

College of Medicine and Health Science Department Of Public Health Officers

Knowledge, Attitude and Practice of Pre-Lacteal Feeding Among Mother Having Children Less Than 24 Month of Age And Who Visit Agena Health Center in Gurage Zone South Ethiopia

Investigator;

1. Girmayinesh Tadesse
2. Ayanesh Bayisa
3. Tamirat Geto

Advisors: -

1. Mr Abdurezak Kemal (BSc, MPH, Lecturer)
- 2 Mr Mehari (BSc, MPH, Lecturer)

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Knowledge, Attitude and Practice (KAP) of Pre-Lacteal Feeding Among Mothers Having Children Less Than 24 Months of Age And who visit Agena Health Center in Gurage Zone , South Ethiopia,2021

Investigator

1. Girmarenshe Tadesse
- 2 . Ayansa bayisa
- 3 .Tamerat Geto

Advisors ;

- 1.Mr Abdurezak Kemal (BSc, MPH, Lecturer)
2. Mr Mehari (BSc, MPH, Lecturer)

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Abstract

Background: - A pre-lacteal feed is any food except mother's milk provided to a newborn before initiating breastfeeding. The early introduction of complementary foods before the age of six months can lead to displacement of breast milk and increased risk of infections such as diarrhea, which further contributes to weight loss and malnutrition.

Objective:- to assess pre-lacteal feeding knowledge, Attitude, and Practice among mothers having children less than 24 months of age and who visit Agena health center in Gurage Zone, South Ethiopia, 2021.

Methods: - facility based cross-sectional study conducted at Agena town from **July to, November 2021**. 238 number of mothers having children less than 24 months of age and visit to Agena health center will be selected by systematic sampling technique. After the data was checked for completeness, it was coded and entered into EPI Info version 7.1.2.0 and exported to SPSS version 20 software for analysis. Descriptive statistics was used like prevalence mean and standard deviation was computed. Finally, the analyzed data was organized and presented using tables, graphs, charts and narrative as per necessary.

Results:

The prevalence of pre-lacteal feeding practice was 21.8% in Agena health center. The common type of pre-lacteal feeding given was Cow milk; 27(13.2%) and the major reason were mother believed that breast milk only dose not satisfy the new born for growth. majority of the respondent have knowledge about pre lacteal feeding and its risk

Conclusion & Recommendation:

Pre-lacteal feeding is commonly practiced among mothers of children less than two years of age in Agena health center. This makes breast feeding practices sub-optimal in the study area. The most common types of pre-lacteal feeding were Cow milk; 27(13.2%) followed by formula milk 12(5.8%), and butter 10 (4.9%).

Key Words: - Pre-lacteal feeding, Exclusive breast-feeding, Mothers, health center

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Abbreviation and acronyms

Abbreviations/acronyms	Definition
ANC	Antenatal Care
BFHI	Baby Friendly Hospital Initiative
BME	Black and Minority Ethnic
CS	Caesarean Section
EDHS	Ethiopian demographic health survey
EBF	Exclusive breastfeeding
ETB	Ethiopian birr
HEW	Health extension worker
ICT	Information and Communication Technology
IYCI	Infant and Young Child Feeding
KAP	Knowledge, attitude and practice
MCH	Maternal and child health clinic
NGO	Non-governmental organization
PAS	Proportional allocation to sample size
PLF	Pre-lacteal feeding
PISS	Principal Investigator Systematic sampling
TBA	traditional birth attendants
UNICEF	United nation international children's emergency fund
WKU	Wolkite University
WHO	World health organization

Chapter 1; Introduction

1.1 Background of the study

A pre-lacteal feeding (PLF) is any food except mother's milk provided to a newborn before initiating breastfeeding. Pre-lacteal feeding is a major barrier to exclusive breastfeeding (EBF)(1). Exclusive breastfeeding is the cornerstone of adequate early infant nutrition. Despite the acknowledged gains of Baby Friendly Hospital Initiative (BFHI) and other interventional measures in ensuring optimal infant nutrition, it is still a common practice for newborn babies to be given substances other than breast milk within the first day of life (2). Exclusive breastfeeding is recommended as the optimum method of feeding for the first 6 months of life. In many countries across the world, the practice of giving new born babies other substances (pre lacteal feeding) even before lactation has been initiated is a common cultural practice. Pre lacteal feeds are very common and are an important factor in delaying the initiation of breast feeding. These delay the milk letdown reflex and could contribute to lactation failure(3). Despite the demonstrated benefits of breast milk, the prevalence of breastfeeding, in particular exclusive breastfeeding (EBF), in many developing countries including Ethiopia is lower than the international recommendation of EBF for the first six months of life(4).

Breast milk provides immunologic protection against death from infectious diseases, such as diarrhea, respiratory infections, otitis media, pneumonia and meningitis. Good nutrition during this period of rapid growth is vital to ensure that the infant develops both physically and mentally to the fullest potential. Poor feeding practices are a major threat to social and economic development. Nutritional counseling is required to improve the infant feeding practices(5).

World Breastfeeding Week commemoration is the global campaign which has the greatest outreach that raise public awareness about breastfeeding and reap support for it. This annual event usually carries different themes which advocate issues that create enabling environment on breastfeeding (6). Breastfeeding is one of the most important determinants of child survival, birth spacing, and the prevention of childhood infections. The beneficial effects of breastfeeding depend on its initiation, duration, and the age at which the breastfed child is weaned. Breastfeeding practices vary among different regions and communities (7).

1.2 Statement of the problem

In Ethiopia a high prevalence of pre-lacteal feeding practices have been reported in different part of the country; Harari, (45.4%) (8), Jimma, (17%), Sidama,(40.8%), and West Gojam (48.3%)(9,10).Every day, three to four thousand infants died in developing world from diarrhea and acute respiratory infections. Even though pre lacteal feeding is not the direct cause of this death, it is one of the contributing causes of death as comorbidity with diarrhea and respiratory tract infection(10). Pre-lacteal feeds increases the risk of illnesses such as diarrhea and other infections and allergies, if they are given before the baby has had colostrum.(11). Pre-lacteal feeds affect stimulation of breast milk production, suckling and mother-baby bonding. Children who exposed for pre-lacteal feeding before six months of age were 16 times more likely to develop diarrhea or pneumonia(12). .Most mothers practice pre-lacteal feeding because they believe that; it gives laxative effect, clean meconium from the gut or has rehydration effect for newborns. But these prone the newborn to contamination and diarrhea(13). he commonly used pre-lacteal feed practiced in Ethiopia includes; raw butter, plain water and milk-other than breast milk(14). . Ethiopia implements exclusive breastfeeding as one of the components of Primary Health Care and National Infant and Young Child Feeding (IYCF) Guideline, which discourage pre-lacteal feeding practices, but pre-lacteal feeding practice is still a neglected challenge (15). In Ethiopia, like in other developing nations, diarrhea is a major contributor of morbidity and mortality in young infant and children, especially in urban areas, due to inappropriate breastfeeding patterns(16).Pre-lacteal feeding is a common practices in Ethiopia: 12.8%,17%,19%,34%,38.8%,48.3% in Endertaworeda in tigray, Jimma zone, Lalibela town administration, Arba Minch Zuriaworeda, Raya Kobo, and West Gojam zone respectively(17,24–10). Study in West Gojam Zone showed that children deprived of colostrum (52.0%) were stunted than children who received it. Similarly, a significantly higher proportion of children who received pre-lacteal feeding (48.3%) were stunted as compared to children who were not given fed pre-lacteal feeding by their mothers or care takers(10).A wide range of harmful new born feeding practices are documented even after the implementation of infant and young child feeding guide line(18). Although pre-lacteal feeding is widely practiced in Ethiopia, Therefore, the purpose of this study is to assess the prevalence of KAP of pre-lacteal feeding among mothers having children less than 24 months of age and who visit Agena health center in Gurage zone , south Ethiopia 2021.

1.3. Significance of the study

The problem of Pre Lacteal Feeding(PLF) has been the matter of concern for Ministry of Health(MOH) for years. Although PLF is widely practiced in Ethiopia. Therefore, this study attempted to fill this information gap and come up with recommendation on possible intervention for PLF in Agena health center, south Ethiopia. This study may help Community health workers (health extension workers) and health care service provider (Nurses and midwives), who work at under five and Maternal and Child Health Clinic (MCH)as a baseline in their counseling/health education session to minimize pre-lacteal feeding practice and strengthen good breast feeding practice. It helps Health manager by providing relevant information for future planning and interventions of appropriate strategies to reduce pre-lacteal feeding. It also helps to Non-Governmental Organizations (NGOs) and policy makers to give information that will help to formulate appropriate implementation tool. It may serve as baseline data for those who are interested in carrying out further research with this regard.

Chapter 2; Literature Review

2.1 The prevalence and types of pre-lacteal feeding

Every day, 3000 – 4000 infants die in the developing world from diarrhea and acute respiratory infections because they are given inadequate amounts of breast milk and were introduced pre-lacteal feeding(6). Exclusive breastfeeding of newborns, a practice recommended by WHO, is hindered in many countries by practices such as pre-lacteal feeding (feeding other foods before breast milk is fed to infants)(19).The study done in Nepal showed that from a total of 3948 mother 841 (26.5%) of mothers reported of providing pr- lacteal feeds to their newborn infants. Plain water (n = 75), sugar/glucose (n = 35), gripe water (n = 3), sugar/salt solution (n = 3), fruit juice (n= 3), infant formula (n = 96), tea (n = 3) and other milk other than breast milk (n = 556) were some of the types of pre-lacteal feeds reported(4).

According to study done in Vietnam Pre-lacteal feeding was very common, practiced by nearly three out of four respondents (73.3%) Infant formula was the most commonly fed pre-lacteal(53.5%), followed by plain water (44.1%). Other pre-lacteal feeds included honey, glucose water, and other liquids(20).Study done in rural northern India revealed that 40.1% of mothers gave pre lacteal feeding to their newborn(21). A cross sectional study was conducted in 3 hospitals of Haryana district, Northern India, for the duration of six months in the year 2013. Data from 576mother- new born pair was collected. During the first 24 hours after birth, 209(36.9%) of the newborns were given pre-lacteal feeding in various form. Most common type of pre-lacteal feed was animal milk (56.9 %) followed by holy water (22.5 %)(22).A longitudinal observational study conducted in rural area of West Bengal showed that 71.7%infants were given pre-lacteal feed, honey (25%) was the most common followed by substitutes like water- 18.4% and Palm candy water 13.3% or combination of those 10%(23) .Study conducted by in the area of Chandigarh, India showed that the necessity of pre lateral feed was seen amongst74.7% of mothers. Around 75.2% were of opinion that Honey should be given followed by water(13.3%) and Jaggery water by 5.1%(17). Study done in Azamgarh district of Eastern Uttar Pradesh revealed that the pre-lacteal feed used by 33.1 % among rural mothers whereas it is comparatively more prevalent (60.9%) among urban mothers. Generally, 'cow milk mixed with water' and 'honey mixed water' is used as pre-lacteal feed. 'Cow milk mixed with water' is in use

of 50.9% urban and 513.0% rural mothers whereas honey mix with water is in use of 13.9% of urban mothers and seems to be comparatively more popular among rural mothers (23.2%)(24).

2.2 Maternal knowledge and attitude towards PLF

Study in Maharashtra India revealed that Insufficient milk was the reason reported by the 20 (31.25%) mothers followed by elder's advice 19 (29.68%) and family custom 16 (25%). Thirteen mother (20.3%) gave reason of good for health (Child will talk early and Tongue will become thin) while 6 (9.37%) opine that that it will remove meconium from the gut of the child (19A cross-sectional door-to-door survey was conducted in Jaipur, India 57.6% of the mothers think pre-lacteal feed should be given and the majority of were illiterate. 49.60% of the mother think that 1st feed (colostrums) should be discarded and should not be given to the baby but (25%) of the mother believe that it should be given this was statistically significant ($p < 0.001$)(39).

According to the Community based cross sectional study done in Maharashtra, India, Insufficient milk was the reason reported by the 20 (31.25%) mothers followed by elder's advice 19 (29.68%) and family custom 16 (25%). Thirteen mother (20.3%) gave reason of good for health (Child will talk early and Tongue will become thin) while 6 (9.37%) said that it will remove meconium from the gut of the child(25). The analytical study conducted in India showed that the major reason cited for pre-lacteal feed were advice by the elders (52.8%) and cultural practice (48.6%) observed by the family such as to facilitate the passage of meconium in order to keep the child healthy or a very common belief that the child takes after the person who gives pre-lacteal feed to the child(24).

Study done in Mahendragarh, India showed that most common reason for pre-lacteal feed was traditions & customs (41.6 %) followed by pressure/ suggestions from relatives (19.6%)(22). In Mansoura, Egypt the most frequent reasons for giving PLF are tradition (61.0%), mother's/mother in law's advice (58.3%), keeping mouth and throat moist (55.9%), lack of/delay in milk production(47.9%), and advice of health care provider (42.0%)(26).

The study carried out in Nigeria to determine the proportion of health care workers so revealed that reasons for given PLF fell into three main groups. These were: perceived breast milk insufficiency (33.4%)^{3/4} this was the commonest single reason given; medical reasons (35.2%) ^{3/4} these were a group of reasons comprising mainly prevention of dehydration, hypoglycemia and

neonatal jaundice; others included fluids like water given for diagnostic reasons, e.g. to rule out intestinal obstruction and drugs given to stimulate the baby's appetite; non-medical reasons (31.4%) ¾ these included cleansing and preparing the baby's gastrointestinal tract for digestion, to quench thirst, flush the bladder, rest the mother, provide variety in the baby's diet and because colostrum is thought to be too strong for the baby(27).

As the countrywide study conducted in Ethiopia which was used to identify the determinants of EBF practice showed as the reasons that mothers believe that they need to wait until the milk started flowing, secondly giving liquid will clean the baby's throat and it has been a long standing tradition(3). Study done in Arbaminch zuria woreda showed that among those women who gave pre-lacteal feeds, 41.8% of women considered provision of water as a means of cleaning the infant's stomach. This might be due to traditional beliefs and knowledge gap on the dietary value of breast milk(28) In Ethiopia north Gondar Kossoye colostrum was said to cause abdominal problems (63 %)reported ritual pre-lacteal feeding, Pre-lacteal substances may be given for non-nutritional reasons, such as to 'clear the throat' or bowels(13). In Harare region, Ethiopia, mother who had Good level of information of breast feeding gave PLF 207 (74.5%) than Poor level of information 71(25.5%)(6).

2.3. Pre-lacteal feeding practice

Study done in slum children showed that among all the mothers 120 (96%) respondents fed their child colostrums. Out of 120 respondents 54 (45.0%) respondents initiated breastfeeding within one hour of birth. One hundred five (84%) respondents gave pre-lacteal feeding. only 20 (16%) respondents practiced exclusive breastfeeding for six months. It will be revealed that 80 (64%) mothers fed their child complementary feeding at the age 6-7 months, while 31(29.5%) mothers mother feed their children honey and sugar water separately (25).. According to Study done in Timor-Leste, Asia, a total of 4821 mother-infant pairs were included in the analysis. The prevalence of pre-lacteal feeding will be 12.3%. The most popular pre-lacteal food will be plain water (50.7%), followed by glucose/sugar water (32.5%) and milk other than breast milk (22.7%). Older mothers (35–49 years)mothers with upper socioeconomic status, those who perceived their

newborns as small size, and those residing in urban areas were approximately 1.5 times more likely to give PLF, whereas women who followed religions other than Roman Catholic had twice the risk (adjusted odds ratio 1.98; 95% CI 1.16–3.41)(29).

A cross-sectional study in Urban slums of Luck now city, UP showed that Half (50.6%) PLF will be given to newborn. Out of those who had given pre-lacteal feed, 55.1 percent had given gripe water and 49.4 percent had given boiled water as pre-lacteal feed(22). Study in a Tertiary Care Hospital, Bellary, Karnataka revealed 42.4% of children received prelacteal feeds(27). In rural area of Uttarakhand 61.8% of newborns received pre-lacteal feed (30).One study done in rural areas of Maharashtra, India, showed (42.7%) practiced PLF. From the PLF, Cow milk (45.3%) will be the most common pre-lacteal feed administered followed by honey (40%). Honey with the castor oil administered by 6 (9.31%) respondent while castor oil, honey and cow's milk together given by 2 (3.12%) respondent. Only one (1.56%) respondent administered Jaggery water(14). According to study in rural women of Bijapur 91.25 % gave pre-lacteal feed. Commonest pre-lacteal feed given will be sugar water (46.81%) followed by sugar water plus honey (28.63%), Castor oil (8.63), Cow/ Buffalo Milk (8.18) and honey (7.72%)(31).

In the rural community of the Pondicherry the prevalence of rate of pre lacteal feeding will be observed to be 48% and the exclusive breast feeding of 71% and mean duration of continued breast feeding will be 15 months. The differences between feeding practices among male and female children were negligible in this community (20).

Study in Nepal Demographic health survey revealed the Prevalence of introduction of pre-lacteal feeds of 3948 children, 841 [21.3% un weighted proportion; and 26.5% weighted proportion] were provided with pre-lacteal feeds(1). According to study done in Vietnam Pre-lacteal feeding will be very common, practiced by nearly three out of four respondents (73.3%) Infant formula will be the most commonly fed pre-lacteal (53.5%), followed by plain water (44.1%). Other pre-lacteal feeds included honey, glucose water, and other liquids (32).

A questionnaire based study done in Tamilandu India showed 350 mothers took part in the study. The minimum age of the mother will be 19 years and the maximum age will be 30 years, with a mean age of 24 years and 3 months. Of those 350 mothers, 52 (14.85%) had given pre lacteal feeds to their child. There were 25(48.07%) male and 27 (51.92%) female children out of those

52 who were administered pre lacteal feeds. Similarly, when the birth order of the child will be taken into account, 32 (14.47%) of the first born, and 20 (15.50%) of the children born later were given pre lacteal feeds. In this study, regarding the variety of food stuffs that were given as pre lacteal feeds to the children; the most common one will be sugar water (45.1%), followed by honey (25.5%) and diluted cow's milk (21.6%)(3).

Study done in a teaching Hospital of Western Nigeria showed that 60 (96.8%) respondents (29 doctors and 31 nurses) routinely prescribed pre-lacteal feeds for healthy babies whose mothers were considered to have delay in lactation. The pre-lacteal feeds prescribed by 29 doctors were infant formula 15(51.7%), glucose drinks 11(37.9%) and plain water 3 (10.3%) respectively. Also infant formula 16 (51.6%), glucose drinks 13(41.9%) and plain water 2(6.5%) were prescribed by the 31 nurses respectively. Twenty-one (35.0%) of the total 60 subjects giving prelacteal feeds usually advised giving pre-lacteal feeds within the first 2 hours of delivery.

Infant formula will be the most common pre-lacteal feed administered to newborn babies by the pediatric nurses and doctors. Eleven (73.3%) of the 15 pediatric doctors and 10(58.8%) of the 17 nurses gave this feed. On the other hand glucose water will be the most common feed given by the obstetric doctors and nurses-9(60.0%) of the 15 doctors and 8(47.1%) of 17 nurses(32).According to the study done in the rural communities of Arba Minch Zuria the prevalence of pre-lacteal feeding will be 8.9%(9). There will be also another study done in Raya kobo north eastern Ethiopia that showed out of 623 mothers who had ever breastfed their index child, 242 (38.8%; 95% CI: 35.0%, 43.0%) reported giving pre-lacteal feeds to their children. The most common pre-lacteal foods were sugar solution (38%) and raw butter (32%)(33).

As institutional based cross-sectional study will be conducted in Harari region, eastern Ethiopia revealed that out of the total 612 respondents, 278 (45.4%) of mothers gave pre-lacteal liquids for their infants. The common pre-lacteal food includes sugar or glucose water 121 (43.5%) followed by milk other than breast milk 70 (25.1%) (8). study done in Tigray Endertaworeda that showed 68(12.8%) of the mothers gave pre-lacteal feed(34).

Study done in Lalibela town administration showed the prevalence of pre-lacteal feeding practice will be 19%(25). Similar study done in Jimma zone south west Ethiopia that showed the prevalence of pre-lacteal feeding practice will be 17% (17). In East Gojam zone sixty-two

mothers (11.2%) were given additional feeding other than breast-feeding with in the first three days and the item of additional feeding were (8.1%) butter and (3.7%) water (35).

Chapter 3; Objective

3.1. General Objective

- To assess Knowledge, Attitude, and Practice of the pre-lacteal feeding among mothers having children less than 24 months of age and who visit Agena health center in Gurage zone South Ethiopia, 2021

3.2. Specific Objectives

- To assess Knowledge of the pre-lacteal feeding among mothers having children less than 24 months of age.
- To assess attitude of pre-lacteal feeding among mothers having children less than 24 months of age.
- To assess practice of the pre-lacteal feeding among mothers having children less than 24 months of age.

Chapter 4;Methods and Materials

4.1 Study Area And Period

The study was conducted in Gurage zone Agena health center South Ethiopia. it found in Ezha woreda which is 42 km far from Wolkite Town the capital city of Gurage zone and 200km from Addis Ababa the capital city of Ethiopia. the common disease diagnosed in under 5 OPD are diarrhea, pneumonia, acute upper respiratory infection commonly found in the OPD The study was conducted from October 2021.

4.2. Study Design

A facility based cross-sectional quantitative study was employed.

4.3. Source population

Mothers having children less than 24 months of age who are visiting Agena health center was the source population.

4.4. Study population

Selected mothers having children less than 24 months of age and who are visiting Agena health center in Gurage zone.

4.5. Eligibility criteria

4.5.1. Inclusion criteria

- Mothers having children less than 24 months of age who visit health center for any service

4.5.2. Exclusion criteria

- Mothers who visit emergency department with critically ill children
- Mothers who are critically ill or those with mental problem

4.6. Sample Size Determination

The sample size was determined based on the formula used to estimate a single population proportion and using 17.0% prevalence of PLF in Jimma zone, southwest Ethiopia(17)and a 5% margin of error with 95% confidence level.

$$n = \frac{(Z_{\frac{\alpha}{2}})^2 P(1-P)}{d^2}$$

Where, Z= Standard normal variable at 95% confidence level (1.96), p= estimated proportion of pre-lacteal feeding (17%) d= margin of error (5%)

$n = \frac{(1.96)^2 0.17(1-0.17)}{(0.05)^2} = \frac{3.842 \times 0.17(0.83)}{0.0025} = \frac{3.842 \times 0.141}{0.0025} = 217$ the sample size was adjusted to compensate for non-response rate of 10% of 217 was 21 and finally the total sample size was 238

4.7. Sampling procedure/Technique

Respondents were identified using simple random sampling technique from mothers having children with less than 24 months and visiting for any service to Agena health center in Guraghe zone Finally, every mother was identified until the required sample size fulfilled and the starting mother was selected using a lottery method.

4.8 Study variables

- Child and maternal demographic variable (number of children, family size, birth order, maternal age, educational status, occupation, religion)
- Maternal knowledge on the risk associated with pre-lacteal feeding
- Maternal attitude towards pre-lacteal feeding
- Maternal practice with regard to pre-lacteal feeding
- Colostrum's avoidance
- Breast feeding initiation

4.9. Operational definition

Pre-lacteal feeding; defined as giving fluid or semisolid food before breast feeding to an infant during the first three days after birth(20)

Breast problems; defined as whether a mother had experienced one or more of the following: she has insufficient breast milk; and/or pain, engorgement, or cracked nipples(33)

Antenatal care utilization: having at least one visit of health institution for checkup purpose during the pregnancy of the index child(33)

Untrained traditional birth attendant: traditional birth attendant who can provide the delivery services without knowing the basic mother-child cares (did not take any training program)(33)

4.10. Data collection tool and procedure

To collect the desired data, primary source of data was use. The adapted questionnaire was contextualized to fit the local situation and the research objective. The questionnaire was developed after extensive review of literatures and using similar study tools. we were trained for collecting data by respecting advisor. They were explained each question to the respondents to help them understand the questions fill their own response on questionnaire. It has two parts socio demographic and KAP of infant feeding to assess pre-lacteal. The data was collected using interviewer administered semi structured questionnaire which was prepared first in English, translated into Amharic then back into English by fluent speakers of both languages to check its consistency. The data was collected through face to face interview using semi structured questionnaires. we were trained about the data collection to ensure the completeness, consistency of information during the data collection period.

4.11. Data Quality Control

we were trained by our advisor for one day to ensure the data completeness and consistency of information during data collection . The quality of the collected data was controlled by assessing it through cross-checking and correcting incomplete information immediately after data collection by supervisor and principal investigators. Uncorrected and incomplete data were discarded.

4.12. Data Processing And Analysis

After the data was checked for completeness, it was coded and entered into EPI Info version 7.1.2.0 and exported to SPSS version 20 software for analysis. Descriptive statistics was used like prevalence mean and standard deviation was computed. Finally, the analyzed data was organized and presented using tables, graphs, charts and narrative as per necessary

4.13 Ethical consideration

Ethical clearance was obtained from the Research Ethics Committee of Wolkite University. In addition, the letter was prepared and given to the selecting Health center to get permission to conduct the study. Informed consent was taken from the participant and the privacy of an individual's information provided was strictly preserved. It was to be used only for study purposes. It was not disclosed to anyone. A code number was used to identify the participant; therefore, writing their name was not needed. All the methods were performed by approved institutional guidelines.

4.14. Dissemination of the Result

Result of this study will be presented to Wolkite University Colleges of Medicine and Health Sciences Department of Public Health Officer. It will be disseminated to Policy makers, Agency health center and to other concerned bodies. Furthermore, the paper will be presented at workshops, seminars, and at other professional gatherings. The paper will be published in scientific journals.

Chapter 5 Result

5.1 socio demographic characteristic of mother who having child less than 24 month of age.

Two-hundred thirty eight mothers having children less than 24 months of age were drawn and 225 consented to participate and included in this study resulting a response rate of (98.6%). The mean ages of respondents were 28.9 years (\pm SD 6.79) with age range from 18 to 46 years. Out of the total respondents 121 (53.8%) were with age range of 26–35 years. Majority of the mothers; 181(80.4%) had 4-7 member of families and the rest 44(19.6%), had 2&3 family

member.29 (12.9%) were unable to read and write,16 (7.1%) are able to read and write, 101(44.9%) of the respondent are attend primary school ,and the rest79(35.1%) are attend to secondary and above. More than two-third of the respondents (69.8%) were Orthodox religion followers followed by Muslim (16.9%) and 98 (43.6%) were house wife followed by merchants 62 (27.6%). The mean age of children was13.65 with (SD ±6.388) month

Table1; show socio demographic data of mothers having child less than 24 month of age south Ethiopia 2021

Demographic Variables	Frequency	%
Age of Mothers		
15-25	67	29.8
26-35	121	53.8
>=36	37	16.4
Family size		
<=3	75	33.4
4-6	148	65.7
>=7	2	0.9
Marital status		
Single	6	2.7
Married	219	97.3
Divorced		
Widowed		
Level of education		
Unable to Read and write	29	12.9
Able to read and write	16	7.1
Primary education(1-8)	101	44.9
Secondary education (9-12)	59	26.2
College and above	20	8.9
Maternal Religion		
Orthodox	157	69.8
Muslim	38	16.9
Protestant	30	13.3
Maternal Ethnicity		
Gurage	195	86.7

Oromo	12	5.3
Amhara	6	2.7
Hadya	12	5.3
Maternal Occupation		
Private employee	19	8.4
Civil servant	16	7..1
Daily laborer	15	6.1
Trader	62	27.6
Farmer	7	3.1
House wife	98	43.6
Other	8	3.6
Mothers level of income		
<500		
500-1000	4	1.7
1001-1500	31	13.7
>=1500	190	84.6
Age of the child (months)		
<6	62	27.6
6-12	76	33.8
13-24	87	38.6
Sex of the child		
Male	133	59.1
Female	92	40.9

5.2 Knowledge of mother who having child less than 24 month of age on pre lacteal feeding

Majority of the respondents 163(72.4%) knew about the disadvantages of pre lacteal feeding. 33 (14.7%) of the respondent said it may cause for poor growth,42(18.7%),53 (23.6%),35 (15.6%) they said cause for vomiting, diarrhea, and infection respectively the rest62 (27.6%) mothers did not know the risks of pre-lacteal feeding

Table2 Knowledge on pre-lacteal feeding among mothers having children less than 24 months of age in Agena Town , southern Ethiopia2021

Variable	Categories	Frequency	Percentage
----------	------------	-----------	------------

Do you know pre lacteal feeding? Total	Yes	183	81.3
	No	42	18.7
		225	100
Breast feeding is important for infant health?	<i>Yes</i>	<i>225</i>	<i>100</i>
	<i>No</i>	<i>0</i>	
Breast feeding is important for maternal health Total	<i>Yes</i>	<i>167</i>	<i>74.2</i>
	<i>No</i>	<i>58</i>	<i>25.8</i>
		<i>225</i>	<i>100</i>
The first milk /colostrum should be given to an infant	Yes	148	65.8
	No	77	34.2
Know risk of pre lacteal feeding ? Total	Yes	163	72.4
	No	62	27.6
		225	100
Problem of pre lacteal feeding? Total	Poor growth	33	14.7
	Vomiting	42	18.7
	Diarrhea	53	23.6
	Infection	35	15.6
		163	72.4

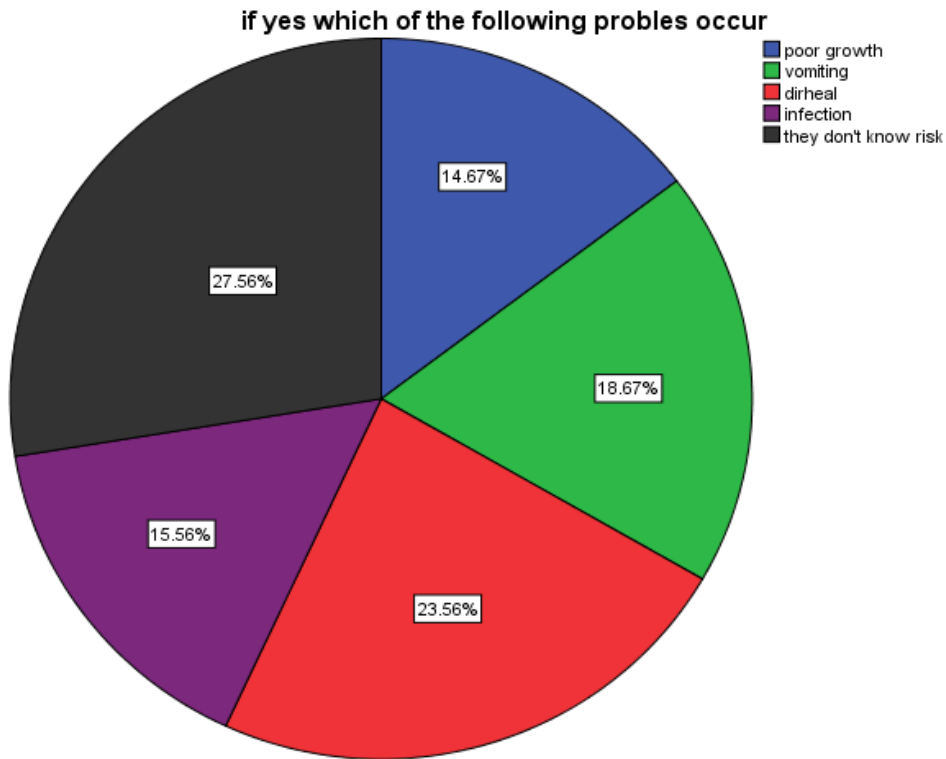


Figure 1; it show risk of pre lacteal feeding practice mention by the mother who having child less than 24 month of age in Agena health center south Ethiopia 202

5.2 Attitude of mother who having child less than the age of 23 month on pre lacteal feeding

Majority of the mother 173 (76.9%) said pre lacteal feeding was a bad practice for child before breast feeding the rest 52(23.1%) thought it is a good practice. regarding their feeling it affect the child health some of the respondent said it is important or advantageous 74(32.4%) they believed its use for child growth, child health , breast milk only for new born will be thirsty, to clean infant bowel and throat

Table 3 Attitude of mother who had child less than the age of 24 month on pre lacteal feeding in Agena Town South Ethiopia 2021(n=225)

Variable	Categories	Frequency	Percentage
What do you think about pre lacteal feeding Total	It is good	52	23.1
	It is bad	173	76.9
		225	100
What do you advice about infant feeding as soon as delivery	Breast milk only	198	88
	Breast milk with additional food	27	12
Do you know advantage of Pre lacteal feeding	Yes	74	32.4
	no	151	67.6
If yes which one	for child health	20	8.9
	For child growth	47	20.9
	Breast feed for new born will be thirst	1	0.4
	To clean infant bowel throat	6	2.7
	Total		74

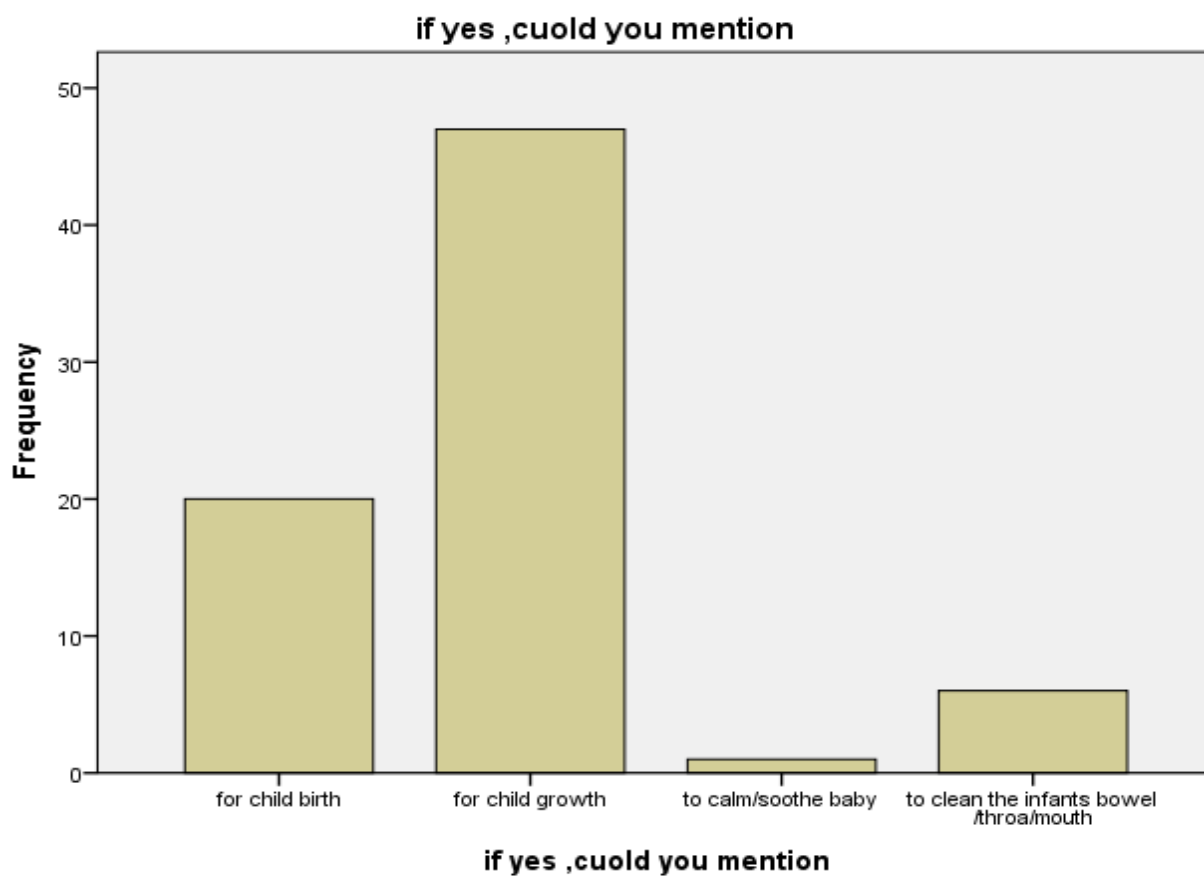


Figure 2; it show Attitude of the mother on purpose of pre lacteal feeding in Agena health center south Ethiopia 2021

5.3 Prevalence of pre-lacteal feeding practices mother who have child less than 24 month of age

Out of 225 who had ever breastfed their index child; 49 (21.8%) were reported giving pre-lacteal feeds to their infants within the first three days before giving breast milk. The most common types of pre-lacteal feeding were cow milk; 27 (13.2%) followed by formula milk ; 12 (5.8%) and the rest 10(4.9%) are use butter. The major reason for PLF were; mothers believed that breast feed only does not satisfy the new born for growth ; 17(8.3%), maternal medical illness 12(5.3%); cultural practice 7(3.4%), to clean infant's bowel throat /Mouth 5(2.4%); infant feeding problem 4(1.3%) and 4(1.3%)are others

Table 4 Pre-lacteal feeding practices among mothers having children less than 24 months of age in Agena Town , southern Ethiopia,

Variable	Category	Frequency	Percentage
Pre lacteal food given for the child	Yes	49	21.8
	NO	176	78.3
Types of pre lacteal food	Cow milk	27	13.2
	Formula milk	12	5.8
	Butter	10	4.9
Reason for pre lacteal feeding	Breast feed only is not sufficient new born growth	17	8.3
	Maternal medical illness	12	5.2
	Cultural practice	7	3.3
	To clean infant bowel throat /mouth	5	2.4
	Infant feeding problem	4	1.3
	Others	4	1.3
	Total	49	21.8

Chapter;6 Discussion

Knowledge, Attitude, and practice of pre lacteal feeding of child among mothers are important aspect to maintain children's Health. this study show that Pre Lacteal Feeding(PLF) practice were optimal in the study area the prevalence of pre lacteal practice in Agena was found to be (21.7%) . this finding higher compared with national prevalence of pre lacteal feeding from the total sample of children (8%)feed pre lacteal(28). and study done In Ethiopia Arbaminch Zuria district(8.9%) , Enderta district (12.8%) (9,36).This variation might be due to the difference in culture, the population character and geographic distribution in the other hand prevalence of pre lacteal feeding in this study was so much lower than study done in Harari (45.4%) ,(48.3%)west Gojam (10,17).this might be due to the difference in level of awareness of involved population about health impact of pre lacteal feeding, health service access for ANC follow up and counseling, religious, and cultural acceptance of pre lacteal feeding. In our study the major reason for pre lacteal feeding were mothers believed that breast feed only does not sufficient for child growth (8.3%), maternal medical illness (5.3%),cultural practice (3.4%),misperception of mother that they provide pre lacteal feeding to clean infant bowel and throat (2.4%), infant feeding problem(1.2%). and other (1.2%).The study further revealed major reason for Pre lacteal feeding were insufficient milk/delay lactation (31.25%), elder's advice (29%) and family custom (25%). (9, 37). In this study 62(27.6%) number of the respondent who didn't have knowledge on risk of pre lacteal feeding. it is higher compare with research done in Raya Kobo district, North East Ethiopia(8, 33) this may be due to cultural practice, maternal educational level, and may be due to lack of Antenatal care service, not supporting about breast feeding at health facility (breast feeding counseling it may affect the maternal knowledge and attitude. also this might be because of those mothers may believed that pre lacteal feeding some advantage or cultural practice to feed other than breast milk those feed pre lacteal feed. lack of full information on the advantage of giving new born colostrum and disadvantage of pre lacteal feeding could lead to mother discarding the first milk..

6.1 Strength and limitation of the study

1. The study include all the Illegible respondents in selected health center and recall bias was minimized since the questionnaire emphasizes only on mother with child.

6.2Limitation of the study

1. since the study is cross-sectional it does not show cause and effect between dependent and independent variable.

2. the information was self reported and no behavior of the mother was observed.

Chapter -7 Conclusion and Recommendation

7.1 Conclusion

Pre-lacteal feeding is commonly practiced among mothers of children less than two years of age in Agena health center . This makes breastfeeding practices sub-optimal in the study area. The most common types of pre-lacteal feeding were Cow milk ; 27(13.2%) followed by formula milk 12(5.8%), and butter 10(4.9%).

The major reason for PLF were; mothers believed that breast feeding only does not sufficient to the child growth maternal medical illness , cultural practice, to clean infant's bowel throat/mouth and mothers provide pre lacteal feeding with their own decision. Therefore, attention has to be given on breastfeeding counseling during ANC follow up with special focus on mothers who live with extended family and Health education about the importance of colostrum and health impact of pre lacteal feeding.

7.2 Recommendation

Based on the result of the study the following recommendation were followed.

- The policy makers, Ministry of health, SNNPR health bureau, Gurage Zonal health bureau should create awareness specially about disadvantage of pre lacteal feeding among mothers and health workers to resolve problem of child that results from pre lactation by giving continuous health education program..
- Health science colleges should be give education on practice of pre lacteal feeding problem for the mother
- Health professionals should provide appropriate information about the importance of colostrum formothers since they had a direct relationship with mothers in different circumstances e.g.during antenatal care, delivery, immunization and integrated management of newborn and childhood illness service.
- Finally researchers should do further study to identify knowledge, attitude and practice of mothers with qualitative data about pre lacteal feeding of child at large scale

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Annex- I English Questionnaires

Wolkite University

Our study focus to assess KAP towards pre-lacteal feeding among mothers having children less than 24 months of age at Agena health center, South Ethiopia

Hello, my name is _____ I am working in a research team of Wolkite University College of Health sciences. This questionnaire is prepared to conduct a study the KAP of pre-lacteal feeding among mothers having children less than 24 months of age and who visit X health center to complete the questionnaire designed by the researcher because you fulfill requirement for sampling. The finding of this study will help in determine the prevalence of pre-lacteal feeding and improve optimal breast feeding practice in the future. Thus this interview is prepared for this purpose to get appropriate data on the study we are conducting. The data that I will obtain using this interview is used only for research purpose and your response is kept confidential. For this purpose your name will not be written here and there was no way of linking your individual responses to the final result of the study findings. The study has no risk to you and your child except sparing a maximum of 30 minutes of your time and if you face any problem in relation to the research you can contact responsible person based on the address below. You have the right not to respond at all or to withdraw in the meantime, but your participation is highly valuable for the success of our research objectives. Therefore, I politely request your cooperation to participate in this interview.

Do you agree to participate in this study? Yes, _____ continue No_____ Thank you!

Name of Data collector -----Signature -----Date-----

Signature of supervisor -----Signature -----Date-----

Annex II Questionnaire

Q/No	ITEM/QUESTION	RESPONSE OPTION	CODE	Remark
	Part one:- socio demographic information			
101	Family size			
102	How old are you	(.....)years		
103	What is your Marital status	Single Married Divorced Widowed	1 2 3 4	
104	What is your Level of education	1,unable to read and write 2,able to read and write 3primary education 4,secondary education 5,collage and above	1 2 3 4 5	
105	What is your religion	1,protestant 2,orthodox 3,muslim 4,other(specify).....	1 2 3 4	
106	Which ethnic group do you belong to	1. haddiya 2 ,Gurage 3 ,Silte 4,kembata	1 2 3 5	

		5,other(specify).....	6	
107	What is your current occupation	1. Private employee 2. Civil servant 3. Daily laborer 4. Trader 5. Farmer 7. House wife 8. Other (Specify)-----	1 2 3 4 5 6 7	
108	What is the approximate household income from all the sources per month?	“ ”in Eth birr		
109	How old is your (the index) child?		
110	Gender of your(the index)child	1. Male 2. Female	1 2	
111	Birth spacing with the previous child	Yes No	1 2	
112	Number of children	-----		
Part two:- Knowledge questions				
201	Do you know pre-lacteal feeding	Yes No	1 2	
202	Breastfeeding is important for	Yes	1	

	infant health.	No	2	
203	Breastfeeding is important for maternal health?	Yes No	1 2	
204	An infant should be put to breast immediately after birth?	Yes No	1 2	
205	The first milk/colostrum should be given to an infant?	Yes No	1 2	
206	Pre-lacteal feeding is needed for an infant before starting breast milk?	Yes No	1 2	
207	Do you Know risk of pre lacteal Feeding	Yes No	1 2	
208	If “Yes” Which of the following problems may occur	Poor growth Vomiting diarrhea Infection		
209	Breast milk alone without water and other liquids is enough for an infant during the first 6 months of life?	Yes No	1 2	
210	Starting from 6 month an infant should start complementary feeding and continued breastfeeding up to 2 years and beyond?	Yes No	1 2	
Part III Attitude Question				
301	What do you think about pre-	1, it is good	1	

	lacteal feeding	2 ,it is bad	2	
302	What do you advice about infant feeding for whom as soon as delivery	1. breast milk only 2. Breast milk with additional food	1 2	
303	Do you know purported pre-lacteal feeding advantage?	YES No	1 2	If no jump to quest 206
304	If yes, could you mention?	1. For child health 2. For child growth 3. Breastfed for newborns will be thirsty 4. To calm/soothe the baby 5.To clean infants bowel/throat/mouth 6.If another (specify)----- --	1 2 3 4 5 6	
Part IV Practice questions				
401	Did you give anything to drink and/or eat before breast milk within 3 days for your child, after delivery?	1 yes 2 No		If no jump to question 208

402	If question 204 is yes, what did you give? (Multiple responses is possible)	1. Plain water 2. sugar /Glucose water 3. cow milk 4. Water and tenadam 5. butter 6. Formula milk 7. Other (specify)-----	1 2 3 4 5 6 7	
403	Why did you give anything to drink and/or eat before breast milk after delivery? (Multiple responses Is possible)	1. Breastfed for newborns will be thirsty 2. for child growth 3. breast problem 4. Inadequate milk secretion 5. Infant feeding problem 6. Maternal medical illness 7. cultural practice 8. colostrum is not good for infant 9. To calm/soothe the baby 10. To clean infant's bowel/throat/mouth 11. To control infants body temperature 12. Other (specify).....	1 2 3 4 5 6 7 8 9 10 11 12	

AnnexIII. Amharic Version Questionnaire

ክፍል 1 : ማህበራዊ ፣ ነባራዊና ኢኮኖሚያዊ ሁኔታ

101. እዴሜሽ/ዎት ስንት ነው?

በቁጥር ያስቀምጡ-----

102. የየትኛው ብሄረሰብ አባላ ናት?

1. ጉራጌ

2. ሰልጠ

3. ከምባታ

4.ልላ ከሆነ (ይጠቀስ)-----

103. የትኛውን ሀይማኖት ተከታይ ናት ?

1. ኦርቶዶክስ ተዋህዶ

2. ሙስሊም

3. ካቶሊክ

4. ፕሮቴስታንት

5. ልላ ከሆነ (ይጠቀስ)-----

104. የጋብቻ ሁኔታዎን ይግለጹልኝ

1. ያላገባ

2. ባህሪዎቼ

3. የፈታኝ

4. ባላ የሞተባት

105. የትምህርት ተረጋጅ

1. ያሌተማረኝ

2. 1-8 ኛክፍል

3. 9-12ኛ ክፍል

4. የኮላጅ ት/ት እና ከዚ በሊይ

107. የስራ ሁኔታ

1. የቤት እመቤት

2. የግሌ ስራ

3. የመንግስት ስራተኛ

4. ልላላ ካህ (ይጠቀስ)-----

109. ባጠቃላይ ምን ያህል ወርሃዊ ገቢ ያገኛለ?-----ኢትዮ. ብር

110. የቤተሰብ ብዛት በቁጥር _____

111. ባጠቃላይ ምን ያህል ሌጅ ወሎቶቹ? -? በቁጥር _____

112. ሌጅሽ ስንት አመቱ / ቷ ነው?

- 1. 0-6 ወር
- 2. 7-12 ወር
- 3. 13-18 ወር
- 4. 19-24 ወር

113. የሌጅሽ ስታ: 1. ወንድ 2. ሴት

ዕውቀት የተመለከተ መጠይቅ

201 ልጅ ዕድተኛነት ከዕድሜ ጠቅላላ ወጪ ስለሚሰጥ ምን ያህል ስምተው ያውቃል?

- 1 አዎ
- 2 አይ

202 ጠቅላላ ማጥገን ለልጁ ጠቃሚ ነው ብለው ያስባሉ ?

- 1አዎ
- 2 አይ

203 ጠቅላላ ማጥገን ለርሶ ጠቃሚ ነው ብለው ያስባሉ?

- 1አዎ
- 2አይ

204 ልጁን ዕድተኛነት ጠቅላላ ጠቅላላ?

- 1አዎ
- 2አይ

205 የመጀመሪያውን ቤጫ ወተት (አንገር) ህፃናት መመገብ አሳድሯል? 1. አዎ 2. የለባቸውም

206 ህፃናት በመጀመሪያቸው ቀናት ውስጥ ጠቅላላ ከመጀመሪያቸው በፊት ወይ በስኬት ወይ ወይም ቅቤ መስጠት አለባቸው 1. አዎ 2. የለባቸውም

207 ጉዳት አለው ብለው ያስባሉ

- 1 አዎ
- 2አይ

208 መልሶ አዎ ከሆነ የትኛው ሊሆን ይችላል?

- 1 ተቅማት 2 ትውከት 3 የድገት መዘግየት 4 ተላላፊ

209 የናት ጠቅላላ ብቻውን ለመጀመርያው 6 ወር በቂ ነው ብለው ያስባሉ ?

- 1 አዎ
- 2አይ

210 እዕስከ 2 አመት ድረስ ጠቅላላ ያጠባሉ? 1 አዎ 2አይ

ግንዛቤ የተመለከተ ጥያቄ

301 ከጡት በፊት ስላለ ምግብ ምን ያስባሉ?

1 □ ሩ ነዉ 2 መጥፎ ነዉ

302 ልጅ ዕንደተወለደ ምን ዕንዲመገብ ይምከራሉ?

1 የዕናት ጡት ብቻ 2 የዕናት ጡትና ተጨማሪ ምግብ

303 ልጅ ዕንደተወለደ የሚሰጥ ምግብ ጥቅም ያዉቃሉ? 1 አዎ 2 አይ

304 303 አዎ ከሆነ የትኛዉ ነዉ? 1 ለልጁ ጤንነት 2 ለልጁ ዕድገት 3 ጡት ብቻ በቂ ስላልሆነ 4 ሌላ ካለ ይጠቀስ_____

ተግባር የተመለከተ ጥያቄ

401 ለልጅ በመጀመሪያዎቹ ቀናት ዉስጥ ጡት ከመጀመራቸዉ በፋት ዉሀ በስኳር ፣ ዉሀ ወይም ቅቤ ሰጥተዉት ነበር?

1. አዎ 2. አልሰጠሁም

402. 401 መልሶ አዎ ከሆነ ምንድነዉ የሰጡት ? 1 ዉሃ 2 የላም ወተት 3 ዉሃና ጤናዳም

4 ቂቤ 5 የታሸገ ወተት 6 ስካር 7 ሌላ ካለ ይጠቀስ_____

403 ለምድነበር የሰጡት?(ከአንድ በላይ መልስ ይቻላል)

1 ጡት ብቻ በቂ አይደለም 2 ለልጁ ዕድገት 3 በጡት ችግር 4 ጡት ወተት አላመጣ ብሎ

5 በልጁ ያመጋገብ ችግር 6 በህመም ምክንያት 7 በባህል 8 ዕንገር ለልጁ ጥሩ ስላልሆነ

9 ሌላ ካለ ጁ□ ቀስ_____

