into EPI-info and analyzed using SPSS software. Chi-square test was used for comparison. Bivariate and multivariate logistic regression analyses were also done to examine the relationship between Exclusive breastfeeding and selected exposure factors with p-value 0.05.

**Results:** The prevalence of Exclusive breastfeeding was 45.2% at 95% CI (40.3-49.6) among employed and 66.7% at 95% CI (62.1-71.4) among unemployed mothers [AOR: 2.40, 95% C.I: (1.72-3.36)]. Mothers who had attained primary education were found to practice Exclusive breastfeeding more likely than those who completed secondary and above [AOR: 2.03, 95% C.I: (0.99-4.16)]. Month specific prevalence of Exclusive breastfeeding showed that, infants between 4 to 6 month age range were less likely to exclusively breastfeed than infants below 1 month [AOR: 0.10, 95% C.I: (0.05-0.22)].

**Conclusion and Recommendation:** The prevalence of Exclusive breastfeeding was lower among employed than unemployed mothers. As the age of infant increases the prevalence of EBF was progressively decrease. Promoting the practice of EBF through the extension of postnatal maternity leave is recommended.

# 1. INTRODUCTION

## 1.1 Background

World Health Organization (WHO) recommends exclusive breastfeeding (EBF) for the first six month of life and thereafter continue breastfeeding with appropriate and sufficient complementary food (1). Appropriate feeding practices have a great implication on child survival, growth, development, health and nutrition. Exclusively breastfed infants have better neuro-developmental outcomes, better physical growth, lower rate of acute respiratory infections and diarrhea compared to mix-fed or non-breastfed infants. Exclusive breastfeeding confers several benefits for the infant and the mother. The advantages include a lower risk of gastrointestinal infection for the baby, more rapid recuperation after birth, and delayed return of menstrual periods (a natural method of family planning). Breastfeeding also provides infants with superior nutritional content that is capable of improving the immunity and possible reduction in future health care spending (1, 2).

Despite the benefits of breastfeeding, a number of barriers to the practice of optimal breastfeeding prevail. Some of these barriers include hospital practices related to initiating breastfeeding, advertisement of breast milk substitutes and lack of support for the breastfeeding mother and many women identify employment as barriers to EBF (3). Other factors influence the prevalence of EBF in different areas based on small scale studies are place of residence, age, education, knowledge about good breast-feeding practices, positive attitudes towards EBF, intent to exclusively breastfeed before delivery, mode of delivery, birth weight of the infant, health system practices and community belief (4, 5). The contribution of employment is not well studied though few have reported to impact the EBF situation. Thus, this study attempted to examine if employment affects the EBF status of the women.

## **1.2 Statement of the Problem**

The benefits of exclusive breastfeeding are numerous. However, the prevalence of EBF is low in developing countries (39%), 35% in Africa and 28% in West Africa and 47% in eastern and central Africa. The low prevalence of EBF in most developing countries including Ethiopia is associated with maternal and child factors such as place of residence, sex and age of the child, maternal age and educational level, access to mass media and economical status by several researchers (4-7).

According to Ethiopian demographic and health survey EDHS 2011, in Ethiopia in general and in Amhara region in particular, half (52%) of mothers practiced exclusive breastfeeding. The introduction of other liquids, such as water, juice, and formula takes place earlier than the recommended introduction at age six months. Among the youngest breastfeeding children (0-1 months), 6% consume other milk and 3% consume other liquids (7).

Inappropriate breastfeeding practices during infancy contribute for 60% of under-five mortality and more than two-thirds of infant deaths. Children's who do not breastfeed are two to six times more likely to die from infectious disease than those children's who breastfeed (1, 6).

Maternal employment usually affects child caring time because working mothers are less likely available for breastfeeding and making frequent meals than non-working mothers. Studies indicate that significant difference (10-30%) was observed between employed and unemployed mothers on practice of exclusive breastfeeding (5, 8). And the improvement on EBF is low presumably due to the short maternity leave and absence of onsite child care at work place for working mothers.

There are many studies that investigated the factors associated with exclusive breastfeeding practices in Ethiopia. Most of them document the presence of differences in place of residence, education, knowledge about good breastfeeding practices and socio-cultural aspects. However, there is lack of data on factors that determine the practice of exclusive breastfeeding among employed and non-employed mothers.

### **1.3 Significance of the Study**

Most mothers in Ethiopia breastfeed their babies, but they do not always follow the recommendations of the "National Strategy for Infant and Young Child Feeding," the guidelines established by the Federal Minister of Health for optimum breastfeeding.

There has been an information gap regarding magnitude and determinant of exclusive breastfeeding among employed and unemployed mothers. In this regard, there is a need to study this issue among the employed and unemployed mothers to come up with strong evidence on the difference of their practice and to improve the policy on duration of maternity leave or other possible solution for EBF practice because mothers play a crucial role in determining the success of this practice.

Therefore this study will attempt to fill the above gap and provide direction for policy makers and stakeholders with relevant information for future planning and interventions.

## **2. LITERATURE REVIEW**

### **2.1 Benefits and Practice of Exclusive Breastfeeding**

EBF is known to be most effective preventive intervention to reduce early-childhood mortality. Exclusive breastfeeding for the first six months and continued breastfeeding to 24 months tops the list of preventive interventions that would most reduce the number of deaths of children less than five years old from all causes. Optimum breastfeeding (OBF) practices have the potential to prevent 1.4 million deaths every year among children under five years; it provides adequate water for hydration, superior nutrition for optimum growth, protects against infection, transfer of antibodies and reduces overall child mortality through reduced risk from contaminated formula. OBF also results in better cognitive development and IQ than in formula-fed children and lowers the risk of chronic conditions such as diabetes, heart disease, obesity, certain cancers etc. when compared with formula-fed infants (9).

Early initiation helps contract the uterus, expel the placenta and reduce bleeding; helps mothers return more rapidly to their pre-pregnancy weight and a lower body mass index after 5–6 years; lowers risk of pre-menopausal breast cancer and ovarian cancer and may delay return of fertility. EBF also lowers family food and health expenditures; decreases workforce absence due to decreased infant and maternal illness; lowers health care provider costs due to decreased infant and maternal illness, staff time, kitchen requirements, space, nursery beds, and is a basic human right and may help bridge the divide between marginalized and vulnerable populations and more privileged groups (9). However, the practice of EBF is low in developing countries (39%), 35% in Africa and 28% in west and central Africa, 47% in eastern and central Africa, in Ethiopia in general and in Amhara region in particular (52%). Although, according to EDHS report in addition to breast milk, 19 percent of infants under six months are given plain water only, while 14 percent receive milk, and 4 percent are given non-milk liquids and juice (7, 8).

In Addis Ababa Kirkos sub city nearly 40% of mothers practice exclusive breastfeeding (10). In Bahir Dar EBF Practice was reported to be 49.1%. Nearly two third of mothers reported that they breastfeed their children 8 or more times per day (5). In Goba district the prevalence of exclusive breastfeeding for infants' aged less than six months in the study area was 71.3%. The median

duration of exclusive breastfeeding for infants less than six months was 3 months. The median frequency of exclusive breastfeeding for infants less than six months per day was 6 times. About 88.8% of infants were breastfed exclusively for 2 months, while 84.4% of infants were breastfed exclusively to 2 to 3 months of age (11). And a study done in Jimma indicates that the prevalence of exclusive breastfeeding is 60.1% (12). Another study done in Injibara was reported 44% and 65% among employed and unemployed mothers respectively (13).

## **2.2 Determinants of Exclusive Breastfeeding**

In order to appreciate what underlies women's infant feeding choices, and to develop strategies to increase breastfeeding initiation and duration, it is important to understand what factors are associated with breastfeeding, and which women are at risk of discontinuing breastfeeding early.

### **2.2.1 Work Related Obstacles to Exclusive Breastfeeding**

International research has shown lower rates of breastfeeding among employed than non-employed mothers, especially those returning before breastfeeding is established or to full-time employment. However, self-employment and part-time work hours affect breastfeeding less (14).

A study which was done in Australia among 207 employing organizations shows that mothers who return to work at six months or earlier introduced formula two months earlier and discontinued breastfeeding around two months earlier than those returning to work in the second half of the first year. On the other hand, employee intentions to breastfeed were mainly hindered by time pressures and mother–infant separation arising from returning to work. Many experienced difficulties expressing sufficient milk and maintaining their milk supply, with problems maintaining breastfeeding reported to arise from separation during the work day and the recommend flexibility in working hours and timing of breaks so that employed mothers express milk or breastfeed their children (15).

A study done in America shows that during a hospital stay the practice of breastfeeding is similar (55%) for both employed and unemployed mothers. However, when employed mothers return to their work the practice of breastfeeding significantly decline to 10%. In this regard, the practice of EBF is significantly associated with short maternity leave, working full-time rather than part-time postpartum and lack of onsite child care. In addition accesses to formula feed and maternal

educational status were factors which are related to practice of EBF indirectly. On the other creating supportive environment at work place resulted in an increase of 5.7 months on duration of EBF (16).

Another study conducted in Singapore among 2149 female residents' shows that working status had no effect on the initiation of breastfeeding, but it had a significant effect on breastfeeding duration. A higher proportion of non-working than working mothers breastfed for more than two months. The main reasons for working mothers to stop breastfeeding between two and six months were due to work-related factors (48.4%), insufficient breast milk (27.0%) and baby preferring formula milk (12.5%). In contrast, the reasons for non-working mothers to stop breastfeeding between 2 and 6 months were insufficient breast milk (43.1%), baby preferring formula milk (16.4%) lack of help with care of baby and household workloads (12.9%). The most important work-related reasons included the need to return to work, lack of facilities at the workplace for breastfeeding and demands of work interfering with breastfeeding. On the other hand, factors which are unrelated to employment such as insufficient breast milk, baby preferring formula milk also influenced the duration of breastfeeding following a mother's return to work (17).

National Maternal and Infant Health Survey in Ghana results showed that maternal employment was not responsible for low rates of breastfeeding initiation. However, it was observed that breastfeeding women who returned to work weaned their infants earlier compared to breastfeeding women who did not work. The negative association between employment and duration of breastfeeding was strongest in white women, and duration of maternity leave was significantly associated with duration of breastfeeding (18). And a study conducted in Ghana among 1000 working mothers showed that 90.5% of the respondents said that the main challenge that hinders exclusive breastfeeding practice is their working status because working mothers are supposed to return to work after they have exhausted their three months maternity leave. More than half of the respondents (51%) said they leave their children at home to their families due to work pressure and go to breastfeed their children when they have break or family members regularly bring the children to the Work places for them to breastfeed their babies. Furthermore, 30.5% of the respondents said they do not have adequate time to breastfeeding their children and

17.5 % said there are no proper place for them to breastfeed their children at their various work places. About 48% of working mothers were able to practice exclusive breastfeeding (19).

In Ethiopia, the maternity leave given during the postpartum period is 2 month. This could affect working mothers not to exclusively breastfeed for the first 6 month (5). A study done in Goba district, south east Ethiopia has indicated significantly more unemployed mothers to exclusively breastfeed than employed mothers (33% vs. 73%) and also revealed that unemployment of the mothers is a predictor of exclusive breastfeeding. Further less maternity leave (two months after delivery in our context), makes employed mothers to have less opportunity to stay at home and compromising exclusive breastfeeding (11). Another study done in Addis Ababa Kirkos sub city shows, that employment status of the mother has significant relationship with exclusive breastfeeding practice. About 34.5 percent of mothers who are practicing exclusive breastfeeding were employed and 46.0% were unemployed (10).

### **2.2.2 Other Factors Affecting Exclusive Breastfeeding**

In addition to the employment status of mothers, socio-demographic factors and obstetric factors could also affect the practice of EBF (Figure 1).

A study done in Nigeria shows that higher educational level of women and maternal age are significantly associated with EBF. The practice of EBF was better among mothers aged between 28-32 years, mothers living together with their partners and those who were less educated while younger mothers (below 22 years of age) are more likely to practice mixed feed (20). Most of the studies done in Ethiopia indicate that EBF was associated significantly with maternal educational level, current marital status, and child age. The other interesting finding was that higher maternal education level was found to be associated with lower rate of EBF in Ethiopia due to the fact that when women are better educated, the opportunity for employment is high and thus the opportunity to stay at home and practice EBF is compromised since influenced by media advertising milk substitutes (5, 6). In Addis Ababa Kirkos sub city the likelihood of practicing EBF among those who have, primary education, secondary education and diploma is higher than those who have no education by 7.07, 6.21 and 3.20 times respectively and the difference is statistically significant (10). Similarly a study done in Bahir Dar indicates that, the practices of

EBF among mothers who were unable to read and write or in primary school were 3 times higher than those who completed secondary school or higher (5).

The same study showed a significant relationship between marital status and exclusive breastfeeding. Women who are not currently married were two times more likely to breastfeed their child exclusively than those married (5, 6).

A study done in Bahir Dar shows that child sex, parity, and family size were significantly associated to the practice of EBF. Those mothers whose child was male were 2 times more likely to practice EBF than those mothers whose children were female. (5).

Another study done in Tanzania indicates that Women's who were delivering at the health facilities had to practice three times more than those who delivered at home (21). Another finding in Timor-Leste shows that as the age of infants increased the likelihood of exclusive breastfeeding declined by 44% (22).

A study conducted in Goba district showed that age of infant was a predictor of exclusive breastfeeding practice. Infants in the age group less than 2 months were about 6 times more likely to be exclusively breastfed than infants in the age group 4–5 months. Although infants in the age group 2–3 months were 2 times more likely to exclusively breastfeed when compared to those infants in the age group 4–5 months. Indicating, as the age of the children approached 6 months, the rate of exclusive breastfeeding decreases significantly (11). Another study which was conducted in Jimma indicates that the prevalence of EBF decrease progressively as the age of the infants' increases by 67.2%, 24.3% and 8.4% at age less than or equal to 2 months, 3-4 months and above 4 months respectively (12).

In contrast another study done in Ethiopia indicated no association of EBF with maternal age, place of residence, current employment of women, and access to mass media, attending antenatal care, and sex of the child (6). Indicating conflicting results, therefore this study is proposed to find out the effect of employment and other factors affecting the practice of EBF.

## 2.3 Conceptual Framework

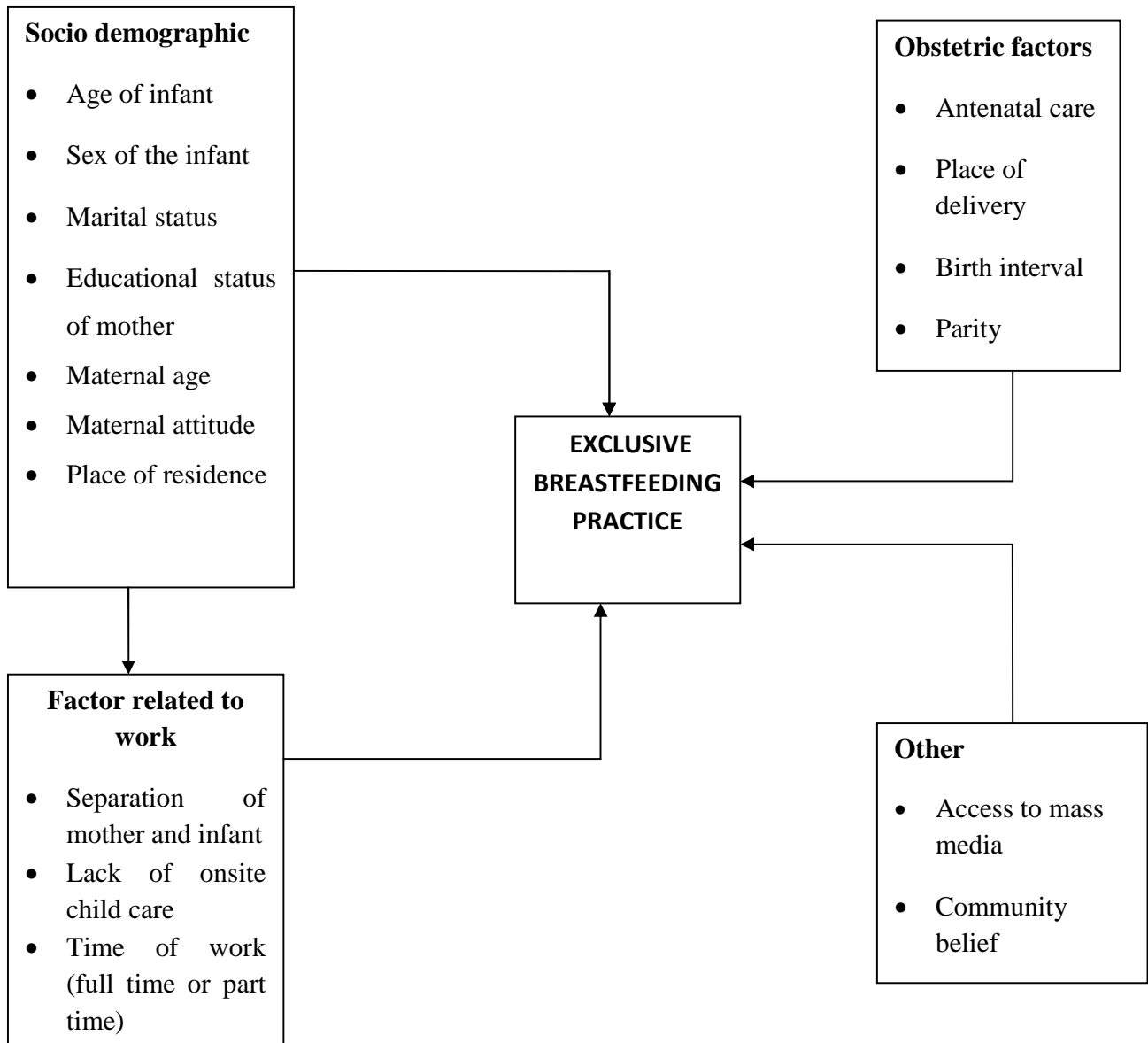


Figure 1: Proposed Conceptual Frame Work of the study

### **3. OBJECTIVE OF THE STUDY**

#### **3.1 General objective**

To assess the magnitude and factors that affects the practice of exclusive breastfeeding among employed and unemployed mothers in Woldiya town.

#### **3.2 Specific objectives**

1. To assess the magnitude of exclusive breastfeeding practices among employed and unemployed mothers in Woldiya town.
2. To identify factors associated with exclusive breastfeeding practices among employed and unemployed mothers in Woldiya town.

## **4. METHODS**

### **4.1 Study Area**

Woldiya is a hillside market town capital of the north Wollo Zone, and woreda in northern Ethiopia. The town is located at about 520 km from Addis Ababa. The town has a total population of 67,760 of whom, infant constitute about 3.1% (2101) of the total population. The town has 12 kebeles (23).

### **4.2 Study Design**

A community based comparative cross sectional study using both quantitative and qualitative method was conducted.

### **4.3 Source Population**

Source population for this study was all mothers that have infants aged 0-6 month residing in Woldiya town.

### **4.4 Study Participant**

The study participants were those selected mothers having infants aged 0-6 month residing in selected kebeles of Woldiya town.

### **4.5 Inclusion and Exclusion Criteria**

#### **Inclusion criteria**

- Has to be a resident of Woldiya
- Infants aged below six month

#### **Exclusion criteria**

- Mothers with chronic illness
- Mothers who are unable to communicate

## 4.6 Sample Size Determination

To determine the sample size for this study, two population proportion formula was used. Since the specific objectives are two, the sample size was calculated for each in order to take a large sample size.

### 1. Specific objective one

The sample size for the study was calculated using the same formula by assuming;  $p_1$  = Prevalence of EBF among unemployed mothers= 46,  $p_2$  Prevalence of EBF among employed mothers=34.5 (10),  $r = n_2/n_1 = 1:1$   $Z_{\alpha/2}$ =the value of the standard normal distribution curve corresponding to level of significance alpha 0.05 = 1.96 and the value of the standard normal distribution curve corresponding to 90% power = 1.21

$$n = \frac{\left[ z_{\alpha/2} \sqrt{(1+1/r)p(1-p)} + z_{\beta} \sqrt{p_1(1-p_1) + \frac{p_2(1-p_2)}{r}} \right]^2}{(p_2 - p_1)^2}$$

The sample size required was **438** for employed and about the same number of sample for unemployed was considered to give a total of **876**.

### 4. Specific objective two

The sample size required was calculated using two-population proportion formula by assuming; for infant age  $p_1$  = Prevalence of EBF at 2 month age =88.8%,  $p_2$ = Prevalence of EBF at 5 month age=73.5%; for marital status  $p_1$  = Prevalence of EBF among unmarried mothers=64.3%,  $p_2$ = Prevalence of EBF among married mothers=48.3%; for educational status  $p_1$ = Prevalence of EBF among illiterate mothers=76.7%,  $p_2$ = Prevalence of EBF among mothers above primary school=65.2%; for antenatal care  $p_1$ = Prevalence of EBF among mothers who do not attend antenatal care=50.0%,  $p_2$ = Prevalence of EBF among mothers who attend antenatal care=66.0%; for Place of delivery  $p_1$ = Prevalence of EBF among mothers who deliver at home=30.0%,  $p_2$ = Prevalence of EBF among mothers who deliver at health facility=49.0%.

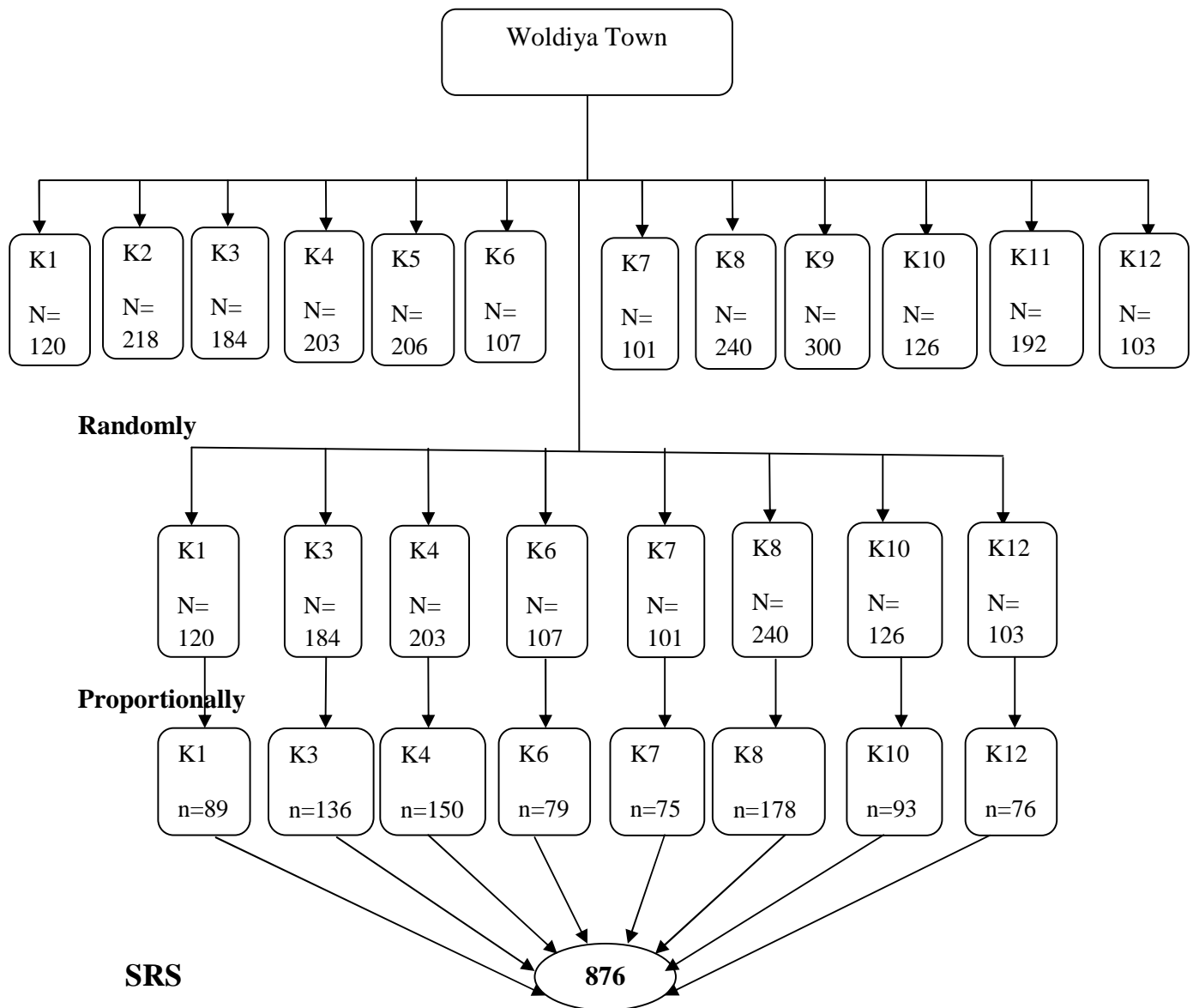
Table 1: Sample size for factors associated with EBF

Variables	EBF P <sub>1</sub> (%)	EBF P <sub>2</sub> (%)	CI	Power	Allocation ratio	OR	Total sample size
Infant age	88.8	73.3	95%	90%	1:1	0.35	290
Marital status	64.3	48.3	95%	90%	1:1	0.52	426
Educational status	76.7	65.2	95%	90%	1:1	0.57	686
Antenatal care	50.0	66.0	95%	90%	1:1	1.94	422
Place of delivery	30.0	49.0	95%	90%	1:1	2.24	296

Since the sample size calculated for specific objective one accommodates the large sample size so, the minimum sample size considered to undertake the study was **876** after considering a non-response rate of 10%.

## **4.7 Sampling Procedure**

Woldiya town was selected purposely. The town has 12 kebeles of which 8 kebeles were selected randomly in order to minimize heterogeneity. In each kebele the number of participants was obtained from each kebele office. From the chosen 8 kebeles, study participants were drawn proportionally. Finally from each kebele sampling frame was obtained from health extension workers then using simple random sampling eligible households which fulfill the inclusion criteria were selected (Figure 2). The sampling technique for the qualitative part was purposive sampling to take samples from both employed and unemployed mother of infants and the sample size was decided at a saturation point (when new participants could not produce new ideas any longer).



**Key:** SRS- simple random sampling, K- kebele, N- number of infant in each kebele, n- number of infant drawn from each kebele by proportion

**Figure 2: Schematic Presentation of the Sampling technique**

#### **4.8 Methods of Data Collection, Training and Tools**

Structured questionnaire was used to collect the data. The questionnaire includes questions on socio-demographic characteristics, factors related to EBF practice of Employed and unemployed mothers. It was administered by two BSc nutritionists and two BSc nurses' data collectors. The data collectors were trained for two days by the principal investigator.

For the qualitative part of the study an in-depth interview guide was developed in order to supplement questions that could be difficult to answer in the quantitative part of the study. It was moderated by the principal investigator with assistant note taker and tape recorder was used to record verbal responses from mothers and grandmothers.

#### **4.9 Data Quality Assurance**

The questionnaire was prepared in English and it was translated into Amharic language. The Amharic language questionnaire was used to collect data. The questionnaire was pre-tested on 5% mothers having infants aged 0-6 months in the households located outside of the selected kebeles. The age range between 0-6 months was selected because, the duration of exclusive breastfeeding practice is recommended up to 6 month and in order to minimize respondents recall bias. Supervision was made by the principal investigator, by observing how data collectors were conducting the interview. At the end of each day interviewers submitted all completed questionnaire and each completed questionnaire was checked by the principal investigator for completeness and consistencies.

#### **4.10 Data Entry and Analysis**

Data was manually cleaned and then entered into a computer using EPI-info version 7.0.8.0 Statistical software and analyzed by SPSS version 21 for statistical analysis. First descriptive analysis was carried out to examine the distribution of each individual variable. Then, chi-square test was done to compare the distribution of independent variables between employed and unemployed mothers with p-value 0.05. Bivariate analysis was carried out to describe association between pairs of variables. Finally, factors which were significant for bivariate association were observed with p-value 0.05 and retained for subsequent multivariate analyses using multiple logistic regression to control for possible confounders. Chi-square and Odds ratios were used for

comparison and to measure the strength of the association between dependent and independent variables respectively. And 95%CI was used to determine the significance of the associations.

The qualitative part was coded and analyzed using Open Code through thematic analysis by looking at across all the data then identifying the common issues that are raised and by identifying the main themes that summarize all views.

#### **4.11 Ethical Consideration**

Ethical clearance was obtained from school of Public Health, College of Health Science, Addis Ababa University Research and Ethical Committee (REC). An official letter was written from school of Public Health to Woldiya city administration to get permission and support letter to each respected kebeles. The purpose of the study was explained to the study participants and a written consent was taken from participants to confirm whether they are willing to participate. Confidentiality of responses was also ensured throughout the research process. All incomplete questionnaires were considered as non response rate.

#### **4.12 Dissemination of Finding**

The findings of this study will be disseminated to the city administration health bureau, kebeles, different organizations that will have a contribution to improve the status of EBF in the city town or woreda. The finding will be presented at various seminars and workshops. Attempt is made to submit the findings to journals.

#### **4.13 Study Variables**

##### **Dependent variable**

Exclusive breastfeeding practice

##### **Independent variables**

###### **Work related**

- Lack of onsite child care
- Time of work

###### **Socio demographic factors**

- Educational status of mothers
- Maternal age
- Maternal attitude
- Sex of the infant
- Age of infant
- Advice on EBF

#### **Obstetric factors**

- Place of delivery
- Antenatal care
- Birth interval

#### **Other factors**

- Access to media
- Community belief

### **4.14 Operational Definitions**

**Exclusive breastfeeding:** The infant should receive only breast milk from his/her mother or a wet nurse, or expressed breast milk, and no other liquids or solids, except medicines or vitamins, mineral supplements.

**Duration of EBF:** Breast milk only for the first 6 months.

**Predominant breastfeeding:** Is the practice of feeding breast milk along with water.

**Mixed breastfeeding:** Is the practice of feeding breast milk along with food.

**Knowledge of mother:** Mothers who are able to answer the duration of EBF till six month and if they are able to mention at least four benefits of EBF.

**Employed mothers:** Mothers who work outside the home for income for at least 8 hour per day in addition to the work they perform at home in raising their child.

**Unemployed mothers:** Mothers who stayed at home and raising their children not engaged in any income-generation activities.

## **5. RESULT**

### **5.1 Quantitative Result**

#### **5.1.1 Socio demographic Characteristics of the Respondent**

From the total of 876 mother-infant pairs, 852 were included in the analysis, making the response rate 98.4% of which 425 (49.9%) were employed and 427 (50.1%) were unemployed. The mean ( $\pm$  SD) age of employed and unemployed mothers was 29.0 ( $\pm$ 5.1) and 29.3 ( $\pm$ 5.4) years respectively. Majority 372 (87.5%) of employed and 367 (86.0%) of unemployed mothers were in the age range of 20-35 years. Pertaining to the educational status of mothers, 738 (86.6%) had attended formal school of which 365 (85.9%) of employed and 187 (43.8%) of unemployed mothers completed secondary school and above. Majority 372 (87.5%) of employed and 369(86.4%) of unemployed mothers were married followed by single 40 (9.4%) employed and unemployed mother. Nearly half 207 (48.7%) of employed mother and 201 (47.1%) of unemployed mother had 2-4 children. While 164 (38.6%) of employed and 174 (40.7%) of unemployed mothers had only 1 child. Regarding the sex of the infant, more than half 242 (56.9%) and 230 (53.9) of females were from employed and unemployed mothers respectively. More than one third 184(43.3%) and 195 (45.7) of the infants of employed and unemployed mothers respectively were between the age ranges of 2 to 3 month (Table 2).

Table 2: Respondents Socio-demographic characteristics and their infant by employment status in Woldiya town, Ethiopia, 2015

<b>Variables</b>	<b>Employed Number (%)</b>	<b>Unemployed Number (%)</b>	<b>Total Number (%)</b>
Age of mothers (years)			
15-19	5 (1.2)	8 (1.8)	13 (1.5)
20-35	372 (87.5)	367 (86.0)	739 (86.8)
36-49	48 (11.3)	52 (12.2)	100 (11.7)
Educational status of the mother			
Illiterate	7 (1.6)	107 (25.1)	114 (13.4)
Primary	53 (12.5)	133 (31.1)	186 (21.8)
Secondary and above	365 (85.9)	187 (43.8)	552 (64.8)
Marital status			
Married	372 (87.5)	369 (86.4)	741 (87.0)
Single	40 (9.4)	40 (9.4)	80 (9.4)
Divorced	8 (1.9)	17 (4.0)	25 (2.9)
Widowed	5 (1.2)	1 (0.2)	6 (0.7)
Parity of mother			
1	150 (35.3)	168 (39.3)	318 (37.7)
2-4	258 (60.7)	228 (53.4)	486 (57.1)
>5	17 (4.0)	31 (7.3)	48 (5.6)
Current number of children			
1	164 (38.6)	174 (40.7)	338 (39.7)
2-4	207 (48.7)	201 (47.1)	408 (47.9)
>5	54 (12.7)	52 (12.2)	106 (12.4)
Birth interval (year)			
1	9 (3.3)	19 (7.4)	28 (3.3)
2-3	68 (24.9)	89 (34.8)	157 (18.4)
4 and above	196 (71.8)	148 (57.8)	344 (40.4)
Sex of Child			
Male	183 (43.1)	197 (46.1)	380 (44.6)
Female	242 (56.9)	230 (53.9)	472 (55.4)
Age of infant (month)			
0-1	67 (15.8)	69 (16.1)	136 (16.0)
2-3	184 (43.3)	195 (45.7)	379 (44.5)
4-6	174 (40.9)	163 (38.2)	337 (39.5)
<b>Total</b>	<b>425 (100)</b>	<b>427 (100)</b>	<b>852 (100)</b>

When employed mothers were asked about the type of work they did, majority 276 (32.4%) of mother were permanent employee followed by petty trader 91 (10.7%) (figure 3). More than two third 295 (69.6%) of employed mothers work for 8 hours per day followed by 10 hour, 9 hour, 12 and 11hour 39 (9.2%), 38 (9.0%), 31 (7.3%) and 21 (5.0%) respectively (figure 4).

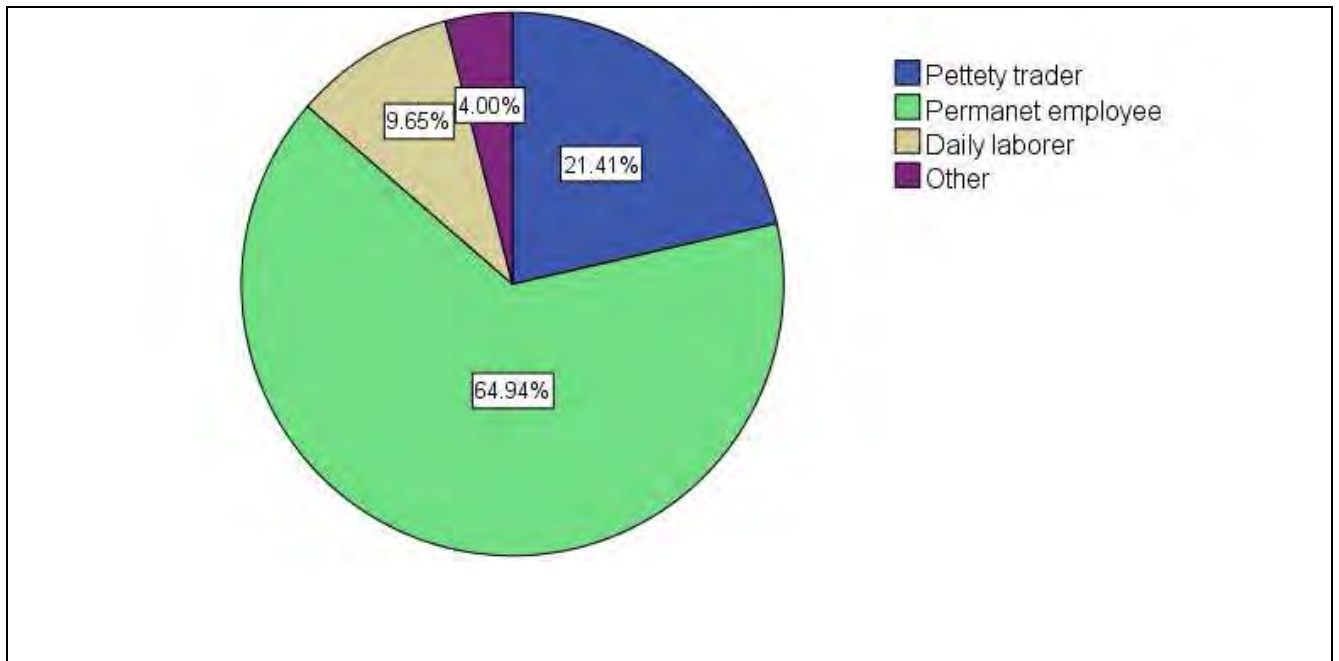
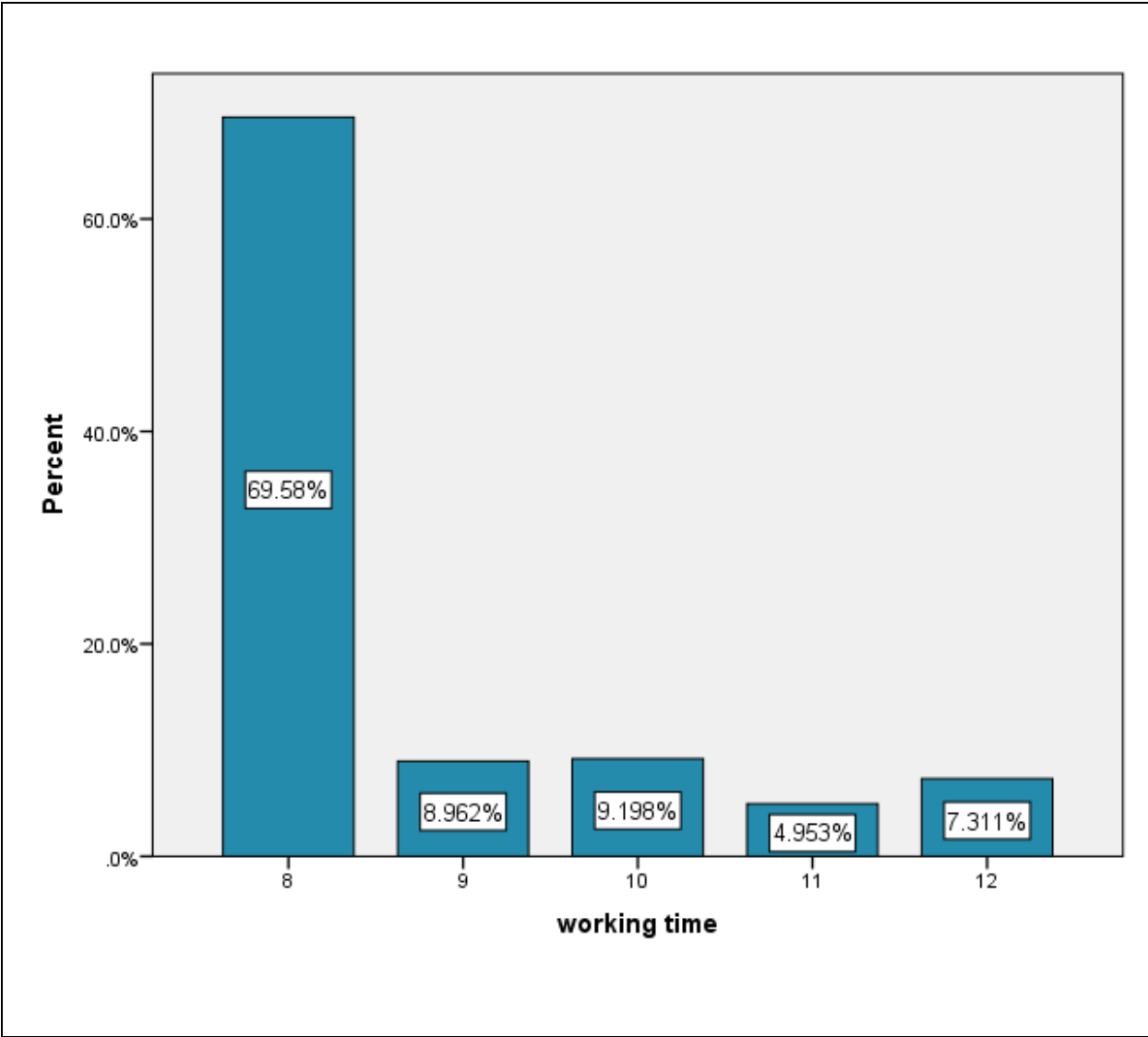


Figure 3: Percentage distributions by type of work of breastfeeding mothers in Woldiya town, Ethiopia, 2015



**Figure 4: working hour of employed mothers of breastfeeding mothers in Woldiya town, Ethiopia, 2015**

### 5.1.2 Health Care and EBF Related Characteristics of Mothers

As shown in the details of the history of health care and EBF related characteristics in Table 3 majority 416 (97.9%) of employed and 397 (93.0%) unemployed mothers attended antenatal follow up of which 373 (87.8%) of employed and 340(79.6%) of unemployed mother received advice on EBF during antenatal follow up. Regarding the place of delivery, 407 (95.8%) of employed and 377 (88.3%) of unemployed mothers gave birth at health facility. More than one third 145 (34.1) of employed and 161 (37.7%) of unemployed mothers had an access to radio to get information on EBF (Table 3).

Table 3: History of health care and EBF related characteristics of breastfeeding mothers in Woldiya town, Ethiopia, 2015

<b>Variables</b>	<b>Employed Number (%)</b>	<b>Unemployed Number (%)</b>	<b>Total Number (%)</b>
Antenatal care visit			
Yes	416 (97.9)	397 (93.0)	813 (95.4)
No	9 (2.1)	30 (7.0)	39 (4.6)
Mother given advice on BF at ANC visit			
Yes	373 (87.8)	340 (79.6)	713 (83.7)
No	52 (12.2)	87 (20.4)	139 (16.3)
Place of delivery			
Home	18 (4.2)	50 (11.7)	68 (8.0)
Health facility	407 (95.8)	377 (88.3)	784 (92.0)
Access to media on EBF			
Not at all	81 (19.1)	143 (33.5)	224 (26.3)
News paper/Magazines/Fliers	54 (12.7)	8 (1.9)	62 (7.3)
Radio	145 (34.1)	161 (37.7)	306 (35.9)
TV	145 (34.1)	115 (26.9)	260 (30.5)
<b>Total</b>	<b>425 (100)</b>	<b>427 (100)</b>	<b>852 (100)</b>

### **5.1.3 Exclusive Breastfeeding Practice of Mother**

From the total mothers participated in the study 843 (98.9%) had ever breastfed their child at the time of survey of which the majority 420 (98.8%) and 423 (99.1%) of mothers were employed and unemployed respectively. Majority 386 (90.9%) of employed and 384 (89.9%) of unemployed mother initiated BF with the first one hour after delivery. The prevalence of EBF among employed and unemployed mothers was 192 (45.2%) at 95% CI (40.3-49.6) and 285 (66.7%) at 95% CI (62.1-71.4), respectively as measured by the 24-hour recall method. Majority 366(85.7%) of unemployed and 298 (70.1%) of employed mother were breastfed >8 times per day. Nearly three quarters 620 (73.6%) of the mother breastfed on the demand of the child; of whom 323 (76.0%) were employed and 297 (69.6%) were unemployed. Majority 367 (86.3%) of employed mothers didn't have access to feed their child at their work place, of whom more than half 249 (58.6) of infant were given infant formula (Table 4).

Table 4: Exclusive breastfeeding practice of breastfeeding mothers by employment status in Woldiya town, Ethiopia, 2015

<b>Variables</b>	<b>Employed Number (%)</b>	<b>Unemployed Number (%)</b>	<b>Total Number (%)</b>
Ever breastfeed			
Yes	420 (98.8)	423 (99.1)	843 (98.9)
No	5 (1.2)	4 (0.9)	9 (1.1)
Initiation in the first 1-hour after delivery			
The fluid that came from the breast	386 (90.9)	384 (89.9)	770 (90.4)
Water and sugar solution	4 (0.9)	8 (1.9)	12 (1.4)
Nothing was given	35 (8.2)	35 (8.2)	70 (8.2)
Practice of EBF			
Yes	192 (45.2)	285 (66.7)	477 (56.0)
No	233 (54.8)	142 (33.3)	375 (44.0)
Frequency of BF in 24-hour			
≤8	122 (28.7)	57 (13.3)	179 (21.2)
>8	298 (70.1)	366 (85.7)	664 (78.8)
BF practice			
On demand	323 (76.0)	297 (69.6)	620 (73.6)
Child cries	235 (55.3)	219 (51.3)	454 (53.9)
On schedule	67 (15.8)	34 (8.0)	101 (12.0)
On convenience	64 (15.1)	26 (6.1)	90 (10.7)
Breast engorged	66 (15.5)	109 (25.5)	175 (20.8)
Other	7 (1.6)	3 (0.7)	10 (1.2)
Liquids/ foods given for the infant during working time			
Breast milk	39 (9.1)	-	39 (9.1)
Expressed breast milk	27 (6.3)	-	27 (6.3)
Infant formula	249 (58.6)	-	249 (58.6)
Cow milk	127 (29.9)	-	127 (29.9)
Other	4 (0.9)	-	4 (0.9)
Access to feed breast milk on work place (Onsite child care)			
Yes	58(13.6)	-	58 (13.6)
No	367(86.4)	-	367 (86.4)

#### 5.1.4 Mothers attitude toward Exclusive Breastfeeding

When mothers were asked about their attitude toward the practice of EBF for the first six month, the majority 729 (85.6%) suggested that children should be exclusively breastfed till six month. Of those 384(90.3%) of mother were employed and 345 (80.8%) were unemployed. While 22 (5.2%) of employed and 48 (11.2%) unemployed mothers suggested that children should be exclusively breastfeed up to  $\leq 4$  month. Of these 40 (97.6%) and 76 (92.7%) of infant among employed and unemployed mothers respectively were given additional milk (Table 5).

Table 5: Mothers attitude on EBF practice and liquids/ foods given to infants by employment status in Woldiya town, Ethiopia, 2015

<b>Mothers attitude toward EBF duration</b>			
	Employed	Unemployed	Total
	Number (%)	Number (%)	Number (%)
$\leq 4$ month	22 (5.2)	48 (11.2)	70 (8.2)
5 month	19 (4.5)	34 (8.0)	53 (6.2)
6 month	384 (90.3)	345 (80.0)	729 (85.6)
Total	425 (100)	427 (100)	852 (100)
<b>Additional foods/liquids given for infants</b>			
Milk	40 (97.6)	76 (92.7)	116 (13.6)
Plain water	14 (34.1)	19 (23.2)	33 (3.9)
Water and sugar	6 (14.6)	5 (6.1)	11 (1.3)
Fruit juice	14 (34.1)	19 (23.2)	33 (3.9)
Infant formula	9 (21.9)	15 (18.3)	24 (2.8)
Tea	3 (7.3)	7 (8.5)	10 (1.2)
Total	41 (100)	82 (100)	852 (100)

### 5.1.5 Reasons of mother not to practice EBF

When mother were asked to mention conditions that affect their practice of exclusive breastfeeding, nearly one third 139 (32.6%) of unemployed and 64 (15.1%) of employed mother responded that fear of not producing enough milk was one of their reason. Majority 339 (79.8%) of employed mother mentioned that working condition as a major reason not to practice EBF for the first six month in 339 (79.8%) of them (Table 6).

Table 6: Reason of mothers that affect EBF practice by employment status in Woldiya town, Ethiopia, 2015

<b>Variables</b>	<b>Employed</b>	<b>Unemployed</b>	<b>Total</b>
	<b>Number (%)</b>	<b>Number (%)</b>	<b>Number (%)</b>
Working condition	339 (79.8)	-	339 (79.8)
Maternity leave	75 (17.6)	-	75 (17.6)
Lack of onsite child care	59 (13.9)	-	59 (13.9)
Working time	53 (12.5)	-	53 (12.5)
Fear of not producing enough milk	64 (15.1)	139(32.6)	203 (23.8)
Sore nipple pain	6 (1.4)	16(3.7)	22 (2.6)
<b>Total</b>			<b>852 (100)</b>

### **5.1.6 Factors associated with Exclusive Breast feeding**

The result of chi-square test showed that, the prevalence of EBF was higher among unemployed mothers 241 (65.7%) between age range 20-35 than employed mothers 173 (46.5%) of the same age range. The prevalence of EBF was significantly higher and among illiterate unemployed 82 (76.6%) and employed mother 6 (85.7%). While 109 (58.3%) of unemployed mothers who attain secondary and above education level had practiced EBF better than employed mothers who attain similar education level 166 (45.5%). The magnitude of EBF was higher 248 (67.2%) among married unemployed mothers than married employed mothers 169 (45.4%). Among mothers who had 2-4 children, more than half 145 (63.6%) of unemployed mothers practiced better than employed mothers 102 (41.0%). The prevalence of EBF was higher 90 (65.2%) among unemployed mothers who had 2 to 3 birth interval than employed mothers 63 (43.3%) who had same birth interval. Month specific prevalence of EBF among employed mother significantly declined 12 (12.1%) as the age of infant increases to 4-6 month than unemployed mothers 44 (56.4%) (Table 7).

Table 7: Socio-demographic and child characteristics associated with EBF by employment status in Woldiya town, Ethiopia, 2015

Independent variables	Practicing Exclusive Breastfeeding				$\chi^2$ - Value	P-value (sig 2-tailed)
	Employed		Unemployed			
	Yes	No	Yes	No		
Age of mothers (years)					0.881	0.644
15-19	3 (60.0%)	2 (40.0%)	6 (75.0%)	2 (25.0%)		
20-35	173 (46.5%)	199 (53.9%)	241 (65.7%)	126 (34.3%)		
36-49	16 (33.3.6%)	32 (66.7%)	38 (73.1%)	14 (26.9%)		
Educational status of the mother					179.523	0.001**
Illiterate	6 (85.7%)	1 (14.3%)	82 (76.6%)	25 (23.4%)		
Primary	20 (37.7%)	33 (62.3%)	94 (70.7%)	39 (29.3%)		
Secondary and above	166 (45.5%)	199 (54.5%)	109 (58.3%)	78 (41.7%)		
Marital status					5.914	0.116
Married	169 (40.4%)	203 (54.6%)	248 (67.2%)	121 (32.8%)		
Single	21 (52.5%)	19 (47.5%)	25 (62.5%)	17 (37.5%)		
Divorced	2 (25.0%)	6 (75.0%)	11 (64.7%)	6 (35.3%)		
Widowed	0	5 (100%)	1 (100%)	0		
Parity of mothers					5.783	0.055
1	83 (50.6%)	81 (49.4%)	125 (71.8%)	49 (28.2%)		
2-4	102 (41.3%)	147 (63.9%)	145 (58.7%)	83 (36.1%)		
>5	7 (31.8%)	5 (33.3%)	15 (68.2%)	10 (66.7%)		
Birth interval (year)					5.038	0.081
1	2 (22.2%)	7 (77.8%)	12 (63.2%)	7 (36.8%)		
2-3	63 (43.4%)	82 (56.6%)	90 (65.2%)	48 (34.8%)		
4 and above	52 (43.7%)	67 (53.6%)	58 (58.6%)	41 (41.1%)		
Sex of infant					0.816	0.366
Male	84 (45.9%)	99 (54.1%)	139 (70.6%)	58 (29.4%)		
Female	108 (44.6%)	134 (55.4%)	146 (63.5%)	84 (36.5%)		
Age of infant (month)					15.415	0.001**
0-1	57 (81.5%)	10 (14.9%)	51 (73.9%)	18 (26.1%)		
2-3	123 (47.5%)	136 (52.5%)	190 (67.9%)	90 (32.1%)		
4-6	12 (12.1%)	87 (87.9%)	44 (56.4%)	34 (43.6%)		

\*. Significant at the 0.05 level (2-tailed)

\*\*.. Significant at the 0.01 level (2-tailed)

As shown in Table 8 the details of obstetric and health service related factors associated with exclusive breastfeeding. The magnitude of EBF was significantly higher among unemployed mothers who attended antenatal care service 270 (68.0%) than employed mothers who attend antenatal service 189 (45.4%). The prevalence of EBF was higher 231 (67.9%) among unemployed mother who had received an advice on EBF during their antenatal care visit than employed mother 162 (43.4%) who had also received the same advise. Among mothers who give birth at health facility, two third 254 (67.4%) of unemployed mother significantly practiced EBF better than employed mothers 185 (45.5%). The magnitude of EBF was higher 84 (73.0) among unemployed mothers who have an access to TV than employed mothers 56 (38.6%) who have similar access and the difference noted was significant (p=0.001).

Table 8: Obstetric and health service related factors by employment status in Woldiya town, Ethiopia, 2015

Independent variables	Practicing Exclusive Breastfeeding				$\chi^2$ - Value	p-value (2-tailed)
	Employed Yes	No	Unemployed Yes	No		
Antenatal care visit					11.747	0.001**
Yes	189 (45.4%)	227 (54.6%)	270 (68.0%)	127 (32.0%)		
No	3 (33.3%)	6 (66.7%)	15 (50.0%)	15 (50.0%)		
Advice on EBF during antenatal care visit					10.336	0.001**
Yes	162 (43.4)	211 (56.6%)	231 (67.9%)	109 (32.1%)		
No	30 (57.7%)	22 (42.3%)	54 (62.1%)	33 (37.9%)		
Place of delivery					16.202	0.001**
Home	7 (38.9%)	11 (61.1%)	31 (62.0%)	19 (38.0%)		
Health facility	185 (45.5%)	222 (54.5%)	254 (67.4%)	123 (32.6%)		
Access to media on EBF					55.583	0.001**
Not at all	40 (49.4%)	41 (50.6%)	87 (60.8%)	56 (39.2%)		
News paper/Fliers	30 (55.6%)	24 (44.4%)	3 (37.5%)	5 (62.5%)		
Radio	66 (45.5%)	79 (54.5%)	111 (68.9%)	50 (31.1%)		
TV	56 (38.6%)	89 (61.4%)	84 (73.0%)	31 (27.0%)		

\*. Significant at the 0.05 level (2-tailed)

\*\* . Significant at the 0.01 level (2-tailed)

The magnitude of exclusive breastfeeding was significantly higher 14 (66.7%) among 11-hour working mother than 9 and 10- hour working mother 22 (57.9%) and 23 (59.0%) respectively. The prevalence of EBF was higher 43 (74.1%) among employed mothers who had an access to breastfeed their child at work place than employed mothers who did not have the access 149 (40.6%) and the difference was significant (p=0.004) (Table 9).

Table 9: Work related factors among employed mothers in Woldiya town, Ethiopia, 2015

Variables	EBF practice		$\chi^2$ -Value	p-value (2-tailed)
	Yes	No		
Working time (hour)			11.930	0.018*
8	120 (40.7%)	175 (59.3%)		
9	22 (57.9%)	16 (42.1%)		
10	23 (59.0%)	16 (41.0%)		
11	14 (66.7%)	7 (33.3%)		
12	13 (41.9%)	18 (58.1%)		
Onsite child care			8.322	0.004**
Yes	43 (74.1%)	15 (25.9%)		
No	149 (40.6%)	218 (59.4%)		

\*. Significant at the 0.05 level (2-tailed)

\*\* . Significant at the 0.01 level (2-tailed)

### **5.1.6.2 Logistic Regression Analysis for Factors associated with Exclusive Breastfeeding**

The result of chi-square analysis showed that variables such as, educational status of mother, age of infant, antenatal care visit, advice on exclusive breastfeeding during antenatal care visit, place of delivery, access to media, working time, and availability of onsite child care were significantly associated with the practice of exclusive breastfeeding [p-value <0.05]. To see the strength of association of previous mentioned factors, Bivariate and multivariate logistic analysis was done for those variables which were significantly associated with the outcome variable in the chi-square test (Table 7-9).

The odds of unemployed mothers practicing EBF to their children were 2 times higher than employed mothers [Adjusted OR: 2.40, 95% C.I: (1.72-3.36)] than those who did not. After adjustment was done in logistic regression, mothers educational status was associated with EBF and the odds of mothers who attended primary education to practice EBF were 2 times higher compared to those mothers who attained secondary and above education level [Adjusted OR: 2.03, 95% C.I: (0.99-4.16)]. Age of infant was assessed whether it had association with the practice of EBF or not and infants who were between age range of 4 to 6 month were 90% less likely to breastfed exclusively than infants who were less than 1 month [Adjusted OR: 0.10, 95% C.I: (0.05-0.22)]. Compared to mothers who did not have any access to media to get information on EBF, the odds of those mothers who have an access to TV were 56% times less to practice EBF [Adjusted OR: 0.45, 95% C.I: (0.26-0.78)] than those who had. Moreover, the odds of mothers who had an access to breastfeed their children at work place were less to practice EBF compared to those mothers who didn't have an access to breastfeed their children at work place [Adjusted OR: 0.18, 95% C.I: (0.08-0.38)] (Table 10).

On the other hand, the odds of those mothers who had antenatal care visit to breastfeed exclusively were less than mothers who had no antenatal care visit [Crude OR: 0.66, 95% C.I: (0.35-1.26)] but the association was lost after adjusting for other variables. Furthermore, place of delivery showed significant association with the practice of EBF ,those mothers who gave birth at health facility were less to practice EBF than those mothers who gave birth at home [Crude OR: 0.79, 95% C.I: (0.68-0.90)] the association was lost after an adjustment was done for the other variables (Table 10).

Table 10: Logistic Regression Analysis for Factors associated with Exclusive Breastfeeding among employed and unemployed mothers in Woldiya town, Ethiopia, 2015

Characteristics	Exclusive breastfeeding practice		COR (95% C.I)	AOR (95% C.I)
	Yes	No		
Employment status				
Employed (RC)	192 (45.2)	233 (54.8)	1.00	1.00
Unemployed	285 (66.7)	142 (33.2)	2.44 (1.84-3.21)*	2.40 (1.72-3.36)*
Educational status of the mother				
Illiterate	88 (77.2)	26 (22.8)	2.14 (1.26-3.62)*	0.02 (0.00-0.26)*
Primary	114 (61.3)	72 (38.7)	3.41 (2.13-5.44)*	2.03 (0.99-4.16)*
Secondary & above(RC)	275 (49.8)	277 (50.2)	1.00	1.00
Age of infant (month)				
0-1 (RC)	108 (79.4)	28 (20.6)	1.00	1.00
2-3	313 (58.1)	226 (41.9)	0.12 (0.07-0.20)*	0.02 (0.01-0.05)*
4-6	56 (31.6)	121 (68.4)	0.33 (0.23-0.48)*	0.10 (0.05-0.22)*
Antenatal care visit				
Yes	459 (56.5)	345 (43.5)	0.66 (0.35-1.26)*	0.33 (0.06-1.87)
No(RC)	18 (46.2)	21 (53.8)	1.00	1.00
Advice on EBF during antenatal care visit				
Yes	393 (55.1)	320 (44.9)	0.81 (0.703-0.944)*	1.46 (0.69-3.12)
No (RC)	84 (60.4)	55 (39.6)	1.00	1.00
Place of delivery				
Home (RC)	38 (55.9)	30 (44.1)	1.00	1.00
Health facility	439 (56.0)	345 (44.0)	0.79 (0.68-0.90)*	0.79 (0.22-2.89)
Access to media on EBF				
Not at all (RC)	127 (56.7)	97 (43.3)	1.00	1.00
News paper/Fliers	33 (53.2)	29 (46.8)	0.88 (0.53-1.45)*	0.48 (0.26-0.92)*
Radio	177 (57.8)	120 (42.2)	0.73 (0.58-0.91)*	0.41 (0.194-0.87)*
TV	140 (53.8)	120 (46.2)	0.86 (0.67-1.10)*	0.45 (0.26-0.78)*
Working time (hour)				
8 (RC)	120 (40.7%)	175 (59.3%)	1.00	1.00
9	22 (57.9%)	16 (42.1%)	0.50 (0.25-0.99)*	0.75 (0.30-1.87)
10	23 (59.0%)	16 (41.0%)	0.46 (0.24-0.94)*	0.71 (0.30-1.68)
11	14 (66.7%)	7 (33.3%)	0.34 (0.13-0.87)*	0.60 (0.17-2.15)
12	13 (41.9%)	18 (58.1%)	0.95 (0.45-2.01)	0.72 (0.64-4.57)
Onsite child care				
Yes	43 (74.1%)	15 (25.9%)	0.42 (0.23-0.79)*	0.18 (0.08-0.38)*
No (RC)	149 (40.6%)	218 (59.4%)	1.00	1.00

\*p-value < 0.05

RC- Reference category

## 5.2 Qualitative Findings

On assessment of knowledge of mothers about exclusive breastfeeding practice, majority of mothers mentioned its benefit for the infant. For example, a 26 year old mother mentioned that *“...breast milk is very important for children’s health because it protects them from disease and it makes children strong and healthy”*.

When mothers were asked about the duration of EBF, except one of the mother who said *“... it is better to start early at least at 4 month of the child with simple foods and liquids but with small amount”*. The rest of mothers agreed on the duration of EBF till six month. A 27 year old mother mentioned that *“...now my baby is close to six month, till now I gave him only my breast milk after few days later he will reach his six month and I will start additional foods to him with continuing breastfeeding”*.

Most respondents mentioned that neonates should start by breast milk immediately after delivery. A 30 year old mother expressed that *“... I gave birth by operation. After I wake up I gave my breast immediately but I didn’t remember the exact time”*.

Some of the respondents stated that having a small size nipple is a reason not to practice EBF. A 28 years old mother said that *“...my nipple is so small therefore I am obligated to give my child ‘Nan’ (powder milk) because I was afraid of that my child will be starved”*.

Another reason which was mentioned by all of employed mothers was their working condition. For example a 26 years old mother said that *“...I was a permanent government employee but after I gave birth I turn down from my job because they gave me only 2 month maternity leave therefore I preferred to care for my baby and breastfeed exclusively till six month”*.

Some of the mother also said that, not producing enough milk as a reason which interrupts the practice of EBF. A 32 years old mother expressed that *“...my breast is empty. My baby sucks the skin of my breast”*.

Mothers were asked whether there is anything which substitutes breast milk or not. Except one of the mother who said *“...cow milk can replace it”*. The rest of mothers mentioned that there is

nothing that replaces breast milk. A 29 years old mother mentioned that “...*never, nothing is good for my child except my breast milk*”.

Having in consideration community beliefs and traditions mothers and grandmothers were asked about EBF related norms. Majority of mothers and grandmothers confirmed that there are some traditional activities practiced by the society especially when infants got sick. A 55 year old grandmother said that “...*I have got this knowledge from my grandparents; they were doing for and for our little brothers and sisters. When we got sick our throat (in its local name Entil siword) they give Lemmon with ash and sometimes ‘Vetch’ (‘Gasho’local name) with water*”. And a 28 years old mother mentioned that “...*sometimes it is good to give boiled water with ‘Rue’ (in its local name Tenadam) because it prevents abdominal discomfort*”.

Some of the respondent mentioned that other people’s enforcement will interrupt the practice of EBF. A 26 years old mother mentioned that “...*after I gave birth when peoples come to my home to visit me, some of my friends told me that I should have to start to feed additional foods at 4 month of my child otherwise as the infant gets matured he starts to differentiate test of different food and later will refuse to eat any food*”.

Majority of employed mothers confirmed that even though they know about that they should have to give breast milk only for six month but they were still interrupting it. A 31 years old mother said that “...*I have no option, I have to work for my family to survive therefore I feed my child ‘Nan’ (powder milk) before I return to my work in order to make him familiar with the new test*”.

## 6. DISCUSSION

This study aimed to determine the magnitude and associated factors of exclusive breastfeeding among employed and unemployed mothers. Despite the benefit of exclusive breastfeeding there are number of barriers which hinders the practice. Maternal employment usually affects child caring time because working mothers are less likely available for breastfeeding and preparing meals for the children than non-working mothers (2, 5). The prevalence of ever breastfeeding was 98.9% while the prevalence of exclusive breastfeeding was 45.2% at 95% CI (40.3-49.6) and 66.7% at 95% CI (62.1-71.4) among employed and unemployed mother respectively. In the multivariate analysis, maternal employment, maternal education infants age, having accesses to media, and having access to breastfeed at work place were the independent predictors of exclusive breastfeeding among the infants aged less than six months.

In this study 98.9% of mothers had ever practiced breastfeeding which is almost similar to the Goba and Ethiopia ever breastfeeding rate 98% and 96% respectively. The prevalence of EBF was 45.2% among employed and 66.7% among unemployed mothers which is comparable with the study done in Goba among employed and unemployed mothers 33% and 73% respectively and in Addis Ababa among employed among unemployed mothers 34.5% and 46.0% respectively (6, 10, 11). The low rate of EBF among employed mother was attributed to less maternity leave after delivery leading to less opportunity to stay at home and practice EBF.

Month specific prevalence of EBF decreases as the age of the infant increases and the finding was in line with EDHS, 2011 70%, 55% and 32% at age below 1 month, 2-3 month and 4-6 month, respectively; Jimma 67.2%, 24.3% and 8.4% and Goba 89%, 83% and 8.4% at age  $\leq 2$  months, 3-4 months and  $>4$  months, respectively (11, 12). On the other hand, the month specific prevalence of EBF was lower among employed mother than unemployed mothers. This difference could be explained by the fact that as an infant gets older the probability of employed mother staying at home will decrease because employed mother return to work and discontinue EBF practice. At the same time as infants gets older mothers believe that breast milk alone will no longer be enough to the infant.

WHO and Ethiopian National Strategy for infant and young child feeding recommends that “infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development and health”, however more than half of employed mother practiced mixed and predominant breastfeeding after 2 month during working time because of their working condition (1,2).

In this study, majority of mother showed positive attitude toward the duration of EBF and is consistent with qualitative findings of this study as well as the study done in Jimma (73.9%) (12).

The main reason for employed mothers not to practice EBF was their working condition, less maternity leave, lack of onsite child care and working time which is comparable with the findings in Ghana and in Singapore. This is supported by the qualitative finding For example a 26 years old mother said that “...I was a permanent government employee but after I gave birth I turn down from my job because they gave me only 2 month maternity leave therefore I preferred to care for my baby and breastfeed exclusively till six month”. And another A 31 years old mother said that “...I have no option, I have to work for my family to survive therefore I feed my child ‘Nan’ (powder milk) before I return to my work in order to make him familiar with the new test”. In contrast in addition to work related factor, producing inadequate milk (23.8%) was mentioned as a reason, which is less than in Singapore (43.1%) (17, 18).

In multivariate logistic regression, maternal education was an independent determinant affecting EBF practice and the finding is in line with the studies done in Bahir Dar, Nigeria and America. This might be explained by the fact that as mothers are educated more, the opportunity for employment will increase and thus the opportunity to stay at home and practice EBF is compromised and also they may think that giving additional foods/liquids as a character of modernity (5, 14, 20).

Age of the infant was another independent determinant factor of EBF. As the age of infant closed to six month EBF is less likely practiced than below 1 month age. This finding is comparable with the finding in Jimma, Goba and Timor-Leste (11, 12, 22).

Mothers who had an access to media like TV were less likely to practice EBF than that mother who didn't have any access at all and is consistent with the EDHS, 2011(7), and could be attributed to the fact that mothers who had an access to such media may have a capacity to purchase milk substitutes and they might be influenced by advertising milk substitutes.

Mothers who had an access to breastfeed their child at work place were found to practice EBF less likely than those who didn't have the access which is different from a study done in Ghana (18). This might be due to the reason that in this study most of the mothers who had an access to breastfeed their child at work place were petty traders and they may have less awareness about EBF than those of educated and other employed mother.

This study showed no association between parity of mothers and antenatal care visit with the practice of exclusive breastfeeding; which is different with the findings in Jimma and Bahir Dar (4, 12).

## **7. STRENGTHS AND LIMITATION OF THE STUDY**

### **7.1 Strength of the Study**

- This study employed both quantitative and qualitative methods of data collection which helps in triangulation of the findings.
- The study used large sample size which increases the validity of the findings.
- There was high response rate

### **7.2 Limitation of the Study**

- The practice of EBF was measured using 24-hour recall method, some of infants who were given other liquids/foods regularly but may not have received such liquids/foods in the last 24 hour before the data was collected might over estimate the prevalence of EBF.
- Socio economic variables were not addressed

## 8. CONCLUSION

- The prevalence of exclusive breastfeeding was higher among unemployed mothers than employed mothers. Furthermore, the month specific prevalence of exclusive breastfeeding progressively declined among employed mothers than unemployed mothers.
- Most of the study participants had favorable attitude toward the duration of exclusive breastfeeding.
- Employment status of mother, educational status, infant's age, access to media and availability of onsite child care were found to be significant determinants of exclusive breastfeeding.
- Even though majority of mothers had positive attitude toward the duration of EBF up to six month but still there are mothers who didn't accept the duration of EBF due to different reasons.
- Based on the qualitative findings, there were some traditional practices which compromise the practice of EBF such as giving *Vetch* ('*Gasho*' local name) with water and boiled water with '*Rue*' (in its local name *Tenadam*). Majority of mothers understood the advantages of breastfeeding though the knowledge on exclusive breastfeeding is limited indicating knowledge gap on exclusive breastfeeding.

## **9. RECOMMENDATION**

### **For policy makers**

- Having in consideration the impact of appropriate infant and young children feeding practice on children's nutritional status and mortality rate, policy makers still need to give more emphasis on promotion of exclusive breastfeeding through creating an enabling environment targeting the extension of postnatal maternity leave up to the first six month.

### **For institutions and organization**

- Since malnutrition has several causes it requires collaborative activities of different sectors and institutions therefore having this in mind in order to improve the nutritional status of children and to decrease inappropriate feeding practice related mortality rates, institutions and organizations should give an emphasis for working mothers by creating supportive working environment like onsite child care for mothers to practice exclusive breastfeeding at work place and empowerment of mothers.

### **For health extension workers**

- Now a day's several health and health related activities are done through health extension workers. EBF is a part of this activity, since health extension workers are closed to the community especially for mothers they should work more on strengthening practice of EBF at household level in order to change mother's attitude on the duration of EBF by giving education and counseling about EBF. Similarly it is important to give an attention on changing grandmother's behavior toward the practice of EBF in order to avoid those traditional practices indicated in the qualitative part of the finding because grandmother's had crucial role on it.

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**ANNEX – I**  
**ENGLISH VERSION QUESTIONNAIRE**  
**ADDIS ABABA UNIVERSITY**  
**SCHOOL OF PUBLIC HEALTH**

**Information sheet**

Hello, my name is ----- I am working with Frehiwot Worku, who is completing her master's Degree in Health Service Management in school of public health. This study is, therefore, part of the requirements for the fulfillment of the MPH programme she is enrolled in.

The study focuses on the identification of the factors that are responsible for mothers to exercise Exclusive Breastfeeding practice among employed and unemployed mothers. Mothers are selected from the households, based on lottery method. Hence, you are now part of the selected mothers for interview.

Hence, I hereby assure you that the responses will be kept strictly confidential for all matters and it will only be used for the purpose of the study mentioned above. Your name will not be mentioned to protect your confidentiality. You have a right to answer or not for questions which might be inconvenient for you. The study may require ----- Minuit. So please give me only some minutes to complete my questions. If you have any questions about the study, you may raise. For detail information you can contact the investigator through cell phone 0913813074 and e-mail [frehiwotworku5@gmail.com](mailto:frehiwotworku5@gmail.com).

And I thank you in advance for your cooperation to the study.

## **Consent form for study participants**

I have been informed about the purpose and use of this particular research project. The information I am going to give will be used only for the purpose of this study and my identity as well as the information I will be providing will be kept confidential. After all these I understood and:

1. I agree to participate in this research voluntarily -----
2. I didn't agree to participate in this research -----

Interviewer name -----signature.....

Result of interview questionnaire – encircle from the given option

1. Completed
2. Refused
3. Partially completed
4. Other specify

Date of visit [\_\_\_\_|\_\_\_\_|\_\_\_\_]

CODE -----

DD |MM |YYYY

Site in which the interview is being conducted-----

Number	Background of the Mother and history of health care		
101.	How old are you	Age in years.....	
102.	Are you able to read or write a simple sentence?	Yes.....1 No.....2	
103.	Did you ever attend formal school?	Yes.....1 No.....2	→Skip to 106
104.	If yes, what is the highest grade you completed?	Grade _____	
105.	Are you employed?	Yes.....1 No.....2	
106.	What is your current marital status?	Single 1 Married 2 Divorced/Separated 3 Widowed 4	
107.	How many children have you born alive	No of children born alive.....	
108.	How many children do you have now alive?	Number of children.....	
109.	What is the age range between your youngest child and his/her bigger brother/sister?	Age difference in number .....	
110.	When you were pregnant, did you go to a health facility for antenatal care?	Yes.....1 No.....2	

111.	Where did you give birth your youngest baby?	At health facility 1 At home 2 Other specify .....3	
<b>Background of the Child</b>			
112.	Sex of Child	Boy.....1 Girl..... 2	
113.	What is the age of your child?	[__ __] MONTHS	
<b>Basic questions about Exclusive breastfeeding</b>			
114.	Which sources do you have access to hear/read about Exclusive Breastfeeding practice?	Not at all.....1 News paper/Magazines/Fliers.....2 Radio.....3 TV.....4	
115.	Did you receive any advice about EBF during your antenatal care or any where?	Yes.....1 No.....2	
116.	What did you give (feed) your baby within the first one hour after delivery?  READ OUT LIST (Circle 1 if mentioned 2 if not mentioned) “More than one answer is possible”	Yes no The fluid that came from the breast 1 2 Butter 1 2 Water & Sugar 1 2 Nothing fed 1 2 Other (specify) ..... 1 2	
117.	Are you still breastfeeding the child?	Yes.....1	

		No.....2	→ Skip to 119
118.	Did the infant drink/eat anything with a bottle/spoon yesterday?	Yes .....1 No .....	
119.	Did you think that breastfeeding only is enough for a child of age 0-6 months?	Yes.....1 No.....2	
120.	At what age do you think breast milk alone would no longer be enough to feed infant?	Two months 1 Three months 2 Four months 3 Five months 4 Six months 5 Other specify-----6	
121.	If you think that breast milk alone will not be enough/if you are not breast feed for the infant during the first six month what kind of food or liquid did you give?  “More than one answer is possible”	Milk (other than breast milk ) 1 Plain water 2 Sugar or glucose water 3 Sugar-salt-water solution 4 Fruit juice 5 Infant formula 6 Tea/infusions 7 Honey 8 Fresh butter 9 Other specify .....10	
122.	What conditions did affect you not to practice Exclusive breastfeed?	Working condition 1 Fear of producing not enough milk 2	

	“More than one answer is possible”	Due to maternity leave 3 Lack of onsite child care 4 Time of work 5 age of the child 6 your marital status 7 Other specify .....8																						
123.	How many times did you breastfed in 24 hours?	.....																						
124.	When do you usually breast-feed the child?  (Read choice Circle 1 if applied 2 if not applied )	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;"></th> <th style="width: 10%; text-align: center;">Yes</th> <th style="width: 20%; text-align: center;">no</th> </tr> </thead> <tbody> <tr> <td>When the child wants</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>When the child cries</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>On schedule</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>On convenience</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>When breast engorged</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Other (specify).....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </tbody> </table>		Yes	no	When the child wants	1	2	When the child cries	1	2	On schedule	1	2	On convenience	1	2	When breast engorged	1	2	Other (specify).....	1	2	
	Yes	no																						
When the child wants	1	2																						
When the child cries	1	2																						
On schedule	1	2																						
On convenience	1	2																						
When breast engorged	1	2																						
Other (specify).....	1	2																						
<b>For employed mothers only</b>																								
125.	What type of work did you do?	Petty trader 1 Permanent employee 2 Daily laborer 3 Other (specify)..... 4																						
126.	How long did you stay at work?	.....																						

127.	Is there onsite child care at your work place?	Yes.....1  No.....2	
128.	What did the infant feed when you are at work place?	Expressed breast milk 1 Infant formula 2 Other specify .....3	

THANK YOU FOR YOUR GENIUNE RESPONSE TO MY QUESTIONS!

## **ANNEX-II**

### **Guide for in-depth interview to assess the individual knowledge and opinion of mothers on the practice of EBF**

#### **The interviewer should follow the following things**

1. Greeting
2. Inform the target of the study and the confidentiality of their response
3. Inform them about tape recorder will be used and the information will be used for the purpose of this study only
4. Kindly ask the willingness of mothers

#### **Issues to be discussed during interview**

1. In your opinion what is the benefit of exclusive breastfeeding?
2. What time is it appropriate to initiate breastfeeding after safe delivery and why?
3. Do you think that breast milk only is enough for the child and at what age it is not longer enough and what is your reason?
4. There are a number of mother who did not practice exclusive breastfeeding for the first six month, so what do you think the reason behind?
5. Some people say that there is a substitute for breast milk, did you agree with this and would you tell us your reason?
6. In your society is there any tradition or norm which doesn't allow the practice of exclusive breastfeeding for the first six month?

**Issues to be discussed during interview (for employed mothers only)**

1. As you told me, you are employed so, for how long did you practice/ plan to exclusively breastfeed your child?
2. Would you tell me the reason behind why you plan or why you haven't practice breast milk only for that specific age?
3. In your opinion what is the best option for employed mother to practice exclusive breastfeeding for the first six month?

ANNEX-III

AMHARIC VERSION QUESTIONNAIRE

አዲስ አበባ ዩኒቨርሲቲ

የህብረተሰብ ጤና ትምህርት ቤት

መጠይቅ

የጥናቱ አላማ መግለጫ

ጤና ይስጥልኝ ስሜ ----- ይባላል። እኔ ከፍሬህይወት ወርቁ ጋር እየሰራሁ ሲሆን ይህ ጥናት በአዲስ አበባ ዩኒቨርሲቲ በድህረ ምረቃ ፕሮግራም የሁለተኛ ዲግሪዎን በህብረተሰብ ጤና ሳይንስ መስክ ለመመረቅ ከሚያስፈልጎት መስፈርቶች አንዱና ዋናው ነው።

የጥናቱ ዋና አላማ ዕድሜያቸው በመጀመሪያዎቹ ስድስት ወራት ውስጥ ላሉ ህፃናት የእናት ጡት ወተት ማጥባትን በተመለከተ ከእናቶች የስራ ሁኔታና ከሌሎች ማህበራዊ ሁኔታዎች ጋር ተያያዘው ያሉ ምክንያቶችን ለይቶ ለማወቅ እንዲሁም ችግሮች በተመለከተ መፍትሄ ለማግኘት የሚካሄድ ጥናት ነው።

በዚህ መረጃ አሰባስብ ላይ የሚሳተፉ እናቶች ተቀጣሪ ሰራተኛ እናቶችና በቤታቸው ውስጥ የሚውሉ እናቶች ሲሆኑ እርሶም የመረጃ አሰባስብ ዘዴን በመጠቀም መስፈርቱን አሟልተው ከተመረጡ እናቶች አንዷ ነዎት። በዚህ ጥናት የሚገኘው መረጃ ለጥናቱ አላማ ብቻ የሚውል ይሆናል። ከእርሶ የሚገኘውን መረጃ ሚስጥራዊነቱን መጠበቅ ዋናው ስራችን ነው። የእርሶ ስም በዚህ መጠይቅ ውስጥ አይጠየቅም። በተጨማሪም የሚጠየቁትን ጥያቄ ሙሉ በሙሉ መተው ወይም በከፊል መመለስ ወይም በፈለጉ ጊዜ ማቋረጥ መብትዎ ነው። መጠይቁ 30 ደቂቃ ይወስዳል ። ለተጨማሪ መረጃ በስልክ ቁጥር 0913 81 30 74 ወይም በኢሜል አድራሻ frehiwotworku5@gmail.com መጠቀም ይችላሉ።

በፍቃድኝነት ስለሚያደርጉት አስተዋኦ በቅድሚያ እናመሰግናለን

**ለጥናቱ ተሳተፊዎች የስምምነት ቅፅ**

የጥናቱ አላማ ተረድቶባለሁ በመሆኑም ማንኛውም የምስጢው መረጃ ለዚህ ጥናት ብቻ እንደሚውል እንዲሁም ማንነቴ የማይገለጽ መሆኑን ስለተረዳው በዚህ ጥናት ላይ ለመሳተፍ፡-

ፍቃዳኛ ነኝ (የ X ምልክት ያድርጉ) -----

ፍቃዳኛ አይደለሁም (የ X ምልክት ያድርጉ) -----

የጠያቂዋ ስም -----

የጠያቂዋ ፊርማ-----

ውጤት መለያ

1. የተጠናቀቀ
2. ለመጠይቅ አልተስማሙም
3. በከፊል የተሟላ
4. ሌላ/ይገለፅ/

የጉብኝት ቀን [ ] [ ] [ ] [ ]  
 - ቀን ወር አ.ም

መለያ ቁጥር -----

ቀበሌ-----

እናቶችን በተመለከተ መሰረታዊና እና የጤና አገልግሎት የተመለከቱ ጥያቄዎች			
ተ.ቁ	ጥያቄ	መልስ መስጫ	እለፍ ወደ
101	እድሜዎ ስንት ነው?	-----አመት	
102	መጻፍና ማንበብ ይችላሉ?	አዎ-----1 አልችልም-----2	
103	መደበኛ ትምህርት ተከታትለዎል?	አዎ-----1 አልተከታተልኩም-----2	→ ጥያቄ ቁጥር 106
104	ያጠናቀቁት ከፍተኛ የትምህርት ደረጃ ስንት ነው?	የትምህርት ደረጃ-----	
105	ተቀጣሪ ሰራተኛ ነዎት?	አዎ-----1 አይደለሁም-----2	
106	የጋብቻ ሁኔታዎን ቢነግሩን?	ያገባች-----1 ያላገባች-----2 አግብታ የፈታች-----3 በሞት የተለየ-----4 ሌላ /ይገለፅ/-----5	
107	ምን ያህል ልጆችን በህይወት ወልደዋል?	በህይወት የተወለዱ ልጆች ብዛት-----	
108	አሁንስ ምን ያህል ልጆች በህይወት አሉ?	በህይወት ያሉ ልጆች ብዛት-----	
109	በትንሹ ልጅዎና በእሱ/በእሷ ታለቅ መካከል ምን ያህል	የእድሜ ልዩነት በቁጥር-----	

	የእድሜ ልዩነት አለ?		
110	በእርግዝናዎ ወቅት ለቅድመ ወሊድ ክትትል የጤና ተቋም ሂደታዎ?	አዎ-----1 አልሂደኩም----- 2	
111	የመጨረሻ ልጅዎን የወለዱት የት ነው ?	ጤና ተቋም-----1 መኖሪያ ቤት ውስጥ-----2 ሌላ /ይገለጽ/-----3	
112	የህፃኑን የታ ቢነግሩን?	ወንድ-----1 ሴት-----2	
113	የህፃኑ እድሜ ስንት ነው?	-----ወር	
<b>የእናት ጡት ወተት ብቻ በመጀመሪያዎቹ ስድስት ወራት ለህፃኑ ከመስጠት ጋር የተያያዙ መሰረታዊ ጥያቄዎች</b>			
114	በየትኛው የመገናኛ ብዙሀን ዘርፍ ለመጀመሪያዎቹ 6 ወራት የእናት ጡት ማጥባትን በተመለከተ መረጃ ሊያገኙ ይችላሉ?	አላገኘሁም-----1 ከ ጋዜጣ/በራሪ ጽሁፎች-----2 ራድዮ-----3 ቲቪ-----4	
115	በቅድመ ወሊድ ክትትል ወቅትም ሆነ በሌላ አጋጣሚ በመጀመሪያዎቹ ስድስት ወራት የእናት ጡት ማጥባትን በተመለከተ የምክር አግልግሎት አግኝተው ያውቃሉ?	አዎ-----1 አላውቅም-----2	
116	ልጅዎን በወለዱ በመጀመሪያዎቹ አንድ ሰዓታት ውስጥ ምን ነበር የመገቡት? (አማራጮችን ያንቡብና የሰጡት ከሆነ 1 ቁጥርን ያልሰጡት ከሆነ 2 ቁጥርን ይምረጡ) (ከአንድ በላይ መልስ መምረጥ ይችላሉ)	የተሠጠ ያልተሠጠ የመጀመሪያው የጡት ፈሳሽ 1 2 ቅቤ 1 2 ውሃና ስኳር 1 2 ምንም አልተሰጠም 1 2 ሌላ /ይገለጽ/-----	
		አዎ-----1	

117	በአሁኑ ሰዓት ጡት በማጥባት ላይ ነዎት ?	አይደለም-----2	
118	ትንናትና ከጧት እስከ ማታ ባለው ጊዜ ጡጦ ወይም ማንኪያ በመጠቀም ፈሳሽ ነገር /ምግብ ለህፃኑ መግባውታል?	አዎ-----1 አልመገብኩም-----2	
119	ለህፃኑ እስከ ስድስት ወር የእናት ጡት ወተት ብቻ በቂ ነው ብለው ያምናሉ?	አዎ-----1 አላምንም-----2	ጥያቄ ቁጥር 122
120	የእናት ጡት ብቻ በቂ አይደለም ካሉ ህፃኑ ስንት ወሩ ላይ ተጨማሪ ምግብ መጀመር አለበት ይላሉ?	2 ወር-----1 3 ወር-----2 4 ወር-----3 5 ወር-----4 6 ወር-----5 ሌላ /ይገለጽ/-----6	
121	የእናት ጡት ወተት ብቻ በቂ አይደለም ካሉ ወይም ጡት እያጠቡ ካልሆነ ምን አይነት ተጨማሪ ምግብ /ፈሳሽ/ እየመገቡት ነው? ( ከአንድ በላይ መልስ መመለስ ይችላሉ)	ወተት(ከጡት ወተት ሌላ)-----1 ውሃ-----2 ስኳርና ውሃ-----3 ጨው ውሃና ስኳር ድብልቅ-----4 የፍራፍሬ ጭማቂ-----5 የታሸጉ የህፃናት ምግቦች-----6 ለጋ ቅቤ-----7 ሻይ-----8 ማር-----9 ሌላ ይገለጽ-----10	
122	ለመጀመሪያዎቹ ስድስት ወራት ለልጅዎ ጡትዎን ብቻ እንዳይመገቡ የሚያደርጎዎት ምክንያት ካለ ቢገልጹልን? ( ከአንድ በላይ መልስ መስጠት ይችላሉ)	የስራ ሁኔታ-----1 ጡቴ በቂ ወተት አያመነጭም-----2 የድረህረ ወሊድ እረፍት ማነስ-----3 በስራ ቦታ ልጄን ለማጥባት የሚያስችል ሁኔታ ያለመቻቸት-----4 ስራ ሰዓት አመች ስላልሆነ-----5 የሕፃኑ እድሜ-----6	

		የጋብቻ ሁኔታ-----7 ሌላ /ይገለጽ/-----8	
123	ትናንት ሌሊቱንና ቀኑን ጨምሮ ለምን ያህል ጊዜ ልጆቻችን ጠጥተው አጥብተዋል ?	-----ጊዜ	
124	ቡዙ ጊዜ ህጻኑን የሚያጠብቅ እንዴት ነው አማራጮቹ ን ያንብቡ ከዚያም ተግባራዊ የሚያርጉትን 1 ቁጥር ይመረጡ የማያደርጉትን ደግሞ 2 ይመረጡ?	የሚተገበር የማይገበር ህፃኑ መጥባት ሲፈልግ 1 2 ህፃኑ ሲያለቅስ 1 2 በእቅድ 1 2 እርሷም ሲመቸዎት 1 2 ጠጥቶ ሲያግት 1 2 ሌላ/ይገለጽ/-----	
<b>ለተቀጣሪ ሰራተኛ እናቶች ብቻ የሚጠየቅ</b>			
125	የሰራዊት አይነት ?	ነጋዴ-----1 መደኛ ተቀጣሪ ሰራተኛ-----2 የቀን ሰራተኛ-----3 ሌላ /ይገለጽ/-----4	
126	በቀን ለምን ያህል ሰዓት ስራ ቦታ ያሳልፋሉ ?	----- ሰዓት	
127	በሰራዊት ቦታ ልጆቻችን ለማጥባት የሚያስችሎ ሁኔታ አለ?	አዎ-----1 የለም-----2	
128	ህፃኑ እርሶም ስራ ቦታ ሲውሉ ምን እየተመገበ ይቆያል?	የታለበ የጠጥ ወተት-----1 የታሸጉ የሕፃናት ምግቦች-----2 ሌላ /ይገለጽ/-----3	

**በጣም እናመሰግናለን!!**

**ANNEX- IV**

**በመጀመሪያዎቹ ስድስት ወራት ህፃናትን የእናት ጡት ወተት ብቻ ስለማጥባት እናቶች ያላቸውን ግንዛቤና እውቀት ለመለካት የሚደረግ ጠለቅ ያለ መጠይቅ መመሪያ የቃለ መጠይቁ መመሪያዎች**

1. መጀመሪያ ሰላምታ ማቅረብ
2. የጥናቱን አላማ ማሳወቅ
3. ከተጠያቂዋ የሚወስደው መረጃ ለዚህ ጥናት አላማ ብቻ የሚውል ስለመሆኑና ሚስጥራዊዎቹ የሚጠበቅ መሆኑን መግለጽ
4. መቅረጻ ድምፅ እንደሚጠቀሙ መንገር
5. በመጨረሻም ፍቃደኛ መሆናቸውን ማረጋገጥ

**በመጠይቁ ወቅት ሊነሱ የሚገባቸው ዋና ዋና ነጥቦች**

1. በእርሶ አመለካከት በመጀመሪያዎቹ ስድስት ወራት የእናት ጡት ብቻ መመገብ ያለውን ጥቅም ቢያብራሩልን?
2. አንድ እናት በሰላም ከወለደች በሁዋላ በስንት ሰዓት ውስጥ ጡት ማጥባት ብትጀምር ጥሩ ይሆናል ይላሉ? ምክንያቱምን ቢገልጹልን?
3. ለህፃኑ የእናት ጡት ብቻ መመገብ በቂ ነው ይላሉ? በቂ የማይሆንበት እድሜስ መቼ ነው ብለው ያስባሉ? ምክንያቱምንም አያያዝው ቢነግሩን?
4. አንዳንድ እናቶች ጡት አያጠቡም። በምን ምክንያት ሊሆን ይችላል ብለው ያስባሉ?
5. አንዳንድ ሰዎች የእናት ጡት የሚተካ ነገር አለ ይላሉ። እርሶ በዚህ ዙሪያ ምን ይላሉ?
6. በእርሶ አካባቢ ሆነ ማህበረሰብ ውስጥ አንድ እናት በመጀመሪያዎቹ ስድስት ወራት ውስጥ የጡት ወተት ብቻ እንዳትመገብ የሚያደርጉዋት ሆኑታዎችን ቢገልጹልን?

**ለተቀጣሪ ሰራተኛ እናቶች በመጠይቁ ወቅት ሊነሱ የሚገባቸው ነጥቦች**

1. እንደነገሩኝ እርሶ ተቀጣሪ ሰራተኛነዎት ስለዚህ ለምን ያህል ጊዜ የጡትዎን ወተት ብቻ ለመመገብ አስበዋል /መግበዋል?
2. ለጠቀሱት እድሜ ያህል ብቻ ልጆዎን ሊያጠቡ ያቀዱት ወይም ያጠቡት ለምን እንደሆነ ቢገልጹልን?
3. በእርሶ አመለካከት ተቀጣሪ ሰራተኛ እናቶች ለመጀመሪያዎቹ ስድስት ወራት የጡታቸውን ወተት ብቻ እንዲመገቡ ምን መፍትሄ ይሆናል ብለው ያስባሉ?

**በጣም እናመሰግናለን!!**