Suboptimal Breast Feeding and Associated Factors Among Mothers of Children Less Than Six Months in Hargiesa City, Southwest Somaliland

Eskinder Wolka Woticha (MPH, PhD Fellow)¹ Mohamed Hersi Ali(MPH)²

1. School of Public health, College of Health Sciences and Medicine, Wolaita Sodo University, Wolaita Sodo,

Ethiopia

2. Africa Medical College, Addis Ababa

Abstract

Introduction: Information on Sub optimal breast feeding practices are limited in Somaliland, although it is believed that they help design and implement interventions that enhance Sub optimal breast feeding and make the best use of its benefits for both the mother and the child. This study assessed the prevalence of sub optimal breastfeeding and associated factors during the first six months of infant life in Hargiesa City, Somaliland.

Methods: Community based Cross-sectional study design was used. Data on infant feeding practice were collected from 634 randomly selected mothers of infants aged under 6 months from March to April 2016 by trained interviewers using a pre tested structured questionnaire. Data entry and analysis were done using Epi info version 3.5.1 and SPSS version 20.0 statistical soft-wares respectively. Descriptive and logistic regression analyses were employed.

Result: Total of 607 women agreed to be involved in the study making response rate 95.7%. The prevalence suboptimal breastfeeding was 29.8% and 70.2% of the mothers initiated the breast feeding within one hour after the delivery. Mothers from high income households, educational status of above secondary level and who attended antenatal and postnatal care were more likely to practice optimal breast feeding of their children.

Conclusion and Recommendation: The prevalence of optimal breast feeding is low in Hargiesa city, Somali land. Higher income, education and maternal service utilization is positively associated with optimal breast feeding practice. Efforts should be in place in areas like women education, improved maternal health services and education and awareness creation on optimal breast feeding in Somaliland.

Keywords: Suboptimal, Breast feeding, Hargiesa city, Somali land.

Introduction

Breast feeding has a sound benefit on the health of an infant as a cheap and suitable basis of nutrition (Sabina Islam etal 2006,). It is a way to provide a live substance with supreme immunological properties that protect against a host of illnesses and diseases thereby lessening infant morbidity and mortality (Rhini Ghosh 2006). Optimal breasting is recognized to be some of the most cost-effective preventive interventions to reduce the overall burden of disease in a population and promotes the health of an infant (Ashmika Motee, 2013).Worldwide only 34.8% of infants are exclusively breast-fed for the first 6 month of life, and the majority get nutritionally insufficient and unsafe complementary foods too soon (Yahya M. etal 2012).

The World Health Organization (WHO), Infant-feeding guidelines recommend that all infants should be breastfed within 1 hour after birth and exclusively breastfed from birth until 6 months of life. Thereafter, infants should be introduced to nutritionally adequate and safe complementary foods with continued breastfeeding for up to 2 years or beyond (WHO 2008,2009).

Optimum International Young Child Feeding (IYCF) is essential for child growth and development. Breast milk alone for the first 6 months and continued breastfeeding thereafter together with adequate complementary feeding (adequate foods, liquids including milk and water in terms of quality and quantity at household level) as well as freedom from illnesses are essential for achieving proper infant and young child growth and development. Breastfeeding plays a significant role on the child's growth, first as a complete and adequate food for the baby in terms of nutrients content and also through reduction of morbidity due to infections and stronger immunological response to diseases as a result of the antibodies that the mother has had in the past(Abdulbasit Musa, 2013).

According to the Somaliland Demographic and Health Multiple Indicator Cluster Survey (SDMICS) in 2011 by, in Somaliland in general Percentage of infants under 6 months of age who are exclusively breastfed in 2006 is 5.1% and 2011 is 12.0% and Percentage of infants age 6-8 months who received solid, semi-solid or soft foods during the previous day were in 2006 is 18.9% in 2011 is 32.5 (Somaliland Multiple Indicator Cluster Survey, 2011).

The gap between breastfeeding practices and recommendations is rising in resource limited countries where socioeconomic and traditional practices have significant consequence on breastfeeding and child feeding. In Somaliland, despite the benefits of breastfeeding, a number of barriers to the practice of optimal breastfeeding

were indicated. Some of these barriers include lack of awareness, advertisement of breast milk substitutes and lack of support for the breastfeeding mother and many women identify employment as barriers to exclusive breast feeding (Nemat Hajeebhoy et al 2014).

Thus, this study attempted to examine the status of suboptimal breastfeeding practices of Somaliland women who have children less than six month. The will provide important baseline information on the prevalence and factors affecting sub-optimal breast feeding practices in study setting.

Methods and Materials

Study setting and Period

Study was conducted in Hargiesa city, northwest Somaliland from March 2016 to August 2016.

Study design

A community-based descriptive cross-sectional study was conducted

Source population and Study population

All Mothers who have children less than six Months in Hargiesa city during study period were taken as source population. Selected mothers of children under the age of 6 months and live in randomly selected households were included in the study.

Inclusion and Exclusion criteria

All mothers who had children under the age of 6 months and who were permanent residents of the selected villages were included and mothers who unable to respond because of medical reasons were excluded.

Dependant variables

Sub-Optimal breast feeding practice

Independent variables

The independent variables were Socio-demographic characteristics: like: age of the infant, Sex of the infant, Maternal status, Educational status of the mother, Maternal age, Religion, Ethnicity. Obstetric factors: like antenatal care, postnatal care, place of birth, parity. Other factors: access to media.

Sample Size determination

The sample determined using a single population proportion formula by using prevalence (P) of non-exclusive breastfeeding (50%) and assuming 95% Confidence level and 5% degree of precision. Then the sample size was calculated as by taking $Z \alpha/2 = Critical$ value for normal distribution at 95% confidence interval which equals to 1.96 (Z value at alpha= 0.05) D= Design Effect (1.5)d = an absolute precision Margin of error P = Expected prevalence (breastfeeding) 50%. The final sample size was 634.

Sampling procedure

Multistage sampling technique was used. Out of seven district of Hargiesa city, three districts (Ga,an libah, M.haye,26th June Districts) were selected Randomly. Then, eligible household from three districts selected based on proportional to population size.

Data collection method and Quality Assurance

The structured questionnaire prepared in English and translated into Somali language was used to collect data. The questionnaire was pre-tested and intensive training was given for data collectors and supervisors. At the end of each day interviewers all completed questionnaire were checked for completeness and consistency by respective supervisors.

Data management and Analysis

Data entery and cleaned by Epi info version 3.5.1 and expore tto SPSS version 20 softwares for analysis. Descriptive statistics (frequencies and percentages) was calculated to give characteristics of variables. Binary logistic regression was used to see the association between dependent and independent variable using odds ratios and 95% of confidence intervals. P-value <0.05 was taken as statistically significant.

Ethical consideration

Ethical clearance was obtained from research ethics committee of Africa Medical College. Respondents participated voluntarily and Informed consent was obtained from all the study participants. All information from respondents remained confidential and shared only by the study team.

RESULT AND DISCUSSION

Socio-demographic Characteristics

From a total of 634 mothers with infant less than Six month of age voluntary requested for, making the participation 607 of them agreed to be involved in the study making respond rate 96%. The mean Age of mothers was 29.16 years (SD=6.833) and ranges from 17 to 45 years. The age range of infant considered in this study was 0-6months. The mean of age of infant was 2 months (SD=0.859). Total number of male infant were 384(63.3%) while, females were 223(36.7%).

Regarding the marital status 503(82.9) were Married, 104(17.1) were Divorced. As educational background, majority of the mothers 386(63.6) were not Attended formals school, where as 221(36.4) were

attended formal school. Majority of the study subject was Somalis 602 (99.2%) were the 2(0.3%, 3(0.5%)), were respectively Yemen and Ethiopian by ethnicity. The entire respondents were Muslims in religion. Three hundred sixty one (59.5) were non employed and 246(40.5) were employed.

Optimal Breast Feeding Practice and Associated factors

Among 607 mothers who were involved in the study, 580(95.6%), ever breastfed their infants as measured by 24 hour recall. Twenty seven (4.4%) and 19(3.4%) of mothers gave sugar with water and plain boiled water for their infants respectively, whereas 24(4.0%) of mothers gave cow's milk.

The prevalence suboptimal breastfeeding was 29.8% and 70.2% of the mothers initiated the breast feeding within one hour after the delivery. The finding of the study was comparable to the 2011 Ethiopian DHS report which was 52%.

Mothers from high income households, (OR=6.21, 95%CI (3.62, 9.31), p-value 0.02) Educational status of above secondary level (OR=2.86, (1.78, 4.43), p-value 0.001 and who attended antenatal care (OR=1.75, 95%CI (1.21, 2.20), p-value 0.03) and postnatal care (OR=3.41, 95%CI (2.33, 4.51), p-value 0.001) were more likely to practice optimal breast feeding of their children and significantly and independently associated. The finding is consistent with studies conducted in Ethiopia and Kenya. (T. Alemayehu et al 2009, Elizabeth W Kimani-Murage et al 2011).

Conclusion and Recommendation

The prevalence of optimal breast feeding is low in Hargiesa city, Somali land. Higher income, education and maternal service utilization is positively associated with optimal breast feeding practice. Measures should be taken in areas like women education, improved maternal health services and education and awareness creation on optimal breast feeding in Somaliland.

Authors' contributions

EWW and MHA designed the study, MHA was responsible for data collection and supervision. EWW and MHA did analysis, write up and reviewing of manuscript.

Conflict of interest

The author(s) declare that they have no competing interests.

Acknowledgement

The authors hereby acknowledge the sincere efforts of Hargiesa Municipality Staffs for delivering relevant information and administrative assistance, data collectors, supervisors and study participants.

References

- Abdulbasit Musa Seid, M.E.Y.a.D.N.K., Prevalence of Exclusive Breastfeeding Practices and associated factors among mothers in Bahir Dar city, Northwest Ethiopia: a community based cross-sectional study Seid et al. International Breastfeeding Journal, 2013. 8(14).
- Ashmika Motee, D.R., 2 Prity Pugo-Gunsam,3 and Rajesh Jeewon1, An Assessment of the Breastfeeding Practices and Infant Feeding Pattern among Mothers in Mauritius. Journal of Nutrition and Metabolism, 2013.
- Central Statistical Agency [Ethiopia] and ORC Macro. 2012. Ethiopia Demographic and Health Survey 2011
- Dessalegn Tamiru1, T.B., Eskindir Loha3 and Shikur Mohammed1, Sub-optimal breastfeeding of infants during the first six months and associated factors in rural communities of Jimma Arjo Woreda, Southwest Ethiopia. BMC Public Health, 2012. 12(363): p. 1471-2458.
- Elizabeth W Kimani-Murage, Nyovani J Madise, Jean-Christophe Fotso, Catherine Kyobutungi, Martin K Mutua, Tabither M Gitau and Nelly Yatich. Patterns and determinants of breastfeeding and complementary feeding practices in urban informal settlements, Nairobi Kenya. BMC Public health. 2011,11:396 http://www.biomedcentral.com/1471-2458/11/396
- Ministry of Health. National Strategy for Child Survivalin Ethiopia. 2015: Addis Ababa, Ethiopia.
- Nemat Hajeebhoy, P.H.N., Priya Mannava, Tuan T Nguyen and Lan Tran Mai, Suboptimal breastfeeding practices are associated with infant illness in Vietnam Hajeebhoy et al. International Breastfeeding Journal 2014, 9(12): p. 1-7.
- ROHINI GHOSH, C.G.N.M.-T., and A.L. ROSETTA, Longitudinal Study of the Frequency and Duration of Breastfeeding in Rural Bangladeshi Women. AMERICAN JOURNAL OF HUMAN BIOLOGY, 2006. 18: p. 630-638.
- Rose Victor, S.K.B., Kingsley E Agho, Michael J Dibley, Determinants of breastfeedingindicators among children less than 24 months of age in Tanzania: a secondary analysis of the 2010 Tanzania Demographic and Health Survey BMJ Open, 2013.
- Sabina Islam, K.N.S.Y.a.M.A.A., DIFFERENTIALS AND DETERMINANTS OF THE DURATION OF BREASTFEEDING IN BANGLADESH: A MULTILEVEL ANALYSIS. 2006. 43(1): p. 1-14.
- Sengchanh Kounnavong, S.P.-G., Kongsap Akkhavong, Uma Palaniappan, Viorica Berdaga, Joel Conkle, Jonathan Gorstein, Key Determinants of Optimal Breastfeeding Practices in Laos Food and Nutrition

Sciences, 2013. 4: p. 61-70.

- Tabish Hazir, D.-S.A., Yasir Bin Nisar, Narjis Kazmi, and S.A. Kingsley E Agho, Amira M Khan and Michael J Dibley, Determinants of suboptimal breast-feeding practices in Pakistan Public Health Nutrition, 2012. 16(4): p. 659-672.
- *T Alemayehu, J Haidar, D Habte.* Determinants of exclusive breastfeeding practices in Ethiopian Journal of Health Development 23(1): 2009
- Tesfa Getanew Woldie, A.W.K., Melkie Edris, Assessment of exclusive breast feeding practice and associated factors in Mecha district, North west EthiopiaScience Journal of Public Health, 2014. 2(4): p. 330-336.
- The Somaliland Multiple Indicator Cluster Survey (MICS) was carried out in 2011 by Somaliland Ministry of Planning and National Development with financial and technical support from United Nations Children's Fund (UNICEF).
- US. Department of Health and Human Services :Kathryn A, D.J., eta, , and The Surgeon General's Call to Action to Support Breastfeeding. Washington DC, USA 2011. [15].
- World Health organization. Learning from large-scale community-based program to improve breastfeedingpractices. 2008.
- World Halth Organization. Infant and young child feeding : model chapter for textbooks for medical students and allied health professionals, 2009.
- Yahya M. Al-Farsi , M.M.A.-S., et al., Effect of suboptimal breast-feeding on occurrence of autism: A casecontrol study Nutrition, 2012. 28: p. 27-32.