Family belief systems and practices that influence exclusive breastfeeding in Sagu, Ghana

Agani Afaya (MSc, BSc, Dip, RN) 1
Karim Jabuni Fuseini (BSc, Dip, RN) 2
Judith A. Anaman-Torgbor (PhD, MPhil, RN) 3
Solomon Mohammed Salia (MSc, BSc, Dip, RN) 4
Peter Adatora (PhD Candidate, MPhil, BSc, RN) 5
Richard Adongo Afaya (BSc, Dip, RN) 6

Abstract
Breast milk provides additional protection to children less than five years against infections. In the last few decades, exclusive breastfeeding has received a growing interest as the appropriate feeding method for infants all over the world. The aim of the study was to identify family belief systems and practices that influenced infant feeding during the first six months of life among rural women in Sagu, in the Upper West Region of Ghana. An exploratory, qualitative research design was employed to obtain in-depth information required to understand and interpret family belief systems and practices that influence exclusive breastfeeding among 27 participants. Data were collected between August and September, 2016. The study found family belief systems and practices such as gender, social role, culture and religious beliefs as factors influencing exclusive breastfeeding among women. Family heads were key in decision-making regarding infant feeding. The findings showed that mothers faced multifaceted cultural and religious beliefs, gender relations and socio-structural factors that influenced their decision making regarding breastfeeding. Grandfathers, grandmothers and fathers have an important role in infant feeding decisions in rural communities; however, they required prior knowledge to provide optimum support to breastfeeding mothers. Public health education on exclusive breastfeeding is required among significant others in the family. Further research is required to explore cultural beliefs and practices influencing exclusive breastfeeding and how they can be modified to promote public interventions particularly in matters relating to exclusive breastfeeding.

Keywords:
Cultural beliefs; exclusive breastfeeding; infants

1. Department of Nursing and Midwifery, University of Health and Allied Sciences, Ho.
2. Department of Surgery, Tamale West Hospital, Northern Region, Ghana.
3. Department of Nursing and Midwifery, University of Health and Allied Sciences, Ho.
4. Department of Nursing and Midwifery, University of Health and Allied Sciences, Ho.
5. Department of Nursing and Midwifery, University of Health and Allied Sciences, Ho.
6. Department of Surgery, Tamale West Hospital, Northern Region, Ghana.

Corresponding Author:
1. School of Nursing and Midwifery, University of Health and Allied Sciences, PMB 31, Ho.
   Tel: +233-203 703 110
   Email: aagani@uhas.edu.gh
Introduction

In the last decade there has been a growing interest in exclusive breastfeeding as the appropriate feeding method for infants all over the world. Scientific evidence has shown that there are health benefits of exclusive breastfeeding (EBF) to the child. For example, exclusive breastfeeding reduces child morbidity and mortality (American Academy of Pediatrics, 2012; Committee on Health Care for Underserved Women, Committee on Obstetric Practice, 2007; Sokol, Aguayo & Clark, 2007). The health benefits of breastfeeding are not only limited to infants but also spread onto the mothers. Breastfeeding can help mothers reduce the risk of cardiovascular disease, breast and ovarian cancer, type 2 diabetes, postpartum depression and prolongs lactation amenorrhea (Kramer & Kakuma, 2004; Schwarz et al., 2009; Stuebe et al., 2009; Stuebe & RichEdwards, 2009). Globally, only 38% of infants aged zero to six months are exclusively breastfed (Black, et al., 2013). Recent analyses indicated that suboptimal breastfeeding practices, including non-exclusive breastfeeding, contribute to about 11.6% of mortality in children under 5 years of age (Black, 2013). In the 2012, World Health Assembly Resolution, 65.6% endorsed a comprehensive implementation plan on maternal, infant and young child nutrition (WHO, 2012), and one of their targets was to increase the rate of exclusive breastfeeding in the first six months of infants’ life to at least 50% globally by 2025 (Global Nutrition Targets, 2025). However, several countries in the sub-Saharan region of Africa are still striving to meet this target. Countries with low exclusive breastfeeding practices include Chad (2%) Cote d’Ivoire (4%), Gabon (6%) and Sierra Leone (8%) (UNICEF, 2011). The Ghana Demographic and Health Survey (GDHS) in 2014 estimated that about 98% of children in Ghana are breastfed at some point in their life. The median duration of EBF is about four months and 73% of breastfed children are given complementary food by age 6 to 9 months (Ghana Statistical Service (GSS), Ghana Health Service (GHS), & ICF International., 2015). Despite the health benefits of EBF and efforts to promote exclusive breastfeeding around the world, the percentage of children who are exclusively breastfed have decreased in Ghana by 17% between 2008 and 2014 (Ghana Statistical Service (GSS), Ghana Health Service (GHS), & ICF International, 2015). Exclusive breastfeeding is not thoroughly carried out in Ghana due to several reasons including the practice of giving complementary feeding. Breastfeeding practices in most rural communities are significantly influenced by cultural beliefs, socioeconomic status, ethnicity, education, urbanization, modernization, and local feeding practices (Ergenekon-Ozelci, Elmaci, Ertem & Saka, 2006). Gender roles, social support and attitudes of friends and relatives towards breastfeeding have also been shown to affect mothers’ intended duration of breastfeeding (Paine & Dorea, 2001; Seidu, 2013). Cultural beliefs and local traditions are important in determining health behavior in most communities around the world. While some of these beliefs and traditions encourage breastfeeding, others discourage it (Osman, Zein & Wick, 2009). A good understanding of local beliefs, customs and traditions related to EBF can help healthcare providers and breastfeeding advocates to provide better support and more appropriate health education on EBF to key decision makers in the family concerning infant feeding.

Previous studies have focused on factors associated with exclusive breastfeeding, health outcomes of non-exclusive breastfeeding, fathers’ experiences of supporting breastfeeding, and knowledge, attitude and practice of exclusive breastfeeding among mothers (Brown & Davies, 2014; Mithani & Premani, 2015; Mogre, Dery & Gaa, 2016; Mohamed, Amin, Okwahi & Elgorashi, 2015; Neji, Nkemdilim & Ferdinand, 2015). However, very little attention has been paid to family and cultural belief systems and practices that might influence exclusive breastfeeding, especially in the rural communities (Swigart et al., 2017). The social life in a traditional African setting, the interpersonal relations in families, schools, churches and workplaces are largely regulated by the dominance of males (Kabeer, 2014). Women, are mainly in a subordinate position with little or no control over sexual matters and the ability to negotiate important family health decisions including, breastfeeding (Farré, 2011). There is therefore the need to investigate cultural belief systems and practices that may be interfering with exclusive breastfeeding among women in the rural settings.

Design and Methods

An exploratory, qualitative research design was adopted in order to obtain in-depth information required to understand and interpret family belief systems and practices associated with EBF. Sampling procedure
Snowball sampling technique was used in the study to enable easy identification of families that had breastfeeding children less than 22 months of age. Due to the small size of the community, the snowball sampling technique was very effective as participants were familiar with each other. Twenty-seven participants were identified and invited to participate in the study. The participants included extended family members (fathers, grandfathers and grandmothers) of breastfeeding mothers, breastfeeding mothers and a traditional birth attendant (TBA). A convenient time and place was scheduled for each interview with participants and with the assistance of a nursing officer from the Regional Hospital and a volunteer community health nurse, the interviews were conducted in Dagaare, the language of the community, which some of the researchers as well as the research assistants speak fluently.

In accordance with the qualitative descriptive approach, the principle of saturation [whereby no new information emerges with the addition of new cases] (Guest, Bunce & Johnson, 2006) was used to determine the sample size of 27.

**Data Collection**

Participants were recruited between August and September, 2016. Individual interviews were conducted for each participant after they had met the inclusion criteria and consented to participate. Inclusion criteria were family members (fathers, grandfathers and grandmothers) with a breastfeeding mother of an infant less than 22 months of age in the family. The breastfeeding mothers in those families and a TBA in the community were all part of the inclusion criteria. Families that had no breastfeeding mother of infant less than 22 months were excluded from the study. Before data collection, the purpose, risk, and benefits of the study were explained to the participants in Dagaare. Participants who agreed to take part in the study voluntarily signed a written consent form and those who could neither read nor write thumb-printed to indicate that they agreed to participate in the study. The participants were also informed that their participation in the study was voluntary and that they could withdraw at any time. Face-to-face in-depth interviews were conducted for each participant, and open-ended questions were used for the interviews. All the interviews were audio recorded with the permission of participants. The open response format of the questions, in the interview guide, allowed the participants to express themselves in their own words according to their understanding. The format also facilitated further probing for clarification of responses. During the interviews, there was a moderator and two assistant moderators. The moderator led the discussion, kept the conversation flowing throughout the interview, while one assistant moderator operated the tape recorder and responded to unexpected interactions, and the other assistant moderator took comprehensive notes, and kept track of time. Interviews were done in isolation from family members. This was intended to make participants feel free to answer questions and share their experiences. The interviews lasted for about 30 to 45 minutes.

**Data analysis**

A qualitative descriptive approach (Sandelowski, 2010) was employed with thematic analysis carried out for each interview. Data were translated, transcribed verbatim, manually coded and analysed thematically. Data analysis was guided using Morse and Richards (2002) framework for thematic analysis and included the following steps: topic coding, creating categories and abstracting. Field notes taken during interviews were reflected upon, coded and analysed. Coding of the data was completed by the first and second author and reviewed by all the research members. The first and second authors led a detailed analysis of the data retrieved for each category, and the research team helped in refining the themes. The data analysis revealed participants’ concepts of family belief systems of EBF, which were then categorized into themes and constantly interpreted throughout the course of the study.

**Rigour**

To enhance rigour, all transcripts were revisited frequently to ensure accurateness in the translation of context and spoken words from the local dialect (Dagaare) into English. Direct quotes and narratives from interviews were used to illustrate and support interpretations of the data.

Trustworthiness of data was ensured by meeting the criteria for credibility, transferability, dependability and confirmability. Credibility was ensured by letting a Ghanaian who was fluent in the local dialect (Dagaare) and English, to review a randomly-chosen
translated transcript for accuracy in translation; and the research team checking to make sure that data reflected the reality and was a representative of the participants. The study also ensured transferability of the findings to other sites through comprehensive methodological approach. The research team enabled dependability of the data by making sure that the study used the same interview guide, asked participants the same questions, audio recorded all the interviews and used the same method to analyse the data. Transcripts data coding, categorization and themes were regularly shared with the research team for crosschecking and questioning, and besides data were immediately transcribed to prevent misinterpretation and this ensured confirmability. Detailed field notes and reflective notes were kept and reviewed frequently for emerging ideas by the research team. Data triangulation (Richards & Morse, 2007) was employed by gathering multiple perspectives of participants’ cultural beliefs and practices that influenced exclusive breastfeeding.

Ethical consideration
Ethical approval was sought from the Ethics Review Board of Valley View University Techiman Campus prior to the collection of data. The chief and opinion leaders in the community were informed about the study for their consent. The purpose, risk, and benefits of the study were all explained to the participants in Dagaare and their consent was sought. Confidentiality was also ensured and written consent was obtained from the participants before conducting the interview.

Results
Twenty-seven participants were interviewed for the study. The participants included family members (fathers, grandfathers and grandmothers) of breastfeeding mothers, breastfeeding mothers and a TBA. The breastfeeding mothers were 18 in number and had children aged four to 22 months. Four of the participants were first-time mothers while the others had on the average three children each. The ages of the breastfeeding mothers ranged from 20 to 37 years. The study participants also included four fathers, two grandmothers, two grandfathers, and a traditional birth attendant in the community. Twenty-one out of the twenty-seven participants did not have any formal education while six participants had vocational training. Farming was the main occupation of most participants except four breast-feeding mothers and a TBA who were traders. Two main themes emerged with regard to the forms of family beliefs and practices that influence EBF; they were gender and social role with culture and religious beliefs. Gender and social role comprised the father, grandfather, grandmother, breastfeeding mother and a TBA while culture and religious beliefs were related to ‘muoluu’ (unexplained sickness of the newborn) and ‘pogpaali kuong’ (new woman water).

Gender and Social Role
The data revealed that issues concerning EBF and infant feeding in general are dependent on gender and social role. In traditional African settings, men are the main decision makers of the family and the community studied was no exception. Men decide what is appropriate in family matters including issues relating to reproductive health and breastfeeding. Men always have the final word in matters concerning their family welfare. One participant stated:

“I make decisions in my house, so I decide what is good for my children and my wife or anyone taking care of my child will do......the role of the woman is just to give me a child and not to take decisions for me” (Father 1).

With regard to husbands’ decision concerning infant feeding, most fathers expressed that, in their view, breast milk contains only water and will not be enough for the growth and developmental requirements of their children. Some fathers indicated that they were fed with ‘porridge’ and ‘tuo zaafi’ (T.Z) when they were infants and that contributed to their strength and muscular development and appearance. They further indicated that they would not allow their wives to starve their children with only breast milk:

“I always ask my wives to give my children enough breast milk but if the baby is still crying and refuses to sleep then I order them to give the child solid food regardless of the age” (Father 2).

Interviews with breastfeeding mothers to find out how family practices influenced exclusive breastfeeding revealed that fathers often instructed them on how they wanted their babies fed:
The study revealed that in the study community grandmothers were the caretakers of the babies and they always fed, bathed and dressed up babies because of the belief that they have rich experiences in child upbringing. For example, when bathing the baby the grandmothers give some of the bathing water to the babies to drink. This is because they believe babies cannot say they are thirsty:

“I give my grandson some water to drink when bathing him or when he is crying in the absence of the mother” (GM 2).

The analyses identified other cultural belief systems that were associated with breastfeeding. The ‘muoluu’ and ‘pogpaali kuong’ for instance were identified. The ‘muoluu’ refers to general weakness or unexplained sickness that new-borns suffer. These are conditions that are believed cannot be cured by orthodox medicine. A ritual is usually done to shield new-borns against diseases and sicknesses believed to be caused by contact with individuals who do not take a bath after sexual intercourse. One respondent explained this ritual concoction as follows:

“In our community we usually protect our new-borns from bad people who will intentionally want your child to fall sick so that you will suffer; if a man or woman holds the baby after having sexual intercourse and without taking their bath the baby will fall sick and may not survive any medical treatment. So, we usually perform some ritual bath for the baby after delivery to protect the new born from such sickness” (GF 2).

Further interrogation to find out how and when such a concoction was administered to the babies, revealed that babies are bathed with it and are made to drink some; this was usually done immediately after delivery. He stated:

“The baby is bathed with some herbs and is made to drink some, if the baby is a boy, he is made to drink it for three days and if a girl, she is bathed and fed with the prepared concoction for four days” (GF 2).

The ‘pogpaali kuong’, which means ‘new woman water’, is a ritual bath usually performed to initiate women who have given birth for the first time into motherhood. It is...
believed that the ritual bath enables the woman to be a responsible mother. However, this ritual is not limited to the mother but is extended to the new born as well. During this ritual, the mother is always separated from the new-born and during this separation period, concoctions are mixed with breast milk or ‘kooko’ (porridge) to feed the baby. It is believed that, this makes the baby grow to be strong and helps to bring out any dirt that is in the stomach of the baby. A participant narrated:

“We still have this traditional rite we perform for our women who give birth for the first time, life is transitional and one need to be well initiated from being a girl to not only a woman but a mother as well. We always separate the baby from the mother as they both undergo the rituals” (father 4).

Another belief, stated by some participants, was that, human spermatozoa could make their way to the breast milk and cause babies who are fed with such milk to have diarrhoea and other unknown sicknesses. When a breastfeeding mother engages in sexual intercourse, therefore, she will have to suspend breastfeeding for two weeks. A respondent explicitly explained this:

“Sperms can travel to the breast so when the child drinks it he will run diarrhoea and will not sleep. So, if a woman who is breastfeeding has sexual intercourse she will have to stop breastfeeding” (BFM 15).

The participants also believed that when a mother gets pregnant during breastfeeding, there is the need for the mother to cease breastfeeding no matter the age of the infant. They believed that pregnancy brings about bad breast milk, which would prevent normal growth and development of the infant. Study participants expressed that modern infant feeds are available for young children but they were used to feeding the infants with natural cow milk after sudden cessation of breast milk. A mother stated:

“At my youthful age I witnessed my aunty cease breastfeeding due to pregnancy immediately after birth...she breastfed for almost five months, the child grew normal with the use of fresh cow milk and other staple food...” (BFM 13).

Discussion
The findings of this study highlight factors that influence EBF in rural communities in the Upper West Region of Ghana. The study showed that multifaceted cultural and religious beliefs, gender relations and socio-structural factors influence women’s decision making regarding breastfeeding.

Gender and Social Role
The current study findings revealed a number of practices where gender and social role were associated with breastfeeding. It is often believed that women with adequate understanding about EBF and its health benefits will be motivated to practice EBF than women with little information and understanding (Bandura, 2004). However, in a typical African context, a woman’s knowledge and understanding about EBF is not enough to enforce the practice of EBF (Sokol, Aguayo & Clark, 2007). This current study revealed that, although mothers had information about the importance and benefits of EBF they did not have the ‘power’ to make independent decision to practice EBF. The women needed permission from their husbands or family heads. The paternal grandmother, grandfather, and father were the key decision makers. Their influential role discovered by this present study is supported by an earlier study in the northern part of Malawi (Kerr & Kakuma, 2008).

The findings revealed that fathers did not support their wives in exclusive breast-feeding. They used their role as family heads or breadwinners to control feeding practices in the family. Most fathers believed that breast milk is mainly liquid and not heavy nor nutritious enough for the baby’s optimal growth and development. The fathers believed that, addition of staple foods would enhance child development. Though fathers’ support is not the only factor related to breastfeeding success (Flacking, Dykes & Ewald, 2010; Kinanee & Ezekiel-Hart, 2009) their support has been recognised as one of the strong predictors of exclusive and optimum breastfeeding (Mithani, Premani, Kurji & Rashid, 2015). Several studies have confirmed that fathers play a pivotal role in supporting mothers to initiate and maintain breastfeeding (Ekström, Widström & Nissen, 2003; Li, Darling, Maurice, Barker & Grummer-Strawn, 2005; MitchellBox & Braun, 2012; Scott, Landers, Hughes & Binns, 2001). Fathers’ decisions in this study did not support EBF practices and because of their role in the family
and the community at large, their wives had to follow their orders. The decisions fathers make within the family context remain and everyone in the family must go along with it, including their wives. Fathers in this study, however, did not know that their decisions in the family influenced EBF, because they did not have adequate knowledge on the benefits of exclusive breastfeeding. As such some fathers in the study indicated that they will not let their children be starved with only breast milk which is just mere liquid.

Participants in this current study revealed that grandmothers also had much influence in caring for children. The participants further indicated that even though some grandmothers had knowledge about EBF, they insisted on giving water to babies during bathing; their reason being that breast milk solely would not be enough to sustain the babies due to the dry and harsh weather conditions. Although mothers were willing to exclusively breastfeed their babies they were however influenced by their mothers-in-law or biological mothers’ decisions. This finding is in accordance with study findings of Osman, El Zein and Wick (2009), who reported that family members (particularly grandmothers) were influential sources of discouragement of breastfeeding. A recent study on exclusive breastfeeding, reported that family members (grandmothers) had an influence on exclusive breastfeeding practices among breastfeeding mothers in the Ayeyawaddy region in Myanmar (Thet, et al., 2016). This suggests that health educational interventions on EBF are mostly tailored to target the breastfeeding mothers with very little or no focus on other significant family members.

Cultural and religious family beliefs
This study also found that cultural and religious practices associated with EBF shaped participants’ views regarding breastfeeding. The study identified baby-feeding rituals called ‘muoluu’ and ‘pogpaali kuong’. The study found out that these cultural and family belief practices interrupted and delayed breastfeeding in many ways, which later affected EBF. The study findings are in accordance with a study done in Bristol, UK that involved ‘South Asian grandmothers’ which concluded that breastfeeding was delayed because of strong cultural values and beliefs (Ingram, Johnson & Hamid, 2003). In contrast to the current study, religious and cultural beliefs were considered as one of the significant factors among both urban and semiurban fathers in promoting breastfeeding in Karachi, Pakistan. All of the study participants agreed that they encouraged their wives to initiate and maintain breastfeeding and because their religion supported it; it played a motivational role (Mithani, Premani, Kurji & Rashid, 2015).

Also, observations noted in studies conducted in Pakistan, Nepal, and India (Laroia & Sharma, 2006; Moran & Giland, 2007) showed that religious beliefs had positive influence on EBF. But the current study revealed a harmful religious and cultural practice that defeats the purpose of EBF. These differences might be attributed to the different cultural and religious belief system practised in the different geographical locations. Moreover the current study revealed that significant others (grandmother, grandfather and father) in the family had little knowledge about the importance of EBF to the baby and the mother as well, but the studies from Pakistan, Nepal and India stated above showed that participants had adequate knowledge about the importance of EBF and also their religious practice supported breastfeeding.

Another important belief is the cessation of breastfeeding after the breastfeeding mother had sexual intercourse and or became pregnant. This practice, though not so dominant in the community where the study took place, was still practised by some families, which hampered the success of EBF. A study conducted by Awumbila (2003) also reported that pregnancy brought about early cessation of breastfeeding among Kusasi community in Ghana where the people of the community thought that pregnancy would make the breast milk warm and cause diarrhoea if the baby was breastfed with it. These beliefs in the communities are not to harm the babies but to protect them from taking what they believed was ‘unsafe’ breast milk that would cause them to become sick. These perceptions were due to lack of knowledge pertaining to exclusive breastfeeding and its associated benefits to both mother and child.

Implications for Health promotion and Policy
The findings from this study imply that cultural and family belief systems did not promote exclusive breastfeeding. The implications of these findings are that efforts to modify infant feeding practices must take into account the many cultural and family belief
influences on feeding practices, and will need to recognize and understand the broad complex of factors and dynamics operating at the household and community level which affect feeding behaviour. They also require that grandfathers, grandmothers, fathers and women’s knowledge on infant feeding are recognized and valued, and that all stakeholders participate in decision making if sustained changes are to be ensured. Education especially, public health campaigns should target rural communities as a way of increasing families’ awareness in relation to EBF practice. Educating significant others such as grandmothers, grandfathers, and fathers on the importance and benefits of EBF to the mother and child may help to improve the practice of EBF. It is also prudent that, availability of essential information pertaining to the benefits of breastfeeding and reproductive health as a whole would help in changing families’ ideas of feeding practices that are deemed to be appropriate for their infants. Community based health promoters and leaders should encourage the formation of breastfeeding support groups in rural communities that would empower breastfeeding mothers with knowledge and logistics to be able to practise EBF. Policy makers should provide community based strategies to support exclusive breastfeeding, including implementation of communication campaigns tailored to the local context.

The study findings imply that furthermore, future research would be needed to examine the role cultural beliefs and practices play in influencing the adherence to exclusive breastfeeding among women and how such beliefs and practices can be changed to support the course of public interventions specifically in areas related to exclusive breastfeeding.

Conclusion
The study revealed that breastfeeding mothers’ efforts to exclusively breastfeed their babies were regularly influenced by their cultural and families’ beliefs and practices over which the breastfeeding mothers did not have the authority to control in their communities. Also, significant others in the family such as the grandfathers, grandmothers and fathers have an important role in infant feeding decisions in rural communities; however, they required prior knowledge to provide optimum support to breastfeeding mothers. The Global Strategy for Infant and Young Child Feeding emphasises on the need for those involved in promoting breastfeeding should understand the benefits and importance of exclusive breastfeeding. Therefore, evidence presented in this study would be useful in design and implementation of behaviour change interventions targeting improved breastfeeding practices especially among rural communities in Ghana.

Conflict of Interest
The authors endorsed that this article content has no conflict of interest.

Acknowledgements
We thank all the study participants in the community.

References
Committee on Health Care for Underserved Women, Committee on Obstetric Practice. (2007). Breastfeeding: maternal and infant aspects. ACOG Clinical Review. 12: 1S-16S.


http://www.numidhorizon.com


