ORIGINAL ARTICLE

KNOWLEDGE AND PRACTICE OF MOTHERS ON INFANT AND CHILD FEEDING PRACTICES, HALABA TOWN, HALABA, SNNPR, ETHIOPIA

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ABSTRACT

Introduction : Lack of breast feeding and especially lack of exclusive breast feeding during the first 06 months of life are important risk factors for infant and childhood morbidity and mortality that are compounded by inappropriate complementary feeding.

Methodology: Health center based cross-sectional study was done from April 08-19, 2013 using the pretested data collecting tools in 344 under-three children at Halaba Health center, Halaba town. The aim was to generate data on knowledge and practice of mothers on infant and young child feeding.

Results: Our study revealed that, out of all respondents, 82.8% (285/344) had information about infant and child feeding practices. For most of them their source of information was health education (71.2%) followed by information from Television (25.9%) and Radio (23%). Considering their knowledge on exclusive breastfeeding 89% (306/344) of mothers had knowledge and 84% (289/344) of them exclusively breastfed their babies. Regarding complementary feeding practices, 255 (74.1%) of mothers having children aged 6-23 months have started complementary feeding at 6 month of post-delivery. Nearly about half of the respondents started with Cow's milk (47.1%) followed by gruel (37.8%), Porridge (27.6%), formula milk (10.2%) and adult food (8.7%).

Conclusion: This data reflects that majority of the women had knowledge about infant and child feeding practices. In addition, it also reflects that most of the respondents practiced their knowledge of infant and child feeding though most of them started complimentary feeding with cow's milk. Thus, improving health education on young child feeding will help to improve this practice.

INTRODUCTION

Appropriate feeding practices in the early months and years have very important role in achieving optimal health outcomes. Lack of breast feeding and especially lack of exclusive breast feeding during the first half-year of life are important risk factors for infant and childhood morbidity and mortality that are only compounded by inappropriate complementary feeding. The life-long impact includes poor school performance, reduced productivity and impaired intellectual and social development. [1]

Under-nutrition is associated with at least 35% of child deaths. It is also a major disabler preventing children who survive from reaching their full developmental Potential. Around 32% of children less than 5 years of

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age in developing countries are stunted and 10% are wasted. It is estimated that suboptimal breastfeeding, especially nonexclusive breastfeeding in the first 6 months of life, results in 1.4 million deaths and 10% of the disease burden in children younger than 5 years. [1]

Feeding practices for infant and young children worldwide are not optimal- 0nly 39% of all infants are exclusively breastfed worldwide. The prevalence of exclusive breastfeeding rarely exceeds 30% in most regions of the developing world. Globally, more than 10 million children under the age of five year 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. [1]

The global strategy for infant and young child feeding is based on respect, protection, facilitation and fulfillment of accepted human rights principles. Nutrition is a crucial, universally recognized component of the child's right to the enjoyment of the highest attainable standard of health as stated in the Convention on the Rights of the Child. [2] Children have the right to adequate nutrition and access to safe and nutritious food, and both are essential for fulfilling their right to the highest attainable standard of health.

"BREAST MILK IS SUPERIOR TO ANY PRODUCT GIVEN TO A BABY"

OBJECTIVES

- To assess feeding practice of mothers to their infants and young children in Halaba town.
- To assess knowledge of mothers residing in Halaba town about complimentary feeding for those children aged greater than six months.
- To assess the socio-demographic features of the mothers in Halaba town.

METHODOLOGY

Study area

The study was conducted in Health center found in Halaba town, Halaba woreda, SNNPR, Ethiopia. The Halaba town is located around 315 km from Addis Ababa, the capital of Ethiopia and 85 km from Hawassa, the capital of SNNP region. The population of the town is estimated to be 35,976, from which the total number of under- two children which are found in the town is 3,884. [3]

Halaba Health center is the only governmental Health center found in Halaba town established in 1974 E.C and it gives services to 68,469 populations.

Study period

The study was conducted from April 08-19/2013.

Study design

Health center based cross-sectional study design was conducted to determine the awareness of mothers on appropriate infant and child feeding practices.

Source population

All mothers with under-three children in Halaba town.

Study population

All mothers of under-three children who came to Halaba health center in Halaba town.

Sampling technique

Sample size was determined by using study done in Jimma showed that about 67.2% mothers had satisfactory knowledge on benefit of breastfeeding and 95% confidence interval and 5% marginal error. The calculated sample size was 339.75 »334.

Because the source population (N) is less than 10,000; we adjusted the sample size using the adjustment formula and then it became 313.45»313.

Then, we add a 10% non-respondent rate i.e. 31 to the final sample size we calculated. So, the final sample size became 344.

Data collection process

A structured and pre-tested questionnaire consisting of open and closed- ended questions prepared in English and translated to appropriate language by the investigator was used .And it was administered by all members of the group.

The youngest child was selected from mothers who have two children less than three years. If eligible child was not found, the consecutive mothers were selected until eligible child is found by jumping every 11 mother in the same direction.

Data processing and analysis

Data was checked for completeness and consistency manually and the data was compiled and analyzed by SPSS computer software on the basis of specific and general objectives. 95% confidence interval and chi-square test and odds ratio were used to test statistical association.

5.10 Ethical consideration

The procedure and purpose of the study was clearly explained and permission was asked from the Health center administrators with a formally written letter from Hawassa University, College of Medicine and Health Sciences, School of Medicine.

Results

Socio-demographic Features Age distribution of respondents

A total of 344 women who had children less than three years of age were interviewed and responded voluntarily, making the response rate 100%. The mean age of interviewed mother was 26.53 years. Among 344 interviewed mother 176(51.16%) age range 15-25years, 144 (41.86%) from 25-35years, 24 (6.97%) >35years. (See table 1 below)

Age	Frequency	Percentage (%)
15-25years	176	51.16
25-35years	144	41.86
>35 years	24	6.97

Table 1: Age distribution of mothers who were interviewed at Halaba Town

Age distribution of children

Total

The age range of children considered in this study was 0-36 months. Thirty five (10.17%) were 0-6 months old, 140(40.69%) were 6-

12 months old, 145(42.15%) were 12-24months old and the rest were 24-36 months old. (See table 2)

100.0

Table 2: Age distribution of children who were involved in the study at Halaba Town

344

Age group	Frequency	Percentage (%)
0-6 month	35	10.17
6-12 month	140	40.69
12-24 month	145	42.15
24-36 month	24	6.9
Total	344	100.0

Educational level

As to educational background of the respondents, illiterate were 96(27.9%), who can read and write were 18 (5.2%), grade 1-8 were 135 (39.2%), 9-12 were 65 (18.9%) and who attend higher institution were 30 (8.7%).

Marital status

Concerning the marital status, 7 (2.0%) were

single, 316 (91.9%) were married, 16 (4.7%) were divorced and 5 (1.5%) were widowed.

Occupation

As to occupation of the respondents 246 (71.5%) were housewives, 32 (9.3%) were government employees, 46 (13.4%) were merchants, 7 (2.0%) were farmers and others listed in Table 3.

Table 3: Occup	ation of mo	thers interv	viewed at I	Halaba Town

Occupation of the respondent	Frequency	Percent
Housewife	246	71.5
governmental employee	32	9.3
Merchant	46	13.4
Farmer	7	2.0
Teacher	9	2.6
Student	4	1.2
Total	344	100.0

Economic status

Income

The households monthly income of the re-

spondents range from 500 ETB to > 3000 ETB as listed in Table 4.

Table 4: Monthly income of the family who were involved in the study at Halaba Town

Income	Frequency	Percentage (%)
0-500 birr	88	25.58
500-1000 birr	101	29.36
1000-2000 birr	100	29.07
2000-3000 birr	33	9.59
>3000 birr	22	6.39

Knowledge and practice

Respondents who acquire information about infant and child feeding practice were 285

(82.8%) from 344 respondents. Their source of information was listed in the graph below (Figure 1).



Figure 1: Source of information about child feeding practice

Those who knew about exclusive breastfeeding were 306(89%). Mothers who exclusively breastfed their children were 289(84%) and who didn't exclusively breastfed at all were 55(16%). From those who didn't breastfed their reason were 45.45%(25) lack of awareness, 1.81%(1) breast disease, 29.09%(16)busy because of so many reasons to breastfed their children, 9.09%(5) prefer bottle feeding over breastfeeding. Who still breast feeding were 237(68.9%). Our study also showed that out of the total children (n=320), age > 12 months, 212 (66.5%) mothers had practiced an optimal duration of breastfeeding for >12 months. Three hundred and twenty eight (95.3%) of the children were vaccinated according to EPI for their age. Regarding complementary feeding practices 255 (74.1%) of mothers having children aged 6-23 months have started complementary feeding at 6 month post-delivery, 49 (14.2%) at the age of <6 months and about

2.9% after 12months of age. About half of the respondents started with Cow's milk (47.1%) followed by gruel (37.8%), Porridge (27.6%), formula milk (10.2%) and adult food (8.7%) This study showed that about 29.4% children of 0-36 months were bottle fed.

Frequency of child breastfeeding

From the respondents 333 (96.8%) of them alternate their breast during feeding. But, only 57.3 % (197) alternate after emptying the first breast. The rest 35.5 %(122/344) alternate randomly and 4.7% (16/344) alternate soon after initiation. And 21.5% (74/344) of them chew chat.

Complementary food preparation

Two hundred fifty six (74.4%) of the respondent prepared the child's food separately and 232 (67.4%) of them use separated utensils to prepare the child's food. During serving the child food 252 (73.3%) of them served the child separately, 64 (18.6%) served with siblings and 28 (8.1%) served with other family member.

HIV Screening

Three hundred and five (88.7%) of the respondents were tested for HIV/AIDS and only one mother was seropositive and still she was feeding breast.

DISCUSSION

Our study revealed that, out of all respondents, 82.8% had information about infant and young child feeding practices. For most of them their source of information was health education followed by information from Television and Radio. When we look at their knowledge on exclusive breastfeeding 89% of mothers had knowledge and 84% of them exclusively breastfed their babies. This finding is found to be relatively higher when compared to study done in Jimma which is 67.2 %. [12] This could be due to the fact that respondents might be well informed by health workers during their visit to health facilities and at community level by community/Keble health agencies, and another possibility could be that health providers might be trained on infant and child feeding practices, so that they are able to provide adequate information.

Practice of exclusive breast feeding is bit lower than that of the national level which is 96% according to EDHS 2005. [3] About 16% of respondents do not exclusively breast fed because of different reasons, mainly lack of awareness followed by they were busy. From the respondents 333(96.8%) of them alternate their breast during feeding, of which 57.3 % (197) alternate after emptying the first breast & rest 35.5 %(122) alternate randomly.

This study showed that 289(84%) mothers have good practice of breastfeeding. This finding is higher than the recent study done in Jimma town which showed, 28% of mothers have good general practice of breastfeeding. [12] This could be because mothers in the study area are not at higher access to current influences on commercial feeding styles and exposed to different infant feeding practices also as implicated by our study health extension workers and health institutions provided adequate information to the community. Regarding complementary feeding practices 255 (74.1%) of mothers of age 6-23 months have started complementary feeding at 6 month post-delivery. This is higher than the study done in Amhara, 39.0%, Oromia, 60.0%, Madagascar, 64.0%, and Dabat, 45.0%. [17, 18] This may be because majority of the respondents were housewives (71.5%) that allows the mothers to start complementary feeding timely.

Our study also showed that out of the total children (n=320) age > 12 months, 212 (66.5%) mothers had practiced an optimal duration of breastfeeding for >12 months. This result is lower than the study done in Jimma town, 77.0%, and the finding of Dabat town, 90% mothers had breastfed for the same duration of time. [12,17] However, it is an encouraging practice in the study area, since continuing breastfeeding for longer duration could prevent chronic malnutrition (stunting).

According to our study 255(74.1%) respondents started complementary feeding at the age of 6-12 months, 49 (14.2%) at the age of <6months and about 2.9% after 12months of age. This is relatively higher than the study done in Amhara 39.0%, Oromia, 60.0%, Madagascar, 64.0%, and Dabat, 45.0%. [16,17,18] Employed subjects were found to have good practice of timely complementary feeding. The possible reasons for this could be mothers who attended antenatal care have been informed adequately on complementary feeding by the health extension workers during their visit, or could be due to the community based teachings by health extension workers.

This study showed that about 29.4% children of 0-36 months were bottle fed. This is higher than the study done in Tigray, 20.0% of children ,<1 year were bottle-fed [16] but very low than study done in Addis Ababa, 438 (77.7%) infants bottle fed [10].

According to 2005 EDHS, bottle feeding with nipple is not widespread in Ethiopia. However, the proportion of children who are bottle-fed rises from 8.0% among children age < 2 months to 19.0% among children age of 6-8 months, after which it declines gradually to 8.0% among children 18-35 months of age [3], and study done by linkages project in Amhara, Oromia and SNNP regions, showed that, 2.0%, 15.0%, and 7.0% children age 0-<6 months bottle-fed, respectively [18]. This shows bottle feeding practice is declining significantly.

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REFERENCES

- 1. WHO, Infant and young child feeding: model chapter for textbooks for medical students and allied health professionals, 2009
- 2. Global strategy for infant and child feeding, 2003
- 3. Ethiopian demographic health survey, 2010
- 4. Victoria Q. Agnes G. Child Health and Nutrition Research Initiative (CHNRI), Successfully Scaling Up Exclusive Breastfeeding: Lessons from Madagascar.
- 5. World Alliance for Breastfeeding Action (WABA), Protecting, Promoting and Supporting continued Breastfeeding from 6–24 + Months: Issues, Politics, Policies & Action; joint 50 statement based on a workshop of the World Alliance for Breastfeeding Action (WABA) Global Breastfeeding Partners Meeting VII in Penang, Malaysia, October, 2008.
- 6. Ethiopian health sector strategy plans, 2005/6-2009/10.
- 7. FMOH and UNICEF joint forces to promote safe breastfeeding, 6 august, 2004.
- Ministry of finance and economic development population department an annotated bibliography of population and reproductive health researches in Ethiopia, 2002-2007 December, 2008 p 24-8.
- Huffman SL. Determinants of breastfeeding in developing countries: overview and policy implications. Stud Fam Plann1984; Jul-Aug; 15(4):170-83.
- 10. Ketsela T, Kebede D. Pattern of feeding infants in Addis Ababa, Ethiopia. Ethiop.J. Health Dev 1996;10 (1): 133-43.
- 11. Benyamen YS, Hassen MK. Feeding Patterns in the first two years of life in Basra, Iraq. EMHJ 1998; 4(3): 448-51.
- 12. Assessing a Behavior Change Strategy for the Essential Nutrition Actions, Immunization and Family Planning; Antananarivo and Finarantsoa Provinces; Madagascar, 2004.
- Bekle A. Magnitude and Determinants of Bottle Feeding in A Peri- urban community, Ethiopia. A Master's Thesis, 1995.
- 14. Walker ARP, Adam FI. Breast-feeding in sub-Saharan Africa: outlook for 2000. Publ. Health Nutr. 2000; 3: 285-92.
- 15. Biruk KT. The status of breastfeeding among mothers of children aged less than two Years and implication for the occurrence of acute diarrhea, Ethiopia. Master's Thesis, 2002.
- 16. Getachew G: Feeding profile and diarrheal morbidity among 7-12 month infants in Tigray, Ethiopia. Master's Thesis, 2006.
- 17. EPHA, Abstract 11, Assessment of Infant and Young Child Feeding Practice in Dabat town, North West Ethiopia, 2006.
- Community Assessment in selected Wordas, in Amhara, Oromia and SNNP regions; ESHA, Ethiopia, 2006.