Assessment of Association Between Soci-economic Status and Breast Feeding Practices among Lactating Mothers in Siaya County

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Abstract Introduction: This was a nested study in which 2011 data from a baseline study conducted by Great Lakes University of Kisumu, supported with funds from UNICEF Kenya. Findings was analyzed and used to describe practices of exclusive breastfeeding among lactating mothers with children under-5 years of age in Nyanza province. Methods: A multi-stage cluster sampling technique was used to select 2,805 households. Descriptive statistics were used to determine the coverage of exclusive breastfeeding practice. Frequencies were run using SPSS and Chi –square test was used to determine the association. Findings: The practice of exclusive breastfeeding in Siaya County is found at 29.9%; with unemployed mothers presenting at 36.1%, while working class mothers performed poorly at 21.4%. On the level of education:- respondents on none level of education reported the highest at 46.2%, while post Secondary level reported the lowest at 26.1%. All had a p-value 0.008 significant at the 5% level. This could be due to connection that education has with employment. Conclusion: Source of income and level of education has an association with exclusive breastfeeding. Recommendation. Need for further research to find out why uneducated mothers breastfeed more than educated mothers.

Keywords Breast Feeding, Exclusive Breast Feeding, Maternal and Child Health

sub district hospital eighty-three dispensaries and twenty six health centres. Notable hospitals are Siaya district hospital and Bondo district hospital. Prevalent diseases are malaria, HIV/AIDS, diarrhoeal diseases and respiratory disorders. In 2010/ 2011, fully immunized population less than 1 year is 81.6%,. Population with primary education is 70.3%, population with secondary education is 10.8%, delivered in a health centre is 47.4% and qualified medical assistant during birth is 52%¹².

UNICEF and WHO recommend that children be exclusively breastfed during the first 6 months of life and that children be given solid or semisolid complementary food in addition to continued breastfeeding from 6 months until 24 months or more when the child is fully weaned. The widely accepted “universal coverage” target for exclusive breast feeding coverage is 90%⁷.

Although disparities exist between regions of the world, the highest rates of exclusive breast feeding are currently in East Asia and the Pacific region at (43 percent) and (39 percent) occurring in Eastern and Southern Africa; with the Middle East and North Africa at 28%; and West and Central Africa at 21%⁹.

Affluence, work and employment conditions do not favour exclusive breast feeding and perhaps that’s why Clara states that breastfeeding practices have fluctuated over the years all over the world¹.

Engagement in Industrial work, with long periods of working hours away from home and day to day activities that reduces the time women can devote to infant care. Breast feeding has led to wet nursing; an ancient social custom which was widely accepted for many years¹.

In Kenya, the rate is 32% and this falls below the widely accepted “universal coverage” target for exclusive breast feeding at 90%⁷.

In Kenya, more than 20,000 children in Western region die annually due to diseases caused by lack of breast feeding among children⁸. The region has a population of

1. Introduction

1.1. Introduction

Siaya County is one of the counties in the former Nyanza province in the South West part of Kenya. It is bordered by Busia County to the North, Kakamega County and Vihiga County to the North east. It has two district hospitals, three

approximately 4 million people with 1 million being children. According to the demographic survey statistics, the mortality rate can be estimated to 35% of children who die of malnutrition, anaemia, diarrhoea, pneumonia, malaria among other diseases, that doctors say can be taken care of via breastfeeding⁸.

A study conducted in Siaya district by CARE Kenya through collaboration with CICSS-11 reveals that 11/37 (29.7) children less than 2 months old were exclusively breastfed while 45/263 (17.1) of children more than 2 months old were exclusively breastfed⁵. Infant mortality rate in Siaya county (age 0 – 11 months) is 82 per 1000 live birth⁵. Diarrhoea contributes 15% of child mortality in Siaya district⁶. This study will contribute new knowledge by identifying factors associated with exclusive breast feeding among lactating mothers thus reducing the diseases caused by lack of exclusive breastfeeding among children therefore contributing to MDG 4.

1.2. Objective

1. To establish prevalence of exclusive breast feeding in Siaya county.
2. To examine socio - economic factors associated with exclusive breast feeding practices among lactating mothers in Siaya County.

2. Methodology

2.1. Study Design

This was a descriptive designed in which quantitative secondary data from the baseline Survey was analysed.

2.2. Study Site

The survey was done by GLUK/ UNICEF in Homabay and Siaya county, in the month of September, 2011 though the key focus for this study is Siaya County in which 5 districts are covered, that is Bondo, Rarieda, Gem, Ugunja and Ugenya.

2.3. Study Population

This study targeted households with women of reproductive age (15-49) and have children who are under five years old.

The target population for this study was the women of reproductive age (15-49) who had children under the age of five years. The unit of observation was a woman of reproductive age (15 – 49) and stays in the households, because she was the key focus of the study.

2.4. Unit of Analysis

The unit of analysis targeted lactating mothers with infants

less than 5 years old, and who had previously breastfed their baby during their age of six month and below in Siaya County.

2.5. Sample Design and Sample Size.

The data used from the study is based from baseline survey conducted in October November 2011 in which the multistage probability sampling design was used. The sample size drawn from the study was 2,805 households. My study is pegged on exclusive breast feeding mothers whom have to be drawn from the same data set.

2.6. Inclusion Criteria

Households with infants under the age of 5 years old preceding the survey were eligible for the study.

2.7. Exclusion Criteria

The study excluded households who did not have children under the age of five years old prior to the study.

2.8. Data Processing

Immediately after field work, data was entered on daily basis by the data clerks. Consistency and completeness checks were done and data cleaned. Information from the questionnaires was electronically entered using Statistical Package for Social Sciences (SPSS) version 16 programme. All the hard copies of all questionnaires were used for counter checking the information electronically entered. Each tool was entered individually and no merging was done during the entry.

2.9. Data Analysis

This was a quantitative research study in which the unit of analysis was mothers with infants less than 5 years old and had previously breastfed their baby during their age of six month below in Siaya County.

Out of this 2,805, this study only included households with mothers in the age category of 15 to 49 and is having infants under the age of five years and excluded households who did not have children under the age of five years and therefore, the denominator for this study was 1815.

The descriptive statistics were used to determine the prevalence of exclusive breast feeding practice in which frequencies were run using SPSS.

Chi –square test was used for both objective. The p.value ($p= 0.001$) is used to show the test statistic if it's significant at the 5% level.

3. Results

Prevalence of Exclusive Breast feeding

Of all the 2,805 households interview, 1815 potential breast feeding mothers were identified and out of this 1815, 29.9% (543) of respondents reported that they practiced exclusive breast feeding while 70.1 (1272) of respondent did not practice exclusive breastfeeding.

3.1. Socio - economic Factors Associated with Exclusive Breast feeding

Table 1 below shows that socio economic factors were associated with exclusive breastfeeding. The key findings under the source of income showed that unemployed reported 36.1% (221/612) exclusive breast feeding which is above the rate of exclusive breastfeeding reported from mothers practicing farming, salaried and employed. The p-value ($p=0.001$) shows the chi square test statistic is significant at the 5% level. The study shows that there was association between main source of income and exclusive breast feeding.

Table 1. Socio - economic factors and association with exclusive breast feeding

	Overall (N=1815) %(n)	Exclusive Breastfeeding % (n)	P-Value
Main Source of Income			
None	33.7 (612)	36.1 (612)	0.001
Farming	24.8 (451)	26.4 (451)	
Self- employed	1.5 (28)	21.4 (28)	
Salaried	1.82 (33)	45 (33)	
Others			
Education Level			
None	4.3 (78)	46.2 (78)	0.008
Primary	78.9 (1432)	28 (1432)	
Secondary	15.5 (282)	34.8 (282)	
Post Secondary	1.3 (23)	26.1 (23)	

On the analysis of the level of education, the key finding showed that respondents with no formal education revealed the highest rate of exclusive breastfeeding at 46.2% (36/78). The p-value ($P=0.008$) shows the chi square test statistic is significant at the 5% level. The study shows that there was association between level of education and exclusive breast feeding. ($P=0.008$)

4. Discussions

Prevalence of Exclusive Breast feeding

The study shows that majority of mothers do not practice exclusive breastfeeding. This is below the widely accepted “universal coverage” target of 90% coverage (Jones et al., 2003) and suggests the need for an urgent acceleration of efforts to scale up effective programs in promoting exclusive breastfeeding [UNICEF, 2010]. In Kenya, the prevalence of exclusive breastfeeding was 32% in 2008, 23-79 % of children 0 –5 months (KDHS, 2008- 2012).

This finding is consistent with finding by Caiet al who

estimated the global trend that suggest the prevalence of exclusive breastfeeding among infants younger than six months in developing countries increased from 33% in 1995 to 39% in 2010. The prevalence increased in almost all regions in the developing world, with the biggest improvement seen in West and Central Africa (Cai et al., 2012). This finding is lower than the findings of a study by Qiu et al who reported that on discharge from hospital, 50.3% of the mothers were exclusively breastfeeding their infants out of 96.9% of the mothers who had earlier initiated breastfeeding (Qiu et al, 2009). However, this was a cohort study of mothers who were being followed up as opposed to current study which was cross sectional. Other studies have reported that the prevalence of EBF is between 20-40% in Sub Saharan Africa (SSA).

4.1. Socio-economic Factors Associated with Exclusive Breast Feeding Practices among Lactating Mothers in Siaya County

There is an association between main source of income and exclusive breast feeding. This findings agrees with the finding done in Goba district East Ethiopia by Setegn, et al 2012. It also agrees with the findings of Kok(2011) done in Malaysia. The only difference between the two is the odd ratio is a little bit high than my research findings. This finding is basically supported by Tella, Et al 2008 which states that affluence and employment condition do not favour breastfeeding. This is especially true of place where women are engaged in industrial work with long period of working hours away from home and their day to day activities in general reduce the time that women could otherwise devote to infant care and breastfeeding. According to Aarta,(2001), some wealthy families employ wet nurses and this could be the reason for low rate of breast feeding. Another reason for low rate of exclusive breast feeding for the employed mothers is returning to work by mothers. Return to work is a significant barrier to exclusive breast feeding since women often face inflexibility in their work hours and lack privacy when breastfeeding or have no place to store expressed breast milk, are unable to find child care facilities at or near the workplace, face fears over job insecurity, and have limited maternity leave benefits. As reported by Aarta, 2001, different types of artificial feeding has always been used as a supplement to breastfeeding and this could be a reason why mothers with income have low rate of exclusive breast feeding since they have the potential to purchase this complementary breastfeed such as cereal pap.

There is also evidence of association between level of education and exclusive breast feeding. This study agrees with a study done in Malaysia by Kok, 2011, showed that there is an association between level of education and exclusive breast feeding. The study results disagree with a study by Tiras, 2010 in Ethiopia and another study by Jones, et al 2011 in US, both reported that there is no association of

exclusive breastfeeding with maternal education. The percentage of exclusive breast feeding is 46.2% in no formal education, it reduces in primary level of education and then increases in secondary level and reduces in post-secondary level of education. My findings shows that mothers without education breastfeed more than mothers with some level of education, and this agrees with an earlier survey done in Ethiopia in 2005 by Ethiopia demographic and health survey which reported the same (Alemayehu, et al 2005). The only difference is the time that both studies were conducted.

The fluctuation in the rate of exclusive breastfeeding could be due to the connection that education has with employment, this simply means that a mother with no education significantly has no employment and therefore they can breast feed easily. The increase in percentage on breast feeding among mothers with secondary level of education may be because of the relationship that education have with being literate and therefore they can utilize services such as antenatal care, health facility delivery and post natal care services where mothers learn about breastfeeding. Due to high competition in the job market, some of the mothers with primary and secondary level may have luck employment and therefore luck of employment gives them time to breastfeed more. The decrease in the rate of exclusive breastfeeding in the post-secondary level mothers could be because of their employment status that hinders them from exclusive breast feeding.

This fluctuation in this finding on the rate of exclusive breast feeding is different with the study of Alemayehu, et al. 2005 in Ethiopia which state that there is high rate of exclusive breast feeding at the primary level and low rate of exclusive breast feeding at the secondary level. This difference could be due to the difference in sampling size in both level of education. The only similarities in this study with the Alemayehu, 2005 are that both have reported a high rate of exclusive breast feeding on mothers with no formal education. The fluctuation in this finding is also different with the study of Tiras, 2010 in USA which reveals that exclusive breast feeding rate reduces as one continues to scale up in her education. The fluctuation in this finding is also different with the study done in Malaysia by Kok, 2011, reveals that exclusive breast feeding rate reduces as one scale up in the formal education level. This study result is also in agreement with the study by Tiras, 2011 in USA.

5. Conclusions

Main source of income and level of education is associated with exclusive breast feeding practices among lactating mothers in Siaya County. For example, women who are not employed breastfeed more than women who are employed. Women without education breastfeed more than women who have some level of education.

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