

Effects of Cultural Practices on Exclusive Breastfeeding among Mothers: A Case Study of Tano North District

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Abstract: Breast milk is an ideal food for infants' growth and development as it has an appropriate balance of nutrients that are easily digested and always available. The aim of the study was to assess the effects of cultural practices on exclusive breastfeeding among mothers in the Tano North District of Ghana. A cross sectional study was used to conduct a study at Duayaw Nkwanta St. Johns of God Hospital. All nursing mothers caring for babies aged between 0-6 months in the Tano North District attending child welfare clinic were involved in the study using a sample size of 100 respondents (nursing mothers). A simple random sampling technique was used to select nursing mothers who were breastfeeding in the Tano North District at the time of the study. A semi-structured questionnaire was used in the study to collect data from the respondents. Data collected were edited, coded and fed into the computer using statistical package for social sciences (SPSS). Data were presented in tables and graphs to give usual impression of the data. It was found out that about 65% the nursing mothers practice exclusive breastfeeding because of advice from midwives. The study concluded that majority of the nursing mothers' initiates' breastfeeding within 6 hours, practice exclusive breastfeeding for 6 months, gave artificial milk to babies before breastfeeding them.

Keywords: Breast milk, Exclusive Breastfeeding, Infants, Cultural Practices, Nursing Mothers, colostrums, Ghana

INTRODUCTION

Breast milk is the perfect food for babies' growth and development. Mostly in unclean environments, however, breast milk alternatives transmit a high risk of contamination and can be deadly in babies (UNICEF 2006). Exclusive breastfeeding is well-defined as "an infant's consumption of human milk without supplementing it with any solid or liquid food but rather could be enhanced by vitamins, minerals, and medications for the first six months (WHO, 2010).

Breastfeeding contribute to the reduction of incidence of diseases such as respiratory tract infections. Otitis media and others infections have been reported to affect infants who receive breast milk. Kramer *et al.*, (2001) compared the possibility of getting one or more occurrences of gastrointestinal tract (GIT) infection, two or more occurrences of respiratory tract infection and atopic eczema and recurrent wheezing in infants who were exclusively breastfed and those who were not. They found out that exclusively breastfed babies had 40% lower risk of getting GIT infections and 46% lower risk of atopic eczema compared to babies who were not exclusively breastfed to 3-6 months.

A study conducted by Clemens *et al.*, (1999) indicated that infants who initiated breastfeeding in the first three days had reduced incidences of diarrhea in their first six months of life in comparison to those who initiated breastfeeding after three days. Another essential benefit of breastfeeding is the highly reduced risk of infant mortality. There was a report in Latin America that infants who were exclusively breastfed for the first three months followed by partial breastfeeding up to at least 12 months were protected from 55% of the infant mortality caused by diarrhea and acute respiratory infection (ARI) (Betran *et al.* 2001).

Early initiation of breastfeeding was reported to reduce neonatal deaths by 16% in Ghana (Edmond *et al.*, 2006). For that matter, it is essential to introduce breastfeeding programs that emphasize early initiation of breastfeeding, especially in sub Saharan Africa where rates of neonatal and infant mortality are unacceptably high.

Many studies indicate that breastfed children score higher in intellectual and motor development test than children who were not breast fed (Dewey, 2001; Horwood *et al.*, 2001; Mortenson *et al.*, 2002). Mortensen *et al.*, (2002) confirmed that children who were breastfed had better test scores on the Danish Wechsler Adult Intelligence Scale which involves verbal and performance tests than children who were not breastfed. Infant and young child feeding practices openly affect the dietary status of children below two years of age and, eventually, influence child existence. Globally, more than 9 million children under five years of age die each year (CARE 2010).

According to Gillman *et al.*, (2001), children who received breast milk for more than seven months were 20% less likely to be overweight and obese than children who received breast milk for less than three months. It was also reported that infants who were not breastfed at the time of discharge from the hospital after delivery had a higher risk of getting diabetes than those who were breastfed at discharge (Jones *et al.*, 1998). The reduced risk of leukemia in childhood was higher than in children who received breast milk for more than six months (Shu *et al.*, 1999). There has also been malnutrition in pre-term infants and blood pressure in later life. Singhal *et al.*, (2001), reported that the mean blood pressure of children aged 13-16 years who were born pre-term and received breast milk from milk banks was lower than that of children of the same age who received formula.

In Africa, over 95% of babies are presently breastfed, however, taking care of feeding practices are frequently deficient; feeding of newborn babies with water and other liquids have become a widespread practice by nursing mothers (Heymann *et al.* 2013). Women in Ghana could breastfeed their babies up to 22 months with 53.4% of women practicing this. Regrettably, the rates of exclusive breastfeeding are very low compared to overall breastfeeding rate due to the practice of giving complementary feedings to infants. The addition of complementary foods and liquids has been identified as a major cause of diarrhoea illness and higher mortality rates in infants (Aidam *et al.*, 2005). In this regard, the objective of the research was to investigate the effects of cultural practices on exclusive breastfeeding among mothers in the Tano north district of Ghana.

MATERIALS AND METHODS

The research was conducted in the Tano North District in the Brong Ahafo Region of Ghana. The Tano North District is one of the 22 administrative districts of Brong Ahafo Region of Ghana. Cross sectional study was used to conduct a study at Duayaw Nkwanta St. Johns of God Hospital to investigate into the effect of exclusive breastfeeding among mothers in the Tano north district of Ghana. All nursing mothers caring for babies aged between 0-6 months in the Tano North District attending child welfare clinic were involved in the study using a sample size of 100 respondents (nursing mothers). Random sampling technique was used to select nursing mothers who were still breastfeeding in the Tano North District at the time of the study. A semi-structured questionnaire was used in the study to collect data from the respondent. Data collected were edited, coded and fed into the computer using statistical package for social sciences (SPSS). Data were presented in tables and graphs to give usual impression of the data.

RESULTS AND DISCUSSION

Table 1: Age Distribution of Respondents (n=100)

Age (years)	Frequency (N)	Percentage (%)
<16	3	3.0
16-25	7	7.0
26-35	31	31.0
36-45	44	44.0
>45	15	15.0
Total	100	100.0

Source: Field work, 2016.

The age group of distribution of respondents in Tano North District revealed that majority (44%) of nursing mothers was within the age group of 36-45 years. The second largest age group of nursing mothers representing 31% was within the range of 26-35 years. The age group of 45 years and above as well as 16 – 25 years recorded 15% and 7% respectively whereas the least age group of nursing mothers representing 3% was below 16. The data showed that majority of the respondents were matured and experienced nursing mothers when it comes to breastfeeding a child. This varies with the study conducted by Chalmers *et al.*, (2009) Chin *et al.*, (2008) which says with increased in age, there is often an increased in the level of education; both factors are associated with higher breastfeeding rates.

Table 2: Effects of cultural practices on exclusive breastfeeding (n=100).

Options	Frequency(n)	Percentage (%)
Most parents do not know that the breast milk contain water	10	10.0

Of the believe that the milk is inadequate	34	34.0
Of ignorance	56	56.0
Total	100	100.0

Source: Field work, 2016.

Despite national effects to promote exclusive breastfeeding for the first six months after delivery, the majority of women provide water, glucose and formula milk to their infants by the end of the first month (NBS & ICF Macro, 2010). This may be due to culture beliefs that breast milk is not enough for infants. Respondents were asked why cultural practices have effect on exclusive breastfeeding. The study has revealed that majority of the respondents (56%) were ignorant, 34% were of the belief that the milk is inadequate and 10% did not know that the breast milk contain water.

Cultural beliefs and local traditions are important in deciding fitness behaviour in general. studies . Studies of feeding practices in unique countries have proven a giant range of beliefs and traditions related to breastfeeding (Ergenekon-Ozelci et al. 2001; Giovannini et al. 1999; Buyukgebiz et al. 1992). Some of these beliefs can stimulate breastfeeding, others can also discourage it. A true grasp of neighbourhood beliefs, customs and traditions associated to breastfeeding can assist midwives to offer advice to nursing mothers towards exclusive breastfeeding (Dennis, 2002).

A study by Scholars mentioned similar anxieties about inadequacy of breast milk as a mutual reason for primary termination of breastfeeding in several special countries such as Iran (Marandi1993), Turkey (Giovannini et al. 1999) and Brazil (Yaman, 2004).

Table 3: When to add foods to breastfeeding (n=100).

Options	Frequency(n)	Percentage (%)
Start adding earlier than 4 months of age	5	5.0
Start adding between 4 – 6 months of age	25	25.0
Start adding later than 6 months of age	70	70.0
Total	100	100.0

Source: Field work, 2016.

A study was conducted on when a mother should start adding foods to breastfeeding. It was revealed that majority of the respondents (70%) were of the view that addition of food to breastfeeding should start latter than 6 months of age, 25% said should start between 4 – 6 months of age, and 5% said mothers should start adding earlier than 4 months of age. It is obvious that after six months, infant's requirements cannot be met with breast milk alone. This is the time to begin complementary foods, which are of good quality and in adequate amounts. This is necessary to prevent malnutrition including anaemia. During this period additional foods and fluids are provided to the baby along with breast milk. A study has shown that early introduction of complementary food does not result in improved growth velocities or food acceptance. Several other studies have also documented that early start of complementary foods earlier than 6 months, replaces breast milk intake and does not increase caloric intake and none of these studies reported any benefit of starting these foods earlier than six months. Replacing breast milk means losing fats, energy and other micronutrients. It would therefore be important to maintain high levels of breastfeeding along with introduction of complementary foods, which are high nutrition density.

Table 4: Opinions of Nursing Mothers on Exclusive Breastfeeding (n=100)

Statement	Responses			Total
	Strongly Agree	Agree	Disagree	
Mothers can always determine that babies are getting enough breast milk	70 (70%)	10 (10%)	20 (20%)	100 (100%)
Mothers can always tell when their babies have finished breastfeeding	12 (12%)	76 (76%)	12 (12%)	100 (100%)
Exclusively breastfed babies have less gastrointestinal and respiratory illness such as can infection and asthma than those who are not breastfed	17 (17%)	65 (65%)	18 (18%)	100 (100%)

Source: Field work, 2016.

A question was asked whether nursing mothers could determine that level of breast milk giving to babies and their satisfaction level as well as finding out whether exclusively breastfed babies have less gastrointestinal and respiratory illness. Table 4 illustrates that majority of the respondents (70%+10%=80%) agreed that mothers can always determine that babies are getting enough breast milk while the remaining 20% disagreed, most nursing mothers (12%+76%=88%) agreed that mothers can always tell when their babies have finished breastfeeding whereas the rest (12%) disagreed with the assertion, 82% (17%+65%) agreed that exclusively breastfed babies have less gastrointestinal and respiratory illness such as canned infection and asthma than those who are not breastfed while the remaining 18% disagreed. This finding is in line with the study conducted by Arifeen, *et al.*, (2001) who indicated that exclusive breastfeeding reduces death related to acute respiratory infections (ARI). Their study to assess the effect of exclusive breastfeeding on infant death risk reported that infants who were not breastfed or who were partially breastfed were 2.4 times more at risk of dying from ARI than infants who were exclusively breastfed. It was also reported that the chance of infant death due to pneumonia following inadequate breastfeeding was 2 times greater than infants who received adequate breastfeeding (Victoria *et al.*, 1999).

Table 5: People who influence mothers to introduce supplementary food to infants before the first 6 months (n=100).

Options	Frequency(n)	Percentage (%)
Midwives	11	11.0
In-laws	67	67.0
Friends	22	22.0
Total	100	100.0

The influence of midwives, in-laws and friends on mothers to introduce supplementary food to infants before the first 6 months was studied. The study has revealed that 67% were influenced by in-laws, 22% were influenced by friends and 11% were influenced by midwives. It can therefore be inferred that majority of the mothers are influenced by in-laws to give supplementary food to infants before the first 6 months.

Table 6: How Mothers Breastfeed their Babies (n=100).

Options	Frequency(n)	Percentage (%)
Directly from the breast	67	67.0
Squeezed into feeding bottle	13	13.0
None of the above	20	20.0
Total	100	100.0

Source: Field work, 2016.

The study was conducted to find out how mothers breastfeed their babies. The results revealed that 67% of the mothers fed their babies directly from the breast, 13% of them squeezed into feeding bottles before feeding the babies with them and 20% affirmed neither options. It can be concluded that majority of the mother breastfed their babies directly from the breast.

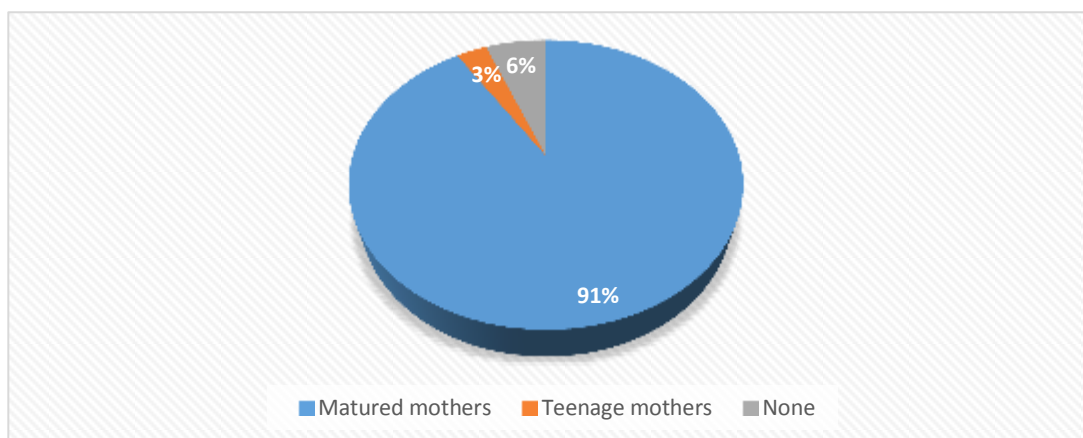


Figure 1 Group of people that practice exclusive breastfeeding (n=100)

Source: Field work, 2016.

The study was conducted to investigate the group of people that practice exclusive breastfeeding. Figure 1 illustrates that 91% of matured mothers and 6% of teenage mothers practice exclusive breastfeeding. However, it was recorded that 3% had the option that exclusive breastfeeding is practice by neither matured mothers nor teenage mothers.

Table 7: Reasons for Practice Exclusive Breastfeeding (n=100)

Reasons	Frequency(n)	Percentage (%)
Advice from midwife	65	65.0
For growth	28	28.0
For protection against diseases	7	7.0
Reduce incidence of diarrhea	0	0.0
Total	100	100.0

Source: Field work, 2016.

The reason why nursing mothers practice exclusive breastfeeding was studied. Table 7 illustrates the reasons given by nursing mothers for practicing exclusive breastfeeding. Out of the 100 respondents, 65% said they practice it because of advice from midwives, 28% said because of growth and 7% said because of protection against diseases. However, no one said because it will reduce incidence of diarrhea. Hence, it obvious that majority of the nursing mothers practice exclusive breastfeeding because of advice from midwives. A study conducted by Kramer *et al.*, (2001) indicated that exclusive breastfeeding contribute to the reduction of incidence of diseases such as respiratory tract infections. Otitis media and others infections have been reported to affect infants who receive breast milk. compared the possibility of getting one or more occurrences of gastrointestinal tract (GIT) infection, two or more occurrences of respiratory tract infection and atopic eczema and recurrent wheezing in infants who were exclusively breastfed and those who were not. They found out that exclusively breastfed babies had 40% lower risk of getting GIT infections and 46% lower risk of atopic eczema compared to babies who were not exclusively breastfed to 3-6 months.

Again, Clemens *et al.*, (1999) reported that infants who initiated breastfeeding in the first three days had reduced incidences of diarrhea in their first six months of life in comparison to those who initiated breastfeeding after three days. Another essential benefit of breastfeeding is the highly reduced risk of infant mortality. There was a report in Latin America that infants who were exclusively breastfed for the first three months followed by partial breastfeeding up to at least 12 months were protected from 55% of the infant mortality caused by diarrhea and acute respiratory infection (ARI) (Betran et al. 2001).

Table 8: The Period to start Exclusive Breastfeeding (n=100)

Options	Frequency(n)	Percentage (%)
2 months	8	8.0
3 months	21	21.0
4 months	6	6.0
6 months	65	65.0
Total	100	100.0

Source: Field work, 2016.

Respondents were investigated on how long they practice exclusive breastfeeding. Table 8 illustrates how long nursing mothers practice exclusive breastfeeding. The study revealed that majority of the nursing mothers (65%) practice it for 6 months followed by 21% who practiced it for 3 months. 8% and 6% practiced it for 2 months and 6 months respectively.

Exclusive breastfeeding in the 3 to 4 months of existence varies from one to 90% depending on where the toddler is born (UNICEF, 2004). This variability practices is severely motivated by means of cultural beliefs, ethnicity, education, urbanisation and neighbourhood feeding practices (Ergenekon-Ozelci et al. 2001; Giovannini et al. 1999; Buyukgebiz et al. 1992).

Table 9: Time to Initiate Breastfeeding (n=100)

Options	Frequency(n)	Percentage (%)
Within 6 hours	49	49.0
7-24 hours	37	37.0
25 – 72 hours	11	11.0
Less than 7 days	3	3.0
Total	100	100.0

Source: Field work, 2016.

Exclusive breastfeeding means giving infants only breast milk with no addition of other foods or drinks including water (WHO/UNICEF, 2003). The WHO recommends on early initiation of breastfeeding of one hour after birth and exclusive breastfeeding for six months (WHO, 2001b; WHO/UNICEF, 2003). Exclusive breastfeeding for the first six months of life is estimated to lower infant death by 13% (Jones *et al.*, 2003). Respondents were investigated on when they initiate breastfeeding. The study revealed that majority of the nursing mothers (49%) initiate breastfeeding within 6 hours followed by 37% who initiate it from 7 – 24 hours. 11% and 3% initiate for 25 – 72 hours and less than 7 days respectively. Early initiation stimulates breast milk production through prolactin reflex and also stimulates oxytocin reflex for better milk flow from mother's breast to the baby. It helps to ensure colostrums, which provides the infant with the antibacterial and anti-viral protection, and the crucial nutrition needed at this hour. Early initiation of breastfeeding is associated with fewer breastfeeding problems and better mother-infant relationship. Babies who are put to breast earlier have been shown to have higher core temperature and less temperature instability

CONCLUSION

Cultural beliefs and local traditions are important in deciding feeding behaviour of a nursing mother. The study reveals that majority of the nursing mothers' initiate breastfeeding within 6 hours, practice exclusive breastfeeding for 6 months, gave artificial milk to babies before breastfeeding them. The study also confirms that babies that were not exclusively breastfed but introduced to infant formulas were susceptible to various disease and infections and were either less or overweight. It was again revealed that exclusive breastfed babies have less gastrointestinal and respiratory illness such as common infection and asthma than those who are not breastfed.

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