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# Socio-demographic factors influencing practice and awareness of exclusive breastfeeding benefits among women of reproductive age attending maternal and child health clinic in tudor sub county hospital

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## ABSTRACT

**Background:** Knowledge of exclusive breastfeeding (EBF) among women is essential when promoting optimal breastfeeding practices. Breastfeeding is recommended for the first six months of life and continuation of breastfeeding and adequate complementary foods for up to two years of age or beyond.

**Methods:** A descriptive cross-sectional study design was used. This study utilized a mixed method approach (qualitative and quantitative).

**Results:** Four socio-demographic factors were found to be influencing the practice of exclusive breastfeeding. Those include child gender, level of education, marital status and parity. Two socio-demographic factors were found to influence awareness of the benefits of EBF. Those are Level of education and Occupation.

**Conclusions:** The government should improve on the level of education of women in the area. Increase in number of educated women.

**Keywords:** Descriptive cross-sectional, Exclusive breastfeeding, Level of awareness

## INTRODUCTION

Breastfeeding is a practice of feeding infants with breast milk from the mother.<sup>1</sup> Exclusive breastfeeding is a practice of feeding only breast milk (including expressed breast milk) and no other liquids or solids except vitamins, mineral supplements or medicine to infants for six months.<sup>1</sup> Exclusive breastfeeding should be practiced for six months and complementary feeding should follow for 2 years or longer for optimal growth and development.<sup>2</sup> Globally, 11.6% mortality in under-fives is due to suboptimal breastfeeding practices, being equivalent to 804,000 infant deaths in 2011.<sup>3</sup> In 2012, WHA 65.6 resolution emphasized on countries to ensure that maternal and child nutrition especially the six global targets are met by 2025, and mostly more efforts were to be put on increasing the rate of exclusive breastfeeding by

50%.<sup>4</sup> In East Africa countries prevalence of are as follows Uganda 63.2%, Kenya 61% and Tanzania 50%, while in Mombasa County, the uptake is 67 - 68% and in Mvita constituency its 49%.<sup>5</sup> In Kenya most mothers prefer mixed feeding than exclusive breastfeeding because they receive conflicting advice on breastfeeding from various sources including health workers, relatives and community members.<sup>6</sup>

### Statement of the problem

Despite the recent increase in EBF to 61%, from 32%, our country is the second lowest rate among East African countries.<sup>7</sup> According to KDHS, 99% of infants under 6 months were breastfed, while 61% were exclusively breastfed, 0-1 months who were exclusively breastfed were 84.1% and 4-6 months were 42%.<sup>8,9</sup> Despite the

Government's efforts on fostering exclusive breastfeeding, its uptake still remains a challenge since three in five (61%) children under six months are exclusively breastfed and also they are breastfed for 21 months and exclusively breastfed for 4.3 month. However, this reflects an overall low uptake of exclusive breastfeeding in the country.<sup>7</sup> Since, there is low uptake on exclusive breastfeeding worldwide and in Kenya as whole, factors contributing to low uptake of exclusive breastfeeding for six months need to be identified and addressed so that child morbidity and mortality is reduced.

**METHODS**

**Research design**

A descriptive cross-sectional study was adopted. It's preferred because it helps to describe the factors affecting exclusive breastfeeding among mothers at that point in time.

**Inclusion and exclusion criteria**

Mothers with infants below two years, from Tudor location and also those who signed consent forms were interviewed. The researcher interviewed mothers with infants below two years because some mothers brought infants for growth monitoring. The basis is that if the researcher dwelt only on mothers with babies who are 6 months old, she may have not been able to achieve the desired sample size.

Mothers with children above two years, not from Tudor location and refused to sign consent form were not interviewed.

**Target population**

The study targeted a population of 12,150 breastfeeding mothers attending maternal and child health (MCH) clinic at Tudor sub-county hospital.

**Sampling procedures and technique**

The study area was chosen among the 6 constituencies conveniently and purposively because it hosts four large slums within the county with people from different background and class.

As for the respondents, the MCH attendance register at the hospital was used to identify the first mother to arrive at the facility and systematic sampling method was used to get the rest of the required sample size. The facility per day receives 40 mothers and monthly 1760 and the sample size was 422, then the sampling interval was 4. Sampling interval was achieved by the following method:

40 mothers per day

44 days-duration of data collection

422 sample size

Therefore:

$$K=N$$

$$\frac{n}{K} = \frac{422}{44} = 9.59 \approx 10$$

$$K = \frac{422}{10} = 42.2 \approx 43$$

Therefore the sampling interval was 4 which is the K. The first respondent was assigned an even number and all mothers with even numbers were interviewed. The sampling frame per day was: 2,6,10,14,18,22,26,30,34,38,.....422

**Sample size determination**

Since the population of the under-five is greater than ten thousand it was calculated using the formula below according to.<sup>10</sup>

$$n = \frac{Z^2pq}{d^2}$$

Where,

n=desired sample (population >10,000) i.e. population greater than 10,000.

Z<sup>2</sup>= 1.96 (confidence interval). The standard normal deviate usually set at 1.96 or simply 2.00 which correspond to 95% confidence level.

P=The proportion of target population (0.5=50%) if prevalence is not known.

$$q = 1-p (1-0.5)$$

$$d = 0.05 \text{ or } 0.02$$

D = Design effect (1 if its 95%, 2 if its 99%)

$$\text{Therefore: } n = \frac{1.96^2 \times 0.5 \times 0.5 \times 1}{0.05^2} = 384$$

$$n = 384$$

$$n = 384$$

10% for none respondents

$$384 \times 10/100 = 38.4$$

Therefore the sample size was 384+38=422.

### Construction of research instrument

Both quantitative and qualitative data was collected in this study. Quantitative data was collected using questions which had multiple choices for the respondents to choose. Qualitative data was collected using open ended questions in the interviewer schedule, which was constructed using simple English language which was easy to interpret to breastfeeding mothers. Leading questions were also avoided to minimize biasness. All the variables were covered in the research instrument.

### Testing for validity and reliability

Validity means the quality or correctness of a measure. The tool measures what is supposed to measure. This was ensured by pre-testing the research instrument after the training research assistants before administering it on breastfeeding mothers. A pre-test of the questionnaire through a pilot study was carried out to ascertain the clarity of the research instrument. The pre-test included 15 respondents who were deemed knowledgeable on issues regarding exclusive breastfeeding. A pilot study was conducted at Shimo annex dispensary to assess the validity and reliability of the data collected. Thereafter the interviewer schedule was adjusted based on the pre-test recommendations.

Pre-testing ascertained the respondents understood the questions in the study tool. Reliability refers to stability of measurement over time even after several repetitions. It was measured using split half technique.

## RESULTS

### Socio-demographic factors influencing practice of exclusive breastfeeding in tudor sub county

Four socio-demographic factors were found to be influencing the practice of Exclusive Breastfeeding. Those include child gender, level of education, marital status and parity. As indicated in the data, the girl child was 11.556 times more likely to exclusively breast fed than the boy child (OR=11.556: 95% CI 6.746-19.796,  $P<0.05$ ), Women with secondary level of education and above were 1.27 times more likely to breastfeed their children exclusively compared to women with primary level of education and below (OR=1.273: 95% CI 1.025-1.580,  $P<0.05$ ). Married women were 1.67 times more likely to breastfeed their children exclusively compared to un married women (OR=1.697: 95% CI 1.056-2.729,  $P<0.05$ ), and lastly women with two children and above were found to be 1.4 times more likely to practice exclusive breastfeeding compared to women with 1 child (OR=1.444: 95% CI 1.145-1.822,  $P<0.05$ ). The following Table, (Table 1) represents a summary of these findings.

**Table 1: Socio-demographic factors influencing practice of EBF.**

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for Exp(B)		
							Lower	Upper	
<b>Step 1<sup>a</sup></b>	Maternal Age	0.151	0.180	0.704	1	0.402	1.163	0.818	1.653
	Infant Age	-0.065	0.136	0.225	1	0.636	0.937	0.718	1.224
	Child Gender	2.447	0.275	79.403	1	0.000*	11.556	6.746	19.796
	Level of Education	0.241	0.110	4.784	1	0.029*	1.273	1.025	1.580
	Marital Status	0.529	0.242	4.771	1	0.029*	1.697	1.056	2.729
	Parity	0.368	0.118	9.637	1	0.002*	1.444	1.145	1.822
	Occupation	-0.018	0.122	0.022	1	0.883	0.982	0.773	1.247
	Constant	-6.411	0.889	52.046	1	0.000	0.002		

Variable(s) entered on step 1: Maternal age, Infant age, Infant gender, Level of education, Marital Status, Number of children, Occupation.

**Table 2: Socio-demographic factors influencing level of awareness of the benefits of EBF.**

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for Exp(B)	
							Lower	Upper
<b>Maternal Age</b>	-0.085	0.160	0.279	1	0.598	0.919	0.671	1.258
<b>Infant Age</b>	-.191	0.121	2.507	1	0.113	0.826	0.652	1.046
<b>Child Gender</b>	0.215	0.122	3.083	1	0.079	1.239	0.975	1.575
<b>Level of Education</b>	0.436	0.106	16.839	1	0.000*	1.546	1.255	1.903
<b>Marital Status</b>	0.228	0.215	1.129	1	0.288	1.257	0.825	1.915
<b>Number of Children</b>	-0.016	0.106	0.023	1	0.879	0.984	0.799	1.212
<b>Occupation</b>	1.368	0.233	34.536	1	0.000*	3.926	2.488	6.195
<b>Constant</b>	-3.135	0.734	18.268	1	0.000	0.043		

a. Variable(s) entered on step 1: Maternal age, Infant age, Infant gender, Level of education, Marital status, Number of children, Occupation.

### ***Socio-demographic factors influencing level of awareness of benefits of exclusive breast-feeding in tudor sub-county hospital***

Two socio-demographic factors were found to influence awareness of the benefits of ebf. Those are level of education and occupation. women with secondary level of education and above were found to be 1.5 times more likely to be aware of the benefits of ebf compared to women with primary level of education and below (or=1.546; 95% ci of or=1.255-1.903,  $p<0.05$ ). Women who reported that they were employed were found to be 3.9 times more likely to practice ebf than women who were not employed and those who reported to be self-employed, (or=3.926, 95% CI of or= 2.488-6.195,  $p<0.05$ ). Table 2 represents the summary of these findings.

### **Discussion**

#### ***Socio-demographic factors influencing the practice of exclusive breastfeeding***

Four socio-demographic factors were found to be influencing the practice of Exclusive Breastfeeding. They were child gender, level of education, marital status and parity. The girl child was more likely to be exclusively breastfed compared to the male child. This is perhaps due to fact that boys are more aggressive in feeding than girls. This could have contributed to the believe that that breast milk is not adequate for boys compared to the girls. A study conducted in Nigeria indicates that the perception that a child does not get satisfied by breast milk is a key barrier to practice of EBF in the country.<sup>11</sup> This is perhaps the reason why male children are more likely to not to be breastfed exclusively in Tudor Sub-county. In regard to level of education, children from educated mothers were found to be more likely to be breast fed exclusively compared to children from less educated mothers. This can be explained by the fact that educated women are more likely to understand the benefits of exclusive breastfeeding compared to uneducated women and hence they are more likely to practice EBF compared to the uneducated. These findings are supported by the following studies.<sup>12-14</sup>

In regard to parity multiparous women were found to be more likely to practice EBF compared to women with one child. This is perhaps due to the fact that the multiparous women have been exposed to health education on the benefits of EBF many times compared to women with only one child. Another possibility is that women with many children are more likely to have experienced the benefits of EBF from previous children and hence they are more likely to practice EBF compare to women with only one child. These findings have been confirmed by studies conducted in other regions. A study conducted in Wajir established that multiparous women were more likely to practice EBF compared to primiparous women.<sup>15</sup> It is however important to note that a study

conducted by, reported that new mothers were more likely to practice EBF compared to multiparous mothers. Other studies have also shown that parity is a significant determinant of EBF.<sup>16,17</sup>

In regard to occupation, women in employed professions were more likely to exclusively breastfeed their children. This is perhaps due to the fact that women in employed professions are more likely to be educated and therefore more likely to know the benefits of EBF. Several studies have also supported these findings. A study conducted in Nigeria identified occupation as one of the determinants of Exclusive breastfeeding.<sup>13</sup> Another study conducted in Ghana also identified occupation as a key determinant of practice of EBF.<sup>18</sup>

#### ***Socio- demographic factors influencing awareness of the benefits of exclusive breastfeeding***

Two socio - demographic factors were found to influence awareness of the benefits of Exclusive breastfeeding. Those include; level of education and occupation. This can be perhaps explained by the fact that educated people are expected to be more knowledgeable than uneducated ones and hence they were found to be more knowledgeable of the benefits of EBF compared to respondents with lower level of education or no education at all. On the same note, educated people are more likely to get employment opportunities and this is perhaps the reason why respondents in employment were more likely to be aware of the benefits of EBF compared to the self employed and those without jobs. Those are supported by the following studies.<sup>19,20</sup>

### **CONCLUSION**

The socio-demographic factors influencing practice of EBF among women of reproductive age in Tudor sub county are child gender (OR=11.556; 95% CI 6.746-19.796,  $P<0.05$ ), Level of education (OR=1.273; 95% CI 1.025-1.580,  $P<0.05$ ). Marital status (OR=1.697; 95% CI 1.056-2.729,  $P<0.05$ ), and parity (OR=1.444; 95% CI 1.145-1.822,  $P<0.05$ ). The socio-demographic factors influencing awareness of benefits of EBF among women of reproductive age are level of education (OR=1.546; 95% CI of OR=1.255-1.903,  $P<0.05$ ) and Occupation (OR=3.926, 95% CI of OR= 2.488-6.195,  $P<0.05$ ).

#### ***Recommendations***

The government should improve on the level of education of women in the area. Increase in number of educated women in Tudor is likely to increase prevalence of EBF in the sub county. The Government must guarantee that workplace is free of harassment and discrimination against women who prefer to breastfeed their babies through appropriate mechanisms.

Stake holders working in slum areas together with department of social services within Tudor location

should sensitize young mothers to start income generating activities which will sustain them with their families instead of practising prostitution.

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