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Infant feeding practices in Cape Coast, Ghana: A sociological perspective

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Abstract

Infant feeding has not always been seen as a social behaviour by health professionals and this has contributed substantially to infant mortality among various communities. This paper describes infant feeding practices among mothers in Cape Coast from a sociological perspective. A Symbolic interactionist perspective guided the study, and a descriptive cross-sectional survey design methodology was used. The study targeted women, 20 years and above, with not more than six month old babies. A total of 138 mothers were selected at the Central Regional Hospital. Mother's marital and employment status, their friends' way of feeding their babies, social support and baby's age influenced mothers' infant feeding practices. Culturally, water, as a welcome drink, was also found to be an important part of infant feeding practices. It is recommended that the Ghana Health Service should fashion infant feeding education taking into consideration socio-cultural factors.

Keywords: breastfeeding, Cape Coast, infant feeding, sociological perspective

Introduction

Infant feeding has become a public health priority worldwide. Research into the physical, psychological and social implications of breastfeeding or not breastfeeding for a baby, a mother and other family members has resulted in widespread endorsement of breastfeeding as the medical gold standard (Knaak, 2005; Martin-Bautista et al., 2010). The World Health Organization (WHO), in close collaboration with the United Nations Children's Fund (UNICEF), organised a conference at Geneva, on 13th –17th March 2000, to formulate a comprehensive policy on infant and young child feeding practices for the next decade (WHO, 2003). The policy recommends exclusive breastfeeding for six months, with timely, adequate, safe and appropriate complementary feeding, while continuing breastfeeding for two years and beyond. It also supports maternal nutrition, and social and community support (WHO/ UNICEF, 2009).

The role of the international organisations is to put breastfeeding on the agendas of national governments, to develop laws and directives, to collaborate in promoting breastfeeding and to collect evidence for effective policy interventions. However, studies have questioned whether mothers should exclusively breastfeed for six months (Graven, 2013; Grimshaw et al., 2013). These studies have produced evidence that challenges WHO's recommendation. The fact still remains that breastfeeding is best for all infants as babies who are not fully breastfed for the first three to four months are more likely to suffer health problems such as gastroenteritis, respiratory and ear infections, urinary tract infections, allergies and diabetes mellitus. Breastfeeding also benefits mothers by reducing risks of breast and ovarian cancer, lowering risks of obesity and saving costs related to buying formula (Büchner et al. 2007).

In line with the UNESCO and WHO, national bodies like the Ghana Health Service and the Ministry of Health are promoting exclusive breastfeeding and delayed introduction of complementary foods as the appropriate infant feeding practices. However, in most cultures, there exist a number of factors and beliefs not directly related to infant feeding practices that nevertheless affect women's decisions on how to feed their children (Matusiak, 2005; Pak-Gorstein, Haq & Graham, 2009). Thus, infant feeding behaviours are embedded within a wider socio-cultural context (Stuart-Macadam & Dettwyler, 1995). Nevertheless, infant feeding has not always been seen as a complex behaviour shaped by social and cultural forces interacting with local environmental and political conditions. This is because most research on infant feeding is not done by sociologists but by researchers in fields that have had the most influence on policy (Esterik, 2002).

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This study was therefore carried out to determine the sociological factors influencing infant feeding practices. In more specific terms, the study describes how factors, such as employment, mothers' source of information on feeding and source of support, influence infant feeding practices.

Contextual Issues

Until the 19th century, breastfeeding was the norm in almost all human societies; almost every infant was breastfed (Sokol *et al.* 2007). Infant feeding practices in Ghana are similar to that of many countries in Sub-Saharan Africa. Studies have shown that the percentage of mothers initiating breastfeeding in Ghana was 98% in 1979, 99.7% in 1989 and 99% in 2003 (LLLI/CBI, 2003; MOH, 1989).

Mothers in Ghana initiate breastfeeding early and breastfeed for long periods. The average breastfeeding duration for Ghanaian mothers in 1979/80 for instance, was 15 months. This figure rose to 20.4 months in 1988 and then to 21.6 months in 1993 (Ministry of Health, 1994). Despite this bright picture, the exclusive breastfeeding rate has been below 35% in the first 3 months and 6.4% by 6 months (GSS 1999; Population Reference Bureau, 1999; LLLI/CBI, 2003). Mothers are quick to start complementary feeding. For instance, Elliot (2003) reported that Ghanaian mothers still frequently feed their one month old babies with tea alongside breastfeeding, reducing the benefits of breastfeeding and inhibiting the absorption of iron, an important nutrient for the prevention of anaemia. Specifically, water and maize-based fermented porridge are usually given to infants in their first months of life (Davis, Tagoe-Darko & Munkuria, 2003), which contravenes the WHO's recommended exclusive breastfeeding practice.

However, studies have shown that these traditional ways of feeding infants are a contributory factor to the high infant mortality and malnutrition experienced in Sub-Saharan Africa and for that matter, Ghana (Fjeld *et al.*, 2008). For instance, in Malawi, mixed feeding begins in the first 48 hours of infant life as advised by paternal grandmothers who are perceived traditionally to be the key decision makers when it comes to good parenting (Bezner-Kerr, *et al.*, 2007). Again in Malawi, Mozambique and Zambia, most women give their babies water in the few days of life due to the traditional belief that breast milk contains insufficient water, and this has been a contributory factor to the high infant mortality rates in those countries (Arts, *et al.*, 2011; Fjeld *et al.*, 2008). Studies have reported similar situations in Ghana (Davis, Tagoe-Darko & Munkuria, 2003; Elliot, 2003) and this has contributed to infant mortality. For instance, the 2008 Ghana Demographic and Health Survey (GDHS) Report indicates under-five mortality rate of 80 per 1,000 live births, having stagnated at 111 deaths per 1,000 live births during the period of 2003 and 2008 (Anim, Awusabo-Asare & Amo-Adjei, 2013).

There is therefore the need to examine infant feeding practices to gain a better understanding and to suggest measures for appropriate feeding practices.

Theoretical Issues

Symbolic interactionism forms the theoretical basis for the study. Karp and Yoels (1993) define symbolic interactionism as "a theoretical perspective in sociology that focuses attention on the processes through which persons interpret and give meanings to the objects, events, and situations that make up their social worlds" (p. 31). It is peculiar because humans interpret or define each other's actions instead of merely reacting to each other's action (Calhoun *et al.*, 2012). George Herbert Mead's contributions to symbolic interaction influenced this study. In *Mind, Self, and Society* (1934), Mead explained how behaviours are constructed from a symbolic interactionist's perspective.

The mind exists in society and it produces human society and it is, in turn, influenced and re-shaped by society. People symbolise, use language, and communicate through ongoing interactions in a complex mode of perceptions. Through this relationship between the mind and society, the social system of norms, values and social institutions are formed and re-formed. The *Self*, which is the set of concepts we use in defining who we are (Hughes & Kroehler, 2005), is created from the relation of mind to society. A self-concept is derived from this ability to see one's behaviours from the point of view of others, and ultimately from the point of view of the standards of society. A self is chosen from imaginative rehearsals and meaningful lines of action that a person decides upon. Through this perspective we see the mind, self, and society as processes.

The development of the self is central to symbolic interactionism. This happens as an individual imaginatively constructs the attitudes of others about a particular role, and thus anticipates the reaction of others (Bailey, 2001). It must be noted, however, that not all “others” are equally influential in constructing the self. Three categories of “others” exert various forms of influences on the construction of the self. These are the generalised other, the reference group and the significant other. The ‘generalised other’, is the widespread cultural norms and values we use as reference in evaluating ourselves (Macionis, 2000). Marketing, advertisement and media portrayals of infant care products are the generalised others for nursing mothers (Newman & Pittman, 2002).

‘Reference groups’ are social groups to which people may or may not belong but use as a standard for evaluating their values, attitudes, and behaviours (Merton & Rossi, 1950 in Anderson & Taylor, 2006). Family, friends, neighbourhood, and workplace groups may become such reference points for mothers who are feeding their infants (Scott & Mostyn, 2003). ‘Significant others’ are considered as actual influential people with whom an individual interacts. Most often they are members of a primary social group where face to face contact occurs (Longres, 2000). Intimate partners have been found to exert substantial influence on mothers’ infant feeding choices (Rempel & Rempel, 2004).

Infant feeding choices can be framed in symbolic interactionist terms. A woman who occupies a social status as a mother must decide on an infant feeding behaviour with special reference to societal expectations. Decisions are made about the symbolic meanings of these behaviours for the performance of the role of a mother. These behaviours are carried out with both the perception of the relative benefits of the behaviour and the influences of a key reference groups and/or significant others. That is, if a mother’s family tradition is mixed feeding, then she has a reference group that may encourage continued mixed feeding. However, a key significant factor which supports and encourages exclusive breastfeeding may trigger a behavioural change.

Through this process of role taking and role performance, a sense of identity is formed as the symbolic interaction continues. Infant feeding, therefore, is a behaviour with symbolic importance for most people.

Methodology

Study area and design. Ghana is situated in West Africa, with ten administrative regions that have been zoned into districts, municipalities and metropolis. The Cape Coast Metropolis, which is the study site, is the administrative capital of the Central Region. The population of the Cape Coast Metropolitan area which was 54,123 in 1960 by the year 2000 has increased to 118,106. Thus, it has more than doubled in 40 years. Cape Coast Metropolis lies within latitudes 5^o.07’ to 5^o.20’ north of the Equator and between longitudes 1^o.11’ to 1^o.41’ west of the Greenwich Meridian. Cape Coast Metropolis is bounded on the East by Abura – Asebu - Kwamankese District, West by Komenda – Edina – Eguafo - Abrem (K. E. E. A.) District, South by the Gulf of Guinea and North by Twifo Heman Lower Denkyria District. There are 84 communities in the metropolis. The Capital of the Metropolis is Cape Coast which doubles as the regional capital of Central Region of Ghana. Other major communities include Efutu, Adisadel, Apewosika, Nkanfoa, Koforidua, Abura, Pedu and Nyinesin. The inhabitants are mainly Fantes. Other tribes, which make up 5% of the total population, are the Ashantis, Ewes, Gas, Hausas, Dagbanis, Dagombas, Nzimas, Fafra and few non Ghanaians.

The city now has a total population of 169,894 comprising 82,810 males and 87,084 females (Ghana Statistical Services [GSS], 2011) with an average density of 1,395 persons per sq. Km. Cape Coast, the capital town of the Central Region of Ghana is chosen as the study area, principally because of its heterogeneous population and the fact that it is one of the regions in Ghana that records low rates of exclusive breastfeeding (GSS, 2012). According to GSS Multiple Indicator Cluster Survey (2012), the Central Region and Ashanti Region recorded the least exclusive breastfeeding rates of 39% and 39.5% respectively, figures which are quite below the national average of 46%. These low rates recorded make these regions a target for studies such as this current one. Cape Coast Metropolis is a rapidly urbanising city with several hospitals where mothers with infant pair go for post natal checkups. The metropolis can boast of one regional referral hospital, one metropolitan hospital and one university hospital. Others are

three urban health centres, and two clinics which are government establishment. The study followed a descriptive cross-sectional survey design. This is because the research problem in this study, does not lend itself to an experimental or quasi-experimental design, that is, human characteristics and behaviours are inherently not subject to experimental manipulation. It would also not be ethical to manipulate the respondent's knowledge (Pilot & Hungler, 1995).

Subject recruitment and selection criteria. The study participants, made up of mothers with infants not older than six months, were recruited at the Central Regional Hospital Child Welfare Clinic. Mothers were eligible to participate in this study provided they met the following inclusion criteria: she was twenty years and above, a mother with an infant not older than six months, and a resident of Cape Coast Metropolis. One hundred and sixty-two mothers, who attended welfare clinic at the Central Regional Hospital, were checked against the inclusion criteria out of which 138 qualified and were recruited as respondents for the study. The respondents were informed about the study, assuring them of their voluntary participation and anonymity.

Instrument and data collection. A standardised semi-structured interview schedule was developed and was pre-tested. The instrument consisted of two sections, A and B. Section A dealt with the socio-demographic characteristics of respondents, while section B elicited information relevant to the study objectives and questions. The schedule consisted of both open-ended and close-ended likert type questions. The data was collected by the researcher. The mothers were met at an agreed venue, date and time where the interviews were conducted. Mothers were asked about their breast-feeding, formula-feeding, complementary feeding, sources of information about infant feeding practices and the pressures from family, friends and neighbours when feeding their babies. Their socio-demographic information was also obtained. Each interview lasted for 30-45 minutes.

Data analysis. Questionnaires were coded, imputed and analysed using SPSS version 16.0 for Windows. Findings from the analysis were presented in contingency tables with summary statistics including proportions to look at the various relationships that exist among variables of interest, which are feeding practices, and mothers' socio-demographic characteristics. In addition, narratives and texts gathered by the study were analysed manually to support the statistical analysis.

Results

Socio-demographic characteristics of mothers. The socio-demographic variables describing the lactating mothers who were interviewed in this study are summarised in Table 1. These variables are known to influence infant feeding practices (Alexy & Martin, 1994; Arora et al., 2000; De La Mora et al., 1999).

Mothers' ages ranged from 20 – 39 years with a mean age of 29 years (Table 1).

Table 1: Socio-demographic characteristics of mothers

Characteristic	Frequency (N =138)	%
Age		
20-24	12	8.7
25-29	15	10.9
30-34	98	71.0
35-39	13	9.4
Marital Status		
Married	103	74.6
Cohabitation	23	16.7
Never married	12	8.7
Education		
Primary	24	17.4
Junior high	33	23.9
Senior high	12	8.7
Voc/Technical	12	8.7
Tertiary	57	41.3
Ethnicity		
Akan	101	73.2
Ewe	10	7.2
Ga/Adangbe	12	8.7
Hausa	15	10.9
Employment		
Yes	103	74.6
No	35	25.4

A little above two-thirds (71%) of the mothers interviewed were between 30 and 34 years of age, while about nine percent were aged between 20 and 24 years. A display of respondents’ reported marital status as given in Table 1, indicates that the majority (103, (74.6%)) of mothers were married. None of the respondents reported being widowed, separated or divorced. Fifty-seven mothers (41.3%) had some tertiary education, while 12 (8.7%) each reported having completed senior high and vocational/technical school. None of the respondents reported to have no formal education. Meanwhile, out of the 24 mothers reported to have had some primary education, 22 representing 92%, could not read and write the English language. Respondents indicated their ethnicity as shown in Table 1. The findings indicated that the majority (n=101, 73.3%) of the respondents were Akans, while ten (5.2%) were Ewes. The majority of the mothers, 103 (75%) were employed.

Current infant feeding patterns of the mothers interviewed. Mothers interviewed breastfed for varied periods. Meanwhile, other foods (formula, juice, porridge etc.) were introduced in the first six months of the child’s life. Figure 1 shows the infant feeding practices of mothers who participated in the study.

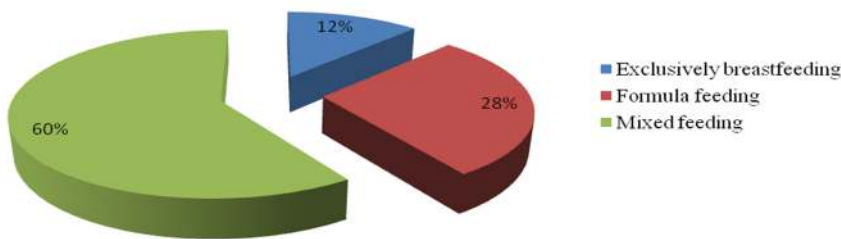


Figure 1. Infant feeding practices of mothers

As shown, the proportion of women who practiced exclusive breastfeeding and formula feeding were 12% and 28% respectively. The proportion of women who practiced mixed feeding within the first six months of life was 60%.

When mothers were asked what food they introduced to their infants in the first six months of life the majority were quick to respond that they gave water. Their responses are summarised in Table 2 in addition to information on the age at which other foods were introduced. The majority (80 of 138) of respondents responded that they gave water in addition to breast milk to their infants. As mentioned earlier 17 respondents were exclusively breast feeding. However, 41 were giving their babies formula and other home prepared foods. Of the 80 respondents who introduced their infants to water, 36.2% gave their infants water in their first two months of life. Another 30% were still receiving water and breast milk at the ages of 3 and 4 months (Table 2).

Table 2: Type of food introduced by age of infant

Age of infant	Type of food introduced			Total 138 (%)
	No introduction 17 (%)	Water 80 (%)	Formula/home food 41 (%)	
2 months & below	1(5.9)	29(36.2)	20(48.8)	50(36.2)
3-4 months	16(94.1)	24(30.0)	12(29.2)	52(37.7)
5-6 months	0(0.0)	27(33.8)	9(22.0)	36(26.1)
Total	17(100.0)	80(100.0)	41(100.0)	138(100)

Mothers in this category explained that water has been part of our culture as a welcoming drink and as part of our food. Their responses emphasize the importance of water in infant feeding practices. The case of a 28-year-old mother indicates some of the views expressed by the mothers who gave their babies water.

I: Is there any reason why you give your baby water?

R: When people visit us, we give them water to welcome them; therefore I give my child water always to assure her that she is welcome into this world (A 28 year mother of a 1 month old baby girl).

Factors influencing infant feeding practices in the first six months of life. A key focus of the study was to look for sociological factors that could help explain feeding practices mothers adopted in the first six months of their infant's life. Specifically, the influences of maternal socio-demographic characteristics, mothers' friends, and family and health attendants on feeding practices are detailed. Table 3 presents data on how socio-demographic variables of mothers influence infant feeding practices. A distribution of current feeding practice by age of mother is displayed in Table 3. Among the respondents aged between 25 and 29 years, 1 (6.7%) reported breastfeeding her youngest child exclusively, compared with 14 (14.3%) of the respondents between the ages of 30 and 34 years, and 2 (15.4%) of those 35 and 39 years. None of the mothers aged between 20 and 24 exclusively breastfed.

However, almost 60% of mothers aged between 30 and 34 are practising mixed feeding. A critical look at the row percentages of mothers' age by current feeding practices displayed in the Table 3 reveals an interesting trend. The percentage of mothers exclusively breastfeeding and formula feeding tends to increase as the age of mothers increases. However, the rate of mixed feeding decreases as mothers' age increases. There seems therefore to be a relationship between maternal age and feeding practice as older mothers are more likely to exclusively breastfeed while younger mothers are more likely to mixed feed.

Table 3: Distribution of current feeding practices by socio-demographic characteristics

Variable	Current feeding practice			Total n=138(%)	p- Value		
	Exclusively breastfeed n=17(%)	Formula feeding n=39(%)	Mixed feeding n=82(%)				
Age of mother	18-22	0 (0)	2 (16.7)	10 (83.3)	12 (100)	0.357	
	23-27	1 (6.7)	4 (26.7)	10 (66.7)			15 (100)
	28-32	14 (14.3)	27 (27.6)	57 (58.2)			98 (100)
	33-37	2 (15.4)	6 (46.2)	5 (38.5)			13 (100)
Marital Status	Married	3 (2.9)	35 (34.0)	65 (63.1)	103(100)	0.000	
	Cohabiting	14 (60.9)	2 (8.7)	7 (30.4)	23 (100)		
	Never married	0 (0)	2 (16.7)	10 (83.3)	12 (100)		
Mother's Level of Schooling	Primary	13 (54.2)	2 (8.3)	9 (37.5)	24 (100)	0.000	
	Junior High	0 (0)	8 (24.2)	25 (75.8)	33 (100)		
	Senior High	2 (16.7)	3 (25.0)	7 (58.3)	12 (100)		
	Voc/technical	0 (0)	2 (16.7)	10 (83.3)	12 (100)		
	Tertiary	2 (3.5)	24 (42.1)	31 (54.4)	57 (100)		
Employment status	Yes	4(3.9)	34 (33.0)	65 (63.1)	103 (100)	0.000	
	No	13(37.1)	5 (14.3)	17 (48.6)	35 (100)		
	Muslim	0 (0)	10 (31.2)	22 (68.8)	32 (100)		
Age of last baby	2months and below	1 (2.0)	19 (38.0)	30 (60.0)	50 (100)	0.000	
	3-4 months	16 (30.8)	11 (21.2)	25 (48.1)	52 (100)		
	5-6 months	0 (0)	9 (25.0)	27 (75.0)	36 (100)		

The distribution of current feeding methods by mothers' marital status (Table 3) portrays a certain trend. Out of the 17 exclusively breastfeeding mothers, 14 were living together with their partners but were not married. The remaining three were married. None of the never-married respondents was exclusively breastfeeding. However, formula and mixed feeding (35 of 39 and 65 of 82 respectively) was very high among married women, compared to those who were living together but not married and never married respondents. This gives the indication that mothers living with their partners are more likely to exclusively breastfeed than mothers without partners.

A distribution of feeding method by mothers' level of schooling is also presented in Table 3. Respondents who reported to have primary school education were more likely to exclusively breastfeed than respondents of the other levels of education. Junior High and Vocational/ Technical graduates were not exclusively breastfeeding. Meanwhile, respondents with tertiary schooling were practising formula feeding more than other respondents.

Mothers' employment status was found to be strongly associated with how they were feeding their babies. As portrayed in Table 3, of the 17 mothers practising exclusive breastfeeding, 14 reported that they were unemployed. However 65 of 82 mothers practicing mixed feeding were employed. This gives an indication of how maternal employment could serve as a barrier to exclusive breastfeeding.

Looking at whether infant feeding practice differ according to the babies' age, It was noted that only one out of the 50 mothers with children aged two months and below was exclusively breastfeeding.

However, as many as 30 mothers of children within the same age were mixed feeding while the remaining 19 mothers were formula feeding. It was also noted that of all the infants' age groups, those within the ages three and four months were exclusively breastfed more than those within the other age groups. None of the children aged between five and six months was exclusively breastfed.

Influence of Family, Friends and Health Workers on Feeding Practices. A major objective of the study is to find out how families, friends and health workers influence infant feeding practices. As a sociological study, these influences are seen as very critical for all behaviours and for that matter infant feeding. To find out these influences, mothers were asked of their sources of infant feeding information, what their friends feed their babies with and who assists them in caring for their babies. Their responses were checked against their feeding practices and the results are summarised and presented in Table 4.

Seventy-one out of the 138 mothers interviewed were advised by clinical nurses on how to feed their infants. Of this number, 16.9% were exclusively breastfeeding, 26.8% were formula feeding, and the remaining 56.3% were mixed feeding. However, only one out of the 17 exclusively breastfeeding mothers received advise on how to feed her baby from friends. It was also observed that 66% of mothers who received advice from their family members on infant feeding were mixed feeding. This shows that the families of the mothers were more likely to support mixed feeding than the other types of feeding. One young woman reported: *“Older people at home have been putting pressure on me that the baby must eats solid food, they like to see the baby eating every time, and they believe if the baby is crying then he/she must eat something”*. Also, a 22-year-old mother who had chosen to mixed-feed her baby reported: *“At home they say breast milk is not enough for the baby, they say I must give him (the baby) other foods so that he can grow. They feel it’s a burden for me to give only breast milk”*.

Table 4 also portrays, to a very large extent that mothers are more likely to be influenced by what their friends do. The majority (68 out of 138) of the mothers have friends who mixed feed their babies. Here, it was observed that 16 of the 17 exclusively breastfeeding mothers had friends who also breastfeed exclusively. A 34 year old mother remarked *“I am doing the exclusive breastfeeding as my friends because we often talk about it when we meet”*. However, only one out of the 17 exclusively breastfeeding mothers had a friend who formula fed. Likewise, 95.6% of the mothers who had mixed feeding friends were also mixed feeding.

Table 4: Influence of family, friends and health workers

Variable		Current Feeding Practice				p-Value
		Exclusive breast feeding N=17 (%)	Formula feeding N=39 (%)	Mixed feeding N=82 (%)	Total N=138 (%)	
Mothers' source of infant feeding advise	Nurse	12 (16.9)	19 (26.8)	40 (56.3)	71 (100)	0.357
	Friends	1 (7.1)	6 (42.9)	7 (50.0)	14 (100)	
	Family	4 (7.5)	14 (26.4)	35 (66.0)	53 (100)	
What friends feed their babies with	Formula only	1 (2.8)	26 (72.2)	9 (25.0)	36 (100)	0.000
	Breast-milk only	16 (47.1)	10 (29.4)	8 (23.5)	34 (100)	
	Mixed Feeding	0 (0)	3 (4.4)	65 (95.6)	68 (100)	
Source of assistance in caring for babies	Husband	3 (20.0)	4 (26.7)	8 (53.3)	15 (100)	0.024
	Fiancée	0 (0.0)	1 (7.7)	12 (92.3)	13 (100)	
	Parents	14 (18.4)	22 (28.9)	40 (52.6)	76 (100)	
	No one (self)	0 (0)	12 (35.3)	22 (64.7)	34 (100)	

Table 4, again, looks at people who assisted the mothers most in taking care of their babies and whether such assistance affected the way the babies are fed. It was found that parents (of the mothers) assisted the majority (76) of the mothers interviewed compared to fiancées (of the mothers) who assisted

13 mothers and husbands who assisted 15 mothers, while 34 mothers were assisted by no one. Table 4 further shows that the majority of the exclusively breastfeeding mothers (14 out of 17) were assisted by parents. This shows the importance of grandparents in the lives of children born in the study area.

However, looking at the row percentages, the proportion of exclusively breastfeeding mothers out of the mothers assisted by their husbands was greater than those of the other subgroups. This therefore implies that mothers who have their husbands supporting them are more likely to exclusively breastfeed. Interestingly, mothers who have nobody to assist them were not exclusively breastfeeding, likewise those who were assisted by their fiancées.

Opinions regarding Current Feeding Practices. Mothers’ opinion and perception on benefits and drawbacks of formula feeding and breastfeeding are important when it comes to infant feeding practices. The study therefore sought from mothers their opinion regarding infant feeding practices. Their responses are presented in Table 5. Approximately 85% of the mothers believed that formula feeding makes babies grow faster than breastfeeding does. The majority of mothers (66.7%), again, expressed that they find breastfeeding more convenient. All the mothers interviewed (including those who never breastfed) were of the opinion that breastfeeding fosters bonding between mother and child more than formula feeding. A little above half of the mothers interviewed (51.4%) expressed the opinion that breastfeeding is more difficult to combine with work than formula feeding.

Looking at Table 5, it can be speculated that the majority of mothers were not exclusively breastfeeding because of the perception that formula feeding makes babies grow faster. Despite the fact that they believed breastfeeding fosters bonding between mother and child, and is more convenient, they also held the view that it is difficult to combine it with work.

Table 5: Mothers’ opinion about infant feeding practices

		Frequency N=138	Percentage (%)
Makes babies grow faster	Breastfeeding	21	15.2
	Formula	117	84.8
Most convenient for mothers	Breastfeeding	92	66.7
	Formula	46	33.3
Helps bonding between mother and baby	Breastfeeding	138	100
	Formula	0	0
Most difficult to combine with work	Breastfeeding	71	51.4
	Formula	67	48.6

Looking at Table 5, it can be argued that the majority of mothers are not exclusively breastfeeding because of the perception that formula/cereal feeding makes babies grow faster. At best, they mixed feed, or formula feed exclusively.

Discussion

A review of literature on infant feeding practices acknowledges the influences of mothers’ socio-demographic characteristics on infant feeding practices (Ford & Labbok, 1990; Shahla, 2010; Sika-Bright, 2010). In this study it was observed that all the demographic characteristics except the age of mother ($p=0.357$) influenced the way infants are fed. Young mothers below 25 years of age were less likely to exclusively breastfeed, likewise mothers who were never married. Exclusive breastfeeding was high among mothers aged between 30-34 years, among mothers living together with their partners, unemployed, and less educated mothers. Scott and Binns (1999) and Arora et al. (2000) reported that older women were more likely to exclusively breastfeed. Volpe & Bear (2000) had also identified that young mothers are unlikely

to breastfeed. This study unveiled similar findings although the relationship between maternal age and feeding practice was not significant.

Mothers' level of education and employment status were found to influence infant feeding practices ($p=0.000$). Mothers with higher educational degrees were not exclusively breastfeeding likewise mothers who were employed. Bick et al. (1998) made it clear that working mothers are less likely to maintain breastfeeding. This has also been confirmed by Setegn et al, (2012) who studied breastfeeding practices among mothers in Ethiopia. To them mothers who are employed were less likely to exclusively breastfeed. Work therefore plays a major role in conditioning mothers' infant feeding practices. Bick, et al. (1988) found a return to work within 3 months of birth predictive of early mixed feeding.

As indicated earlier, the study sought to examine the sociological factors influencing infant feeding practices, specifically the influences of mothers' social group on infant feeding practices. In this study, the influences of family, friends and clinical nurses were examined. It was therefore identified that clinic based nursing staff are the most important source of infant feeding information and this underlines the important role that clinic based staff can play in shaping appropriate infant feeding decisions. Of all the sources of advice, those who consulted the clinical nurses were more likely to exclusively breastfeed than the other subgroups. Black et al. (1990) emphasised the enormous role health workers play in shaping infant feeding practices of mothers. In symbolic interactionist terms, clinical nurses could represent the 'generalised other' for mothers and as such prompted some appropriate infant feeding behaviour in those who took advice from them.

Literature has also shown that mothers are more likely to feed their infants the way their friends do (Hawthorne, 1994; Meyerink & Marquis, 2002). This study tends to portray this trend. Mothers, to a considerable extent, were practicing what their friends were doing. The majority of exclusively breastfeeding mothers had friends who breastfeed, likewise those of the other subgroups. Looking again at this trend from the symbolic interactionist perspective, friends were an important reference group for mothers and thus exert some amount of influence on mothers' infant feeding behaviour. Such associations with the reference groups enable mothers to develop the *self* which is very central to symbolic interactionism (Bailey, 2001).

The study also looked at persons who assisted the mothers in taking care of their babies and whether such assistance received from various persons influenced the way mothers fed their babies. Assistance here refers to domestic chore assistance. The literature makes it clear that mothers whether employed or unemployed, are mostly engaged in domestic chores and this keeps them away from proper infant feeding routines (Bick, Macarthur & Lancashire, 1998; Sullivan, Leathers, & Kelley, 2004). The study portrays that mothers assisted by their husbands were more likely to exclusively breastfeed. This confirms a study conducted by Cohen and his colleagues in 2002 which indicated that fathers are a significant influence on breastfeeding practices. In addition, Dennis's (2002) extensive review of the North American literature from 1990 to 2000 found the mother's partner to be a strong influence in her breastfeeding practice. DiGirolamo et al. (2005) also described the mother's family, including the child's father, maternal grandmother, and close friends, as impacting maternal feeding choices. The study affirms this as most mothers supported by their parents were mixed feeding, while those supported by their husbands and partners were exclusively breastfeeding. Using symbolic interaction as a theory informing this study could offer some insights. The child's father, and maternal parents are 'significant others' in symbolic interactionist terms. These 'others' are the most important sources of influence on the mothers' behaviour. It could therefore be seen that while husbands supported exclusive breastfeeding, maternal parents supported mixed feeding.

Mothers' opinion and perception about a particular feeding practice were also explored as they are also very helpful in shaping their infant feeding practice (De Almeida & Novak, 2004; Scott et al., 2006). Mothers opined that breastfeeding fosters bonding and is more convenient to practice than formula feeding. This finding confirms several other studies (see Bai et al, 2009; Guttman & Zimmerman, 2000). Bai and his colleagues (2009) found out that breastfeeding releases the oxytocin (the love/ bonding hormone) which fosters bonding between mother and infant. The finding is consistent with a study done by Doan, Gardiner, Gay & Lee (2007) who also found out from mothers that breastfeeding is convenient as it leads to more

sleep for mothers, which has a large effect on mental health and productivity. Despite these positive opinions about breastfeeding, the mothers also expressed that formula feeding makes babies grow faster than breastfeeding. This finding conflicts several other infant feeding literature that demonstrate the superiority of breastfeeding over formula feeding (Knaak, 2005; Jones et al., 2003; Ladomenou et al., 2010; WHO, 2012). This opinion could help explain why most of the mothers were not exclusive breastfeeding despite their belief that breastfeeding is convenient and fosters bonding between mother and child.

Conclusion

The study was undertaken to describe infant feeding in sociological terms. Mothers with babies not older than six months were participants of the study. The study portrayed that mothers were not practicing exclusive breastfeeding as recommended by the WHO and other health officials. Instead, the majority of them were mixed feeding. Infant feeding practices were found to be influenced by the following demographic variables: age of last baby, marital status of mother, level of education and employment status of mother. In addition, mothers' infant feeding practices were seen to conform to that of their parents and friends. Clinical nurses and mothers' opinion were found to play a major role in shaping infant feeding practices among mothers. Those who assist the mothers in taking care of their baby were also found to influence mother's choice of infant feeding practice. Finally, the mothers feel breastfeeding is more convenient and fosters bonding between mother and child but formula feeding makes babies grow faster. These infant feeding behaviours were explainable using the symbolic interactionist perspective as a guide.

The study portrayed that mothers' infant feeding decisions are based on wide socio-cultural factors and this challenges the World Health Organisation's recommendation that all mothers should exclusively breastfeed; a recommendation that lacks the contextual situation of mothers. It is recommended that health workers and health authorities do not only target the mother as the sole recipient of infant feeding education, but also the general public, since anyone could be a reference point or a significant other for a lactating mother. International and national bodies involved in health policies, especially those that concern infant feeding practices, should design approaches to emphasise the social aspect in infant feeding in health education.

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