Journal of Health, Medicine and Nursing
ISSN 2422-8419 An International Peer-reviewed Journal
Vol.32, 2016

Assessment of Knowledge, Attitude and Practice of Appropriate Complementary Feeding among Mothers of Children Age 6-23 Months in Gununo Town, Damot Sore Woreda, Wolaita Zone, Southern, Ethiopia, 2016

GujoTeshome RettaBeyene Selamawit Amsalu Yoseph Halala

Abstract
Background- Inappropriate complementary feeding practices are a major contributor to poor nutrition status among children under two in Ethiopia. Encouraging and supporting appropriate complementary feeding practices for children under age two are critical elements of efforts to address malnutrition.**Objectives** –to assess the knowledge, attitude and practice of complementary feeding among mother of children age 6-23 Gununo town, Damot Sore Woreda Wolaita zone southern, Ethiopia.**Methods**–community based cross sectional study was conducted in Gununo town, Damot Sore Woreda Wolaita zone, southern, Ethiopia.A pre-tested structure questionnaire was prepared to obtain necessary information after getting both written and verbal consent from concerned bodies. The data was collected by using quantitative methods. The collected data was checked daily for the completeness and consistency. Calculation of proportion and other appropriate statistical tests was done and interpretation was reached accordingly. **Results** -About 212(90.6%) of respondents know when to start feeding including less than, at and greater than six months. Most respondents 175(74.8%) know with what kind of food to start with;58(33,1%) cow milk, followed by cereal based food, 35(20%) fruits and vegtables,13(7.4%) infant formula and 8(4.6 %) butter.194(82.9%) know when to stop breast feeding. Mother were assessed with the practice of complementary breast feeding on the youngest child;105(45%) started at six months and 14(6%) immediately after birth. **Conclusion and recommendation**-One hundred five (45%) of mothers got information on complementary feeding in their last pregnancy or upon delivery. 180(77%) of mothers know the benefit of complementary feeding for the child and 120(51%) them for mother herself. 105(45%) of mothers started complementary feeding at six months of age and 98(42%) started with muk . All members of the community, policy makers, NGOs, local government should work in collaboration with woreda health office and health center to minimize and remove down sides of mothers on knowledge, attitudes and practices about appropriate complementary feeding.
Keywords: Knowledge, Attitude, Practice and appropriate complementary

Background

Breastfeeding is the practice of a woman feeding an infant & young child with milk produced from her mammary glands usually directly from nipples (1). Complementary feeding is defined as the process of starting other feeding when breast milk alone is no longer sufficient to meet the nutritional requirement of the infants and therefore other foods and liquids are need along with the breastfeeding. (17)

According to WHO definition optimal infant feeding practices is introduction of complementary food from locally available food and hygienically prepared around 6 months and to continue breastfeeding for up to 2 years of age. (17,20)

Introducing solid or semi solid foods into an infant's diet is recommended at about six months because at that age breast milk is no longer adequate in meeting a child's nutritional needs to promote optimal growth. At about six months of age, breast milk is not sufficient to meet energy, protein and micronutrient requirements of most infants and young children. So, locally available foods that are rich in both macronutrient and micronutrient, hygienically prepared and suitable to eat need to be provided. (25)

Inappropriate complementary feeding practices are a major contributor to poor nutritional status among children under two in Ethiopia. Demographic Health Survey 2011(DHS 2011) show that stunting, under-weight, and wasting persist as major public health problems.Encouraging and supporting appropriate complementary feeding practices for children under age two are critical elements of efforts to address malnutrition. (24).

Statement of the problem

Feeding practices for infant and young children worldwide are not optimal. It is only 39% of all infants who are given complementary feeding at appropriate age worldwide. Globally, more than 10 million children under the age of two die each year, 41% of these deaths occur in sub-Saharan Africa and other 34% in south Asia. A major cause of death is inadequate breastfeeding practice in combination with high levels of diseases. (6)

Worldwide, nearly one third of child deaths could be prevented by optimal complementary breastfeeding practice. Approximately 50% of all childhood mortality were related to malnutrition and the first two years represent a critical window of vulnerability. (27)

In developing countries early and abrupt cessation of breastfeeding followed by an introduction of dirty

and unsound artificial feeding of infants with very dilute milk products is common where children are more vulnerable to infection with different pathogens since their body nutrient store is not well developed. (18,20,21)

Breastfeeding is common practice in Ethiopia. However, large proportions of women do not practice appropriate breastfeeding and complementary feeding behavior for their children (22). According to 2012 the Ethiopian Demographic Health Survey report, 27% of mothers provide water, butter, and various types of food before starting breastfeeding their children, thereby reducing the percentage of exclusively breastfeed and increasing the percentage of receiving complementary food at very young age (23). Nationally, 50.6 % of newborns were put on breast with in one hour of birth and 48 % started complementary feeding at six months.

Significance of the study

The study tries to assess the knowledge, attitude and practice of appropriate complementary feeding among mothers of child aged 6-23 months.

So the result of which obtained from this study can be base line for future study. Governmental and nongovernmental organizations can utilize the finding for intervention program and finally health institutions and health professionals may use the result obtained from this study for health education especially for promoting good public awareness of optimal breastfeeding.

Limitation of the study

Recall biases on initiation and duration of both exclusive and complementary feeding.

OBJECTIVES

General Objective

To assess the knowledge, attitude and practice of appropriate complementary feeding among mothers of children age 6-23 months in Gununo town, Damot Sore woreda Wolaita zone,southern , Ethiopia.

Specific objectives

- ✓ To assess the knowledge of appropriate complementary feeding among mothers in Gununo town
- ✓ To assess the attitude towards appropriate complementary feeding among mothers in Gununo town
- ✓ To assess the practice of appropriate complementary feeding among mothers in Gununo town

METHOD AND MATERIAL

Study area

The study was conducted in Gununo Town, Damot Sore woreda, Wolaita Zone, Southern, Ethiopia.Thetown is found 330km far from Addis Ababa, 168km from Hawassa and 18.5Km from Wolaita Sodo. It has three kebele and bounded six kebeles;by Doge Anchucho by north, Bolola Chew kare in south, Doge Shekisho in west, Shamba kilena in east, Dambeza meane in north west and Doge mashido in south west. The number of house hold are 2622. The total population of the town is estimated to be 18123;8880 males and 9243 females out of these 4222 were women in reproductive age group (15-49) in the town the expected number of pregnancy in a year is 627 and under five (5) children are 2829. The number of mothers with children age 6- 23 months is 636.The town has 4 health facility;1 health center and 3 private clinics.

4.2 Study period

The study was conducted from May 23-26, 2016.

4.3 Study design

A community based cross sectional study was conducted among mothers of children age 6 - 23 months.

4.4 Source population

Our source population was the total number of mothers of child aged 6-23 months in Gununo town.

4.5 Study population

The study population is mothers who had child aged 6-23 months those are included in the sample.

4.6 Inclusion and exclusion criteria

Inclusive criteria

- Mothers of children age 6- 23 months who are permanent residents of Gununo town.

Exclusive criteria

-unhealthy/sick (unable to hear or speak) and mentally retarded mothers.

4.7 Sampling technique

We selected the study population using systematic random sampling from the total number of mothers of children age 6- 23 months.

4.8 Sample size determination

The sample size was determined by using single population proportion formula. A non-respondent rate of 5% was calculated and this number was included in the study by using 95% confidence on interval, 5% margin of error and using 65.7% prevalence of complementary feeding in Hula woreda Sidama zone (16), the sample size was determined as follows.

$$n = \frac{(Z\alpha 1/2)^2 P (1-P)}{}$$

d^2

where n= sample size
p= prevalence of complementary feeding= .657
z= confidence interval at 95% =1.96
d=margin of error (5%)

the formula yields n=346

Since our source population is less than 10,000 we need correction formula (no=n/1+n/N) where N is the source population which is 636.

n is minimum sample size required.

n=the sample size required, which yields 224.

None response rate = 224 x5%=11

n +non respondent rate=hence,224 + 11= a total 235 sample was taken.

4.9 Study variables

Knowledge of mothers on complementary feeding, Attitude of mother on complementary feeding, practice of complementary feeding**,** Socio-demographic and other health service related characteristics, such as maternal age, educational status, religion, ethnicity, marital and occupational status income, number of children, ANC and PNC service utilization and Place of delivery.

4.10 Data collection procedure

Data was obtained using pretested structure questionnaire. It is collected by interviewer guided questionnaire and was administered for selected mothers, if the mother is not available during the visit, 2nd visit was conducted, if still both times she was unavailable it was recorded as non-respondent.

Data was collected by principal investigators under the close supervision of the Advisor and was checked for completeness and consistency every day.

4.11 Data analysis plan

Data was analyzed manually by using tally tables and scientific calculator.

4.12 Data quality assurance

Group members was discussed in detail about how we ask respondents and take common understanding on the questions. Pretest on 5 % of the sample size was conducted which was not included in the actual study. Vague terms and questions was modified and changed during the pretest.

Following data collection process, checking for completeness of the questionnaire was done.

4.13 Dissemination of results

Study finding was submitted to CBE office, school of public health, college of medicine and health sciences in Wolaita Sodo University and to the Woreda health office of Gununo town.

4.14Operational definition

Breast-feeding**:** is a means of infant feeding where infants exclusively feed on breast milk at least 6 months.

Breast feeding duration: the time length for which the child is feed with or without supplements measured by month(year).

Exclusive breast feeding: refer to feeding infant only with breast milk.

Complementary feeding: is defined as the process of starting other feeding when breast milk alone is no longer sufficient to meet the nutritional requirement of the infants and therefore other foods and liquids are need along with the breastfeeding.

Appropriate complementary breastfeeding: as WHO definition is introduction of complementary food from locally available food and hygienically prepared around 6 months and to continue breastfeeding for up to 2 years of age.

Infant feeding: is feeding a child until two year of age.

Maternal attitude: it is the like and dislike of breast and complementary infant feeding that the mother exhibit.

Maternal knowledge: refers to the extent to which the breast and complementary infant feeding mothers respond correctly to items asking for their know-how or skills in feeding their infants.

Maternal practice: this refers to any behavior or action that breast and complementary feeding mother disclose in relation to infant feeding. Were assessed whether they have adequate knowledge about the benefits of breast-feeding or not. Summary score was calculated for knowledge of benefit of breast-feeding based on 10 knowledge related questions. The mean score for benefit of breastfeeding knowledge was found to be 4.28(SD ±1.05) and those who scored above the mean were considered as having sufficient knowledge, while those below the mean score labeled as having insufficient knowledge for the benefit of breast feeding.

4.15 Ethical consideration

First permission from our Advisor, public health department and CBE offices of the college of health science was secured then a written letter was given from the school to administration of Gununo town. Individual consent was obtained from each respondent and then will also be told that they have the right to give up the interview at any time when he /she wish.

RESULTS

5.1 Sociodemographic status

A total of 234 mothers with children6- 23 months of age voluntarily responded, making the respondent rate 99.6%. The majority age group was 26- 30 year. 39(17%) have one child,49(21%) have two ,73(31%) have three,42(18%) have four and 31(13%) have five children.

Majority of the mothers 130(56%) were house wives.33(14.1%) have monthly income of less than 500,94(40.2%) 500-1000 and 107(45.7%) greater than 1000.

Table 1: Sociodemographic status of respondents in Gununo town, Damot sore, Wolaita zone, Southern Ethiopia, May 2016

Variables		Frequency	%
Respondents age	15-20	22	9.4
	21-25	54	23
	26-30	83	35.5
	31-35	42	17.9
	36-40	27	11.5
	41-45	6	2.6
Religion	Protestant	170	72.6
	Orthodox	60	25.6
	Other	8	1.8
Marital status	Married	219	93.6
	Single	3	1.3
	Widowed	7	3
	Divorced	5	2.1
Ethnicity	Wolaita	221	94.4
	Other	13	5.6
Age of youngest child	6 - 9	62	26
	9 - 11	66	28
	11 - 18	46	20
	18 -23	60	26

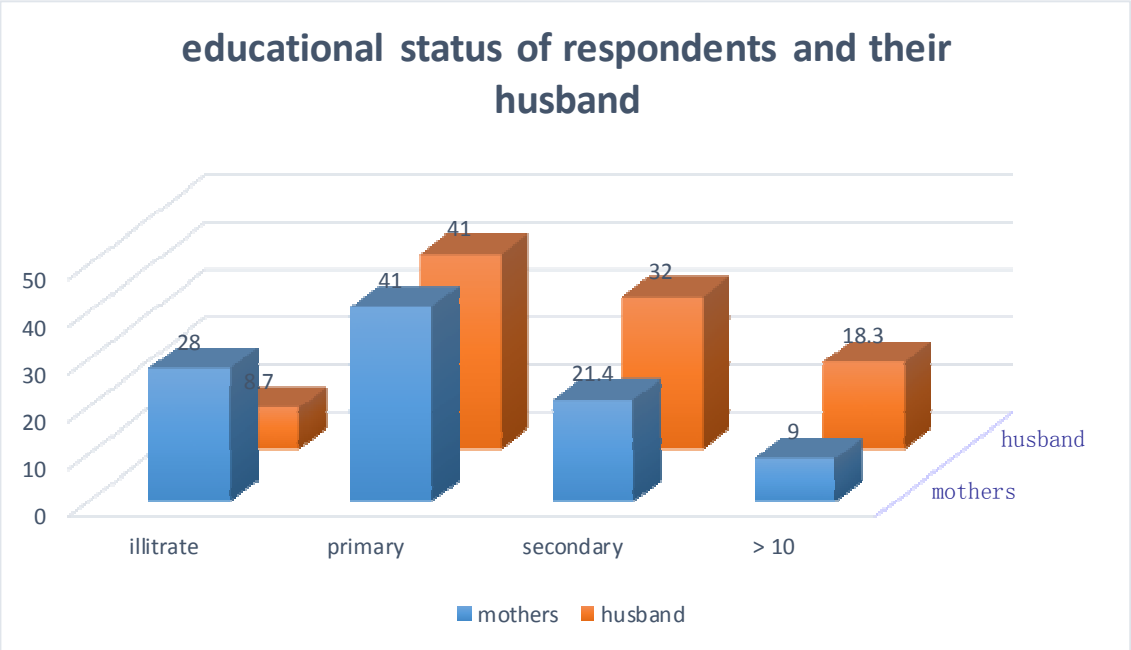

Fig 1: Educational status of respondents with their husband in Gununo town, Damot sore, Wolaita zone, Southern Ethiopia, May 2016

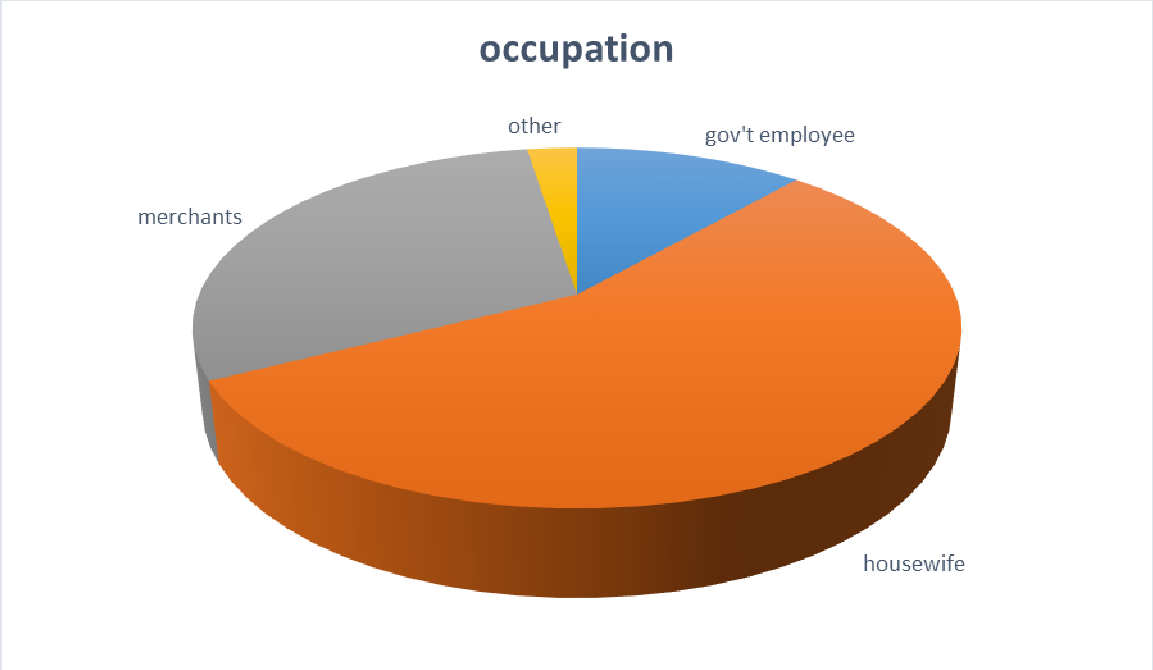

Fig. 2: Occupational status of respondents in Gununo town, Damot sore, Wolaita zone, Southern Ethiopia, May 2016

5.2 Maternal health service utilization

From the total of 234 mothers 153(65.4%) had ANC service at least once while they were pregnant with their last child. Mothers who gave birth at the health institution and had PNC were 122(52%) and 42(18%) respectively.

Table 2: ANC service utilization of respondents in Gununo town, Damot sore, Wolaita zone, Southern Ethiopia, May 2016

	Variables		Frequency	%
ANC visits	Yes		153	65.4
		0nce	24	15.7
		Twice	34	22.2
		Three times	51	33.3
		Four times	43	28.1
		>Four times	1	0.7
	No		81	34.6

5.3Advice on complementary breastfeeding

105(45%) did get advice on complementary feeding in their last pregnancy or up on delivery,115(49%) did not and 14(6%) do not remember. 113(48.3%) were advised at least once in their life time.33(22%) from friends and neighbors ,27 (18%) from mothers ,42(27%) from mass media ,72 (47%) from health extension workers and 46(30%) from health professionals.

Table 3 : Advise on complementary feeding in Gununo town, Damot sore, Wolaita zone, Southern Ethiopia, May 2016

	Variables		frequency	%
ever advised on complementary feeding	Yes		113	48.3
		Friends and neighbors	33	22
		mother	27	18
		Mass media	42	27
		Health extension workers	72	47
		Health professionals	46	30
	No		121	51.7

5.4 Knowledge on benefits of appropriate complementary breast feeding

Mothers were assessed whether they have knowledge about the benefit of breastfeeding for both the child and the mother including nutritious benefits,diseases protection, contraceptive effect and other related advantage.180(77%) of mothers know the benefit for the child and 120(51%) for the mother.

Table 4: Advantage of CBF in Gununo town, Damot sore, Wolaita zone, Southern Ethiopia, May 2016

For the child	Frequency	%	For the mother	Frequency	%
Child growth	109	60.5	Early return to work	45	37.5
Balanced diet	61	33.8	Increase chance of pregnancy	12	10
Prevent diseases	49	27.2	Restore mothers strength	84	70

5.5 Role of husband on complementary breast feeding

Majority of the response concerning the role of husband on complementary breast feeding 129(55.1%) were to give economic support,57(24.3%) to know the advantage and give advice,25(10.8%) to help in home activities and the rest did not know.

Table 5: Role of husband in complementary breast feeding in Gununo town, Damot sore, Wolaita zone, Southern Ethiopia, May 2016

Role of husband	Variables	frequency	%
	Give economic support	129	55.1
	Give advice	57	24.3
	Help in home activity	25	10.8
	Do not know	23	9.8

5.6 Knowledge toward complementary breastfeeding

About 212(90.6%) of respondents know when to start feeding including less than, at and greater than six months. Most respondents 175(74.8%) know with what kind of food to start with;58(33.1%) cow milk, followed by cereal based food, 35(20%) fruits and vegtables,13(7.4%) infant formula and 8(4.6 %) butter.194(82.9%) know when to stop breast feeding.

Table 6: Knowledge on time of complementary breast feeding in Gununo town, Damot sore, Wolaita zone, Southern Ethiopia, May 2016

Variables			frequency	%
Know when to start CBF	Yes		212	92.6
		<6 months	37	17.7
		At 6 months	109	51.4
		>6 months	66	31.1
	No		22	9.4
Know when to stop CBF	Yes		194	82.9
		<2 years	42	21.6
		At 2 years	111	57.2
		>2 months	41	21.1
	No		40	17.1

5.7 Attitude of respondents towards complementary breast feeding

Concerning the attitudes of mothers towards complementary infant feeding most respondents85 (36%) didn't know with the item that states about complementary foods make the infants fat, while 42 (18%) ,71(30%),30(13%) and 6(3%)shows the strongly agree, agree, disagree and strongly disagree on the item that it makes their infants fat respectively.

Table 7 : Attitude of respondents on CBF in Gununo town, Damot sore, Wolaita zone, Southern Ethiopia, May 2016

Variables	Strongly agree		Agree		Do not know		Disagree		Strongly disagree	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
I provide complementary food because it make my infant fat.	42	18	71	30	85	36	30	13	6	3
I have enough money to by complementary food item instead of suffering my self by breast feeding.	3	1.2	27	12	80	34	101	43	23	9.8
My breast milk is not sufficient to my infant so just after birth. I like introduce complementary food to my infant.	0	0	31	13	67	29	133	57	3	1
Breast feeding make my appearance thin so I like to give complementary food to my infant.	49	21	130	55	32	14	17	7	6	3
Providing my infant with complementary food make him/her health and strong.	39	17	118	50	42	18	27	12	8	3
After six months in addition of breast feed complementary food are preferable.	81	35	139	59	11	5	3	1	0	0

5.8 Complementary breast feeding practice

Mother were assessed with the practice of complementary breastfeeding on the youngest child;105(45%) started at six months and 14(6%) immediately after birth. Most of the mother started with *muk* 98(42%) and cow milk 88(38%),24(10%) with butter,35(15%) with *injera* and 30(13%) with fruits and vegetables.

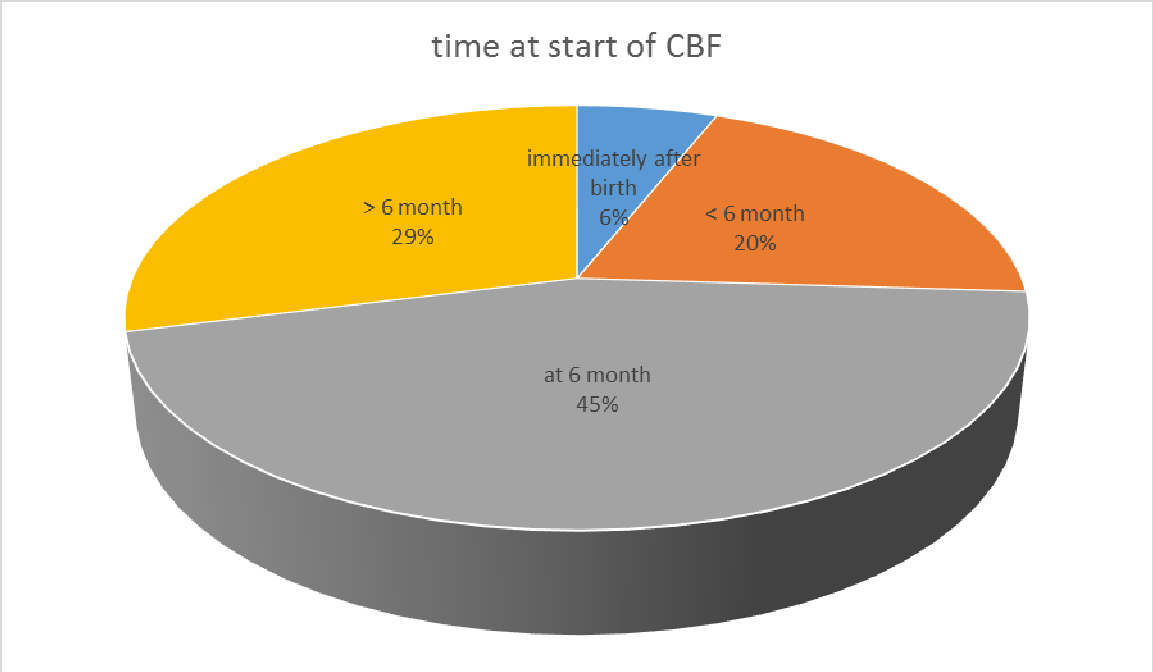

Fig 3: Time at start of CBF in Gununo town, Damot sore, Wolaita zone, Southern Ethiopia, May 2016

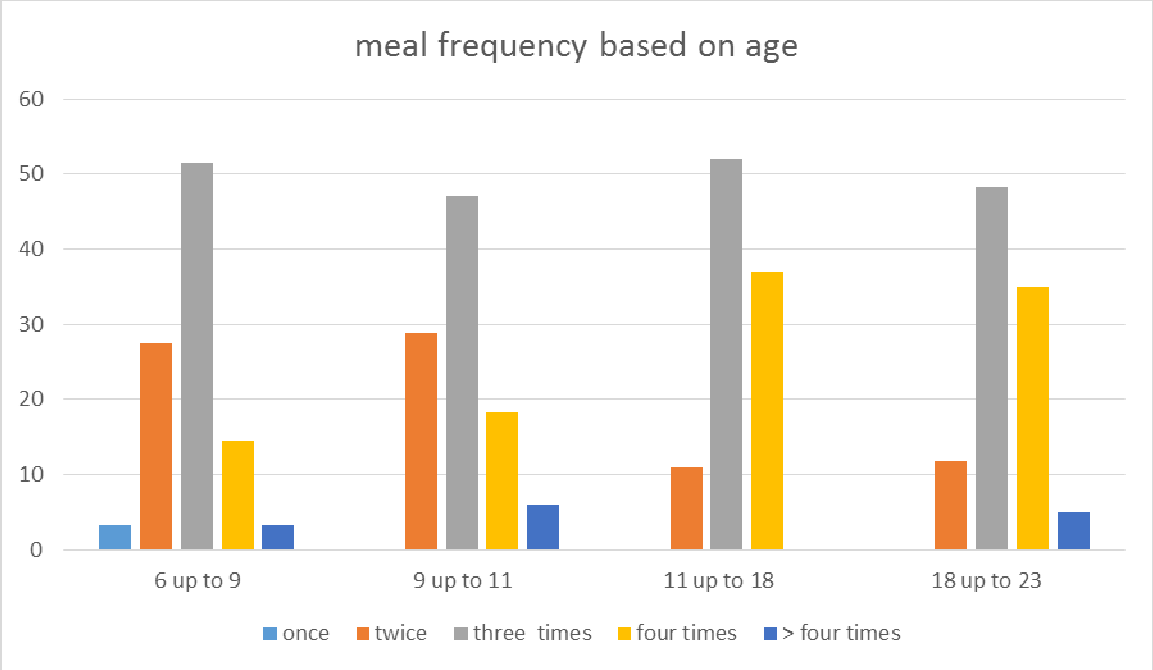

Fig 4: Meal frequency based on age in Gununo town, Damot sore, Wolaita zone, Southern Ethiopia, May 2016

On 24hour recall cereal based food 78(33.3%), food the same with adults 97(41.5%) ,56(23.9%) cow milk and 3(1.3%) water and tea were given. of the total respondents, 139(59.4%) of mother served food for the child alone ,60(25.6%) shared a plate with their parents,17 (7.3%) with siblings and 18(7.7%) with children of the same age.

Mothers who serve food while the family feeds are 69(29.5%), when child likes to have 50(21.4%), when child cry 55(23.5%).

About 39(16.7%) of mothers have stopped breast feeding; out of this 26(66.7%) did it gradually and the rest at once.

Table 8: Respondents reason to stop BF in Gununo town, Damot sore, Wolaita zone, Southern Ethiopia, May 2016

Variables	Frequency%	
Not enough milk	16	41
Mothers illness	4	10.2
Mother returned to work	4	10.2
Time to stop BF	15	38.6

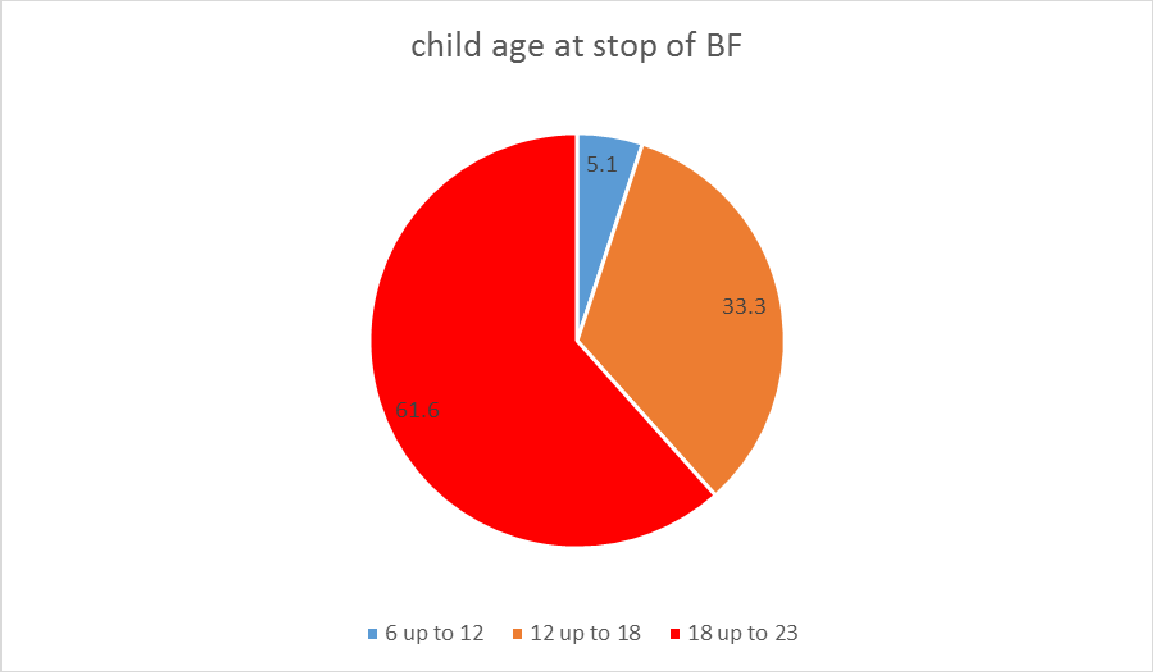

Fig 5: Child age at stop of BF in Gununo town, Damot sore, Wolaita zone, Southern Ethiopia, May 2016

DISCUSSION

This study assessed the knowledge, attitude and practice of 234 mothers with children 6-23 months. We sought to establish age at complementary breastfeeding, duration of breastfeeding, items given, and various other aspects related to the subject.

The source of information about the benefit of CBF revealed that most of the mothers (47%) got advice from health extension workers,30% from health professtionals,27% from mass media and 18% from their mothers. According to a study in Bullen Woreda Benshangul Gumuz (27) ,41.2% of data were from mothers,20% from health proffesionals,41.2% from health extension workers; which shows in our study the contribution of health extension workers and health professionals are high.

About 51% of mothers know the benefit of initiating complementary to themselves; which in contrast to a study in Bullen woreda (27) which was (82.2%) is low.

Ninety point six percent of mothers know when to initiate feeding to breastfeed children, from this 51.4% were around six months and 31.1% were after six months, when compared to a study in Bullen woreda which shows 80% of initiation after six months is good. But in a study Done in Sidama zone hula district (12) 65.7% know six months as a start of complementary feeding.

Concerning attitude of mother to ward complementary feeding with health efficacy most respondent 118(50%) agree that complementary food make their infant health and strong. Butto contrast to the study conduct in Bullen woreda, Benshangul Gumuz which was 23(28.75%),ours is high. .

The139(59%) of the participants that complementary food conduct in in addition of breast milk after six months are more preferable. This finding is high compare with study agreedBullen woreda, Benshangul Gumuz was 4(5%).

Concerning attitude of mother toward complementary feeding most participant who prefer complementary feeding after six month 137(59%) were agree; when compare with the study conduct in Bullen woreda Benshangul Gumuz was(55%) is high.

Appropriate infant and young child feeding (IYCF) practices include timely initiation (at six month) of feeding of solid and semi solid foods, to increase the quantity, number of times and food Varity while maintaining breast feeding (23). having this as a guiding principle; in our study 6% of mothers give their child a pre lacteal food, when compared to EDHS 2011 which was to be 10.4% for SNNPR is low.

Our study revealed that 20% started complementary breastfeeding less than six months,45% at 6 months and 29% greater than six months, when compared to a study in Halaba (12) in which 6.5% started less than six monts,76.3% at six months and 17.2% less than six months. The percentage of mothers who initiated feed at six months are low as well initiation of feeding at less six months and greater than six months was high.

Most mothers initiated the feeding with food made from cereals (42%) followed by cow milk (38%).A study in Bullen woreda (27) cow milk account for 32.5%, gruels 27.5% and porridges 27.5% which shows in both studies food from cereals are used monthly.

Result of our survey on practice of frequency of feeding shows 20.5% of them feed two times a day and 49.6% three times a day 25.2% four times a day. Which showed most children were feed three times a day. When this is put in minimum meal frequency (two times for children age 6-9 month and three times for 9-23) children age 6-9 month with minimum meal frequency were 96.8%, for 9-11 month 71.2%, for 11-18 89.1% and for 18-23 months 88.3%; all when compared with EDHS 2011(27); for 6-9 month 36.3%, for 9-11month 37.7%, for 11-18 month 47.4% and for 18-23 month 65.4%, are high.

In EDHS 2011(27) 82% of mothers continued breastfeeding till two years and the rest have not. In our study this figure was 83.3% which is relatively high and most of their reasons were because of not having enough milk.

CONCLUSION AND RECOMMENDETION

Conclusion

Based on the finding the following conclusions were drawn:

The commonest age group of mothers was (26-30 year) and 130(56%) are housewives.

153(65.45) of mothers had ANC follow up at least once while they were pregnant with their last child and 122(52%) of them gave birth at health institution.

One hundred five (45%) of mothers got information on complementary feeding in their last pregnancy or upon delivery and mothers informed about complementary feeding in their life were got information 72(47%) from health extension workers followed by 46(30%) health professionals.

Maternal knowledge and attitude:

- 180(77%) of mothers know the benefit of complementary feeding forthe child and 120(51%) of them for mother herself.
- 212(90.2%) of mother know when to start complementary feeding and 175(74.8%) with what kind of food to be started as well.in addition to this 194(82.9%) of mothers know when breast feeding to be stopped.

Maternal complementary feeding practice:

- When we see complementary feeding practice 105(45%) of mothers startedcomplementary feeding at six months and 98(42%) started with *muk*followed by 88(38%) cow milk.
- When we see meal frequency per day three times dominate in each age group.
- On 24hour recall 81(33%) of them gave cereal based food and 139(59.4%) of mothers serve food for the child alone. but, 69(29.5%) serve food while the family feeds.
- Thirty-nine (16.7%) of mothers have stopped breast feeding for the reason of no enough milk of mother 16(41%) dominates it. Out of these 24(61.6%)stopped after 18months.

Recommendation

Based on the major finding obtained the following recommendation are forwarded.

1. Sufficient information should be given to mothers and the community in general about breast feeding and complementary feeding before child birth by the health extension workers and health professionals.
2. There should be a regular program to teach mothers about the advantages of complementary feeding to them and their child through health care professionals of the community so that gap of awareness about importance appropriate complementary feeding will be bridged.
3. All mothers should be well oriented by health extension workers about regular schedule of complementary feeding for children.
4. Even if mothers believe that early introduction of complementary foods to their child is important to mothers, they should learn that, child should get complementary foods after six months of age and too early introduction of complementary foods may make children unhealthy and weak.
5. Mothers should be made aware that they should give complementary foods to child many times and practice five to six times a day for better nutritional satisfaction.
6. All members of the community, policy makers, NGOs, local government should work in collaboration with woreda health office and health center to minimize and remove down sides of mothers on knowledge, attitudes and practices about appropriate complementary feeding.

REFERENCES:

1. Feeding New Born and Infants-Breastfeeding: Dr.R.K. Anand's guide to child care, Linkages Academy for Educational Development, 2006.

2. Nelson, et al, Textbook of Pediatrics 15TH edition, USA, 1996.
3. Addis A; Socio-cultural factors related to breastfeeding in Jimma town: A thesis paper, Ethiopia, 1987.
4. Mahoney MC, James DM, Predictors of anticipated breastfeeding in an urban, low Income setting, J. FAM, pract. 49(6):529-33, USA, 2000.
5. Essential Nutrition Actions to Improve the Nutrition of Women and Childern in Ethiopia, including under Situations of Emergencies' and HIV/ and AIDs; Training Manual, Linkages, 2004.
6. Shewayeneshgebru, Assessment of breast-feeding practice in yeka sub-city Addis Ababa Ethiopia, February 2007.
7. World Health Organization: Global strategy for infant and young child feeding. The optimal duration of exclusive breastfeeding. Geneva: World Health Organization; 2001.
8. World Health Organization: infant and young child feeding (IYCF) model chapter for textbooks for medical students and allied health professionals. Switzerland: world health organization; 2009.
9. Biruk K.T. The status of breastfeeding among mothers of children aged less than two Years and implication for the occurrence of acute diarrhea, Master's Thesis, Ethiopia, 2002.
10. EPHA, Abstract 11, Assessment of Infant and Young Child Feeding Practice in Dabat Town, North west Ethiopia, 2006.
11. Getachew G: Feeding profile and diarrheal morbidity among 7-12 month infants in Tigray, Master's Thesis, Ethiopia, 2006.
12. Community Assessment in selected Wordas, in Amhara, Oromia and SNNP regions; ESHA, Ethiopia, 2006.
13. Shazia Memon et.al, Assessment of infant feeding practice at tertiary care hospitals, December 2010.
14. Rose victor, Determinants of breastfeeding indicators among children less than 24 months of age in Tanzania,2010
15. zelalem kebede: determinants of optimum breastfeeding among mothers of child less than 2 years Bishoftu 2015
16.Carol Jean Henry, Susan J. Whiting & Nigatu Regassa,Complementary Feeding Practices among Infant and Young Children in Southern Ethiopia: Review of the Findings from a Canada-Ethiopia Project,2015
17. UNICEF and WHO. 2003. Global Strategy for Infant and Young Child Feeding, Geneva, Switzerland.
18. WHO. 2001. Report of the global consultation on Summary of guiding principles for complementary feeding of the breastfed child, Geneva Switzerland.
19. Federal ministry of health. 2005. National strategy for child survival in Ethiopia, Addis Ababa Ethiopia, Family health department publications.
20. Bernadette Daelmans, Jose Martines, and RandaSaadeh. 2003. Special Issue Base World Health Organization Expert Consultation on Complementary Feeding. Food and Nutrition Bulletin; 24(1): 3-141.
21. Tefera Belachew.2003. Human Nutrition for Health Science Students Jimma. Public Health Department.
22. Federal Ministry of Health. 2008. Program Implementation Manual of National Nutrition Program(NNP).Addis Ababa, Ethiopia.
23. Central Statistical Authority and ORC Macro. 2012. Ethiopia Demographic and Health Survey 2011. Addis Ababa, Ethiopia and Calverton, Maryland.
24. IYCN, Washington, DC, USA, Focus on improving complementary feeding in Ethiopia, 2011
25. Dessalegn Tamiru, Dayan Aragu, Tefera Belachew Survey on the introduction of complementary foods to infants within the first six months and associated factors in rural communities of Jimma Arjo,2013.
26.Central Statistical Agency Addis Ababa, Ethiopia ICF International Calverton, Maryland, USA March 2012Ethiopia Demographic and Health Survey2011
27.Knowledge, Attitude and Practice of Breast and Complementary Infant Feeding Among Mothers in Shinasha Culture: The Case of Bullen Woreda, Benishangul Gumuz Region,2014