Breastfeeding Practices among Infants and Young Children Less Than Two Years of Age in East-Central Ethiopia: A Community-Based Cross-Sectional Study

Ahmed Adem¹, Hiwot Berhanu² and Daniel Geleta³*

¹Department of Medicine, Jimma University, Ethiopia
²Department of Medical Physiology, Jimma University, Ethiopia
³Department of Child Health, John Snow International Research and Training Institute, Ethiopia

Abstract

Introduction: Globally 60% of the infant and young child death occurs due to the inappropriate infants feeding practices and infectious diseases from which two-thirds of the deaths are attributable to sub-optimal breastfeeding practices. In Ethiopia, sub-optimal breastfeeding was annually contributed to 70,000 infant mortalities. Therefore, the current study aimed to assess breastfeeding practices among children aged 0-23 months.

Methods: Community-based cross-sectional study was conducted from July 18-31, 2017. A systematic random sampling technique was used to select mothers (n=421) with index age child. Data was collected on socio-demographic characteristics and breastfeeding practices through face to face interview using World Health Organization’s breastfeeding assessment criteria. The collected data were entered into and analyzed by statistical software SPSS version 20 and tested for significance at 0.05. Finally, results were presented using tables and figures.

Results: The study depicted all participant infants have ever breastfed at some point in their life. The proportions of infants and young children who put on the breast early and fed colostrum were 58.4% and 52.4% in respective order while the prevalence of exclusive breastfeeding practice reported 57%. Complementary food was introduced at exactly 6 months for 34.5% of infants. The higher proportions of young children were continued breastfeeding at the age of 1 year (87%) and 2 years (62.5%). Similarly, about sixty-eight (68.2%) of infants were fed breast ≥ 8 times in 24 hours. On the other hand, 41.8% of mothers practiced bottle feeding and 76.7% reduced child feeding frequency when their child got ill. Finally, early initiation of breastfeeding (X²=5.9, P=0.01) and bottle feeding (X²=3.7, P=0.03) were demonstrated significance with child sex.

Conclusion: Breastfeeding practice is relatively not at the better rim among the current study community. Therefore, the scaling up of breastfeeding practice should be the imminent assignment for service providing health facilities in the area. Further, it is massive to local government to form a coalition with breastfeeding partners and community to improve optimal breastfeeding practices.

Keywords: Infant; Young children; Breastfeeding practices


Introduction

Breast milk has the perfect combination of nutrients to provide infants with adequate health and development [1]. This milk is particularly very important for birth to 24 months of age because of the rapid growth and brain development that occurs during this time. But the period is often marked by growth faltering, micronutrient deficiencies and common childhood illnesses following sub-optimal breastfeeding and infant transition from exclusive breastfeeding to additional foods [1-3]. To prevent these problems, World Health Organization recommends optimal/appropriate breastfeeding practices. Appropriate breastfeeding contains initiation of breastfeeding within 1 h of delivery, exclusive breastfeeding for the 1st 6 months of life, introducing sound complementary feeding at the age 6th month, predominantly breastfeed, increase feeding when the child is sick and continues on-demand breastfeeding to the age of 2 years or above [4]. Whereas Pre-lacteal feeding (giving any food before initiation of breastfeeding), discarding colostrum and bottle feeding are common dangerous bad habits demonstrated in breastfeeding practice [4]. Over the years, the World Health Organization (WHO) and United Nations Children’s Fund (UNICEF) have recognized breastfeeding as the most cost-effective, health-promoting and disease-preventing strategy across the globe [5]. Following this, if every baby exclusively breastfeeds from birth to 6 months, an estimated 13 million additional lives could be saved annually in many countries [6].

Globally 60% of the infants and young child death occurs due to the inappropriate infants feeding practices and infectious disease from which two-thirds of these deaths are attributable to sub-optimal breastfeeding practices. Reports also added that less than 35% of mothers exclusively breastfeed their infants during the first few months of life [2]. In the developing world studies showed only 39% of mothers exclusively breastfeed their infants up to 6 months, while in some...
countries, no mother exclusively breastfeeds for 6 months [7,8]. The gap between breastfeeding practices and recommendations is increasing in developing countries where socioeconomic and traditional practices have considerable implications. The gap is highly increasing in sub-Saharan countries, including Ethiopia. Early and abrupt cessation of breastfeeding followed by an introduction of dirty, unsound artificial feeding of infants with very dilute milk products is common. As a result, infants and young children are more vulnerable to infection with different pathogens [7,9]. According to the 2011 EDHS, though there were considerable variations between regions, rural and urban areas, the overall initiation of breastfeeding within the first hour is less than 70% and 27% were given pre-lacteal feeding within 3 days. Similarly exclusive breastfeeding as per WHO recommendation is only 52% and only 51% started on complementary feeding by age of 6-9 months, 16% of under 6 months were bottle fed while age-appropriate breastfeeding (0-23 months) is 66%. In the Oromia region, according to EDHS 2011, about 26% of infants were given pre-lacteal feed and only 47.8% of infants received colostrum [10]. Based on core breastfeeding indicators, different studies conducted in different countries have shown the proportion of mothers who initiate breastfeeding within 1 h of birth. Accordingly, initiation in 1 h was found 41% in U.S, fewer than 15% in sub-Saharan and Asian countries, 52.3% in Kenya, 46.3% in Ghana, 64.7% in Mozambique, 17% in Bangladesh, 38.7% in Nigeria and only 6.3% in India [2,3,11,12]. On the other hand, in the US (71%), in Kenya (81.7%), in Ghana (75.2%), in Mozambique (91.9%) and in Bangladesh (79%) infants were put to the breast within a day after birth [2,3]. In some countries like India, Pakistan, Nigeria, Haiti and Cameroon more than 40% of children were put on breast less than the same day after birth wherein Guatemala 79% of mothers did not initiate breastfeeding in the 1st 24 h of birth [12,14]. Breastfeeding initiation time has also shown variation among Ethiopia cities such as Mota (78.8%), Jimma (79%), Dire Dawa (74.6%) and AA (66.2%) [15]. On the initiation of breastfeeding colostrum was reported to be discarded before breastfeeding as of the study results conducted in different countries. In India (15.49%), Bangladesh (11%), rural Northern Ethiopia (79%) and different cities of Ethiopia, AA (42%) and Dire Dawa (66.1%), colostrum was reported expelled before feeding their child [10,16,17]. Studies also showed that 65%, 19.6%, 15.8%, 71% and 36.1% of mothers in Kenya, Ghana, Mozambique, Bangladesh and India in respective order were given pre-lacteal feeding to their child [3,17]. Every year, 31% infants worldwide are EBF for the first 6 months of life [2]. In Asia and Nearest, North Africa, over 40% in Latin America, sub-Saharan Africa only about 20% of infants are exclusively breastfeeding for the 1st 6 months [18]. While in Kenya, Ghana, India, Bangladesh, Nigeria, Mauritius, Navi Mumbai and Mozambique the percentage of exclusive breastfeeding was 12.7%, 53.4%, 68%, 20%, 56.1%, 17.9%, 70.2% and 30% in respective order [3,17,19-21]. Similarly, exclusive breastfeeding during the first six months after birth is not widely practiced in Ethiopia. Currently, mothers exclusively breastfeed approximately half of children (52%) less than six months, 40.6% in Kemb Awo and 74% in Hosanna, Ethiopia [10,22,23]. About two-thirds of the children aged 6-9 months in sub-Saharan African are fed complementary feeds compared to 56% in Latin America, about 50% in Asia, 46% in the near east and North Africa [12]. Research result on infants and young children feeding practice in urban areas of Bangladesh shows that about 60% mothers initiated complementary feeding before 6 months of age likewise it more commonly initiated before 6 months (72.5%) in Mauritius, but 59.8% exactly introduced at 6 months of age in India [19,21,24]. In Ethiopia complementary feeding begins too early or too late and insufficient supply of the necessary food and even distribution of the available foods. In a survey done in Addis Ababa, Timely complementary feeding rate in the age group 6-9 months was found to be 57% [25]. As of optional breastfeeding indicators report, a controlled community intervention trial conducted in India 41% of infants were given sugar water and 24% given formula feeding in addition to breast milk while their age is below six months [20]. Similarly, seventy-five percent (75%) of under-six month children are predominantly breastfed in Ethiopia. From these 19% of infants were given plain water only, while 14% received milk and 4% given non-milk liquids and juice [10]. The breastfeeding levels in 65 different countries in the world survey shows that child ever breastfeed were 96% where it was 91% in Guatemala, 93.4% in Mauritius and 100% in Nigeria [2,20,21]. In Teheran (68%) and Indian (70%), mothers were bottle feed their child [13,17,26]. Whereas in Ethiopia it was reported that sixty-six (66%) children under the age of two receive age-appropriate breastfeeding and 12% use a bottle with a nipple [10]. Again in Ethiopia only 2.8% of mothers were not breastfed at all following this, bottle feeding was given to 12% of Ethiopian children below two years with similar 44% in Addis Ababa [13,17,25]. Globally, 40% of children were reported to continue breastfeeding at least to two years and 26.1% of mothers were found to breastfeed up to 2 years in Mauritius [2,21]. Whereas in Ethiopia, 96% and 82% of children were reported to continued breastfeeding to the age of one year and two years respectively [10]. From breastfeeding mothers according to some studies, less than half of mothers feed breast the minimum recommended times (at least eight times) per day [4,23]. Finally, as of the study conducted in six countries in South Asia, when the child get sick 49% mothers breastfed less than usual and only 31% feed as usual with the remaining less than 20% feed more than usual. In up to 75% see their complementary foods restricted in frequency, quantity and quality [27,28].

Methods

This study was conducted in Welenchiti, the administrative center of a Boset district, which is one of Oromia Regional state town located 125 km east of the Ethiopian capital city Addis Ababa. According to the new administrative organization, the town is restructured into 2 kebeles (lowest administrative units) named 01 and 02 with an estimated total population of 12,079 [10]. Though there were five health facilities in the area, there was no documented data regarding the practice of breastfeeding in this community. The study was a community-based cross-sectional study conducted from July 18-31, 2017 in Welenchiti Town. Mothers’ of Infant and young children (0-23 months), who were resided in the study area for at least 6 months, volunteer to participate and presented home on the day of the survey, were included by systematic randomly selection from all households of the area. But, orphan infants and young children who weaned breastfeeding for different reasons were excluded from the study.

Sample size was computed based on single population proportion assuming 95% confidence interval, 5% margin of error. Prevalence (p) of 52% (prevalence of exclusive breastfeeding children less than six months in Oromia Regional state, Ethiopia) and a non-response rate of 10% (n=Z(α/2)2*p(1-p)/d2) which gave a final sample size of 421 mother-infant paired subjects [10]. The two district kebeles were purposively included in the study. To select best representatives, the required sample size for both kebeles was distributed by population proportionate ratio. Then individual households were systematically chosen at regular interval from the sampling frame of the households. In case of more than one infant in the domain age group and for twins, one infant was selected by lottery method. Data were collected on maternal sociodemographic factors (age, occupation, education, marital status, household income, religion and ethnicity of the mother), breastfeeding...
practices (initiation of breastfeeding, exclusive breastfeeding, colostrum feeding and bottle feeding), child age and sex and place of delivery.

A pretested (done in similar settings but not included in the main study of 5% of the sample size) questionnaire mainly based on the standard questionnaire on the infant and young child feeding practices given by World Health Organization (fifteen world health organization criteria) and adapted by government of Ethiopia was used for data collection. Additional questions were framed by referring the relevant questions. A questionnaire was first developed in English and translated into local language (Oromiffa) for the coninnance and retranslated into English by independent langue expert for consistency check. Grade 12 completed data collectors and supervisors were employed from the study area and provided two days intensive training on the technique of data collection and ethical issues. Ethically explained and written informed consent was obtained from each participant by data collectors and the data were immediately transformed into anonymous. Completeness, accuracy, clarity and consistency of every filled questionnaire were scrutinized by the supervisors on daily basis. Checking for completeness and consistency of variables during data entry and analysis were continued before actual data analysis. The reviewed questioners were entered into Epi-info and exported and analyzed by Statistical Package for the Social Sciences (SPSS) version 20.0. Relevant descriptive and inferential statistics were calculated herby the level of significance (p) was set at 0.05.

Ethical clearance had been obtained before the study began from the Research program ethical clearance committee of Community Base Education office of Jimma University. An official letter of permission was obtained from Welenchiti administrative office. The respondents were informed about the objective and the purpose of the study and verbal consent was obtained from each respondent. Confidentiality of the information was assured and secured anonymously throughout the study period.

Results

Socio-demographic characteristics

A total of four hundred twenty-one (421) mother-infant paired from two kebeles were interviewed making 100% response rate. The modal age of mothers was fallen in the age group of 20-24 years (41.6%) followed by 25-29 years (28.7%) and least reported to be 15-19 (7.9%). The mean age of mother was reported 24.9 years with standard deviation of ± 5.34. The dominant religion and ethnicity in the study area were found Christian (80.3%) and Oromo (68.4%) in respective order and 32 (7.6%) were reported others. From all participant mothers, 88.4% were married, 62.7% were formally educated and 81.2% were reported, housewife. The family size of the area was commonly reported above 4 (59.4%) with the remaining 40.6% below or 4. The majority (66.3%) of the study participants were reported to earn less than 1000 Birr on average family income (in ETB) (Table 1).

For all 421 infant participants (51.1% male and 48.9% female), the mean age was reported 16.2 months with ± 9.48 SD. The modal age group was found to be ≤6 months (23.5%) where 6-8, 9-11, 12-15, 16-19, 20-23 months were 20%, 7.8%, 20.7%, 10.9% and 17.1% in respective orders. Three hundred twenty-two (76.5%) of the participant infants were born at the health facility with the remaining slice to be at home (Table 2).

Core breastfeeding indicators

From the total breastfed infants, 240 (57%) of them have initiated breastfeeding within 1 h after delivery with the remaining 43% being initiated after an hour to the second day. During initiation of breastfeeding 246 (58.43%) of the mothers were fed colostrum to their newborn while 41.57% of them were discarded it. The prevalence of Exclusive breastfeeding (EBF) until the age of the sixth month was computed to be 53 (52.5%) from infants aged below 6 months. In 29 (34.5%) of participants, complementary foods were introduced exactly at the completion of 6 months (with remaining 65.5% to practice either too early or too late). At the age of child’s one year, the majorities 76 (87%), of the participants continued breastfeeding except 13% who used to wean breastfeeding. As the current result indicates, higher proportions of males (62.8%) were put on the breast within 1 h of delivery than females (51.0%) as in Table 3.

Exclusive breastfeeding for the first six month of life was also noted higher for males (54.4%) than females (51.0%). On the other hand, lower proportion of males (39.5%) was fed colostrum during breast initiation than females (43.7%) (Table 3).
Table 3: Core breastfeeding indicators and their significance level with child sex in Wolenchit town, Ethiopia, July 2017.

<table>
<thead>
<tr>
<th>Infant and Young Child Feeding indicators</th>
<th>Responses</th>
<th>Values</th>
<th>Male</th>
<th>Female</th>
<th>X² (P-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early initiation of breastfeeding (Proportion of children born in the last 24 months who were put to the breast within one hour of birth)</td>
<td>Yes</td>
<td>240 (57.0%)</td>
<td>135 (62.8%)</td>
<td>105 (51.0%)</td>
<td>5.9 (0.01)*</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>181 (43.0%)</td>
<td>80 (37.2%)</td>
<td>101 (49.0%)</td>
<td></td>
</tr>
<tr>
<td>Colostrum feeding practices (Proportion of children born in the last 24 months who were fed colostrum)</td>
<td>Given</td>
<td>246 (58.4%)</td>
<td>85 (39.5%)</td>
<td>175 (43.7%)</td>
<td>0.7 (0.2)</td>
</tr>
<tr>
<td></td>
<td>Discarded</td>
<td>175 (41.6%)</td>
<td>130 (60.5%)</td>
<td>246 (56.3%)</td>
<td></td>
</tr>
<tr>
<td>Exclusive breastfeeding under 6 month (Proportion of infants 0-5 months of age who are fed exclusively with breast milk)</td>
<td>Done</td>
<td>53 (52.5%)</td>
<td>27 (54.0%)</td>
<td>25 (51.0%)</td>
<td>0.5 (0.3)</td>
</tr>
<tr>
<td></td>
<td>Not done</td>
<td>46 (47.5%)</td>
<td>23 (46.0%)</td>
<td>24 (49.0%)</td>
<td></td>
</tr>
<tr>
<td>Introduction of complementary foods (Proportion of infants 6-8 months of age who receive solid, semi-solid or soft foods)</td>
<td>Yes</td>
<td>29 (34.5%)</td>
<td>16 (37.2%)</td>
<td>13 (31.7%)</td>
<td>0.5 (0.5)</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>55 (65.5%)</td>
<td>26 (62.8%)</td>
<td>29 (68.3%)</td>
<td></td>
</tr>
<tr>
<td>Continued breastfeeding at 1 year (Proportion of children 12-15 months of age who are fed breast milk)</td>
<td>Yes</td>
<td>76 (87.0%)</td>
<td>38 (86.4%)</td>
<td>38 (88.4%)</td>
<td>0.1 (0.8)</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>11 (13%)</td>
<td>6 (13.6%)</td>
<td>5 (11.6%)</td>
<td></td>
</tr>
</tbody>
</table>

*Indicated for significant values

Table 4: Optional breastfeeding indicators and their significance level with child sex in Wolenchit town, Ethiopia, July 2017.

<table>
<thead>
<tr>
<th>Optional Infant and Young Child Feeding (IYCF) indicators</th>
<th>Responses</th>
<th>Values</th>
<th>Male</th>
<th>Female</th>
<th>X² (P-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children ever breastfed (Proportion of children born in the last 24 months who were ever breastfed)</td>
<td>Yes</td>
<td>421 (100%)</td>
<td>215 (51.1%)</td>
<td>206 (48.9%)</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Predominant breastfeeding under 6 months (Proportion of infants 0-5 months of age who are predominantly breastfed)</td>
<td>Yes</td>
<td>67 (67.7%)</td>
<td>33 (66.0%)</td>
<td>34 (69.4%)</td>
<td>0.1 (0.8)</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>32 (32.3%)</td>
<td>17 (34.0%)</td>
<td>15 (30.6%)</td>
<td></td>
</tr>
<tr>
<td>Continued breastfeeding at 2 years (Proportion of children 20-23 months of age who are fed breast milk)</td>
<td>Yes</td>
<td>48 (62.5%)</td>
<td>20 (60.6%)</td>
<td>28 (71.8%)</td>
<td>1.1 (0.3)</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>24 (37.5%)</td>
<td>13 (39.4%)</td>
<td>11 (28.2%)</td>
<td></td>
</tr>
<tr>
<td>Frequency of breast feeding</td>
<td>≥ 8 times</td>
<td>287 (68.2%)</td>
<td>177 (62.3%)</td>
<td>165 (80.1%)</td>
<td>0.3 (0.3)</td>
</tr>
<tr>
<td></td>
<td>&lt;8 times</td>
<td>134 (31.8%)</td>
<td>87 (37.7%)</td>
<td>47 (19.9%)</td>
<td></td>
</tr>
<tr>
<td>Bottle feeding practice (Proportion of children 0-23 months of age who are fed with a bottle)</td>
<td>Yes</td>
<td>176 (41.8%)</td>
<td>110 (51.2%)</td>
<td>66 (41.7%)</td>
<td>3.7 (0.03)*</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>245 (58.2%)</td>
<td>105 (48.8%)</td>
<td>120 (58.3%)</td>
<td></td>
</tr>
<tr>
<td>Feeding practice during child illness</td>
<td>Reduces</td>
<td>323 (76.7%)</td>
<td>166 (77.2%)</td>
<td>166 (80.6%)</td>
<td>1.9 (0.4)</td>
</tr>
<tr>
<td></td>
<td>As usual</td>
<td>59 (14.0%)</td>
<td>35 (16.3%)</td>
<td>24 (11.7%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increases</td>
<td>39 (9.3%)</td>
<td>14 (6.5%)</td>
<td>16 (7.8%)</td>
<td></td>
</tr>
</tbody>
</table>

*Indicated for significant values

Optional infant and young child feeding (IYCF) indicators

Regarding optional indicators of IYCF, all (100%) of the studied mothers reported to have ever breast-fed their child at some point in the past and 48 (62.5%) of them were continued breast-feeding up to 2 years. The majority, 287 (68.2%), of mothers were used to give breast milk for their infant eight times and above within 24 h where the remaining counterpart fed less than eight times. During breast feeding 67 (67.7%) of children were exposed to predominant breastfeeding during 6 months of age. In regards to feeding during child illnesses, 323 (76.7%) mothers fed breast less than usual, 59 (14.0%) fed the same as usual and 39 (9.3%) fed more than usual frequencies. Finally, bottle feeding was identified to be practiced by 41.8% of participant mothers. There were differences in proportion among sex of the children on frequency of breast feeding, bottle feeding and feeding practice when the child got illness. Accordingly, higher proportion of males (82.3%) fed breast within 24 h than females (80.1%) and similarly 51.2% of males were bottle feed while it was 41.7% for females. During child illness feeding practices, likely to reduce/increase frequency was observed for females than males. The difference in proportions between male and female children for early initiation of breastfeeding (X²=5.9, P=0.01) and bottle feeding (X²=3.7, P=0.03) were significant for sex at the level of 0.05. However, colostrum feeding practice (X²=0.7, P=0.2), EBF for the first 6 months (X²=0.5, P=0.3), introduction of complementary food (X²=0.5, P=0.5), continuation of breastfeeding at 1 (X²=0.1, P=0.8) and 2(X²=1.1, P=0.3) years, predominant breastfeeding (X²=0.1, P=0.8), frequency of breastfeeding (X²=0.3, P=0.3) and feeding Practice during Child illness (X²=1.9, P=0.4) had no significance with child sex (Tables 3 and 4).

Discussion

The result of this study has revealed sub-optimal breastfeeding practices. Every studied child fed breast at some point in its life whereof these, 57% initiated breastfeeding within 1 h of delivery. The rate of initiation within 1 h is better as compared to findings in United state (41%), sub-Saharan and Asian countries (52.3%), Ghana (46.3%), Bangladesh (17%), Nigeria (38.7%), India (6.3%), Guatemala city (21%), urban slums of Chandigarh (6.3%) and Kenya (52.3%) [2,3,12,29]. However, it was lower than studies done in Mozambique (64.7%), Jimma (79%), Addis Ababa (66.2%) and Dire-Dawa towns (74.6%) [11,15]. 43% of the mothers, who initiated breastfeeding later than 1 h of delivery, were lesser than the study result conducted in US (71%), Kenya (81.7%), Ghana (75.2%), Mozambique (91.9%) and Bangladesh (79%) [2,3]. The delay of breastfeeding initiation was yet found higher than some countries(India, Pakistan, Nigeria, Haiti and Cameroon) mothers who put infants on the breast later than the second day of birth [12-14]. The proportion of mothers who expelled colostrum on breastfeeding initiation (43%) was compared and read better than the study done in Addis Ababa (42.1%), Indian (15.49%), Bangladesh (11%) but much worse than study conducted in urban community of Navi Mumbai (95.1%), Dire-Dawa (66.1%) and rural northern Ethiopia (79%) [7,14,15]. The rate of Exclusive breastfeeding for the first 6 months of infant life was 52.5% and is found nearly the same with the rate of initiation within 1 h of delivery. The rate of initiation within 1 h is better as compared to findings in United state (41%), sub-Saharan and Asian countries (52.3%), Ghana (46.3%), Bangladesh (17%), Nigeria (38.7%), India (6.3%), Guatemala city (21%), urban slums of Chandigarh (6.3%) and Kenya (52.3%) [2,3,12,29]. However, it was lower than studies done in Mozambique (64.7%), Jimma (79%), Addis Ababa (66.2%) and Dire-Dawa towns (74.6%) [11,15]. 43% of the mothers, who initiated breastfeeding later than 1 h of delivery, were lesser than the study result conducted in US (71%), Kenya (81.7%), Ghana (75.2%), Mozambique (91.9%) and Bangladesh (79%) [2,3]. The delay of breastfeeding initiation was yet found higher than some countries(India, Pakistan, Nigeria, Haiti and Cameroon) mothers who put infants on the breast later than the second day of birth [12-14]. The proportion of mothers who expelled colostrum on breastfeeding initiation (43%) was compared and read better than the study done in Addis Ababa (42.1%), Indian (15.49%), Bangladesh (11%) but much worse than study conducted in urban community of Navi Mumbai (95.1%), Dire-Dawa (66.1%) and rural northern Ethiopia (79%) [7,14,15]. The rate of Exclusive breastfeeding for the first 6 months of infant life was 52.5% and is found nearly the same with the data of EDHS 2011 (52%), Ghana (53.4%) and Nigeria (56.1%) [17,21]. When compared to the urban community of kalamboi, Navi Mumbai (70.2%), Hosanna of Ethiopia (74%), India (68%), the current result was much lower [16,20]. On the other hand, the current result of EBF is higher than study result reported in Mozambique (30%), Guatemala...
City (21%), Komba (40.6%) and Kenya (12.7%) [3,10,13,17,22]. Unlike study results of sub-Saharan African (75%), Latin America (56%), Asia (50%), India (59.8%) and the near East and North Africa (46%), the current study result identified the lower proportion of children (34.5%) to started complementary feeding at the age of exactly six month [12,19,24]. But 65.5% of the studied mothers share similar feeding practice with mothers studied in urban areas of Bangladesh (60%), other area Ethiopia and Mauritius (72%) in which mothers initiated complementary feeding either too early or too late [21,25].

At the age of one year (87%) and two years (62.5%), the majorities of the participants were continued breastfeeding. The result at one year was lower than the study conducted in another area of Ethiopia (96%). Where as the proportion of mother, who continued breastfeeding at the age of 2 years in the current study, were higher than study results in Mauritius (26.1%) and global report (40%) [2,21]. Yet it was found lower than other area Ethiopian study reports (82%) [10]. Child exposure to the predominant feeding practice in this community (67.7%) during age less than 6 months was higher than the study result in India (41% and 24%) but lower than (75%) national figure of EDHS 2011 in Ethiopia [10].

From breastfeeding mothers according to this study, 68.2% of mothers fed breast the minimum recommended times (at least 8 times) per day or above. This result was higher than fifty-fourth World Health Assessment conducted in 2001 by WHO and study result conducted in Australia [4]. In 41.8% of studied mothers bottle feeding was provided to their children during feeding time. The proportion of bottle feeding was better than mothers' bottle feeding practice in Tehran (68%) and India [13,17,26]. When compared with survey results conducted in Ethiopia (12%) the current result was much worse but share similarity with study result in Addis Abeba (44%) [13,17,25]. Whenever the child gets sick, only 9.3% of mothers were reported to increase the frequency of child feeding unlike higher proportion in Asia (20%) [27]. Similarly, mothers who feed the usual frequency (14%) were lower than the same country's practice (31%). On the other hand, the majorities (76.7%) of mothers in the current study decreases feeding frequency than other countries' mothers (49% in Asia and 75% in Ethiopia) when their child got sick [25,28]. The possible reasons could be lack of awareness on sick child feeding, traditional beliefs, sub-optimal counseling and/or poor support by health workers. It was noted that the difference in proportion for some variables among sex of the infants has shown significance. Here, the majority of male children were put on the breast within 1 h after delivery as compared to their counterpart (X²=5.9, P=0.01). Similarly, sex of the child was identified to influence bottle feeding (X²=3.7, P=0.03). Hence child sex was found to influence early initiation of breastfeeding and bottle feeding in this community where other breastfeeding practice indicators had no significance with child sex. This result agrees with the studies conducted in Hosana and Matrious [21,23].

Conclusion and Recommendations

The universal coverage of breastfeeding and the relatively higher proportion of early breastfeeding initiation, exclusive breastfeeding for the first six months of child age, feeding infants with optimal frequency and continuation of breastfeeding at age of 2 years were good breastfeeding practices identified in this community. On the other hand, colostrum discard/expel on initiation of breastfeeding, an introduction of complementary foods before six months of child age, use predominant breastfeeding in under 6 months of age, feeding frequencies during child illnesses and bottle feeding were yet indicating derelictions. This study has also identified significance between sex of the child and some factors (early initiation of breastfeeding and bottle feeding). In general, breastfeeding practice is relatively not at the better rim in the current study community. Therefore, the scaling up of breastfeeding practice will be the looming assignment for service providing health facilities in the area. Further, it is missive to local government to form a coalition with breastfeeding partners and the community to meet the ideal feeding practices.

Ethics Approval and Consent to Participate

The study was approved by research program ethical clearance committee of Jimma University. Official letter of permission was obtained from Welenchiti administrative office and kebele managers. The respondents were informed and verbal consent was obtained from each respondent. Confidentiality of the information was assured and secured anonymously throughout the study period.

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Authors' Contributions

AA, HB and DG have designed the study, coordinated resources, ensured quality and ethical issues of the study, conducted statistical analysis and result interpretation. The author read and approved the manuscript.

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References


17. Assessment CN. Countries, with special reference to less technically developed jellife DBJ and EFP 18.


