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A PRELIMINARY CROSS-SECTIONAL ASSESSMENT ON EXCLUSIVE BREASTFEEDING AMONG WOMEN ATTENDING A POSTNATAL CLINIC AT THE HOLY FAMILY HOSPITAL, TECHIMAN, GHANA

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ABSTRACT

Exclusive breastfeeding (EBF) for the first six months of life has remained low in Ghana, despite strong evidence of benefits to babies/infants that supports the practice. This study is a preliminary assessment of the adherence to EBF among mothers attending the postnatal clinic. Methods: The study was cross-sectional, involving 85 breastfeeding mothers who attended the postnatal clinic at the Holy Family Hospital, Techiman. A structured questionnaire was used to collect data on socio-demographic information and adherence to EBF. A total of 85 mothers and their babies (50 females and 35 males) participated in the study. Out of this total, 45.9% (39/85) were exclusively breastfed, while 54.1% (46/85) were non-exclusively breastfed. About 17.6% of the mothers with Junior High School (JHS) education exclusively breastfed their babies compared to those with Senior High School (SHS) (15.3%) and tertiary (12.9%) ($p > 0.05$). Babies who were not exclusively breastfed were 12.9% (11/85), 17.6% (15/85), and 23.5% (20/85) for mothers with JHS, SHS, and tertiary education respectively ($r = 0.182$, $p = 0.096$). The distribution of weight classification among exclusive and non-exclusively breastfed babies was significantly different ($\chi^2 = 13.583$, p 0.001). The findings of this study provide a preliminary assessment of adherence to EBF in Techiman, Ghana. Exclusive breastfeeding practices appear suboptimal. Education and working status of mothers negatively impact adherence on exclusive breastfeeding. Interventions emphasizing the continuous education of mothers could promote exclusive breastfeeding.

Contribution/Originality: This study documents a preliminary assessment of adherence to Exclusive Breastfeeding among women attending postnatal clinic at Holy Family Hospital in Techiman, Ghana.

1. INTRODUCTION

The importance of breastfeeding practices for the healthy growth and development of infants and young children has been presented in numerous policy documents [1]. Breastfeeding practices are categorized into two broad aspects: exclusive breastfeeding and complementary feeding [2]. Each of these practices has guidelines on how to appropriately practice them to yield the maximum outcome or good health of children. Mothers are encouraged to exclusively breastfeed their infants for the first six months of their lives [3, 4]. However, breastfeeding is much more than giving infants and young children breast milk but a complex adaptive process that bonds a mother and her child. During this process, physical, hormonal, biochemical, and psychological exchanges

facilitate the transfer of needed essential nutrients between the mother and her child [5]. Reports show that good breastfeeding practices, especially exclusive breastfeeding (EBF), could prevent about 11.6% of the 6.9 million under-five deaths in developing countries [6]. After six months of exclusive breastfeeding, breastfeeding should be continued with added complementary feeds recommended by World Health Organization [7]. At this stage, it is required that infants receive nutritionally adequate complementary feed by introducing them gradually to family foods [1]. Research indicates that sometimes mothers are influenced negatively by significant others as to how to practice breastfeeding [8]. Other challenges include the belief that breast milk alone is not sufficient in meeting the nutritional needs of infants, short maternal leave period, socio-cultural pressure to introduce water and artificial feeds. While some mothers try to breastfeed exclusively, most perceive exclusive breastfeeding to be too difficult and tasking and resort to feeding their babies with infant formula [9]. Employed women were more likely not to practice exclusive breastfeeding compared to unemployed women due to the nature of their jobs [10, 11]. Also, some employers do not encourage working mothers' optimal exclusive breastfeeding practice after the maternity period because they think it will interfere with their daily work. So, when mothers get back to work, and there is no baby-friendly place or room where they can have their babies close by to breastfeed, it can be a big problem to breastfeed [12] exclusively.

Despite the benefits and efforts to promote breastfeeding, EBF is sub-optimally practiced in many developing countries, including Ghana. It is therefore essential that mothers are counselled, encouraged, and supported to initiate exclusive breastfeeding. Government, family members, and community health workers have various roles to play in the survival of newborns through uptake of exclusive breastfeeding [13] The focus of this study would highlight issues that impede exclusive breastfeeding practice.

2. METHODS

2.1. Study Site

The study was conducted at the Holy Family Hospital, Techiman, a Municipal Hospital, and offers a wide range of services. The hospital is part of the National Catholic Health Services (NCHS) and a member of the Christian Health Association of Ghana (CHAG). This hospital is located in the vibrant commercial town of Techiman (7°35'30.7 "N 1°56'16.1 "W). The facility provides general and specialist care and a major referral center to Techiman Municipality and beyond (Brong Ahafo Region). The hospital trains doctors and physician assistants by the Medical and Dental Council. In addition, the Ghana College of Physicians and Surgeons has designated the hospital for the training of residents in family medicine.

2.2. Study Population

The target population included mothers (15-35 years) with children aged 6 to 12 months at the Holy Family Hospital who visited the clinic for postnatal care services and various immunizations for their babies.

2.3. Study Design and Sample Size

A cross-sectional descriptive study was used. In addition, a questionnaire consisting of both close and open-ended questions was used. The open-ended questions were included to gain an understanding of why mothers gave a specific answer. The study sampled 85 women who attended the postnatal clinic at Holy Family Hospital.

2.4. Ethical Consideration

The hospital granted authorization to carry out this study for information and educational purposes. Participants' consent was received, and their identity was concealed by providing unique identifiers. In addition, participants were informed of their right to withdraw from participating in the study.

2.5. Data Analysis

The IBM® Statistical Package for Social Science (SPSS) (Version 27) was used. The Data was analyzed according to socio-demographic characteristics and adherence to exclusive breastfeeding. The correlation coefficient was estimated to determine the association between breastfeeding and the level of education of mothers. The Chi-square test was used to determine the difference between the percentage of babies with normal weight, underweight, and overweight. Test of statistical significance was determined at $p < 0.05$.

3. RESULTS

3.1. Assessing Practices That Support Exclusive Breastfeeding

Figure 1 below shows the percentage of mothers who exclusively breastfed. A total of 85 mothers with children aged 6 to 12 months (50 females and 35 males) were involved in this study. Mothers who exclusively breastfed their babies constituted 45.9% (39/85), while 54.1% (46/85) did not adhere to exclusive breastfeeding.

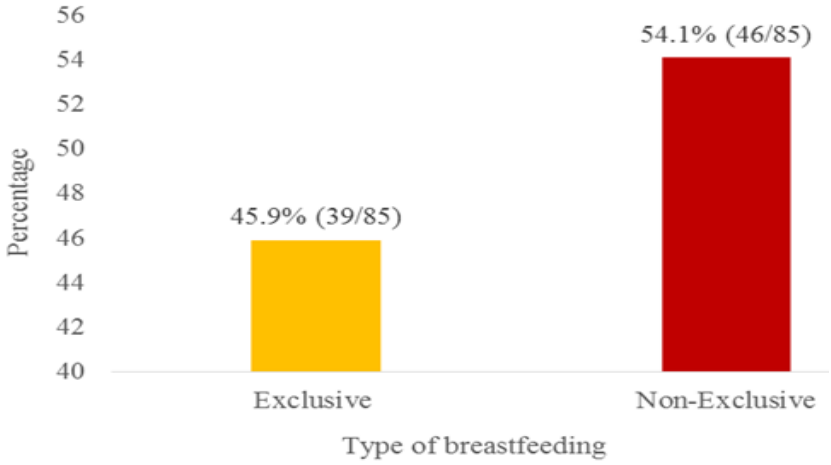

Figure-1. Percentage of mothers practicing exclusive breastfeeding.

3.2. Association between the Level of Education and the Practice of EBF

Table 1 below shows the effect of education on the practice of EBF. Of the total,17.6% (15/85 with Junior High School (JHS) education exclusively breastfed as compared to those with Senior High School education, 15.3% (13/85), and tertiary education 12.9%(11/85). As well, 12.9% (11/85) with JHS education did not exclusively breastfeed, compared to 17.6% (15/85) with SHS education and 23.5% (20/85) with tertiary education ($r = 0.182$, $p = 0.096$).

Table-1. Effect of education on the practice of Exclusive Breastfeeding.

EBF status	Level of education n (%)			Total
	JHS	SHS	Tertiary	
Exclusive	15 (17.6)	13 (15.3)	11 (12.9)	39
Non-exclusive	11 (12.9)	15 (17.6)	20 (23.5)	46
Total	26	28	31	85

3.3. Effect of Working Status on the Practice of Exclusive Breastfeeding

In line with the main objective, respondents were asked to state if they could practice the recommended exclusive breastfeeding according to World Health Organisation standard with their breastfeeding with the nature of their work. From Table 2, 21.2% of women were employed as professionals, 18.8% (16/85) unemployed, and 14.1% (12/85) self-employed mothers could not practice exclusive breastfeeding. On the other hand, 27.1% (23/85)

unemployed mothers, 10.6% (9/85) self-employed, and 8.2% (7/85) practiced exclusive breastfeeding (r = 0.167, p = 0.127).

Table-2. Effect of working status on the practice of exclusive breastfeeding.

EBF Status	Employment Status			Total
	Unemployed	Professional	Self-employed	
Exclusive	23 (27.1)	7 (8.2)	9 (10.6)	39
Non-exclusive	16 (18.8)	18 (21.2)	12 (14.1)	46
Total	39	25	21	85

Figure 2 below shows the weight classification of exclusive and non-exclusive breastfed infants. Of the total number of babies weighed, 32.9% (28/85) were normal weight, 38.8% (33/85) were underweight, while 28.2% (24/85) were overweight. As well, 23.5% (20/85) of exclusively breastfed babies had normal weight, 9.4% (8/85) underweight, and 12.9% (11/85) were overweight (χ^2 = 13.583, p 0.001). With regards to babies who were not exclusively breastfed, 9.4% (8/85) were normal weight, 29.4% (25/85) were underweight, while 15.3% (13/85) were overweight.

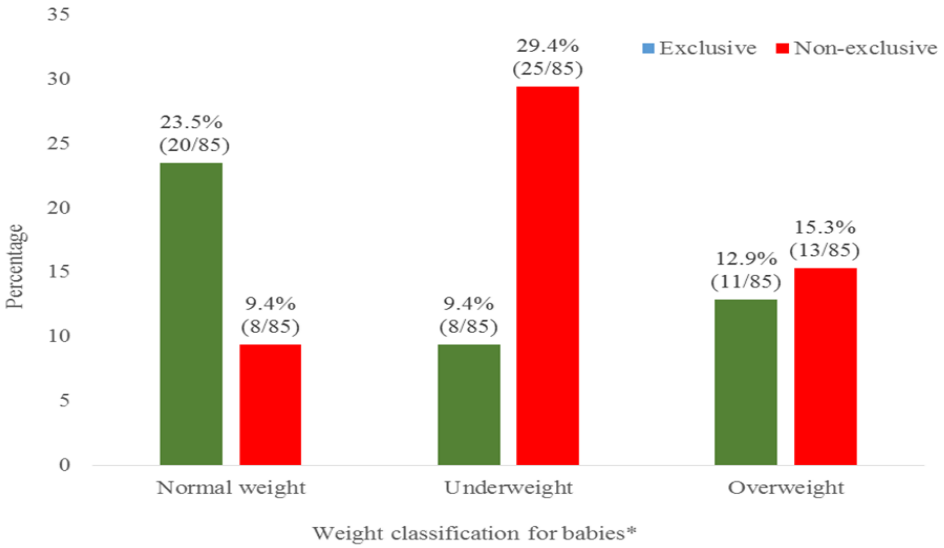

Figure-2. Weight classification of exclusive and non-exclusive breastfed babies.

Note: *Ghana Health Service Classification for infant weight – Normal weight = 2.5-3.9 kg, Underweight = 2.4 kg below, Overweight = above 4.0 kg.

4. DISCUSSION

The mother's level of education was considered to be a barrier to exclusive breastfeeding. Although research has established a positive correlation between higher education and exclusive breastfeeding [14, 15] this study found that most mothers that exclusively breastfed their babies were those with low education. Breastfeeding status decreases with the mother's educational level [16, 17]. Also, mothers with no or primary education exclusively breastfeed than mothers with higher education [18, 19]. Some surveys have established that employment status and work environments may adversely impact the duration of breastfeeding [20, 21]. For instance, in these studies, most mothers who exclusively breastfed their babies were unemployed compared to those with professional work or are self-employed. According to Aryeetey and Goh [3], mothers in business and professional work are more likely not to maintain exclusive breastfeeding because of their busy schedules [22]. The practice of EBF is supposed to be uninterrupted for six months and is usually seen as time-consuming by working mothers. Most mothers have challenges coping with practicing EBF because of work demands and the unavailability of places designated for breastfeeding at their workplace. Another study reported that countries with guaranteed breastfeeding breaks at work had 71% of their working mothers practicing exclusive breastfeeding. In comparison, only 4 % of working

mothers exclusively breastfed in countries with unpaid guaranteed breaks [23]. In this current study, the lack of EBF reflected the infant's current weight status, reflecting the nutritional status. Our data show a significantly higher number, 20 out of 39, exclusively breastfed babies having normal weight. Of the 46 babies who were not exclusively breastfed, 25 were underweight. In our view, this outcome could be due to the early introduction of complementary foods, which may predispose the child to waste and, eventually, stunting. A similar study done in India among tea garden workers of Assam reported low birth weight among exclusively breastfed and non-exclusively breastfed infants as underweight, wasting, and stunting [24]. We are uncertain what might have influenced underweight and overweight in exclusively breastfed babies. Likewise, there is the need to investigate further why babies who are not exclusively breastfed could have normal weight or overweight status.

5. CONCLUSION/IMPLICATIONS FOR PRACTICE

Exclusive breastfeeding practices for our study population are sub-optimal. The education and working status of mothers affect the adherence to exclusive breastfeeding of babies. Even though initial breastfeeding is common in developing worlds, exclusive breastfeeding for six months is regularly not normal. Interventions emphasizing practical education should therefore be targeted to help promote exclusive breastfeeding.

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