



Level of Knowledge and its Associated Factors towards Acceptable Diet of 6-23 Months Old Children in Gimbichu Woreda, Ethiopia

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Abstract

Background: The available data suggests that the rate for Minimum acceptable diet (MAD) is low across all regions worldwide. The level of mothers towards acceptable diet one of the key elements to feed their child. However, level of Knowledge and its associated factors towards acceptable diet among infants and children aged between 6 and 23 months living in study area is unknown.

Objective: this study was aimed to assess the level of Knowledge and associated factors towards acceptable diet among infants and children aged between 6 and 23 months old children in Gimbichu Woreda, Oromia, Ethiopia, 2019.

Methods: A descriptive community-based cross-sectional study was conducted among 782 mothers/caregivers paired with infants and children aged 6 to 23 months with a response rate of 97.1%, from March 12 to April 08, 2019. One-stage cluster sampling technique was employed. A structured pretested tool was used to collect the data. The binary logistic regression analysis was applied for levels of knowledge. All variables were transformed to multivariable logistic regression model irrespective of any transforming criteria to control the effects of confounder/s and to identify statistically significant variables. Finally, the variables which had independent correlations with level of the knowledge were identified on the basis of Adjusted Odds Ratio (AOR) and a p-value less than 0.05 with 95%CI were claimed as statistically significant.

Results: The proportion good knowledge of the mother towards practicing MAD was 52.4% (95% CI, [48.8, 56.0]). Fathers' who have attended secondary and above (AOR=3.97, 95%CI (1.58,12.42)), mothers attending PNC [AOR=7.24, 95% CI (4.34,14.4)], husband involvement (AOR=6.05, 95% CI (2.43,15.10)), richest wealth status [AOR=2.7, 95%CI (1.24,6.03)], women's involvement [AOR= 9.32, 95% CI (4.03,21.52)] were positively associated with the level of knowledge.

Conclusion: Almost half mothers have good knowledge regarding acceptable diet. Educational level of fathers, PNC, husband involvement, richest wealth status, and women's involvement was positively associated with the level of knowledge. Assuring mother's involvement on decision making and promoting husband involvement on infant and child feeding are strongly recommended to mitigate the problem.

Keywords: Nutrition; Feeding; Acceptable Diet; Level of Knowledge Gimbichu Woreda; Ethiopia

Abbreviations: EDHS: Ethiopia Demographic and Health Survey; FANTA: Food and Nutrition Technical Assistance; IYCF: Infant and Young Child Feeding; MAD: Minimum Acceptable Diet; MDD: Minimum Dietary Diversity; MMF: Minimum Meal Frequency; PCA: Principal Component Analysis; PNC: Postnatal Care

Introduction

Complementary feeding is defined as the practice of beginning liquid, solid, as well as semi-solid foods alongside the breast milk, as the breast milk alone is not adequate in satisfying the demand of the baby at the age of six months

and onwards [1]. Accurate complementary feeding plays a great role in preventing childhood undernutrition, infectious disease, and mortalities. Diversified diet is the main strategy to meet optimum growth and development [2]. In the same way, minimum acceptable diet are amid of the eight core indicators of Infant and Young Child Feeding (IYCF) practices for 6-23 months of age in which it was ascertained by combining the two indicators, MDD and MMF [3]. MDD is defined as infants and children aged 6-23 months received four or more food groups out of seven food items [1], whereas, MMF is defined as infants and children aged 6-23 months who get two, and three times per day for breastfed infants aged 6-8 and 9-23 months, respectively; fourtimes for non-breastfed infants and children aged 6-23 months irrespective of their age category [3].

Under-nutrition accounts for about 45% of all under-five child deaths, and most deaths occur in low and middle-income countries [4,5]. Under-nutrition has been an underlying factor of childhood killer diseases such as malaria, pneumonia, and diarrhea [6]. The prevalence of stunting is declining only by one percent per annum, which is associated with sub-optimal complementary feeding practices in Ethiopia [7,8]. The available data suggests that the rate for MAD is low across all regions worldwide [2].

According to Ethiopian demographic health survey (EDHS) shown, the trends of children who received acceptable diet show that only a small increment from 4% in 2011 to 7% in 2016 at the national level. Similarly, at the regional level of Oromia revealed that increment from 5.8% in 2011 to 8.9% in 2016 [7,9]. However, the level of knowledge regarding to minimum acceptable diet is unknown globally. There is no study conducted to show the level of knowledge of mothers towards acceptable diet, and associated factors in the study area, even in our country Ethiopia. Therefore, this study was intended to determine the level of knowledge and its associated factors towards acceptable diet among 6-23-month-old children in Gimbichu woreda, Oromia, Ethiopia. Thus, determining the level of knowledge of mothers regarding acceptable diet, and identifying associated factors will be crucial to the community health. Also, it will reveal the existing gap for healthcare workers, government, stakeholders, and the researchers who want to undertake the study on this problem.

Objectives

General Objective

To assess the Level of Knowledge and Associated Factors towards Acceptable Diet among mothers paired with infants and children aged 6 to 23 months in Gimbichu woreda, East shoa zone, Oromia, Ethiopia.

Specific Objectives

1. To determine the level of knowledge towards acceptable diet of mother/caregiver-child pairs aged between 6 to 23 months in Gimbichu woreda, East shoa zone, Oromia, Ethiopia
2. To identify factors associated with the level of knowledge towards acceptable diet of mother/caregiver-child pairs aged from 6 to 23 months in Gimbichu woreda, East shoa zone, Oromia, Ethiopia

Methods

Study Area, Design and Period

The study was conducted in Gimbichu district, East Shoa zone, Oromia Regional State. The district is located 84 km away from Addis Ababa, the capital of Ethiopia, and 87 km far from Zonal town, Adama. Administratively, this Woreda comprised of 35 kebeles (the smallest administrative unit). According to the data from the woreda health department, the total population residing in the area is estimated to be 120,725, of which 61,087 are males and 59,638 are females. Children aged between 6 and 23 months accounted for 6.4% of the total population. The woreda consists of 5 health centers and 33 health posts. A quantitative community-based cross-sectional study was conducted from March 12 -April 08, 2019. Mother/caregiver- children pairs aged between 6 and 23-months living in Gimbichu woreda were Source of population. Whereas, Mother/caregiver- children pairs aged between 06 to 23 months paired living in randomly selected kebeles and available during the data collection period were the Study population.

Eligibility Criteria

Mother/caregiver- children pairs aged 6 and 23 months paired with mothers who live in randomly selected kebeles were included in this study. Those infants and children who were sick during the previous week and during the data collection period were excluded from the study.

Sample Size Determination

The sample size for this study was calculated using the single population proportion formula by considering the following statistical assumptions:

$$n = D * (Z_{\alpha/2})^2 p (1-p) / d^2$$

Where:

n = the required sample size

$Z_{\alpha/2}$ = critical value for normal distribution at 95% confidence level, which equals to 1.96

P = proportion of MMF (67.3%) , MDD (18.8%) and

MAD(12.3%) [10].

Sample size with MMF proportion (67.3%)

d = margin of error 5%.

D= design effect, which was 2

$D*(Z\alpha/2)^2p(1-p)/d^2$

$n1=2*(1.96)^2*(0.673)*(1-0.673)/(0.05)^2=676$,

By adding 10% non-response rate the final sample size was 744

Sample size with MMF proportion (18.8%)

$n2=2*(1.96)^2*(0.188)*(1-0.188)/(0.04)^2=732$

by adding 10% as non-response rate yielded a final sample size of 805.

Sample size with MMF proportion (12.3%)

$n2=2*(1.96)^2*(0.123)*(1-0.877)/(0.04)^2=517$

by adding 10% as non-response rate yielded the final sample size of 569

Sample Size with Level of Knowledge on MAD

since there was no study conducted in our country Ethiopia and economical developing country which are expected to be comparable. We have ignored to calculate by using 50% of the proportion because we couldn't compare this sample size with those have the actual proportion of the study.

Therefore, since the larger sample size was 805, a final sample size taken was 805.

The main reason for using the proportion of MDD and MMF in calculating the sample size was that this study was conducted as mega project which have included the objective of assessing the proportion of MDD, MMF, knowledge, MAD and associated factors.

Sampling Technique and Procedures

One-stage cluster sampling technique was employed. There were 35 kebeles in the district; firstly, from those kebeles, eight kebeles were selected using simple random sampling. The total numbers of children living in these kebeles were 826. Then after, proportional allocation to each cluster was done. All participants residing in each kebeles were enrolled because; the calculated sample size to each kebeles was near to the study population.

Variables of the Study

Dependent Variables

- Mother's knowledge on MAD

Independent Variables

- **Socio Demographic/Economic Characteristics:** Age of the mother, Education status of the mother, Occupation

of mother, Mothers involvement in decision, Husband educational status, Husband occupational status, Family size, Husbands' direct involvement in feeding

- **Child Characteristics:** Age, Sex, Birth order, Birth interval
- **Maternal Health Service Factors:** Antenatal care (ANC), Postnatal care (PNC), Place of delivery

Data Quality Control

The quality of the data was assured through careful plan, translation, and transliterate of the questionnaire. The questionnaire adopted in English from different literature was translated into local language (Afan Oromo) and then transliterate to English. To maintain the validity of the tool, the content was reviewed by a nutritionist. In addition, pre-test was done on 5% of sample size two weeks ahead of the actual data collection period. Half a day training was given for data collectors and supervisors. Furthermore, the reliability of the tools, especially knowledge related question was checked by the reliability analysis, and the Cronbach's alpha test was 0.83, suggesting the tool as reliable. The principal investigator and the supervisors were checked the collected data for completeness on a daily basis and corrective measures were taken accordingly.

Data Collection Tool and Procedures

A face-to-face interviewer administered questionnaire was employed. Data were collected using structured and interviewer guided questionnaire adapted from previous studies and Food and Nutrition Technical Assistance (FANTA) and IYCF guideline [1, 11]. Data collected by eight diploma nurses and supervised by two BSc nurses.

Operational Definitions

MDD: Infants and children who received four or more food groups among the seven food items within the previous 24-hours [1].

MMF: Infants and children who received any solid, semisolid, or liquid (but also including milk for non-breastfed children) twice for breastfed infants aged 6-8 months, three times for breastfeeding children aged 9-23 months, and four times for non-breastfed children aged 6-23 months [1].

MAD: Children who received both the MDD and MMF were considered as receiving the minimum acceptable diet [1].

Knowledge of infant feeding: In the Principal Component Analysis (PCA), participants who were fall in the first and second rank were considered as having good and poor knowledge, respectively.

Women's involvement in decision: This variable was ascertained through asking whether they participate in

household decisions make decisions alone, or mutually with their husbands' in all four of the following areas: how the money is managed in the home, the woman's own health care, major household purchases, and household purchases for daily needs [7].

Wealth status: The study participant's income status was assessed by using questions adopting from the 2016 Ethiopian Demographic and Health Survey (EDHS) and other literature. The tool comprises of the number and kinds of livestock, availability of agricultural land, the quantity of cereal products, amount of money/birr available in the bank, and materials in the house. After labeling the variables between 0 and 1, the Principal Component Analysis (PCA) was applied. Then after, the wealth status ranked and labeled as richest, rich, middle, poorer, and poorest from the highest to the lowest rank.

Household wealth status: In the PCA, participants who fall in first, second, third fourth, and fifth ranks were defined as richest, rich, middle, poorer and poorest, respectively.

Husband's involvement in feeding: they were considered to be involved in feeding when they perform/answer all from four questions [11].

Birth interval: Number of months since the preceding birth considered as short and optimal subsequent birth interval if less than 24 months and ≥ 24 months respectively [7].

Data Processing and Analysis

The collected data were entered into Epi-data Version 4.4.3.1 and exported to SPSS version 20 for recoding and cleaning purposes. All continuous independent variables were categorized. The income status and knowledge of mothers/caregivers on infant feeding of the participants were analyzed through Principal Component Analysis (PCA). All categorical and continuous variables were categorized to be between 0 and 1. All statistical assumptions of factor analysis was checked, Next, all eligible components were pooled together to generate one variable, wealth status. Then after, the loading factors were sorted in their descending order. Next to this, the loading factors were corrected to be between four and negative four. After this, the final scores were ranked to five quantiles as first, second, third, fourth, and fifth. Ranks were coded as richest, rich, middle, poorer and poorest, respectively. Besides, the knowledge of the study participants was ascertained by using a list of questions from different former literature. The tool contained, but is not limited to, the commencement time of the complementary feeding and frequency of feeding. Each correct response (yes) has got one point, whereas any wrong responses (no) have got zero. Principal Component Analysis (PCA) was performed. Accordingly, the scores were categorized into two ranks, good knowledge and poor knowledge.

The outcome variables were dichotomized and coded as 0 and 1, representing level of the knowledge of mothers' as good and poor respectively. Table's graph, and texts were used to present the findings.

Binary logistic regression analysis was applied for the level of the knowledge to identify factors associated with it. All variables were entered into multivariable model irrespective of any transforming criteria from bivariable to multivariable analysis to control the possible effects of confounder/s and to identify independent variables. Finally, the variables which had independent correlations with the level of the knowledge were identified on the basis of Adjusted Odds Ratio (AOR) and a p-value less than 0.05 with 95% CI were claimed as statistically significant.

Results

Socio-Demographic Characteristics of the Study Participants

A total of 782 respondents were enrolled in the study, making a response rate 97.1%. Majority 746(95.4%) of the house heads were males. Among mothers participated in the study 89(11.4%), 424(54.25), and 269(34.4%) were belonging to 15-24, 25-34 and ≥ 35 years' age category respectively. Five hundred and ninety-nine (76.6%) were orthodox Christian followers. Regarding the educational status of the mothers, a bit more than one-third 296(37.9%) of the them were unable to read and write, while about a fifth (18.2%) of them have attended secondary and above educational level.

Similarly, concerning educational level of the fathers nearly two in every ten (17.9%) of them have attended secondary and above educational level, a 17.1% of them attended primary educational level and (26.3%) have ability to read and writes. Moreover, almost all 660(84.4%) of mothers are farmer/housewife, while a 57(7.3%) of them were merchant. Likewise, 623(85.4%) of the fathers were a farmer, 42(5.7%) were governmental employees, and 36(4.9%) were merchants. Regarding to respondents' ethnicity about 730(93.4%) of them were Oromo, the rest of 51(6.5%) were Amhara. Moreover, concerning wealth status of study participants about 146(18.7%), 163(20.8%), 137(17.5%), 181(23.1%), and 155(19.8%) were found in poorest, poorer, middle, richer and richest level of household wealth index rank respectively. As well, about 202(25.8%), 454(58.1%), and 126(16.1%) of the study participants have of 1-3, 4-6 and ≥ 7 family size respectively.

Infant and Young Child Feeding Practices

Half of (51.4%) of infants and children were female. The

median age of infants and children was 15.0 (IQR± 8) months. Nine in every ten (90.2%) of them were on breastfeeding.

About 592 of them were found in second and above birth order (Table1).

Variables	Category	Frequency	Percent
Sex	Male	380	48.6
	Female	402	51.4
Age of starting complementary feeding	0-5months	104	13.3
	At 6 months	631	80.7
	>6 months	47	6
Birth order	First	190	24.3
	Second & above	592	75.7
Birth interval (n=591)	Short	57	9.6
	Optimal	534	90.4
Breast feeding status	Yes	705	90.2
	No	77	9.8

Table 1: infants and young child characteristics of aged 6-23 months, Gimbichu district, southern Ethiopia, 2019 (n = 782).

Maternal Health Services Related Factors

Around eight in every ten (80.2%) and about (35.2%) of the mother/caregivers have attended antenatal and postnatal care, respectively. About half (48%) of the mothers attended four and above ANC follow-ups. Nine in every ten (91.6%) of the children were born in health institution. About half of 410(52.4%) mother/ caregivers have good knowledge about child feeding.

Level of Knowledge about Acceptable Diet

The proportion of good knowledge regarding acceptable diet was 52.4% (95% CI, [48.8, 56.0]) (Figure 1).

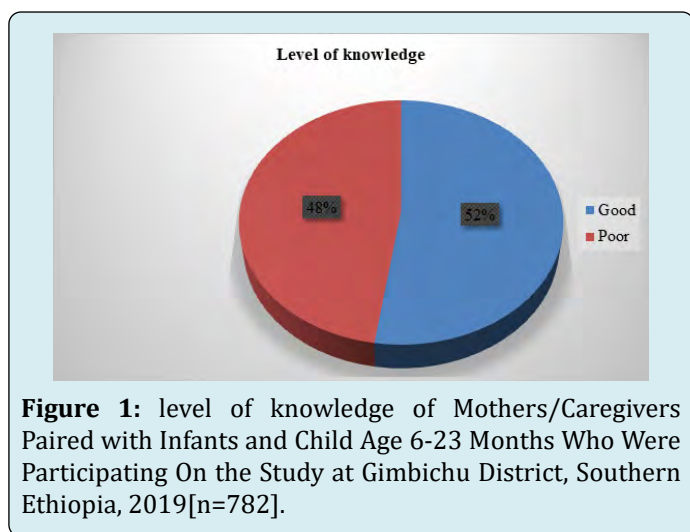


Figure 1: level of knowledge of Mothers/Caregivers Paired with Infants and Child Age 6-23 Months Who Were Participating On the Study at Gimbichu District, Southern Ethiopia, 2019[n=782].

Factors Associated with the Level of Knowledge

Factors associated with level of knowledge were classified as sociodemographic factors, mother related factors, and infants & young child characteristics. In the bi-variable analysis, maternal age, educational level of mothers and fathers, occupation of mothers, ANC, PNC, Birth order, Birth interval, Family size, husband decision on feeding and women involvement were associated with level of knowledge. However, in the multivariable analysis, Father educational level, PNC, wealth status, husband decision on feeding, and women involvement were the only factors that have shown association with level of mothers' knowledge towards acceptable diet.

The odds of having good level of knowledge among fathers' who have attended secondary and above education was nearly four times (AOR=3.97, 95%CI (1.58,12.42) higher than those who were unable to read and write. The likelihood of having good level of knowledge among mothers attending PNC were nearly seven times [AOR=7.24, 95% CI (6.34,14.4) higher as compared to their counterparts. Similarly, the odds of good level knowledge among husband who involved on child feeding was almost six times (AOR=6.05, 95% CI (2.43,15.10), higher as compared to their counterparts. Mothers whose wealth status were rich and richest level were [AOR=3.27, 95%CI (1.12,9.56)] and [AOR=2.7, 95%CI (1.24,6.03) more knowledgeable as compared to their poorest respectively. The odds of having good knowledge among women who involved on household decision was nine folds [AOR= 9.32, 95% CI (4.03,21.52) more as compared to their counterpart (Table 2).

Variables	Category	Level of knowledge		COR (95%CI)	AOR (95%CI)	P-Value
		Good	Poor			
Age	15-24	63(70.8%)	26(29.2%)	3.61(2.15,6.06)	5.60(1.43,21.89)	0.013
	25-34	239(56.4%)	185(43.6%)	1.93(1.42,2.63)	1.42(0.79,2.52)	0.233
	35-49	108(40.1%)	161(59.9%)	1(ref)	1(ref)	
Educational level of mother	Unable to read & write	163(55.1%)	133(44.9%)	1(ref)	1(ref)	
	Ability of read & write	42(21.1%)	157(78.9%)	0.22(0.15,0.33)	0.33(0.17,0.63)	0.061
	Primary	94(64.8%)	51(35.2%)	1.50(0.99,2.27)	0.64(0.27,1.55)	0.323
	Secondary and above	111(78.2%)	31(21.8%)	2.92(1.85,4.63)	1.24(0.35,4.42)	0.737
Educational status of father	Unable to read & write	125(44.2%)	158(55.2%)	1(ref)	1(ref)	
	Able to read & write	62(32.3%)	130(67.7%)	0.6(0.41,0.88)	0.74(0.39,1.37)	0.334
	Primary	96(76.8%)	29(23.2%)	4.2(2.59,6.74)	1.28(0.55,3.00)	0.566
	Secondary & above	100(76.3%)	31(23.7%)	4.1(2.56,6.50)	3.97(1.58,12.42)	0.008
Occupation of mother	House wife	347(50.7%)	338(49.3%)	1(ref)	1(ref)	
	Civil servant	34(85.0%)	6(15%)	5.52(2.29,13.32)	6.73(0.366,23.6)	0.199
	Merchant	29(50.9%)	28(49.1%)	1.01(0.59,1.73)	2.6(0.59,11.47)	0.205
	Farmer	336(51.5%)	317(48.5%)	1(ref)	1(ref)	
Occupation of father	Civil servant	32(76.2%)	10(23.8%)	3.02(1.46,6.24)	0.25(0.034,1.83)	0.173
	Merchant	15(41.7%)	21(58.3%)	0.67(0.34,1.33)	0.39(0.07,2.01)	0.258
ANC	Yes	365(57.9%)	265(42.1%)	3.16(2.16,4.61)	3.12(1.42,6.82)	0.056
	No	45(29.6%)	107(70.4%)	1(ref)	1(ref)	
PNC	Yes	357(70.4%)	150(29.6%)	9.96(6.99,14.22)	7.24(6.34,14.4)	0.0001
	No	53(19.3%)	222(80.7%)	1(ref)	1(ref)	
Place of birth	healthy facility	400(55.9%)	316(44.1%)	7.01(3.56,14.12)	2.21(0.616,7.94)	0.224
	At home	10(15.2%)	56(84.8%)	1(ref)	1(ref)	
No of give birth	Single	400(52.2%)	367(47.8%)	0.13(0.06,0.29)	0.87(0.096,7.94)	0.905
	Twins	10(66.7%)	5(33.3%)	1(ref)	1(ref)	
Husband decision on feeding	Yes	367(55.8%)	291(44.2%)	6.20(3.34,11.48)	6.05(2.43,15.10)	0.0001
	No	16(21.9%)	57(78.1%)	1(ref)	1(ref)	
Women involvement	Yes	169(90.9%)	17(9.1%)	15.34(9.07,26.06)	9.32(4.03,21.52)	0.001
	No	214(39.3%)	331(60.7%)	1(ref)	1(ref)	

Wealth status	Poorest	47(32.2%)	99(67.8%)	1(ref)	1(ref)	
	Poor	61(37.4%)	102(62.6%)	1.26(0.79,2.02)	1.75(0.78,3.93)	0.953
	Middle	76(55.5%)	61(44.5%)	2.62(1.62,4.26)	0.98(0.437,2.18)	0.173
	Rich	141(77.9%)	40(22.1%)	7.42(4.53,12.17)	3.27(1.12,9.56)	0.013
	Richest	85(54.8%)	70(45.2%)	2.56(1.59,4.09)	2.7(1.24,6.03)	0.031
Age of child	06-Nov	131(53.3%)	115(46.7%)	1(ref)	1(ref)	
	Dec-17	140(50.7%)	136(49.3%)	0.90(0.64,1.28)	1.26(0.675,2.35)	0.468
	18-23	139(53.5%)	121(46.5%)	1.01(0.71,1.43)	1.19(0.631,2.26)	0.585
Birth order	First	125(65.8%)	65(34.2%)	2.07(1.47,2.91)		
	Second & above	285(48.1%)	307(51.7%)	1(ref)	1(ref)	
Birth interval	Short	7(12.3%)	50(87.7%)	1(ref)	1(ref)	
	Optimal	279(52.1%)	257(47.9%)	7.79(3.45,17.41)	0.21(0.02,1.88)	0.161
Family size	01-Mar	120(59.4%)	82(40.6%)	1.83(1.17,2.87)	0.325(0.078,1.348)	0.21
	04-Jun	234(51.5%)	220(48.5%)	1.33(0.89,1.98)	0.769(0.396,1.49)	0.438
	≥7	56(44.4%)	70(55.6%)	1(ref)	1(ref)	

Table 2: Bivariable & multivariable logistic regression analysis of factors associated with level of knowledge, Gimbichu district, southern Ethiopia, 2019; (n=782).

Discussion

Level of Knowledge Towards Acceptable Diet

There is no study conducted to show the level of knowledge of mothers about acceptable diet and associated factors in Ethiopia and also in different countries, therefore, it is impossible to compare level of knowledge of mothers and factors associated with level of knowledge of mothers about acceptable diet.

The proportion of good knowledge regarding acceptable diet was 52.4% [95% CI, [48.8, 56.0]]. Concerning to associated factors, the odds of having good level of knowledge among fathers' who have attended secondary and above education was nearly four times (AOR=3.97, 95%CI (1.58,12.42) higher than those who were unable to read and write. In fact, as the level of education increases the knowledge of mothers about why the reason for feeding her child. To explain, these segments of population are chanceful in reading and gathering information regarding nutrition from any sources that could promote child feeding.

The likelihood of having good level of knowledge among mothers attending PNC were nearly seven times [AOR=7.24, 95% CI (6.34,14.4) higher as compared to their counterparts. One of the strategies of postnatal care is give health education regarding infant feeding and healthcare professionals usually advise them to feed their babies appropriately. Therefore, health education given during postnatal care is crucial to

improve the level knowledge regarding infant's nutrition and acceptable diet.

Similarly, the odds of good level knowledge among husband who involved on child feeding was almost six times (AOR=6.05, 95% CI (2.43,15.10), higher as compared to their counterparts. Mothers whose wealth status were rich and richest level were [AOR=3.27, 95%CI (1.12,9.56)] and [AOR=2.7, 95%CI (1.24,6.03) more knowledgeable as compared to their counterparts respectively. The possible reason could be that having enough income supports them to afford the expenses of materials which could be the source of information such as TV, newspapers, magazine, radio, books, and nutritional guidelines. In fact, these could have the potential to improve their level of knowledge about the acceptable diet. The odds of having good knowledge among women who involved on household decision was nine folds [AOR= 9.32, 95% CI (4.03,21.52) more as compared to their counterpart.

Limitation of the Study

There is no study conducted to show the level of knowledge of mothers about acceptable diet and associated factors in Ethiopia and also in different countries, which made comparison problematic. However, hopefully this study could minimize such problem being a baseline for other researchers who will be willing to undertake the same study.

Conclusions

Almost half mothers have good knowledge regarding acceptable diet. Educational level of fathers, PNC, husband involvement, richest wealth status women involvement was positively associated level of knowledge. We recommend mother's involvement on decision making and promoting husband involvement on infant and child feeding and also health care providers should improve the mothers' knowledge by creating the health education program particularly during ANC, PNC service utilization and community mobilization by far regarding minimum acceptable diet.

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