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# The maternal factors associated with exclusive breastfeeding among postnatal mothers at A private hospital in post-Conflict mogadishu

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Abstract---Breast milk increases resilience against infections, boosts infants' neurodevelopment, and reduces the likelihood of noncommunicable diseases. All mothers must breastfeed their babies exclusively for the first six months of their infant's life. All mothers must breastfeed their babies exclusively for the first six months of their infant's life. In low-income countries, only 39% of children are exclusively breastfed. In Somalia, only 33% of babies are exclusively breastfed. Therefore, we determine the maternal factors associated with the low level of exclusively breastfeeding in Mogadishu, Somalia. Methods We conducted a cross-sectional study among mothers of babies aged between 6-9 months attending postnatal care at a private hospital, in Mogadishu. Mothers were recruited using a consecutive sampling method. Data were collected using questionnaires, and the analysis was done using SPSS version 23. Logistic regression was used to determine the factors associated with exclusive breastfeeding, and statistical significance was determined at a 5% significance level. Results A total of 280 mothers with a child aged between 6-9 months participated in the study. The mothers' average age was 27.8 (±4.12) years, while the babies were on average aged 7.6(±1.2) months. About 63% of the mothers were married, and 67% had 2 to 5 children. The level of exclusively breastfeeding was at 30% (95%CI: 25.2-36.03). Being married/cohabiting (OR=2.877, 95%CI:1.21-6.90), acquiring up to secondary/tertiary education level (OR=4.282, 95%CI: 1.78-10.30), knowledge about the benefits of exclusive breastfeeding (OR=5.869, 95%CI: 2.59-13.29), attending four antenatal care visits or more (OR= 4.202, 95%CI:1.47-11.99) and delivering from the health facility (OR= 6.49, 95%CI:2.47-13.20) were associated with exclusively breastfeeding.

**Keywords**---exclusive breastfeeding, postnatal, post-conflict, Mogadishu.

## Introduction

Malnutrition is the most significant cause of death and illness globally, outnumbering the costs of several other important global health issues (Debela Daba Jebena 2022). Breast milk is the best reliable food that provides a complete source of infant nutrition for the first six months of life. Optimal infant and young child feeding is a cornerstone for optimal child growth and development.

Breastfeeding is considered one of the best sources of optimal nutrition for an infant (Edris 2015). World Health Organization recommends exclusive breastfeeding for the first six months of an infant's life, with continued breastfeeding up to two years or beyond alongside appropriate complementary feeding practices (Leah N. Mututho 2017). Promoting EBF is essential to prevent complex infant health problems even in adulthood.

Globally, in 2017 around 41% of under-six infants were exclusively breastfed. About 37% of infants in low- and middle-income countries were exclusively breastfed. Studies also reported that the magnitude of exclusive breastfeeding ranged from 19% to 65% in the African context. In the globe, more than 1.4 deaths were reported due to non-exclusive breastfeeding in the first six months of life, where 41% in SSA (sub-Saharan Africa) and 34% in South Asia (SA) (Shambel Aychew Tsegaw 2021).

Somalia has one of the lowest exclusive breastfeeding rates; only 60 percent of infants are put to the breast within one hour of birth. Only 33 percent of infants are exclusively breastfed in Somalia for the first six months of life. Moreover, 40 percent continued breastfeeding up to 2 years of age (MoH 2020). If this number were increased, Somali infants would receive tremendous health benefits, critical nutrients, and protection from deadly diseases such as pneumonia. In a country where one in five children dies before the age of five, breastfeeding has the potential to reduce mortality by as much as 20 percent and decrease the likelihood of disease.

Different studies have found it challenging to practice exclusive breastfeeding unless its value is known to community members, specifically family members (Senghore, Omotosho et al., 2018). The difficulty is worse among young or adolescent mothers who frequently depend on family members' advice to practice infant feeding (Bootsri and Taneepanichskul 2017). Besides, for teenage mothers, the opinions on infant feeding from families are highly valued, mainly when they depend on the families for financial and emotional support.

Hospitals, through counsellors, play a significant role in advocating recommended infant feeding practices. During antennal visits and shortly after delivery, giving health workers information about breastfeeding for the woman will help to feed choice, decision-making, and actual practice, which leads to a lowered risk of mixed feeding (Iliyasu, Galadanci et al. 2019).

Health workers (HWs) play a central role in the mother's decision on infant care. Mothers have consistently referred to the importance of the advice they receive from HWs. When consistent, health workers' advice can help mothers persevere

community norms or family pressure to mixed feeding. Likewise, conflicting or misguided feeding advice can confuse mothers and contribute to suboptimal practices. The employment of different cadres of HWs to counsel mothers, from clinic sisters to community health workers, has increased the need to focus on the consistency and quality of infant feeding counselling reaching mothers as they interact with the health system from the ante to postnatal period (Alzaheb 2017).

Skilled birth attendance (SBAs) has a significant role in supporting the mother to initiate and establish exclusive breastfeeding, including educating women and their families and other helpers in maintaining successful breastfeeding (Alebel, Tesma et al. 2018). Encouragement and mothers' skills during the early postpartum have influenced the successful, increasing exclusive breastfeeding rates. Breastfeeding education and support immediately after childbirth could increase breastfeeding duration (Khanal, Lee et al., 2015). Twenty-two percent of mothers meet the need for skilled birth attendance in Somalia. The rate of skilled birth attendance (SBA) is meagre, so the lack of skilled birth attendance significantly affects the promotion of exclusive breastfeeding (UNICEF 2016). On the one hand, vaginally induced birth has been associated with not initiating breastfeeding. On the other hand, cesarean deliveries (C-sections) have been associated with lower initiation rates and shorter breastfeeding duration than spontaneous vaginal delivery (Paksoy Erbaydar and Erbaydar 2020). This may be due to delays in mother/infant skin-to-skin contact, mother's post-surgery physical complications, and anaesthetics effects. In addition to the mode of delivery, other factors that may influence breastfeeding initiation and duration include challenges encountered during nursing, availability of support systems, the mother's socio-cultural and economic situation, and the recommendations and attitudes of family, peers, and healthcare professionals (Pilla and Kitsantas 2017).

Furthermore, to determine whether elective caesarean delivery harm breastfeeding, they report that emergency and elective caesarean deliveries are similarly associated with a decreased rate of exclusive breastfeeding vaginal delivery (Chen, Yan et al., 2018).

## Research Methodologies

This descriptive cross-sectional study employed the quantitative technique of data collection. The cross-sectional survey was chosen because it is both time and cost-effective and because the study entails many participants. The descriptive research detailed the Maternal Factors Associated with Exclusive Breastfeeding among postnatal Mothers at a Private hospital in Post-Conflict Mogadishu. A consecutive sampling method was used; every eligible mother willing and consented to participate in the study was enrolled. Data were collected using Semi-structured interviewer-administered questionnaires. Data was gathered quantitatively, with variables being measured in terms of numbers. Data was gathered from 280 postnatal Mothers at a Private hospital in Post-Conflict Mogadishu. All mothers were chosen using the Kish Leslie (1965) sample size determination. Descriptive statistics for continuous variables were presented in terms of mean, median, inter-quartile range, and standard deviation. Categorical variables were presented in terms of frequencies and proportions. A series of

analyses were performed at bivariate and multivariate levels using logistic regression. The result was disseminated to the private hospital department of obstetrics and gynaecology.

# **Findings**

Demographic characteristics of the participants

The mothers' average age was 27.8 ( $\pm 4.12$ ) years ranging from 19 to 39 years; most mothers (59%) were aged between 25 to 30 years. Most mothers (63%) were married, 49% had no occupation, and 67% had between 2 to 5 children. The average age for the children was  $7.6(\pm 1.22)$  months, ranging from 6 months to 9 months. Most (72%) were aged above six months.

Table 1: Maternal Factors associated with Exclusive Breastfeeding

| Variables                                   | Exclusive<br>Breastfeeding |           | Crude                | P-         |
|---|----------------------------|-----------|----------------------|------------|
|   | No=195(f,                  | Yes=85(f, | OR(95%C.I)           | value      |
| Age   | %)                         | %)        |                      |            |
| <25   | 39(20)                     | 17(20)    | 1                    |            |
| 25-30                                       | 108(55)                    | 57(67)    | 1.21(0.62-<br>2.33)  | 0.556      |
| >30   | 48(25)                     | 11(13)    | 0.52(0.22-<br>1.25)  | 0.147      |
| Marital Status                              |                            |           |                      |            |
| Married/Cohabiting                          | 114(58)                    | 67(79)    | 2.64(1.46-<br>479)   | 0.001      |
| Divorced/Widowed                            | 81(42)                     | 18(21)    | 1                    |            |
| <b>Education level</b> Non-informal/primary | 121(62)                    | 19(23)    | 1                    |            |
| secondary/tertiary                          | 74(38)                     | 66(77)    | 5.59(3.10-<br>10.06) | <0.00<br>1 |
| Occupation                                  |                            |           | 10.00)               | _          |
| Employed                                    | 108(55)                    | 35(41)    | 1.77(1.06-<br>2.97)  | 0.030      |
| Un Employed                                 | 87(45)                     | 50(59)    | 1                    |            |
| Number of children                          | 0(4)                       | 17(00)    |                      |            |
| 1 child                                     | 8(4)                       | 17(20)    | 1<br>0.21(0.08-      |            |
| 2-5 children                                | 130(67)                    | 57(67)    | 0.51)                | 0.001      |
| 6-11 children                               | 57(29)                     | 11(13)    | 0.09(0.03-<br>0.26)  | <0.00<br>1 |
| Knowledge of the benefits of EBF            |                            |           | ,                    | _          |
| Yes   | 48(25)                     | 65(74)    | 9.89(5.44-<br>17.97) | <0.00<br>1 |
| No  | 146(75)                    | 20(24)    | 1                    |            |

| Attendance of ANC               |         |        |                      |            |
|---------------------------------|---------|--------|----------------------|------------|
| Yes                             | 165(85) | 78(92) | 1.96(0.81-<br>4.67)  | 0.129      |
| No                              | 29(15)  | 7(8)   | 1                    |            |
| Number of ANC visit             |         |        |                      |            |
| <4 times                        | 152(92) | 47(60) | 1                    |            |
| 4 times                         | 14(8)   | 31(40) | 7.16(3.52-<br>14.57) | <0.00<br>1 |
| Mothers heard about EBF.        |         |        | 0.50/1.15            |            |
| Yes                             | 147(77) | 76(89) | 2.53(1.17-<br>5.45)  | 0.018      |
| No                              | 44(23)  | 9(11)  | 1                    |            |
| Source of information about EBF |         |        |                      |            |
| Health workers                  | 65(44)  | 59(78) | 1                    |            |
| Media                           | 66(45)  | 10(13) | 0.17(0.08-<br>0.35)  | <0.00<br>1 |
| Relatives/friends               | 16(11)  | 7(9)   | 0.48(0.19-<br>1.25)  | 0.134      |
| Mode of delivery                |         |        |                      |            |
| Normal delivery                 | 161(83) | 65(76) | 1                    |            |
| Caesarian/Assisted delivery     | 34(17)  | 20(24) | 1.457(0.78-<br>2.72) | 0.236      |

Maternal factors associated with exclusive breastfeeding were marital status, education level, occupation, and children.

Married/cohabiting mothers were about three times more likely to exclusively breastfeed their babies than mothers who were divorced/widowed (OR=2.54; 95%CI (1.46 -4.79); P=0.001). Mothers with either secondary or tertiary education were about six times more likely to breastfeed their babies exclusively than mothers with either non-informal or primary education (OR=5.59; 95%CI (3.10 – 10.06);P<0.001). Mothers who knew the benefits of breastfeeding were about ten times more likely to exclusively breastfeed their babies compared to mothers who did not know the benefits of exclusive breastfeeding (OR=9.89; 95%CI (5.44 – 17.97) ;P<0.001). Mothers who attended antenatal care four times or more were 7.16 times more likely to exclusively breastfeed their babies than those who attended antenatal care less than four times (OR=7.16; 95%CI (0.81 – 4.67);P<0.001). Furthermore, mothers who have heard about exclusive breastfeeding were 2.53 times more likely to breastfeed exclusively than mothers who had never heard about exclusive breastfeeding (OR=2.53; 95%CI (1.17 – 5.45); P=0.018).

#### **Discussion**

The results have shown that maternal and infant factors have significance in EBF. Among the maternal characteristics, results have shown that married mothers practised exclusive breastfeeding more than their divorced counterparts. Moreover, married women were three times more likely to practice exclusive

breastfeeding than those who were single, divorced, or widowed. This may be attributed to the social and financial support that married women get from their husbands (Tilahun Tewabe1\*, 2016). Women who do not have partners are likely to spend more time working to provide for the family and may fail to get enough time to breastfeed their children. This finding is congruent with earlier studies from Kenya that reported that marital status was independently associated with exclusive breastfeeding (Nyanga, Musita, Otieno, & Kaseje, 2012).

In this study, mothers who had acquired secondary education or higher education were more likely to exclusively breastfeed their infants than those who had primary or no formal education.

This has been attributed to the fact that these mothers had access to knowledge related to EBF since they went for antenatal care. This finding is reasonable since more educated mothers are likely to read health-related information, including breastfeeding, and be more aware of the benefits of exclusive breastfeeding, which may influence their practice (Mogre, Dery, & Gaa, 2016b). These findings were in contrast with Alemayehu et al.; (2009), who found that in Ethiopia, educated mothers were less likely to practice EBF, claiming that they are committed to employment (Alemayehu, Haidar, & Habte, 2009).

Employed mothers were approximately two times more likely to breastfeed their children than unemployed mothers. In Somalia, breastfeeding women formally employed are given full maternity leave for the first four months and are granted fewer working hours from four months to six months. Therefore, it is not surprising that mothers with formal employment have higher chances of exclusively breastfeeding their infants than those who were not formally employed. The maternity leave considerations in Somalia could also explain the difference in findings regarding employment and EBF. For example, contradicting results were recently reported in Kenya, where Ickesetal; reported a lower EBF prevalence (47%) among formally employed women compared to 78 percent of women who were not employed officially (Issaka et al., 2017). Low levels of exclusive breastfeeding have also been reported in Ghana (Danso, 2014).

Mothers who knew the benefits of exclusive breastfeeding were nearly ten times more likely to exclusively breastfeed their babies than mothers who did not know the benefits of breastfeeding. In other studies, knowing the benefits of exclusive breastfeeding has been associated with actual breastfeeding. For example, in a cross-sectional study conducted in Sudan, mothers who understood the benefits of exclusive breastfeeding were more than two times more likely to exclusively breastfeed their infants for the recommended six months than those who did not know the benefits of exclusive breastfeeding (Tafeng, 2013).

This highlights the importance of adequate knowledge on exclusive breastfeeding for its practice, especially in low and middle-income countries. This study's empirical findings could result from respondents' regular exposure to nutrition education, mainly focused on infant and young child feeding through the radio, TV, newspapers, and health education done at the facility during antenatal and postnatal periods.

Mothers who attended antenatal care four times or more were more likely to exclusively breastfeed their babies than those who heard it less than four times (OR=7.16, P<0.001). Attendance of four ANC visits or more was also reported to be independently associated with exclusive breastfeeding in Uganda (Nabunya, Mubeezi, & Awor, 2020). Provision of knowledge about breastfeeding is part of ANC. Therefore, mothers who attend more ANC visits are more likely to get more appropriate information that may be reflected in their breastfeeding practices (Shifraw, Worku, & Berhane, 2015).

## Conclusion

The minority of the mothers, 30%, exclusively breastfed their children. However, this percentage falls way below the level recommended by WHO and National Infant and Young Child feeding practices (IYCF). This means that Somalia's breadfeeding practices (at least in the study area) are still deficient.

Marital status, education level, knowledge of the benefits of exclusive breastfeeding, number of Antenatal care visits, and delivery places were statistically associated with exclusive breastfeeding in this study.

## Recommendations

- i. The ministry of health should design strategies, policies, and guidelines to ensure proper protocols geared toward educating and training health care providers on exclusive breastfeeding to reaching mothers with insufficient knowledge of the benefits and optimal breastfeeding duration.
- ii. Health workers from private and government health centres should double their effort as regards massive education of mothers on the benefit of exclusive breastfeeding to improve the knowledge gap
- iii. There is a need to encourage and support community health workers to sensitise the community on the practice, benefit, and correct duration of exclusive breastfeeding to enhance the level of exclusive breastfeeding and lower the negative attitudes, beliefs, and myths regarding exclusive breastfeeding.

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