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Special Issue Vol.1 Issue 1, pp. 1223-1238

SOME FACTORS AFFECTING EXCLUSIVE BREASTFEEDING (EBF) AMONG MOTHERS IN DUTSIN-MA COMMUNITY OF KATSINA STATE, NIGERIA

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Abstract

This study investigated some factors affecting exclusive breastfeeding (EBF) among mothers in Dustin-ma community of Katina state, Nigeria with an intension to proffer lasting solution for effective EBF. Descriptive survey research design was used in this study. The population of the study was all mothers drawn from eleven political Wards of Dutsin-ma Local Government Area, Katsina State. A sample of 177 mothers was used, using cluster sampling technique. A self-developed questionnaire named EH- QEBF was used, using split-half method with the help of Spearman –Brown Prophecy Formula for reliability (0.76). Frequency counts and percentage were used to organize and present the demographic data of the respondents; t-Test was used to test the two hypotheses which were based on mothers’ age and home locations as factors affecting EBF at α level of 0.05. The findings of this study revealed that there is no significant difference in the knowledge, and practice of EBF among mothers based on their age in Dutsin-Ma, community (P=0.426>0.05) and (P=0.452>0.05) respectively. There is no significant difference in the knowledge of EBF among mothers in Dutsin-Ma community based on their home location (P=0.286>0.05). Meanwhile, there is significant difference in the practice of EBF among mothers in Dustin-Ma community based on their home location (P=0.001 <0.05). Following the findings of this study, it is concluded that young and old mothers did not differ in
the knowledge, and practice of EBF in Dutsin-Ma community. They also did not differ in the knowledge of EBF based on their home locations, but they differ in the practice based on their home location. Finally, it is recommended that mothers should be encouraged to control any factor capable of deterring them early initiative of breastfeeding (i.e. after an hour from birth) up to the first six months of their infants’ life in exclusion of any other formula even water besides prescribed drugs.

Keywords
Factor affecting, exclusive breastfeeding (EBF) and mother

1. Introduction

The practice of breastfeeding is a very old method of feeding infants with breast milk of their mothers. According to Essen et al., (2009), breastfeeding means an unequalled way of providing ideal food for the growth and development of infants; it is also an integral part of the reproductive process with important implications for the health of mothers. Following this notion et al., (2011), stated that breastfeeding remains the simplest, healthiest and least expensive feeding method that fulfils infants’ needs. Ojo & Opeyemi (2012) opined that breastfeeding provides infants with super nutritional content that is capable of improving infants’ immunity and possible reduction in future health care spending. WHO (2015), stated that it is the normal way of providing young infants with the nutrients they need for health growth and development.

Meanwhile, exclusive breastfeeding (EBF) is an extract and improvement on normal breastfeeding for desirable health status of infants and their mothers. Exclusive breastfeeding (EBF) as an extract and improvement on breastfeeding implies method of feeding infants with only breast milk of their mothers (either directly from the breast or expressed) and no other liquids or solids with the exception of drops or syrups consisting of vitamins, mineral supplements or medicines (Kook, 2011). In congruent with this definition, World Health Organization/Nutrition for Health and Development (WHO/NHD) (2015), excluded every food type including water from breast milk of the mother of the baby. Credence should be given to
patriotic health agencies such as WHO and UNICEF in the field of health sciences for their in-depth knowledge on innovations in health issues.

Critical analysis of Kok (2011), definition above can assist in bringing out hiding points for proper understanding of the concept EBF. Thus, it is much healthier and preferable to breastfeed infants with their mothers’ breast milk in absence of any health or maternal health problems so as to avoid health problems which can erupt from non biological mothers’ breast milk. This type of breast milk can be dreadful to infants; using wet nursing was actually discouraged during the middle Ages and the Renaissance (Emily et al., 2009). They further asserted that breastfeeding was not always possible, however, due to lactation failure of the mother or to mother dying from childbirth. HIV/AIDS infected mother can also be one of its kinds.

Issues on EBF cannot be concluded without emphases on Baby-Friendly Hospital Initiative (BFHI). This was launched by WHO and UNICEF in 1991 following the Innocenti Declaration of 1990 in Italy (WHO/NHD, 2015). It further stated that the initiative is a global effort to implement practices that protect, promote and support breastfeeding. Furthermore, it posited that since its launching, BFHI had grown, with more than 152 countries around the world implementing the initiative. In summary, it is the introduction of BFHI in 1991 that gave birth to EBF in the world today.

Exclusive breastfeeding as an extreme breastfeeding (rooming) is preventive and most economical feeding method one can experience. In this regard, Ip, Chung, Raman, Chew, Magula, De Vine, Trikalinos and Lau (2007), affirmed it that a history of breastfeeding was associated with reduction in the risk of acute otitis media, non-specific gastroenteritis, severe lower respiratory tract infections, atopic dermatitis, asthma (in young children), obesity, type 1 and 2 diabetes, childhood leukemia, sudden infant death syndrome (SIDS), and necrotizenterocolitis. In the same vein, breastfeeding creates a special bond between mother and baby and the interaction between the mother and child during breastfeeding (UNICEF, 2015).

Significantly, EBF for six months is the optimal way of feeding infants if the encouragement is there. It is on this note that it is imperative to note that EBF is an exercise of first 4-6 months of child’s life (Ezenkiri & Hamisu, 2015). WHO recommendation for the optimal practice of EBF is 90 per cent (Agho et al., 2011; Ojo & Opeyemi, 2012). These indices
(duration and required rate) are to assist the society to practice the EBF initiative effectively so as to attain the maximum rate for quantity and quality health.

Therefore, the attainment of the recommended rate of EBF is highly dependent on numerous factors based on regions (tropical and temperate region) such as mothers’ educational level, residential location, occupation, health, maternal age and host of others. It is on this note that Mgomgo et al., (2013), asserted that the factors influencing EBF have shown to vary from to country and within countries. Employment status, urban/rural differences, marital status, knowledge on breastfeeding, education status, place of delivery, HIV status, advice on breastfeeding, ant-natal care clinic (ANC) attendance and type of delivery have shown to have an influence on EBF (Lande et al., 2003; Tanzania Demographic & Health Survey, 2010; National Bureau of Statistics Tanzania and ICF Macro, 2011). WHO (2001), made a serious case known as a factor affecting EBF; it is possible from birth except for a few medical conditions and unrestricted EBF results in ample milk production.

Thus, Oche et al. (2011), agreed that educational level of the mothers is a factor affecting EBF practices. Constraints to EBF such as maternal health problems, pressures from mother in-law and work are not exempted (Ojo & Opeyemi, 2012). Ogbonna et al., (2000), also opined that mothers’ literacy level, ante-natal services, home locations and occupation are really influencing EBF practices in Jos, Nigeria. Sika-Bright (2010), suggested that the following are adduced to be influencing breastfeeding practices; mothers’ marital status, employment status, friends’ methods of feeding their babies, social support and baby’s age. On the affecting factors, UNICEF (2015), stated that this year’s world breastfeeding week; 1-7 the August, 2015 the theme is ‘Women and Work – let’s make it work’ which emphasizes the need for better support system and policies to enable ‘working mothers’ to breastfeed. It is against this background that the researchers were aroused and become motivated to carry out a research on some factors affecting EBF among mothers in Dutsin-Ma, Community of Katsina State, Nigeria.

2. Statement of the Problem

Studies have shown that EBF as well as breastfeeding lower the risk of chronic health conditions later in life such as obesity, high cholesterol, high blood pressure, diabetes, childhood
asthma and leukemia (UNICEF, 2015). This feeding method of infants is the most preventive, natural, pure and economical prevailing both in developed and developing countries.

However, mothers’ age, residential locations, educational levels, maternal health status and occupation are affecting the early initiation of breastfeeding which is the basis of EBF among mothers in Dutsin-Ma. Virtual all mothers can breastfeed exclusively, if given appropriate support, advice and encouragement as well as practical assistance to resolve any problems such as maternal age and home location which are influencing EBF (UNICEF, 2015). WHO (2015), also asserted that virtually all mothers can breastfeed, provided mothers have accurate information, and the support of their family, the health care system and society at large. Based on this situation, the researchers become motivated to investigate factors affecting EBF in Dutsin-Ma community, Katsina State, Nigeria.

3. Review of Related Literature

The finding of Oche et al. (2011), who carried a study on knowledge and practice of EBF in Kwara State, Nigeria, revealed that on-set of a new pregnancy and mother or child illness stopped mothers from breastfeeding their babies. Result of Ojo & Opeyemi (2012), who studied constraints to EBF practice among breastfeeding mothers in South-West, Nigeria, showed that maternal health problems 26 per cent, affect the practice of EBF in the region. The age of the mothers and infants can be adduced to be a factor affecting EBF among mothers across races on the earth planet. Martti et al., (1984), researched on breastfeeding for nine months: risk of iron deficiency in University of Helsinki, observed that it is safe in breastfed infants to shift the starting age for introduction of iron to six months. On this indication, Fatoumata, Bell, Jean-Marie, and Garant (2009), whose result revealed that there is no significant difference on EBF based on the mothers’ age. Agho et al. (2011), investigated determinants of EBF in Nigeria, and actually found out that increasing age of the infant was associated with significantly less EBF (AOR=0.65, 95% CI = 0.51 – 0.82). Kim, Kim and Yoo (2013), observed from their study conducted: factors affecting EBF during the first six months in Korea, that factors that were positively associated with EBF at six months were younger maternal age (odd ratio (OR) = 0.85, 95% confidence interval (CI): 0.79 – 0.92), using Stepwise
logistic regression analysis. From all indications, it could be understood that age is a significant factor affecting breastfeeding both in the 20\textsuperscript{th} and this 21\textsuperscript{st} century, perhaps across the world.

It is presumed that mothers’ home location can be a great influence in the knowledge, and practices of EBF due to access to the health information pertaining breastfeeding. It is therefore hypothesized that urbanized mothers are likely be more advantageous than rural ones possibly in all about EBF. In agreement with this assertion, Agho et al. (2011), based on their result, un-variated analysis indicated a significantly lower EBF rate for infants less than six months among mothers who live in rural region 14.7 per cent, compared to those who live in urban regions 20.7 per cent. Finding of Anthony and Akwasi (2013), who studied determinants of EBF among mothers in Ghana: a cross-sectional study, revealed that mothers’ residential locations in Volta region in Ghana is of significance in the practice of EBF.

It is pertinent to remarking that if associated factors of EBF can be influenced and become modified in the right direction, then many lives will be saved. Children estimated 220,000 could be saved every year as a result of early initiation of breast milk (i.e. within first one hour after birth and continued to be exclusive breastfed for first six months of life (WHO, 2013; Olagunju, 2013). In another instance, WHO (2013), maintained that a recent analysis of studies in Ghana, India and Peru showed that infants who were not breastfed were ten times more likely to die than those who were predominantly or exclusively breastfed.

4. Purpose of the Study

This study investigated factors affecting EBF among mothers in Dutsin-Ma Community of Katsina State, Nigeria with intention to devise means for effective and comprehensive EBF.

5. Significance of the Study

It is foreseen that the findings of this work will be of great benefit to: all mothers despite their age in raising up healthy children, schools/students as they are expected to be contributing to the world of knowledge for a better society, future researchers who can lay their hands on the findings for further studies on issues that are related to EBF, and health agencies that are in position of developing community health in this contemporary society.
6. Hypotheses

The following hypotheses were formulated to guide this study:

**H₀₁.** There is no significant difference in the knowledge of EBF between young and old mothers in Dutson-Ma community.

**H₀₂.** There is no significant difference in the practice of EBF among mothers based on their age in Dutson-Ma community.

**H₀₃.** There is no significant difference in the knowledge of EBF among mothers in Dutson-Ma community based on their home location.

**H₀₄.** There is no significant difference in the practice of EBF among mothers in Dutson-Ma community based on their home location.

7. Methodology

In this study, descriptive survey research design was adopted based on the fact that it is a research design that absolutely agreed with study of representatives of entire population and the use of questionnaire for data collection. The population of this study comprised all mothers from the eleven political Wards of Dutson-Ma community of Katsina State, Nigeria; (Bagaggadi, Dabawa, Dutson-Ma ‘A and B’, Karofi ‘A and B’, Kuki ‘A and B’, Kutawa et al) as at August, 2015 (National Programmers on Immunization, Dutson-Ma Office, 2015). A sample of one hundred and seventy-seven mothers was used for this study using cluster sampling technique. A self-developed questionnaire named English & Hausa - Questionnaire on Exclusive Breastfeeding (EH- QEBF) was used as it had English and Hausa version for data collection. Split-half method was used, using Spearman-Brown Prophecy Formula with reliability index of 0.76. Six research assistants (three males and three females; health personnel) were used to administer the copies of questionnaire after pilot study in Kurfi L. G. A. of Katsina State. Data generated were subjected to frequency counts and percentage for demographic information of the respondents, and t- Test was used to test four hypotheses formulated that rooted in the knowledge and practice of EBF based on mothers’ age and home location at α level of 0.05, using SPSS 20.0 version.
8. Results

The findings of this work, using descriptive and inferential statistics are presented in Table 1-3.

Table 1: Summary of Frequency Counts and Percentage on the Demographic Information of the Respondents

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. AGE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young mothers</td>
<td>150</td>
<td>84.7</td>
</tr>
<tr>
<td>Old mothers</td>
<td>27</td>
<td>15.3</td>
</tr>
<tr>
<td>Total</td>
<td>177</td>
<td>100.0</td>
</tr>
<tr>
<td>2. HOME LOCATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dutsin-Ma Town</td>
<td>92</td>
<td>52.0</td>
</tr>
<tr>
<td>Outside Dutsin-Ma Town</td>
<td>85</td>
<td>48.0</td>
</tr>
<tr>
<td>Total</td>
<td>177</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The above diagram showed that young mothers (14-35 years old) according to the researchers formed bulk of the population (150, polling 84.7%) while old mothers (36-49 years old) were 27 (15.3%), totaling 177 mothers used in this study. It further showed that out of 177 (100%) mothers involved in this study, 92 (52.0%) of them reside in Dutsin-Ma town while, 85 (48.0%) of them reside outside Dutsin-Ma town.

Table 2: Summary of t-Test on Knowledge, and Practice of Exclusive Breastfeeding among Mothers based on their Age in Dutsin-Ma Community

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Std. error mean</th>
<th>T</th>
<th>Df</th>
<th>P- value</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. KNOWLEDGE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young mothers</td>
<td>150</td>
<td>15.13</td>
<td>1.880</td>
<td>0.153</td>
<td>0.799</td>
<td>175</td>
<td>0.426</td>
</tr>
<tr>
<td>Old mothers</td>
<td>27</td>
<td>14.81</td>
<td>1.798</td>
<td>0.346</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>177</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
b. PRACTICE

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Std. error mean</th>
<th>T</th>
<th>Df</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. KNOWLEDGE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dutsin-Ma Town</td>
<td>92</td>
<td>14.93</td>
<td>1.874</td>
<td>0.195</td>
<td>-1.071</td>
<td>175</td>
<td>0.286</td>
</tr>
<tr>
<td>Outside Dutsin-Ma Town</td>
<td>85</td>
<td>15.24</td>
<td>1.856</td>
<td>0.201</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>177</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. PRACTICE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dutsin-Ma Town</td>
<td>92</td>
<td>10.10</td>
<td>2.273</td>
<td>0.237</td>
<td>-3.248</td>
<td>175</td>
<td>0.001</td>
</tr>
</tbody>
</table>

The above diagram showed in the knowledge of EBF that young mothers had the mean value which is relatively greater than the mean of the old mothers (15.13>14.81). It also, showed that P-value is greater than the alpha value set for this study (P=0.426>0.05). The null hypothesis which stated that there is no significant difference in the knowledge of EBF between young and old mothers in Dutsin-Ma, community of Katsina State, Nigeria is accepted. Hence, there is no significant difference in the knowledge of EBF based on mothers’ age. Furthermore, in the practices of EBF, the above diagram also showed that young mothers polled the mean value which is relatively above the mean value of the old mothers (10.63>10.30) following their respective frequencies (150:27). It also showed that P-value is greater than the $\alpha$ value (P=0.452>0.05). The null hypothesis which stated that there is no significant difference in the practice of EBF among mothers based on their age in Dutsin-Ma, community is accepted. Hence, there is no significant difference in the practice of EBF among mothers based on their age in Dutsin-Ma, community.

**Table 3: Summary of t-Test on Knowledge, and Practice of Exclusive Breastfeeding among Mothers, regarding their Home Locations**
The above diagram showed that mothers who live in Dutsin-Ma Town had the mean value which is less than the mean value of mothers, living outside Dutsin-Ma Town (14.93<15.24). It also indicated that the P-value is greater than the α value (P=0.286>0.05). The null hypothesis which stated that there is no significant difference in the knowledge of EBF among mothers in Dutsin-Ma community based on their home location is accepted. Hence, there is no significant difference in the knowledge of EBF among mothers in Dutsin-Ma community based on their home location. The above diagram further showed that mothers living in Dutsin-Ma Town had the mean value which is less than the mean value of mothers living outside Dutsin-Ma Town in the practices of EBF (10.10<11.09). It also indicated that the P-value is less than alpha value (P=0.001<0.05). The null hypothesis which stated that there is no significant difference in the practice of EBF among mothers in Dutsin-Ma community based on their home location is rejected. Hence, there is significant difference in the practice of EBF among mothers in Dutsin-Ma community based on their home location.

9. Discussion

The result on the demographic data of the respondents revealed that young mothers formed the bulk of the subjects studied, while home location is relatively equal, but township outweighs. This finding is in agreement with the finding of Essien et al. (2009), who studied mothers’ knowledge, attitudes, beliefs, and practice concerning exclusive breastfeeding in Calabar, Nigeria which showed that mothers within the age limit of 15-35 years old 71.85 per cent formed the major proportion of the population. It also goes in line with the Awogbenja (2010), who studied factors influencing breastfeeding practices among mothers in Lafia Local Government Area of Nasarawa State, revealed that the age of the majority of mothers interviewed falls between 15-34 years polling 87.9 per cent while old mothers polled 12.1 per cent. From the Table 1 above, the researchers suggested that young mothers are more willing to
bear babies, and pregnancy perhaps occurs more frequent among them than the old mothers naturally.

The finding of this study revealed that there is no significant difference in the knowledge of EBF based on mothers’ age. This result tallied with the finding of Fatoumata et al. (2009), who investigated effects of exclusive versus non-exclusive breastfeeding on specific infant morbidities in Conakry (Guinea), showed that there is no significant difference in the knowledge of EBF among mothers based on their age as variable. It is congruent with findings of (Kok, 2011; Kim et al., 2013).

The result of this study showed that there is no significant difference in the practice of EBF among mothers based on their age in Dutsin-Ma, community. This finding is not at variance with the finding of Rajesh, Chikitsa, & Yogesh (2009), who studied breastfeeding initiation practice and factors affecting breastfeeding in South-Guajat Region of Indian, revealed that maternal age which was considered factor affecting EBF has not shown any significance. However, this present finding is at variance with Ajibade et al., (2013), who carried a research on factors influencing the practice of exclusive breastfeeding in rural communities of Osun State, Nigeria, whose finding revealed that nursing mothers’ age had significant difference in the practice of EBF in Osun State.

Following the results in Table 2, the researchers believed wholeheartedly that mothers’ age does not make any difference in the knowledge, and practice of EBF for the fact that age is a common and natural gift which does not require extra commitments to gain like education and residential locations.

The result of this work revealed that there is no significant difference in the knowledge of EBF among mothers in Dutsin-Ma community based on their home location. This is congruent with Ajibade et al. (2013), whose result showed that majority 65 per cent of the nursing mothers from the rural and urban areas of Osun State had been informed about EBF. It is also in line with the finding of Mgongo et al., (2013), who carried out research on prevalence and predictors of EBF among women in Kilimanjaro region, Northern Tanzania: a population based cross-sectional study, showed that there was no urban and rural difference for all the major predictors like educational status evaluated.
The researchers are of the opinion based on the finding in Table 3 that home location does not pose any difficulty in the knowledge of EBF. It is assumed that rural mothers have access to media and hospital services as their counterpart in the urban area of Dutsin-Ma community through which, they may gain knowledge on EBF.

The finding of this study proved that there is significant difference in the practice of EBF among mothers in Dutsin-Ma community based on their home location. This result is in order with the assumption of Ajibade et al. (2013), who asserted that mothers’ information acquisitions on EBF, did not guarantee their practicing it. Thus, the result of this present study is congruent with Lande et al. (2003); Fjeld et al., (2008), who studied ‘no sister the breast alone is not enough for my baby’ a qualitative assessment of potentials and barriers in the promotion of EBF in southern Zambia, generally revealed that there was significant difference in EBF rates for urban and rural mothers. This situation was predicted to be that mothers form rural areas were likely to give pre-lacteal feeds and mix fed earlier compare to urban mothers. However, the result of this study is at variance with Mgongo et al. (2013), who observed in their study that there was no significant difference in EBF rates between urban and rural areas. The researchers suggested that the significant difference in the practice of EBF could be that mothers in the town influenced themselves for the fact that there are good numbers of non indigenes who live together with the indigenes unlike the rural mothers in the community.

10. Conclusions

Based on the results of this study, it is concluded that:

Young and old mothers do not differ in the knowledge of EBF in Dutsin-Ma community of Katsina State, Nigeria. Similarly, they do not differ in the practice of EBF as well. Mothers living in Dutsin-Ma Town do not differ from the mothers living outside Dutsin-Ma Town in the knowledge of EBF. It is assumed that they both might have access to the same hospital services and media which assist in information dissemination on health matters and others. Meanwhile, Mothers living in Dutsin-Ma Town differ from the mothers living outside Dutsin-Ma Town in the practices of EBF. This could be that mothers living in Dutsin-Ma Town might not completely
hold the tradition so tight thereby adhering to some health information that might be obtained than their counterpart in the practice.

11. Recommendations

Based on the findings of this study, the following were proffered:

- The State Government should introduce functional Baby-Friendly Hospital Initiative centers across the State for the promotion of EBF in Katina State.
- The mothers should be encouraged to control any factor capable of deterring them from early initiative of breastfeeding (i.e. after an hour from birth) up to the first six months of their infants’ life in exclusion of any other formula even water besides prescribed syrups.
- Mothers (parents and families) are advised to be dynamic enough in accepting changes from health sectors for safety, quality and quantity life on earth.
- Health agencies and schools should be used to sensitise would be mothers on the knowledge of EBF.

REFERENCES


