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A Hospital-Based Assessment of Breast-Feeding Behaviour and Practices among Nursing Mothers in Nigeria and Ghana

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Abstract: Exclusive breast-feeding is recommended for infant nutrition during the first 6 months after birth. Worst still, this behaviour practices have not yet improved in Africa despite this recommendation. This study therefore, examines breast-feeding behaviour and practices among nursing mothers in two African countries: Nigeria and Ghana. A sample of 300 nursing mothers attending ante-natal clinic was randomly drawn from 4 hospitals, two in Nigeria and two in Ghana. The demographic characteristics of the respondents show that their age range between 19 - 51 years with a mean of 35 years and standard deviation of 22.6 years. A modified self-report questionnaire assessing breast-feeding attitudes, intentions and support was used for the collection of data. The reliability co-efficient yielded r = 0.82 after modification. Four research questions were raised to guide the study. The results indicate that nursing mothers do not breast-feed based on personal frustration and painful experience, fear of loosing weight, nature of job, lack of confidence in breast-feeding, long period of recommended exclusive breast-feeding and the fact that infant may become addicted to the behaviour. The result also reveal that nursing mothers may continue exclusive breast-feeding when decided to do so through the provision of social support, modeling, public enlightenment and appointment of care nursing mother. While at the same time, it was shown that there is significant difference in breast-feeding behaviour of mothers based on their occupations and of course no difference exists in the breast-feeding behaviour of Nigeria and Ghana nursing mothers. Recommendations based on the findings of the study were highlighted.

Key words: Exclusive breast-feeding, breast-feeding behaviour, breast-feeding practices, infant nutrition nursing mothers, Nigeria, Ghana, Africa

Introduction

Breast-feeding is considered the most complete nutritional source for infants because breast milk contains the essential fats, carbohydrates, proteins, and immunological factors needed for infants to thrive and resist infection in the formative first year of life Cadwell in Barry, 2004. Jones *et al*., 2003 in an analysis of child survival strategies identified exclusive breastfeeding (EBF) in the first 6 months of life and continue breastfeeding from 6 to 11 months as the single most effective preventive intervention in reducing child mortality, with the potential of saving 1.3 million lives annually. Similarly, Leon-Cava *et al*. (2002) have observed that improved breastfeeding practices are crucial for child growth and development. However, advocate of breastfeeding have noticed there has been a global decline in the behaviour among nursing mothers. This is particularly more pronounced in developing countries. Wagner *et al*. (2005) have also observed that despite all the recommendations by expert as regard infant breastfeeding for the first 6 months of life, a significant percentage of mothers……chose not to breastfeed. Going by population studies in developing countries, it has been shown that the greatest risk of nutritional deficiency and growth retardation occurs in children between 3 and 15 months of age, a period noted for suboptimal breastfeeding and inadequate complementary feeding practices (Shrimpton *et al*., 2001).

Researches have shown various factors that influence nursing mothers' decision to breastfeed their children. These actually include education, social class, culture, locale, nature of work, and health status of both the nursing mothers and their infants Newton and Newton in (Wagner *et al*., 2005). It should be as well stated that breastfeeding is a phenomenon that is deeply rooted in the tradition of human culture. It is a post-natal activity of paramount importance and interest to diverse professional in paediatrics, nursing, endocrinology, psychology, as well as sociology and anthropology (Uwakwe, 1996). The basic definition of breastfeeding divides it into two, "the full/ exclusive" and the "partial breastfeeding". Full or exclusive breastfeeding mean that no other liquid or solid is given to the baby. Partial breastfeeding means three levels of substantial feeding: high, medium, and low. Another term worthy to note is 'Token'. Token breastfeeding is used primarily for the infant comfort and consolation or as a pacifier and not

for nutritional purpose (Ajello in Alutu, 2000).

The past few years have witness new exciting observations worldwide concerning the bio-chemical, immunological, anti-allergic, emotional and economic benefits of breastfeeding (Lucas and Cole, 1990). These have aroused renewed and vigorous effort to increase the practice of breastfeeding (Alutu, 2000). Part of the efforts to promote improved breastfeeding practices focused on hospital norms and services, legislation and institutional policies, health workers training, mass media campaigns peer counselling and educating mother - to - mother support, and a combination of these strategies (Green, 1999; Hill *et al*., 2004). Meanwhile, lots of these efforts have been of limited size and scope (Quinn *et al*., 2005). Specifically, the United States Agency for International Development (USAID) in 1996, issued a grant to the Academy for International Development to design and implement a 10-years program, known as the LINKAGES project, to improve breastfeeding practices rapidly and at scale. Unluckily, this has not yielded an encouraging result. This is because in African countries, the national rates for early initiation of breastfeeding were low, with Ghana having the lowest rate (25%) followed by Madagascar (34%) (Quinn *et al*., 2005). The same applicable to other African countries like Nigeria. As it has been said that breastfeeding ensures the safety, optimum growth, health, survival of the human infants; that, duration of the breastfeeding may also determine the strength of mother / child bond and attachment, yet exclusive breastfeeding is not being in full practice by African nursing mothers. Essentially therefore, there is need for improving infant breastfeeding practices because African children need to be protected. The researcher therefore felt that studies on exclusive breastfeeding of infants should continue until there is a dramatic increase in the behaviour among African nursing mothers. This is why the present study is considered necessary because it's an additional effort in the direction of improving exclusive breastfeeding practices in Africa. The study therefore attempts to investigate the exclusive breastfeeding behaviour practices among nursing mother in Ghana and Nigeria.

Literature review: The process of breastfeeding encourages the formation of positive bonds and attachments between the mother and child that cannot be stimulated in utilizing supplementations such as bottle-feeding (Biancuzzo, 1999). The health benefits of breastfeeding for both mother and child are firmly established, making it a key public health issue globally (Dykes *et al*., 2003). Many studies have shown that breastfeeding results in a reduced risk of infant mortality e.g., (Victoria, 1997), morbidity from infection (Huffman and Combest, 1990; Lucas and Cole, 1990), enhances infant immunity (Spady and Pabst, 1990), and reduced infant atopic disease (Lucas and Cole, 1990). Other studies show that breastfeeding is beneficial to mothers' health, reducing their risk from premenopausal breast cancer, ovarian cancer, and auto-immune disease e.g., (Chilvers, 1993).

In spite of these findings, the incidence of breastfeeding is much lower in Africa. Breast milk is universally acknowledged to be beneficial to child health and development, with proven advantages over artificial milk in this respect (Uwakwe, 1996). First, breast milk is hygienic. Secondly, it is nutritionally well adapted to infants' requirements, and finally, breast milk confers a unique immunological protection on the infant. In other words better survival chances are expected for breastfed infants especially under conditions of poverty, ignorance, crowding and overall morbidity (Hofvander, 1977; Huffman, 1984).

Breastfeeding is a systematic product of many interacting factors rather than a product of individual's behaviour only Straus in (Tella, 2003). There are process of positive feedback which encourage breastfeeding and negative feedback which retards the process and leads to the choice of alternative methods of feeding (Uwakwe, 1996). The world Health Organization (WHO) in 1982 highlights a list of factors influencing breastfeeding. These to them are as follows:

1. **Health care practices:** Many of the practices of maternity wards and hospital have contributed to the decline in breastfeeding by limiting the possibility of its early initiation as well as feeding on demands and close contact between the mother and the infant during the first days.
2. **Neonatal Practices:** This is the assumption of great deal of care of the young infant immediately after birth. This is because breastfeeding begins during the first hours of life.
3. **Work Patterns:** In modern societies, conditions of life and work do not favour breastfeeding. This is especially true of place where many women are engaged in industrial work away from home, long period of working hours and their day to day activities in general reduce the time that women could otherwise denote to infant care and breastfeeding.
4. **Infant food industry and marketing:** The advertising and promotion of breast milk substitutes particularly in health facilities, many have contributed to the decline in breastfeeding. This general development is now in fashion in rural and urban areas.
5. **Family Influence:** in industrial societies, the typical urban tend to be small. Based on this. Adolescent girls and young mothers have little opportunity to observe and learn informally about mothering practices from older female relatives.
6. **Current trends:** It is a well known fact that many mothers are either not breastfeeding their infants at all or weaning them after a few weeks without strong

interventions to promote and support breastfeeding. These trends are likely to continue and more infants and young children are likely to be placed at risk of infections, malnutrition and death.

During the 20th century, it was determined that maternal breastfeeding behaviour is associated with variable such as verbalized attitudes toward breastfeeding (Scott *et al*., 1997; Losch *et al*., 1995; Lawrence, 1986, Jones, 1986; Unvas-Moberg *et al*., 1990), physical responsiveness (Wiesenfeld *et al*., 1985) and life experiences including previous lactation experiences, and certain personality characteristics such as passivity, acceptance of feminine role, comfort with physical contact, affection, and nurturance. The few studies that exist in the literature suggest differences in personality traits of mothers who breastfeed compared to those who do not, namely utilizing traditional psychoanalytic interpretation such as acceptance of the feminine role, comfort with physical contact and sexuality (Wagner *et al*., 2005).

Jellif and Jellif in (Tella, 2003) described two positions concerning the factors helping mothers to continue exclusive breastfeeding of their infants. First, they consider the pleasure arising from successful breastfeeding as the template not only for good infant mother relationships, but for all relationships. Secondly, they consider feeding and material behaviours as only one aspect of a mother infant attachment, a process which fosters the child's development, his exploration and construction of the World and how he relates to it.

There are some studies conducted related to breastfeeding behaviour of nursing mothers in Africa. Alutu (2000) reported that the decline of breastfeeding in most cultures has been associated with mothers being frustrated by factors external to them as well as personal. Igbedion (1994) in a study with Makurdi women in the middle belt region of Nigeria confirmed that the reduction of sucking events (breastfeeding) due to introduction of weaning has a direct proportional effect on the length of the lactational amenorrhea. It is evident from the above that women who sucked their infants regularly in the early months after delivery and introduced weaning foods at a later stage experienced a longer period of lactation amenorrhea, compare to women who introduced weaning foods in the earlier stages.

In another study by Mudambi (1981) on the attitudes of Urhobo mothers in the defunct Bendel state of Nigeria, now Edo and Deltas. It was revealed that there is tendency towards short duration of breastfeeding especially among literate mothers. While Quinn *et al*. (2005) reported that in 2003 breastfeeding rate in Ghana jumped from 32 to 62% and then dropped to 40% by the last survey when the program began shifting emphasis to support for pre-service review and capacity building in other areas of the country. To them, explanation for the drops may not be evident but may be related to how the question was translated in the local vernacular.

There are also studies from other parts of the world which reveals results relevant to what obtain on breastfeeding behaviour in Africa. Barber *et al*. (1997) in a study conducted in America, reported that breastfeeding rates rapidly decline in the initial 4 to 8 weeks post partum with less than 35% of mothers exclusively breastfeeding at 4 months. In another survey study, only 30-40% of mothers continue any form of breastfeeding until 6 months post partum. Bourgoin *et al*. (1997) reported that breastfeeding duration rates among socially disadvantaged women are even lower. Thus, most mothers do not breastfeed for the 6 to 12 months recommended by the Canadian Paediatric Society and the American Academy of Paediatrics or the 2 years suggested by the World Health Organization (WHO) (Cindy-Lee *et al*., 2002). A major reason for this premature discrimination is difficulty with breastfeeding rather than maternal choice.

Through the evaluation of sample of 50 maternal newborn nurses and 136 breastfeeding mothers Bernaixs (2000) carried out a study in Canada where she identified the characteristics of nurses and external factors that influenced their ability to provide effective breastfeeding support to mothers and their infants. Through multiple regression analyses, data suggested that nurses' intentions during the immediate in-hospital post-partum stay are best predicted by nurses' attitudes and social pressures. Furthermore, the actual supportive behaviour towards breastfeeding mothers was influenced by these same attitudes; the best predictor of supportive behaviour was nurses' knowledge of breastfeeding (Bernaix, 2000).

A 2003 study conducted by Dykes, Morm, Burt and Edward in the North West England, UK evaluated the experiences and support needs of adolescent mothers who had commenced breastfeeding. The study conducted in-depth focus groups as well as interview to elicit the support needs identified with regard to breastfeeding. The data transcribed were thematically analyzed. Five themes of experiences and five themes of support needs were found. The five themes of breastfeeding experiences included feeling watched and judged, lacking confidence, tiredness, discomfort, and sharing accountability. Support needs were also expressed themes. These themes included emotional support, esteem support, instrumental support, informational support and network support. Of these, esteem support was crucial to the adolescent in enhancing their feeling of self-worth, ability and being valued as both a mother and in relation to breastfeeding. The adolescents also valued instrumental support and the nurses' pro-practical support with breastfeeding, particularly with attaching their baby effectively to their breast, but they wanted to be shown how to do it. The

desire for praise and encouragement from significant others, and health professionals was particularly strong in this study and was a key element in self-efficacy building Dykes *et al*. (2003), concluded that when encouragement was combined with provision of realistic, useful and accurate information, the adolescent perceived that encounters were supportive of breastfeeding.

Ineichen *et al*. (1997) conducted a study to evaluate the attitudes and behaviours of 55 teenage mothers in relation to older mothers in America. They found that midwifes and other professionals were almost without exception reported as being in favour of breastfeeding, but ten mothers (four breastfeeders and six non-breastfeeders) said the professional had given them advice on line of try whatever you are comfortable with. They concluded that such a vague comment from a practitioner further discourage six adolescent mothers who inevitably chose not to breastfeed. Perez-Escamilla *et al*. (1994) in a meta-analysis study of maternity-ward practices concluded that they could make a positive contribution to increasing breastfeeding rates, attention needs to be paid to the birth. While in a study Ineichen *et al*. (1997) observed that several mothers in the sample had given up before day three after birth before the flow of milk had been established.

Considering all the review above, the focus of this study still remain to examine breastfeeding behaviour practices of nursing mother in Nigeria and Ghana. To achieve this objective, the following research questions were raised:

1. Why is it that nursing mothers do not breastfeed?
2. What factors help mothers to continue exclusive breastfeeding once they decide they want to?
3. Are there differences in the breastfeeding behaviour of nursing mothers based on their various occupations?
4. Are there differences in the breastfeeding behaviour of Nigerian and Ghanaian nursing mothers?

Materials and Methods

Research design: A descriptive survey research design was adopted to carry out the study.

The population comprised nursing mothers in Ibadan, Nigeria Kia and Korle Bu in the Eastern part of Ghana. A sample of 300 nursing mothers who were attending post-natal medical clinic was purposefully selected from four hospitals. One hundred and fifty, 75 each from Jericho Nursing Home and University of Ibadan Teaching Hospital both in Nigeria. The other one hundred and fifty, 75 each were selected from East Legon medical centre and pain clinic Kia and Korle Bu teaching hospital, Korle Bu, both in Ghana. The age of the respondents ranged between 19 - 51 years, with a mean of 35 years and a standard deviation of 22.6. Their educational qualification varying from primary education, technical/ grade II certificate, school leaving certificate to University education.

Sample Selection Table

Hospitals	No. of Sample	Percen-tage
University of Ibadan Teaching Hospital	75	25
Jericho Nursing Home	75	25
East Legon Medical & Pain clinic, Kia	75	25
Korle Bu Teaching Hospital	75	25
Total	300	100
Occupation of Nursing Mothers		
House wives	40	13.3
Rural women	70	23.3
Nurses	60	20
Teachers	90	30
Bankers	40	13.3
Total	300	100.0
Age of the Nursing Mother		
Group A 19 - 31	181	60.3
Group B 32- 51	119	39.7
Total	300	100.0

Instrument: All the participants were asked to complete a modified questionnaire assessing breastfeeding attitudes, intentions and support developed by Kloeblen *et al*. (1999) which originally contained 70 items but was reduced to 35 items after modification. The reliability co-efficient yielded r = 0.86 through a cronbach alpha. This questionnaire has been modified to fit the objectives of this research through the alteration of its content to relate to mothers who chose to breastfeed and the reason given for breastfeed in the past. The 35 items questionnaire is based on a 5 points scale format ranging from Strongly Agree to Strongly Disagree. It separately evaluate reasons why nursing mothers in Africa don't breastfeed, what can help nursing mothers continuing exclusive breastfeeding after deciding to do so; attitudes and intentions in providing breastfeeding support to nursing mothers. The personal demographic part of the questionnaire contains 7 items that measure selected demographic data about the participants. The data includes their age, occupation, and work experience, level of education, number of children, personal breastfeeding history and country of origin.

Procedure: In each of the selected hospital the participants were administered the questionnaire assessing exclusive breastfeeding behaviour under close monitoring. The items in the instrument were constructed in English language which is the official language of the two countries where respondents were drawn. This gives room for better understanding of the instruction on how to fill the instrument by the respondents. Since the schedule of the participants in attending ante-natal clinic each day differs, and the need to travel to Ghana by the researcher, the administration of the instrument took a whole month.

Data analysis: The analysis of variance ANOVA, T-test statistics and simple percentage statistical tools were employ for the analysis of data collected on the study.

Results

Research Question 1: Why is it that Nursing Mothers do not breastfeed?

In Table 1 the result reveal that majority of the participants 105 (35%) indicated that nursing mothers do not breastfeed because of personal frustration and painful experience. The fear that they might loose weight by breastfeeding their baby followed with 75 (25%). Nature of nursing mothers' job is also identified by 50 participants (16.7%). Other reasons are long period of breastfeeding 37. (12.3%), lack of confidence in breastfeeding 22 (7.3%) and the fear that infant may become addicted to breastfeeding 11 (3.7%).

Research Question 2: What factors help mothers continue exclusive breastfeeding once they decided they want to?

In Table 2, 98 nursing mothers (32.7%) indicated that providing social norms and support is one of the factors that can keep them continuing exclusive breastfeeding of their baby once decided to do so. 86 (28.6%) indicated the appointment of care nursing mother will go a long way in helping them to continue exclusive breastfeeding. Care nursing mother used here mean nurses who are to be in charge of explaining the advantage of exclusive breastfeeding to nursing mothers who are attending ante-natal hospital. Modelling is another factor identified by 74 participants (24.7%) while timely organization of public campaign where nursing mothers can be continuously educated on breastfeeding with 42 (14%) complete the number of factors raised for the continuation of exclusive breastfeeding.

Research Question 3: Are there differences in the Exclusive breastfeeding behaviour of nursing mothers based on their various occupations?

The result in Table 3 show that a significant difference exists in the exclusive breastfeeding behaviour of artisans, nurses, teachers, and bankers. To determine the direction of significance among the four occupational groups, post-hoc analysis was conducted. Since the number of subjects in the four levels is not equal, Scheffe's Post-Hoc analysis was used. The Table 4 contain the detail.

The result in Table 4 show that the nurses engaged mostly in the exclusive breastfeeding of their baby than other occupational groups.

Research Question 4: Are there differences in the Exclusive breastfeeding behaviour of Ghanaian and Nigerian nursing mothers?

In Table 5, the result revealed that no significant difference exists in the exclusive breastfeeding behaviour of Nigerian and Ghanaian nursing mothers (t. cal = 0.35; t.tab = 1.96; DF = 298 and .05 significant level).

Table 1: Reasons for not Breastfeeding

Statement	No.	Percentage
Lack of confidence	22	7.3
Personal frustration/painful experience	105	35
Long period of recommended exclusive breastfeeding	37	12.3
Fear of loosing weight	75	25
Fear of infant becoming addicted to breastfeeding	11	3.7
Nature of job	50	16.7
Total	300	100

Table 2: Promoting Exclusive Breastfeeding

Statement	No.	Percentage
Social norms and support	98	32.7
Public enlightenment	42	14
Modelling	74	24.7
Appointment of care nursing mothers	86	28.6
Total	300	100.0

Discussion

Literatures have revealed that African nursing mothers do not breastfeed their infants. The result of the first research question on this study revealed various reasons why African nursing mothers do not breastfeed. The various reasons given are personal frustration and painful experience; fear of loosing weight, nature of job, lack of confidence in breastfeeding and the fear that infants may become addicted to breastfeeding. Some empirical findings corroborate this present result. For example, Alutu (2000) reported that decline of breastfeeding in most culture has been associated with mothers being frustrated by external and personal factors. Mudambi (1981) attributed it to illiteracy of mothers. Dykes *et al.* (2003) identified lack of confidence, while education, social class, culture, locale, nature of work, wealth and status of both the mother and infants was identified by Newton and Newton in (Wagner *et al.*, 2005). Looking at these reasons as advanced by various researchers in their findings, it means that almost the same thing obtain on the issue of breastfeeding in various part of the world.

In order to encourage nursing mother to continue exclusive breastfeeding once they are decided to do so, the second research question reveal some factors that can help in this direction. It was reveal that social norms and support can be put in place. Appointment of nursing care mothers can be done in all hospital in charge of creating awareness and encourage the nursing mothers during ante-natal visits on the benefits of exclusive breastfeeding for the first six months to a year. Modelling and public enlightenment were also given as factors that can help nursing mother continue exclusive breastfeeding. By considering what African nursing mothers needed most as buffer to exclusive breastfeeding, all the factors are so much important and may perhaps increase the rate of exclusive breastfeeding of the infant on the continent of Africa.

Table 3: Analysis of variance of the Exclusive breastfeeding behaviour of nursing mothers and their occupations

Source of variation	Sum of square	df	Mean square	F. Calculate.	F. tabulated	Remark
Between Group	3482.82	4	870.705			
WithinGroup	85601.33	295	290.174	3.000	62.60	S*
Total	89084.15	299				

Table 4: Scheffe's Multiple Range Comparison of Exclusive Breastfeeding Behaviours for Occupational Groups

Groups	No	X	HW	RW	Nurses	Teachers	Bankers
House Wives	40	39.5					
Rural Women	70	21.6					
Nurses	60	45.16	S*				
Teachers	90	37.84					
Bankers	40	31.82					

Significant @ 0.05

Table 5: Exclusive Breastfeeding Behaviour of Ghanaian and Nigerian Nursing Mothers

Variables	No	X	SD	df	t. cal.	t. tab.	Remark
Nigerian Nursing Mothers	150	56.67	13.10				
Ghanaian Nursing Mothers	150	57.19	12.32	298	0.35	1.96	N.S

Not significant @ 0.05

The result of the third research question indicated that a significant difference exists in the breastfeeding behaviour of house wives, rural women, nurses, teachers, and bankers in favour of nursing mothers as confirmed by the Scheffe's post-hoc analysis. This as well agree with Alutu's (2000) report that nurses were most positive to exclusive breastfeeding base on their awareness and knowledge of the benefits of exclusive breastfeeding practices as health professional. According to her, it is the nurses who are championing the campaign to increase the rate of exclusive breastfeeding of baby. With these reasons therefore, the result is not surprising.

Lastly, the result also demonstrates that no difference was observed in the breastfeeding behaviour of nursing mothers in Africa irrespective of their country of origin. This can be explained by pointing to fact that the issue of awareness of exclusive breastfeeding is at the same level in all African countries.

It is noted from the findings of this study that the high level of illiteracy in Africa is basically the factor slowing down the rate at which nursing mothers engages in exclusive breastfeeding behaviour practices. It is also shown that nursing mothers can be helped in term of public enlightenment, social support and modelling. It is hereby recommended that the kind of support to be given should range from informational support whereby latest information is provided to the nursing mothers as regard new development on breastfeeding practices. Peer and telephone support from nursing mothers with good breastfeeding experience should always be provided. Care nursing mothers should as well be raised in all ante-natal clinics. This will boost the rate of breastfeeding among African nursing mothers. On public enlightenment, campaign through media like radio and television as usual should continue, handbills together with posting of posters in strategic places with inscriptions written in simple grammar and translated in native languages will go a long way to improve exclusive breastfeeding practices in Africa.

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