

Assessment of the Influence of Mother's Occupation and Education on Breastfeeding and Weaning Practice of Children in Public Hospital, Harari Regional State Ethiopia

Maleda Tefera Iffa¹ and Masresha Leta Serbesa^{2*}

¹Department of Nursing and Midwifery, Haramaya University, Harar, Ethiopia

²Department of Midwifery, Harar Health Science College, Harar, Ethiopia

Abstract

Background: During infancy and early childhood adequate nutrition is essential to ensure the growth, health, and development of children to their full potential. It has been recognized worldwide that breastfeeding is beneficial for both the mother and child, as breast milk is considered the best source of nutrition for an infant. Factors include the mother's social class, occupation, educational attainment, cultural factors can influence the duration of breastfeeding (exclusive or partial).

Objective: The objective of this study was to assess the influence of mother's occupation and education on breastfeeding and weaning practice of children in public Hospitals

Methodology: Hospital based cross sectional study design combining both qualitative and quantitative methods were used among mothers whose age is 15-49 years, while their infants' ages range between 0 and 31 months were visiting HiwotFana and Jugal Hospital for immunization and under 5 years outpatient clinic seeking health service at Harar from February to May 2014 and the total of 425 study participant were selected and interviewed systematically every 3 mothers interval.

Result: Predictor variables identified in the bi variant analysis were maternal education especially secondary education, occupation like Daily labourer, frequency of breastfeeding, the presence of job in last 12 months prior to study were significant. In multiple regressions maternal education and occupation remain significant, mothers who were secondary education were 4 times more likely to exclusively breastfeed their child for 6 months and start complimentary diet at this age than mother who had diploma and above (AOR=4.364, 95% CL (1.369-13.907)) and regarding occupation, Mothers who had no job were 13 times more likely to EBF their child and initiate complementary diet at proper age than who had job, (AOR=13.219, 95% CL (3.200-34.602)).

Conclusion: Prevalence of EBF was much lower than the WHO recommendation, and Ethiopian national HSDP target. Mother education were significant, mothers who had secondary education 3times more likely to EBF and initiate additional die at appropriate age, regarding mother's occupation un employer mother 13 times more likely EBF and started complimentary diet at age of 6 month.

Keywords: Weaning; Complementary feeding

Abbreviations

AAU: Addis Ababa University; BSc: Bachelor of Science; CSA: Central Statistical Agency of Ethiopia; ETB: Ethiopian Birr; EBF: Exclusive Breastfeeding; Hr: Hour; EDHS: Ethiopia Demographic and Health Survey; FMOH: Federal Ministry of Health; FGDs: Focus Group Discussion; HSDP: Health Sector Development Program; Min: Minute; MCH; Maternal and Child Health; MSc: Master of Science; NGO: Non-Governmental Organization; PI: Principal Investigator; OPD: Out-patient Door; ROM: Recurrent Otitis Media; REC: Research Ethics.

Introduction

The World Health Organization (WHO) recommends exclusive breastfeeding during the first 6 months of life for the optimal growth and development of infant and, followed by breastfeeding along with complementary foods for up to two years of age or beyond [1].

Exclusive breastfeeding can be defined as a practice whereby the infants receive only breast milk and not even water, other liquids, tea, herbal preparations, or food during the first six months of life, with the exception of vitamins, mineral supplements, or medicines [2].

During infancy and early childhood adequate nutrition is essential to ensure the growth, health, and development of children to their full potential. It has been recognized worldwide that breastfeeding is

beneficial for both the mother and child, as breast milk is considered the best source of nutrition for an infant [3].

Breastfeeding is associated with significant health benefits for children. These benefits are wide ranging, including lower incidence of asthma, allergy and respiratory illnesses, fewer infections of the gastrointestinal tract, middle ear and urinary tract with consequently lower rates of hospitalizations [4]. A study done at US (2006) was the first to document decreased risk for respiratory tract infection, particularly recurrent otitis media (ROM), in children who are fully breastfed for 6 vs. 4 months. The findings add to growing evidence that breastfeeding benefits are dose and duration responsive and support

***Corresponding author:** : Masresha Leta, Department of Midwifery, Harar Health Science College, Harar, Ethiopia, Tel: +2510911947787; E-mail: masreshaleta3@gmail.com

Received November 05, 2018; **Accepted** December 04, 2018; **Published** December 11, 2018

Citation: Iffa MT, Serbesa ML (2018) Assessment of the Influence of Mother's Occupation and Education on Breastfeeding and Weaning Practice of Children in Public Hospital, Harari Regional State Ethiopia. Fam Med Med Sci Res 7: 234. doi:10.4172/2327-4972.1000234

Copyright: © 2018 Iffa MT, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

current recommendations that infants receive only breast milk during the first 6 months of life [5].

After six months, infants require complementary foods to meet their nutritional needs. This is when weaning begins. Weaning is the gradual process of introducing complementary foods to an infant's diet while continuing to breastfeed. A planned wean occurs when the mother decides to stop exclusive breastfeeding without receiving infant's cues about readiness for this change. Reasons commonly given for a planned wean include: not having enough milk or concerns about the baby's growth; painful feedings or mastitis; returning to work; a new pregnancy [6].

Generally breast feeding and weaning practice is essential for in preventing communicable as well as non-communicable disease such as, asthma, allergy and respiratory illnesses, infections of the gastrointestinal tract, middle ear and urinary tract and also it is important for children's psychosocial and cognitive development [4,5].

Children who are not breastfed properly have repeated infections, grow less and are more likely to die by the age of one month than children who receive at least some breast milk [7]. However, the infant feeding and weaning practice are influenced to a great extent by the socio-economic status, education, occupation, religion, knowledge, attitude and the beliefs of the mother about child care [8].

Globally, 60% of the infant and young child deaths occur due to inappropriate infant feeding practices and infectious disease where two-thirds of these deaths are attributable to sub-optimal breastfeeding practices [9]. Poor nutrition is not always only the result of lack of food, but it can be due to lack of knowledge about optimal feeding practices, lack of time and provision of poor quality of food [7,8].

In many countries insufficient breastfeeding and complementary feeding practices are widespread. Complementary foods are often introduced before or after the recommended age of 6 months and are often nutritionally inadequate and unsafe [10,11]. Going by population studies in developing countries, it has been shown that the greatest risk of nutritional deficiency and growth retardation occurs in children between 3 and 15 months of age, a period noted for suboptimal breastfeeding and inadequate complementary feeding practices [12].

Maternal employment usually results in a loss of child care time; presumably the mother is therefore less available for breastfeeding, making frequent meals, etc. However, it is possible those non-working mothers also spend relatively little time in child care, or that important care giving behaviours continue to be performed if there is adequate substitute care [13].

When mothers worked away from home maternal care decrease significantly which include breastfeeding and frequency of meal to children, in contrast housewives have unlimited time available to feed their infants [9]. Conversely, studies in the Philippines and India have shown that when mothers spend more time caring for their children the nutritional status of their children is better [14]. A heavy maternal workload and subsequent minimal time for childcare are associated with poor feeding practices and poor child nutrition. In Tanzania and Iran, for example, a heavy maternal workload and longer labour time in the field are associated with lower energy intake and less frequent feeding of children [15]. According Marie report, almost 70% of employed mothers of the US with children younger than three years of age work full-time. One-third of these women return to working within three months of delivery, and two-thirds return within six months. However, working outside the home is related to a decreased duration

of breastfeeding, and intention to work full-time negatively affects that duration even more [16].

Therefore, the rationale of conducting this study was that poor breastfeeding and weaning practice a major health problem among children in developing countries as well as in developed countries which lead severe malnutrition and over nutrition respectively. The effect mother's occupation and education have major effect on it. Despite its significance on breastfeeding and weaning practice is not focused wall especially in Ethiopia. So the study was identifies the influence of mothers' occupation and education on breast feeding as well as weaning practice for children and give direction for health professional in maternal and child care and it helps to generate baseline information for further investigation on similar studies at local and national level, in addition, it can use in developing health education for the source population (communities) based on the finding and the result of the study might act as an input information for the department of paediatric in identifying the magnitude of the problem.

Materials and Methods

Hospital based cross sectional study design complimentary with qualitative methods was employed from February to May 2014 at randomly selected hospitals, among 425 systematically selected mothers whose age is (15-49) years, while their infants' ages range between 0 and 31 months were visiting HiwotFana and Jugal Hospital for immunization and under 5 years outpatient clinic seeking health service at Harar town. The study was conducted at Hiwot fana and jugal Hospitals which was found in Harari region(Harar town), located in Eastern Ethiopia, and 525 km east of Addis Ababa. HiwotFanna hospital is a referral and teaching hospital, with 210 beds which is managed by Haremaya University. The hospital has 129 nursing staffs and 31 staff physicians. Jugal hospital is also regional hospital which is managed by the Federal Ministry of Health (FMOH) with 105 beds. It has 120 nursing staffs and 12staff physicians. These two public hospitals serve for the people living in the whole urban and rural kebeles related to maternal and child health.

Sample size was determined by using a single proportion sample size calculation formula with a source of population size greater than 10,000. Assuming the prevalence of influence of mother's occupation and education on breastfeeding and weaning practice of children to be 50%, and, margin of Error 5% and 95% confidence interval and adding non-responses rate of 10%. Since our source population was less than 10,000, finite population correction was made. Accordingly, the sample size of 425 was obtained. So data were collected from every

Variable	Mean (SD)	Median(minimum-maximum)
p1 sEMG fluid	17.3 (6.6)	17.2 (8.3-38.2)
peak sEMG fluid	45.0 (7.4)	50.0 (24.4-50.0)
p2 sEMG fluid	17.3 (7.3)	16.6 (6.7-41.8)
Dt sEMG fluid	1.0 (1.6)	0.8 (0.0-11.4)
p1 sEMG soft food	17.6 (7.8)	15.3 (8.8-41.6)
peak sEMG soft food	46.5 (6.5)	50.0 (25.1-50.0)
p2 sEMG_ soft food	15.9 (8.3)	13.9 (4.2-42.1)
dt sEMG_ soft food	0.8 (0.4)	0.7 (0.1-1.8)
p1 solid	17.5 (7.5)	15.7 (5.9-36.4)
peak solid	45.7 (8.0)	50.0 (12.0-50.0)
p2 solid	15.7 (6.6)	14.4 (6.1-35.1)
Dt solid	0.8 (0.3)	0.8 (0.0-1.6)

Table 1: sEMG description statistics for different foods in 92 patients. p1: the start point of the muscle contraction, Peak-the maximum of muscle contraction; p2: the finish point of muscle contraction, Dt-total time of muscle contraction.

three mothers after randomly selecting the first mother from 1 to 3 until calculated sample size reached.

Data was collected by interviewing clients using structured questioner which were prepared in English that was translated to Amharic by linguistic professionals. That was translated back to English for its consistency and to make it simple during administration. Matching was made on the exact fitness of the two languages. The data was collected with a face-to-face interview by using open and close ended equations as well Qualitative data was consists of focus group discussions ,that was held with mother at post natal, immunization, under five clinic in order to identify challenges in breast feeding and weaning practice in relation to mother's job and education. Discussants were recruited on the basis of homogeneity, convenience, and willingness to participate in the study in which each group was hade 8 members. All discussions were conducted in Amharic for maximum of one hr, by a team of three including a moderator, note taker, and tape recorder after the discussant got health service. Before the FGDs, the moderator was introduced all participants and were explained the general purpose of the study and topic of the discussions. The discussants were informed about the tape-recorder and permission to be recorded was requested. Note was taken through writing and each discussion were tape recorded in order to back up the written note. Qualitative data collection was continued till information gathered was saturated so that new ideas were no longer emerge.

The quality of data was assured by training of data collectors and supervisors, properly designing and pre-testing of the questionnaire. Three day training was given for the data collectors and supervisors before the actual work began about the data collection procedures, proper categorization and coding of the questionnaire. A pretest was conducted in five percent of the total sample size on population outside of the study area. The pretest as well as the study was done by trained data collectors and any ambiguous and unclear questions were be modified after the pretest was conducted. After checking of questioner completeness with pretest, the actual data collection was conducted by using structure questionnaire. The qualitative data was be taped and fully transcribed, summary notes and the transcriptions were be used for the final write up and interpretation of the qualitative data. 3 data collectors who were diploma nurses and 2 supervisors of BSc nurse holder and experienced in previous data collection and supervision activities were involved.

After data collection, each questionnaire was checked for completeness, then coded and entered into Epi-info version 3.5.1 and exported to SPSS for Windows version 20 for cleaning, editing, and analysis. Binary and multiple logistic regressions were used to observe the association (p -value<0.2 for binary and p -value <0.05 for multiple) between independent variables and dependent variable. Odds ratio with 95% CI was calculated using multiple logistic regression models to control confounders and identify factors that influence of mother's occupation and education on breastfeeding and weaning practice of children. The results was presented in the form of tables, figures and text using frequencies and summary statistics such as mean, mode, standard deviation and percentage to describe the study population in relation to relevant variables.

In order to confirm the ethical and legal standard of the investigator, approval was obtained from the ethical review board of Addis Ababa University College of Health and Allied Science. The survey was commence after written consent obtained from Hiwot fana and Jugal hospitals.

Results

Socio demographic and economic characteristics

Four hundred twenty five mother-infant pairs sampled, all respondent were included in the analysis making the response rate 100%. The mean (\pm SD) age of mothers was 28 (\pm 4.4) years. Fifty nine percent (254) of mothers were in the age group of years 20-29. Forty eight percent of respondents were Orthodox by religion. The largest ethnic group was Oromo 163 (38.4%) followed by Amhara 129 (34.4%). Concerning the educational status of mothers, 312 (73.2%) had attended formal school of which 95 (22.4%) completed primary school (grade 1-8). Twenty of the study subjects were diploma and above. Majority of the mothers were married 342 (80.5%). Regarding occupation 33.5%of mothers were unemployed and 264 (62%) mothers were employer of which 99 (23.3%) were government, 23 (5.4) were non-government the rest 33.3% were merchant, daily laborer and farmer. Of the total participants, 38.6% earns an average family monthly income of less than 1000.00 ETB. Television, radio and telephone were available 64.7% of participants (Table 1).

Child health service, feeding and other related characteristic

Study subjects were asked whether they were delivered their index child at health institutions or not, 381 (89.6%) were instructional delivery and the rest 10.4% were home delivery .Ninety nine percent of mothers had breastfeed at least once in their life time among which, 14 (3.3%) of them squeezed out and discarded the colostrum and 80 (18.8%) of mothers gave pre-lacteal food to their infants. Among mothers who had ever breastfed, 185 (43.4%) of them initiated breastfeeding immediately after delivery and 12 (2.8%), initiated breastfeeding within the period of 7 hour and above. More than one third of mothers reported that they breastfeed their children 6 or more times in the previous 24 hours and about 40.8% of mothers were EBF up to 6 months and at the same time introduced complimentary diet at this age, the rest 199 (49.5%) were not EBF, from those who were not EBF 40% of them introduced complimentary food age of <4 month and the rest 9.7% were at >6 month. Regarding to the sex of the child, fifty two percent were males. 36% and 36.9% of children were developing fever and diarrhoea last two week of data collection respectively; almost all (94.8%and100%) were seeking medical advice from public and private health institutions. Regarding vaccination, 99.3% children vaccinate at least once, of them 279 (65.7) vaccinated fully. About 44% mothers respond that their children usually got care from adult caregiver like husband, grandmother/father, sibling, neighbour, friend while they were work (Table 2).

The study asked whether they have taken any job outside of home in last 12months of interview, more than half of respondents (55.3%) have taken a job outside the home, of them 120(28.2%) reported that they work five days per week and 1.6% work whole week, concerning working hour 32% work (6-8) hr and 14% full day/night. For Ninety four percent of respondents the time taken from to work place were less than or equal to an hour the mean time was 40 min. From162 mother who had work rather than merchant and farmer 118 (72.8%) got maternity leave, 81.4% of them got for three month and one mother from nongovernmental institution got 12 months by releasing her salary. Those who have no job got earning from husband (93.6%), relative (5.8%) and the rest help from other. About 33% respondents were report that, they were prepared food for family while they were at home, 24% report that spends their free time by caring their child and 31.5% mothers were prepared food and care their child at the same time.

Variable		frequency	Percent
Sex of the child	Male	220	51.8
	female	205	48.2
Did you ever breast feed	Yes	422	99.3
	No	3	0.7
BF frequency in 24 hrs.	no during day time	33	7.8
	2-3 times	36	8.5
	3-4 times	98	23.1
	5-6 times	78	18.4
	>6 times	177	41.1
EBF	yes	164	40.8
	No	238	59.2
Did you start additional diet	Yes	402	94.6
	No	23	5.4
Age of starting complementary	<6 months	199	49.5
	=6 months	164	40.8
	>6months	39	9.7
Institutional delivery	Yes	381	89.6
	No	44	10.4
Has the child been ill with fever any time in the last two weeks	Yes	157	36.9
	No	268	63.1
did you seek advice or treatment	Yes	145	94.8
	No	8	5.2
Has the child had diarrhoea in the last two weeks	Yes	153	36
	No	272	64
did you seek advice or treatment	Yes	153	97.5
	No	4	2.5

Table 2: Child health/child feeding & related characteristics of study participants (n=425) in Harar city Eastern Ethiopia, 2014, Characteristics Mother occupation and decision making in current relationship Harar city Eastern Ethiopia, 2014.

Regarding decision making in most of condition like whether the child is sick enough to be for treatment, or the whether a child enrolling school, whether or not the mother should work outside the home and in use contraceptive both mother and husband had a great role on decision making activity but in purchasing consumable food about 69.6% of decision made by the mothers, 31.3% of respondents prepare food for family and care their children while they were home (Table 3).

Factor affected exclusive breastfeeding and weaning

In binary logistic regression analysis certain variables such as age , marital status, religion, ,income, child age, knowledge of the mother on EBF and weaning practice , distance house of job, working days, were not found to be significantly associated with EBF.

Exclusive breastfeeding was practiced in 41% of the study participants. With regard to the determinants of exclusive breastfeeding practice, each variable were assessed independently whether they were predictors of the practice of EBF and proper weaning practice or not. Predictor variables identified in the bivariate analysis were marital status. Married mother (COR=4.277, 95% CI (2.096-8.419)) ,maternal

education especially secondary education (COR=3.017, 95% CL (1.460-6.235)), occupation like Daily laborer and student (COR=15.326, 95% CI (7.941-29.578)), (COR=2.778, 95% CI (1.400-5.512)) respectively, frequency of breastfeeding (COR=0.129, 95% CI (0.047-0.352)) ,the presence of job in last 12 months (COR=, 6.535, 95% CI (4.203-10.159)) and leaving a child at adult care giver were significant. Regarded decision making activity most of the variable was significant like mother's decision making on whether a child got enough treatment while sick. (COR=0.373, 95% CI (0.233-0.597)) and purchasing consumable food (COR=0.345, 95% CI (0.210-0.567)), preparing/cooking food in your leisure time were also significant, (COR=1.834, 95%CI (1.104-3.046)) .Variables such as diarrheal episode, working day per week and hour per day were marginally significant.

Variables were included in the final multivariate logistic regression model to see their predictive effect on the practice of exclusive breastfeeding and weaning, Maternal education level occupation, marital status and decision making activity remained determinants of EBF and weaning practice in the multivariate model but frequency of breastfeeding, availability of job last 12 months and working day per week and hour per day and diarrheal episode ,which were marginally associated in the bi variant model had lost their significance in the final model. With regard to their predictive effect, mothers who were secondary education were 4 times more likely to exclusively

Variable		Frequency	Percent
Have you taken any job outside of home in last 12 months	Yes	235	55.3
	No	190	44.7
how many days do you work per week	2 day	7	2.9
	3 days	9	3.8
	4 days	8	3.4
	5 days	120	51.0
	6 days	84	35.7
	The whole week	7	2.9
How much time is taken from your home to your work area	<=1	221	94
	>1	14	6
For how much time did you do your job	full day or night	33	14
	(10 -12) hr	38	16.1
	(8-10) hr	55	23.4
	(6-8)hr	75	32.0
	(4-60hr	34	14.5
Did you get maternity leave	Yes	118	72.8
	No	44	27.2
how many months	<=3	112	26.4
	>3	6	1.4
Decide in purchasing consumable food	Mother	297	69.9
	Father	20	4.7
	both	108	25.4

Table 3: Characteristics of Mothers' occupation and decision making in current relationship.

breastfeed their child for 6 months and start complimentary diet at this age than mother who had diploma and above; AOR=4.364, 95% CI (1.369–13.907)), From FGD the discussant reached on consensus in the influence of education on breastfeeding and weaning practice “yes.....education has impact on breast feeding ,mother who educate can understand the advantage of breast feeding easily than uneducated and on weaning practice not only on time of initiation but also on the type of food that a child must be get for example mixed cereal, egg, red meat, milk, fruit etc. which is very important to a child, and some mothers gave water to a child who is on breast feeding due to not understand the breast milk has water so education help mothers to understand this like thing” some argue on this idea “even if the educated mothers understand the advantage of breast feeding they might not be had time to breast feeding because the more educated ,the more chance to get job, and no enough time in purchasing consumable food and prepare food, this activity may replace by others”.

Discussion with non-educated who came from around Harar city also done on the advantage of breastfeeding “breast feeding is important for a child health, EBF up to 6 month and if the mothers can breast fed even more than 6, complimentary food start at 6 and more, a children can eat whatever get but not tolerate meat, milk without diluting by water, we give for our children the diet that we eat, no special diet for children”.

Mothers who had no job were 13 more likely to EBF their child and initiate complementary diet at proper age than who had job; (AOR=13.219, 95% CI (3.200-34.602), In focus group the discussant who had job, discusses on the influence of occupation on EBF and weaning practice and they were agreed on the some idea” it difficult to fed only breast milk a child until 6 months for us because of our job, the maternity leave that we got maximum 3 month, one month before birth and two month after birth, in some institution not allowed to took all maternity leave after birth but in most institution by knowingly allowed us to get after birth all leave but the code of civil servant not allowed to take all 3 month after birth so this made difficult to EBF even for 3 months ,in some institution give time of breast feeding from working time one hr. before lunch and one hr. before finishing work day this not enough to breast feed a child for more than six times” more than two third of discussant stop breast feeding less than 4 months, the rest one third 4-6 months they were discuss how they got the advance leave “.....we got this advance leave by different mechanism one month from annual leave, and the rest by sick leave from public hospital”.

Single mom were about 11 time more likely to EBF and in time initiation complimentary feeding, AOR=10.5, 95% CI (1.483–74.709)), the children who had got care from child care institution were decrease got EBF and fall to initiated additional at age 6 months by about 10% than who got care by adult care giver and other AOR=0.098, 95% CI (0.011–0.867)). The mother who were got decision by their husband to get treatment while they sick, decrease EBF and introduction of additional diet at proper age by about 3% , AOR=0.330, 95% CI(0.114-0.951), than who were decide by themselves AOR=0.301,CI 95%, (0.122-0.743), and less by 33% than decision by both (Table 4).

Discussion

The importance of breastfeeding and adequate weaning to infant and child health, among other benefits, is now widely accepted. Breastfeeding is unequalled way of providing ideal food for the healthy growth and development of infants. As a global public health recommendation, infants should be EBF for the first 6 months because breast milk is uncontaminated and contains all the nutrients and antibodies that are very important to prevent disease [1-3].

EBF and weaning practice			AOR (95%CI)	P .value
Characteristic	EBF and compel = 6m No (%)	NEB &comp<6m		
Education				
Illiterate	28(46)	33(%54)		0.089
Read and write	18(37.5)	30(62.5)		0.561
Primary	40(46.5)	46(54.5)		0.162
Secondary	54(55)	44(45)		0.013
Certificate	6 (22)	21(78)		0.958
Diploma and above	18(22)	64(78)	4.364(1.369,13.907)	0.013
Occupation				
Government Employee	18 (18)	80(82)		0.316
NGO	5 (23)	18(78)		0.837
Student	3(18)	14(82)		0.637
Merchant	30(38.5)	48(61.5)		0.688
Daily laborer	3(8)	35(92)		0.15
Unemployed	100(77.5)	29(22.5)	13.219(3.200,34.602)	0
Farmer	5(26)	14(74)	1	1
Child care while mothers were at job				
adult caregiver	38(20.5)	147(79.5)	0.098(0.011,0.867)	0.227
a child care instruction	1(10)	9(90)	0.193(0.013, 0.107)	0.007
Leaving with child <14 year	0(0)	7(100)		0.076
Child in school	2(67)	1(33)		0.999
Take with mother to work	17(32)	15(47)	1	1
Decision by mother for when mother sick				
Mother	39(26)	112(74)	0.301(0.122,0.743)	0.009
Husband	41(53)	36(47)		0.04
Both together	84(48)	90(52)	1	1

Table 4: The influence of mother's education and occupation on EBF and weaning practice using multi variant logistic regression analysis model Harar 2014.

Prevalence of EBF

In this study about 41% of mothers reported that they were exclusively breastfeed their current child. The finding of the study was comparable with the prevalence of EBF in developing country (39%) ,south Asia,(45%) 2010 (20)but lower than the 2011 Ethiopian DHS report (52%), the 2005 Ethiopian DHS report (49%) (46) and higher than the study done in Mauritius 17.9%2013 (19) and Nigeria (32.2%) at the same year [17].

The influence of education and occupation on EBF and weaning

Education is an important factor influencing individual's attitude and opportunities in life. Although educational attainment in Ethiopia is low among both men and women, women are much more disadvantaged than men. In this study almost half (49%) of mothers were unable to read and write or in primary school. The finding was comparable to the Ethiopian national education prevalence (51%) [18], but it was much better as compared to the prevalence report of Amhara region where 50% of adults were unable to read and write or in primary [19].

In the multivariate logistic regression model, maternal education was the independent determinant factor to the practice of EBF where mothers who were in secondary school were 3 times more likely to practice EBF than those who primary school or less and higher

then secondary education. This might be explained by the fact that women who were better educated could have a better opportunity for employment that could lead them to be out of house the whole day and the mother less than secondary prolong the EBF from 6 month because spend more time with their child this might related to they had less opportunity of getting a job. The finding was in agreement to a study done in Tigray [20], 18% mother who were primary school and less delay weaning bends the appropriate age of life and 4% for secondary and above, this finding agree with study done in Lahore [21], at Hong Kong which shown Mothers with only primary level education has a mean breastfeeding duration of 7 month [22] and the finding contradicted with the study done at Bahir Dar, the practice of EBF where mothers who are unable to read and write or in primary school are 3 times more likely to practice EBF than those who completed secondary school or high [18].

regarding occupation those mother who had no work 13 times more likely to exclusively breastfeed and were initiate complement die at recommended age than those who were government employer or self-employer this might because they return to work more early Returning to work was a strong predictor of early weaning in this sample, 72.8% mothers in this study reported that they were returning to work within 3-4 month, 32% respondents were employed 6 hr-8 hr and 51% 5 days per week. The finding was in agreement to a study done in Hong Kong where 73.7% of mothers return to work in the postpartum period, Urban Nepal, UK Taiwanese, Goba Bihar Dar [13,22-25].

Ethiopia the Government mandated maternity leave is granted for a maximum of, 2 month with at least one month having to be taken before the expected date of delivery therefore this could affect employer mother not to exclusive breastfeeding for 6 month and initiate complimentary diet at early age. While comparing this leave with more developed country it is much better, mothers in Hong Kong got maternity leave for maximum of 10 weeks, US for 6 weeks and, six to eight weeks for the in Washington [26,27]. In contrast, in Mainland China, a less developed economy than Hong Kong, USA postpartum women are provided with a more supportive environment for breastfeeding due to government legislation. New mothers receive four months of paid maternity leave and receive two hours of breaks during their workday to breastfeed their infants. Discussants of FGD were raising some solution to solve the problem of EBF related to their job [27] "Government has considered on the problem of EBF related to the job, the duration of maternity leave have to increase, as some institution do, if one or more hr. advance hr. rest time were given to mother on EBF it might be helpful and for the who like take leave without salary also consider. another solution to feed child the breast milk up to 6 month is that by pumping the milk by clean material but in this area the health professionals has a great responsibility to disseminate information and demonstrate how to pump breast milk and ,how feed a child while the mother at job"

Regarding to decision making activities 43% of decision were made by mother and husband whether the mother had to get enough treatment or not and 37.6% a decision were by themselves and 41% of government employer decide by them self to get treatment The finding was somewhat higher than Ethiopian DHS report [2] 26% and 24% respectively [21]. In multivariate the EBF decrease by 3% with decision by husband than decision by themselves. The finding was comparable with study done in Canada showed that men strongly believed that their pregnant partners should breastfeed over the first few months, from those, men who strong beliefs that their partners should exclusive breastfeed 4 months were 1.5 more than who belief for six month and,

the children who had got care from child care instruction were decrease got EBF and fall to initiated additional at age 6 month by about 10% than who got care by adult care giver and other.

Conclusion

Prevalence of EBF was much lower than the WHO recommendation, and Ethiopian national HSDP target. Mother education were significant, mothers who had secondary education 3times more likely to EBF and initiate additional die at appropriate age, regarding mother's occupation un employer mother 13 times more likely EBF and started complimentary diet at age of 6 month, the adult role care giver were on EBF than children <14 year age of life and on decision on mother own health were the predictors for exclusive breastfeeding practice.

Recommendations

Based on the findings of the study, the following recommendations are made:

A great effort should be exerted to greatly increase the rate EBF, by educating and motivating the public, in order to reduce mal nutrition and infant mortality, This is possible through strengthening the currently available sources of information, recommend radio programs broadcast in all language like the national service of Radio Ethiopia, Addis Ababa and Harar branches, and Radio Fana to give adequate coverage on breastfeeding and weaning practice behind family planning and by using this media it important to empower mother on decision making activities on their child and their own.

Health officials at various levels should do better works on the advantage of breastfeeding and timely initiation of complimentary diet and also on the type of diet specially, at health institutions at the rural areas,

The administration should work on promoting behaviour change communication on exclusive breastfeeding practice giving special emphasis to educated and employer mothers. The government should consider revising the legislation of the two month postpartum maternity leave. The administration should also focus must now be on implementing adequate early postpartum support programs, both in the hospital and after the mother goes home, to enable mothers to continue breastfeeding for as long as possible and promoting mother on decision making activity on their own health and their child to get sufficient health service by empowering them.

Competing Interests

We declare that we have no competing interests.

Acknowledgment

We would like to extend appreciations to individuals who involved in data collection and Hiwot fana and jugal hospital staffs as well those mothers who willingly gave us all the information we needed without any reservation.

References

1. WHO e (1982) The prevalence and duration of breastfeeding.
2. MsuyaTENaSE (2011) Prevalence and predictors of exclusive breastfeeding among women in Kigoma region, Western Tanzania. *International Breastfeeding Journal* 6.
3. Ku CMCS (2010) Factors influencing the practice of exclusive breastfeeding among Hong Kong Chinese women: a questionnaire survey. *Journal of Clinical Nursing* 19: 2434-2445.
4. Quigley MA KY, Sacker A (2007) Breastfeeding and hospitalization for diarrrheal and respiratory infection in the United Kingdom Millennium Cohort Study. *Pediatrics* 119: 837-842.
5. Chantry CJ HC, Auinger P (2006) Full breastfeeding duration and associated decrease in respiratory tract infection in US children. *Pediatrics* 117: 425-432.
6. Wikipedia fe (2005) Definition of weaning.
7. Organization (2003) UaWH e Strategy for Infant and Young Child Feeding. Geneva, Switzerland.
8. WHO (2003) Implementing the global strategy for infant and young child feeding.
9. TK (1989) Maternal employment, differentiation, and child health and nutrition

- in Panama. In *Women, Work and Child Welfare in the Third World*, eds.
10. WHO (2007) Indicators for assessing infant and young child feeding practices Washington DC, USA.
 11. Federal Ministry of Health FHDoe (2004) National Strategy for Infant and Young Child Feeding. Ethiopia National Strategy for Infant and Young Child Feeding.
 12. Shrimpton RCGV, deOnis M, Costa-Lima R, Blossner M, Clugston G (2001) Worldwide timing of growth faltering: implication for nutritional interventions. *Paediatr* 107.
 13. Nakahara SPK, Lopchan M, Ichikawa M, Poudel-Tandukar K, Jimba M, et al. (2006) Availability of childcare support and nutritional status of children of non-working and working mothers in urban Nepal. *American Journal of Human Biology* 18: 169-81.
 14. Jain SCM (1993) Mother surrogate and nutritional status of preschool children. *The Indian Journal of Pediatrics* 60: 429-433.
 15. Rabiee FGC (1992) The impact of maternal workload on child nutrition in rural Iran. *Food and Nutrition Bulletin* 14: 43-48.
 16. MLB (2008) Supporting Breastfeeding in the Workplace. Fitzgerald Health Education Associates.
 17. TWaDWB (2012) XC Global trends in exclusive breast feeding. *international journal breastfeeding*.
 18. Bhandari NMS, Bahl R, Martines J, Black RE, Bhan MK (2004) An educational intervention to promote appropriate complementary feeding practices and physical growth in infants and young children in rural Haryana, India. *The Journal of nutrition* 134: 2342-2348.
 19. Mandana Arabi (2004) *Infant and Young Child Feeding*. Ethiopia.
 20. WG A (2001) Determinants of Weaning Practices. *The Ethiopian Journal of Health Development* 14: 183-9.
 21. NS MB (1996) Breastfeeding in China: what a difference a yearmakes. *Medela Rental Roundup* 13: 21-4.
 22. Tarrant MFD, Wu K, Lee I, Wong E, Sham A, et al. (2010) Breastfeeding and weaning practices among Hong Kong mothers. *BMC pregnancy and childbirth* 10: 27.
 23. Bolling KGC, Hamlyn B, Thornton A (2007) *Infant Feeding Survey 2005*. The Information Centre for Health and Social Care: London.
 24. Cohen R MM, Mrtek RG (1995) Comparison of maternal absenteeism and infant illness rates among breast-feeding and formula-feeding women in two corporations. *American Journal of Health Promotion* 10: 148-153.
 25. Setegn T BT, Gerbaba M, Deribe K, Deribew A, Biadgilign S (2012) Factors associated with exclusive breastfeeding practices among mothers in Goba district, south east Ethiopia. *International breastfeeding journal* 7: 17.
 26. Solutions SWW (2002) Challenges of the working breastfeeding mother. *Am Assoc Occupational Health Nurses J* 50: 61-66.
 27. Iwfsfamt BR (1999) is there competition between breast feeding and maternal employment? *Ethiopian Demographic and Health Survey ICF intenational. Demography* 36: 157-171.