



Prevalence, Level of Awareness and Socio-Demographic Predictors of Exclusive Breastfeeding among Women of Reproductive Age in Waberi District, Mogadishu, Somalia

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Summary

BACKGROUND

Breastfeeding is a natural and World Health Organization recommended way of feeding infants and young children. There is a robust body of evidence highlighting the importance of breastfeeding for the optimal health and long-term well-being of women and children worldwide. Breast milk is cheap, convenient, hygienic, and has high concentration of growth and immunity factors. Research indicates that infants who are breast fed exclusively up to 6 months of age have reduced risk of morbidity and mortality. In Somalia, Exclusive Breast Feeding (EBF) is low. The objective of this study was to establish the prevalence of EBF, level of awareness of benefits of EBF, and the socio-demographic predictors of EBF in Waberi district of Mogadishu in Somalia.

METHODOLOGY

This was a descriptive cross-sectional survey. The study sample size was 448 households (calculated using Fisher et al., (1998) method. Study participants were women of reproductive age with a child aged over 6 months to 12 months. Purposive and simple random sampling methods were used to identify study area and participants respectively. Data was collected at household level using research assistant administered questionnaires. Logistic regression was used to identify socio-demographic predictors of practicing EBF among women of reproductive age.



RESULTS

Prevalence of Exclusive Breast-Feeding (EBF) among women of reproductive age in Waberi District of Mogadishu is low at 29.7%. Half of women of reproductive age in Waberi District of Mogadishu (51%) had good understanding of the benefits of EBF, 39.7% had fair knowledge and 9.2% had poor knowledge. The socio-demographic factors which influenced EBF practice among women of reproductive age in Waberi District of Mogadishu are Maternal age (OR 1.273, 95% CI of OR: 1.025-1.580, $P < 0.05$) and Parity (OR 0.752, 95% of OR: 0.636-0.889, $P < 0.05$).

CONCLUSION

Health interventions targeting young women and new mothers should be conducted to increase level of awareness of the benefits of EBF and prevalence of EBF in Waberi District.

Keywords: Exclusive Breastfeeding, Socio Demographic, Predictors, Mogadishu

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Introduction

There is a robust body of evidence highlighting the importance of breastfeeding for the optimal health and long-term well-being of women and children worldwide [1][2][3][4]. Adequate and appropriate feeding practices are crucial for the optimal growth and development of infants and young children. Breastfeeding has been identified by the United Nations Children's Fund (UNICEF) and the World Health Organization (WHO) as the single most effective and affordable feeding practice that should be adopted for good infant health and improved survival.

Evidence suggests that breastfeeding alone can improve the chances of survival of a new-born by 44% if initiated within the first hour after birth [4]. Based on this evidence, WHO emphasizes that breast milk promotes sensory and cognitive development, and protects the infant against infectious and chronic diseases. Exclusive breastfeeding reduces infant mortality due to common childhood illnesses

such as diarrhoea or pneumonia, and helps for a quicker recovery during illness.

Breastfeeding contributes to the health and well-being of mothers; it helps to space children, reduces the risk of ovarian cancer and breast cancer, increases family and national resources; is a secure way of feeding and is safe for the environment [5].

To enable mothers to establish and sustain exclusive breastfeeding for six months, WHO and UNICEF recommends the following; initiation of breastfeeding within the first hour of life, Exclusive Breastfeeding (EBF) - that is, the infant only receives breast milk without any additional food or drink, not even water for the first six months in life, breastfeeding on demand - that is, as often as the child wants, day and night and no use of bottles, teats or pacifiers [6][1].

Despite this evidence, recent global statistics show that only 43% of new-born children were breastfed within the first hour of birth, thereby increasing negative consequences



to the infants [4], and only 40 per cent of children younger than 6 months old are exclusively breastfed as recommended, far lower than the 2030 target of 70 per cent [1].

In Africa, though numerous interventions aimed at improving EBF have been rolled out, recent Demographic and Health Surveys still indicate that over half of children under the age of six months are not exclusively breastfed. Countries like Cote d’Ivoire reported EBF rate of 13%, Nigeria -17%, Guinea -21%, Niger-24%, and Burkina Faso-25%. Thirteen Countries of the Economic Community of West African States (ECOWAS) countries reported an average EBF rate of 31% [7].

In Somalia, where this study was conducted, studies have reported that the EBF rate in the war torn country as low as 5% [8]. Low EBF rate in Somalia contributes to the high under five mortality rate reported as 111.5 per 1000 live births and projected to be 91.3 per 1000 live births by the year 2030 [9]. The aim of this study was to establish the prevalence of EBF, the level of awareness of benefits of EBF, and the socio-demographic predictors of Exclusive Breastfeeding among women of reproductive age in Waberi District, Mogadishu, Somalia.

Materials and Methods

This was a descriptive cross-sectional study conducted in Waberi District in Mogadishu Somalia. The study population was women of reproductive age (18-49 years). Inclusion criteria was lactating mothers over the age of 18 years with a child aged 7 to 12 months and able to give informed consent.

Purposive sampling and simple random sampling techniques were used to identify the study site and study participants respectively. Waberi district has a population of 100,540 people in total and approximately 40% of this population is women of reproductive age [10]. Based on this number, a formula used by [11]

was used to calculate a sample size of 448 participants. A sampling frame of 3446 women of reproductive age met the inclusion criteria. Using SPSS, a representative sample of 422 participants was generated by simple random sampling method. Data was collected using a research assistant administered questionnaire.

The questionnaire was pretested for reliability and Cronbach alpha statistic was established as 0.87 which was within the recommended limits by [12]. Data was collected on socio demographic characteristics of respondents’ breastfeeding practices and level of awareness of benefits of Exclusive Breastfeeding. Level of Awareness of the benefits of Exclusive Breast-feeding was measured by inquiring if a woman of reproductive age knew at least 3 benefits of Exclusive Breastfeeding.

Those who knew 3 or more benefits of exclusive breastfeeding were categorized as knowledgeable (good knowledge), those who knew 2 benefits were categorized to be having fair knowledge and those who knew 1 had poor knowledge. Those who did not know any benefit of EBF were categorized to be having no knowledge of EBF at all; and those who knew only one benefit of EBF or didn’t not know any benefit were categorized as not knowledgeable.

The study proposal was subjected to the University of Eastern Africa Baraton Ethical review ethical review board for review and approval.

Results

Social Demographic Characteristics of Respondents

Table 1 at the end of the article provides a summary of the socio demographic characteristics of the respondents.



Prevalence of Exclusive Breastfeeding and Level of Awareness of EBF

Data from the study indicated that only 29.7% of women practiced EBF (N=448). In regard to knowledge and awareness of benefits of EBF, 51.1% had good knowledge (identified at least 3 benefits of EBF), 39.7% had fair knowledge (identified 2 benefits of EBF) and 9.2% had poor knowledge (identified only 1 benefit of EBF) of the benefits of EBF.

Socio-Demographic Predictors of EBF

A regression Analysis of all social demographic characteristics of respondents against practice of EBF established that only two socio demographic factors influenced practice of EBF. Those are; Maternal age (OR 1.273, 95% CI of OR: 1.025-1.580, $P<0.05$) and Parity (OR 0.752, 95% of OR: 0.636-0.889, $P<0.05$).

A cross tabulation established that women who had six or more children were more likely to breast feed exclusively compared to women who had two children and below and women aged between 26 to 30 years were more likely to practice EBF compared to women aged between 16 to 20 years. Table 2 provides a summary of the socio demographic predictors of EBF.

Discussion

Prevalence of EBF in Waberi District

The Prevalence of EBF in Waberi District was very low as shown in the data. This can be attributed to, among other things, the low knowledge of the benefits of EBF as reported in results, which indicate that close to half of women in Waberi District had fair or no knowledge on the benefits of EBF at all. Another reason why this prevalence could be

low is that the health systems in Somalia broke down over two decades ago. This can be attributed to political instability and warring clans in the region.

The low prevalence has been supported by studies conducted in Central African Republic (CAR) which shares similar conditions with Somalia. A meta-analysis conducted to study the prevalence of key EBF indicators in 29 sub-Saharan African countries indicated that the prevalence of EBF in CAR was low at 24.62% [13]. A study conducted in Vietnam; a country which has been ravaged by war and unrest also indicated that Exclusive Breastfeeding up to 4 months was recorded in 15% (959/ 6210) of participants; this declined to $< 1\%$ (56/6093) at 6 months [14].

A recent global food crisis survey conducted by UNICEF and Food Security Information Network (FSIN) also indicates that the prevalence of EBF is always low in countries affected by conflict such as Yemen, Democratic Republic of Congo and Syria [15][1]. The survey also reported prevalence of EBF at 30%. [15][1]. These studies support the findings in this study.

Level of Awareness of Benefits of EBF in Waberi District

The results in this study indicate that half of women of reproductive age in Somalia do not have good knowledge on the benefits of EBF. This again can be attributed to a broken health system as discussed in the previous section as well as poor literacy levels. As indicated in the social demographic characteristics of the respondents, only 10% of the respondents have acquired secondary and tertiary levels of education. Majority have primary education or no education at all. This coupled with a weak, almost nonfunctional, health system which does not conduct adequate



maternal and child health education perhaps can explain the low levels of awareness on the benefits of Exclusive Breastfeeding.

Those findings have been supported by other findings in resource poor countries affected by conflict. A study conducted in Sanas city of Yemen reported that mothers had a very low knowledge of benefits of breastfeeding [16]. Another study conducted in DRC reported low levels of knowledge of the benefits of EBF [17].

These findings support the fact that countries destabilized by political strife and conflict have lesser literacy levels compared to stable countries. This in turn affects women negatively in regard to knowledge of health issues including knowledge of the benefits of EBF. Women in Somalia are not excluded in this regard.

Socio-Demographic Predictors of Exclusive Breastfeeding in Waberi District

The socio-demographic factors found to be influencing Exclusive Breastfeeding in Waberi District in Mogadishu were Maternal Age and Parity. A further analysis to establish how maternal age and parity influenced the practice of Exclusive Breastfeeding revealed that women who had six or more children were more likely to breast feed exclusively compared to women who had two children and below and women aged between 26 to 30 years (78.3%, n=141/180) were more likely to practice EBF compared to women aged between 16 to 20 years.

These two pieces of data have created a valid argument in that women aged 16 to 20 years are more likely to have fewer children compared to women aged 26 to 30 years and thus it is valid to observe that women aged 26 -

30 years were more likely to have 6 children and above and even more likely to breastfeed exclusively. Perhaps can be explained by the fact that such women have experience in breastfeeding and perhaps they have observed the benefits from their other children.

Young women on the other hand are still new in breastfeeding and they have perhaps they belong to the group that is not aware of the benefits of EBF. These findings are supported by studies conducted in other resource poor and conflict affected regions in the world. In Iran, a study conducted to establish the factors influencing practice of EBF establish maternal age was among the factors determining practice of EBF [18].

Another study conducted in Japan established that maternal age and parity worked together to promote initiation of EBF [19]. In Saudi Arabia, a study conducted to establish the factors associated with EBF success singled out previous experiences of EBF among women of reproductive age [20]. This supports my previous argument suggesting that parity as a determinant could be due to the good EBF experiences Somali women would have had with previous children.

Conclusions

That prevalence of Exclusive Breast-Feeding (EBF) among women of reproductive age in Waberi District of Mogadishu is low at 29.7%. Half of women of reproductive age in Waberi District of Mogadishu (51%) had good understanding of the benefits of Exclusive breastfeeding, 39.7% had fair knowledge and 9.2% had poor knowledge. The socio demographic factors which influenced EBF practice among women of reproductive age in Waberi District of Mogadishu are maternal age and parity.



Recommendations

1. There is need to carry out health interventions aimed at increasing level of awareness of the benefits of EBF and prevalence of EBF in Waberi District.
2. Breastfeeding interventions should target more young women and new mothers. This is the group which is less likely to practice EBF based on the data available

Competing Interests

The authors declare no competing interest.

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Tables

Table 1: Social Demographic Characteristics of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Age	16-20 years	66	14.7	14.7	14.7
	21-25 years	94	21.0	21.0	35.7
	26-30 years	180	40.2	40.2	75.9
	31-35 years	67	15.0	15.0	90.8
	36-40 years	19	4.2	4.2	95.1
	41-45 years	22	4.9	4.9	100.0
	Total	448	100.0	100.0	
Parity	0	1	.2	.2	.2
	1	17	3.8	3.8	4.0
	2	39	8.7	8.7	12.7
	3	66	14.7	14.7	27.5
	4	51	11.4	11.4	38.8
	5	55	12.3	12.3	51.1
	> 6	219	48.9	48.9	100.0
	Total	448	100.0	100.0	
Age of lastborn child	7 - 8 months	125	27.9	27.9	27.9
	9-10 months	157	35.0	35.0	62.9
	11-12 months	166	37.1	37.1	100.0
	Total	448	100.0	100.0	
Education	Never	112	25.0	25.0	25.0
	Primary	294	65.6	65.6	90.6
	Secondary	41	9.2	9.2	99.8
	College/University	1	.2	0.2	100.0
	Total	448	100.0	100.0	
Employment Status	Employed	112	25.0	25.0	25.0
	Not Employed	336	75.0	75.0	100.0
	Total	448	100.0	100.0	
Marital status	Single	3	.7	.7	.7
	Married	378	84.4	84.4	85.0
	separated	1	.2	.2	85.3
	Divorced	66	14.7	14.7	100.0
	Total	448	100.0	100.0	
Income in Somali SHS	Mean Income	Mode	Median	Standard Deviation	Range
	69881.17	3000	2700		
	317542.388	0-3240000			



Table 2: Socio-Demographic Predictors of EBF among Women of Reproductive Age in Waberi District

Variables	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Age	0.241	0.110	4.784	1	.029*	1.273	1.025	1.580
Parity	-0.285	0.085	11.152	1	.001*	.752	0.636	0.889
Education Level	-0.005	0.104	.002	1	.963	.995	0.811	1.221
Employment Status	-0.035	0.075	.218	1	.641	.966	0.834	1.118
Occupation	-0.049	0.062	.636	1	.425	.952	0.843	1.074
Marital Status	0.035	0.153	.051	1	.821	1.035	0.767	1.397
Household income	0.0001	0.000	1.307	1	.253	1.000	1.000	1.000
Constant	-0.046	0.589	.006	1	0.938	0.955		