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EXCLUSIVE BREASTFEEDING AND HEALTH BENEFITS OF NEWBORNS IN ISOBOR, OBUBRA LOCAL GOVERNMENT AREA, CROSS RIVER STATE, NIGERIA. WEST AFRICA

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ABSTRACT

Breastfeeding is the act of feeding or nursing babies with milk from a mother's breast. It is best recommended for infant babies as it offers them the nutrients they need for healthy growth and development. Most mothers, especially the uneducated in rural communities lack a good breastfeeding approach while others deliberately neglect the practice. This study was focused on exclusive breastfeeding and health benefits of newborns in Isobor, Obubra Local Government Area, Cross River State, Nigeria, West Africa. To achieve this objective, three research questions were formulated to guide the study. The instrument used was a structured questionnaire to gather Data from 120 respondents which include nursing mothers and infants from the sample communities. Simple random technique was employed to select the sample for the study. Descriptive survey design was adopted for the study. The findings of the study revealed significant levels of health benefits of exclusive breastfeeding to newborns of Isobor. From the findings it was recommended that nursing Mothers, especially those in the rural communities, should be educated and encourage on the health benefits of exclusive breastfeeding to the newborns.

KEYWORDS: Exclusive Breastfeeding, Health, Newborns, Benefit.

INTRODUCTION

Over 820,000 children under the age of five die for lack of or insufficient breastfeeding annually across the globe (Victoria et al, 2016). Babies who are not breastfed are six times more likely to die by the age of one Month than those who are partially or fully breastfed (World health organization, WHO 2015).

Breastfeeding refers to the feeding of an infant or a young child with breast milk directly from female breast rather than using infant formulas. Babies suck and swallow breast milk through a suckling reflex (Agostoni, 2003), that is established between the mother's nipple and brain when the baby sucks.

WHO, 2015 defined breastfeeding as the normal way of providing young infants with the nutrients they need for growth and development. According to the World Health Organization, virtually every mother can breastfeed provided they have accurate information and the support of their family, the health care system and the society at large.

According to Healthdirect 2018, breastfeeding brings a lot of health benefits to both mother and child. It helps to create beautiful bonding between mother and her newborn baby, its more convenient, cheap and very reliable means of feeding a baby (Awatef, 2010). Breastfeeding increases a child's appetite, facilitates digestion and helps in jaw development of the baby. It also helps to improve a child's cognitive development and builds a strong immunity for the child.

The American academy of pediatrics and the American dialectic association promote breastfeeding as the best source of nutrition for infants. The world health organization (WHO), State of the world's mothers, 2012 and the America academy of pediatrics (APP) recommend that exclusive breastfeeding be adopted for the first six Months of life, after which infants should be given nutritionally adequate and safe complementary foods while breastfeeding continues for two years of age and beyond (Gartner, 2015).

Breastfeeding helps the children to grow well and develop vital organs. There is no amount of

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breastfeeding that do not yield health benefits to a baby. The longer the duration of breastfeeding, the longer the protection and the greater the benefits to a child (Bartick, 2010). Breast milk has an optimal balance of fat, sugar, water and protein needed for baby's growth and development.

The Australian breastfeeding association 2016 pointed out that breastfeeding is a normal and natural process that is acknowledged as important for mothers and babies. However, some controversial opinions yet abound. Many believe that breastfeeding is not a natural process since it cannot be done publicly. Although many laws abound that protect or check breastfeeding activities, a number of mothers still lack complete breastfeeding norms. The Australian federal law under the federal sex discrimination Act 1984 upheld against any direct or indirect discrimination of a person or persons on grounds of breastfeeding.

Mothers who indulge in psychoactive drugs and other forms of strong medications should not breastfeed as this could lead to serious health challenges including death of infant. The American Academy of pediatrics APP upheld that tobacco smoking do not pose any threat on breastfeeding due to its protective effect against sudden infant death syndrome SIDS.

Exclusive breastfeeding refers to a situation where an infant receives no other food or drink besides breast milk for the first six months of life (Olusegun, 2006). It is the consumption of human milk with no supplementation of any type (no water, no juice, no nonhuman milk and no food). Exclusively breastfed babies have less chance of developing diabetes mellitus type 1 than those with shorter duration of breastfeeding and early exposure to cow milk and solid foods. Exclusive breastfeeding also appears to protect against diabetes mellitus type 2, at least in part due to its effect on the child's weight (Mayer-Davis, 2008).

To enable mothers establish and sustain exclusive breastfeeding WHO,2014 and UNICEF, 1992 recommends improved maternity services and exclusive breastfeeding from the first hour of life without any additional food or drinks, not even water. Exclusive breastfeeding reduces infant mortality rate that stems from illnesses such as diarrhea or pneumonia, and enables quick recovery from sicknesses (Kramer, 2001).

Exclusive breastfeeding prevents and treats to early breastfeeding problems such as cracked nipples, engorgement, and mastitis. These problems often lead to early infant supplementation and abandonment of exclusive breastfeeding. Proper positioning and attachment of the baby to the breast and frequent breastfeeding can prevent those problems. Support to mothers for early initiation has been effective at prolonging exclusive breastfeeding. This is often provided via peer support network (Allison, 2008).

Greer, 2008 upheld that children who are at risk of developing allergic diseases like atopic syndrome can be prevented or delayed through exclusive breastfeeding for four Months, though these benefits may not be present after four Months of age. However, the key factor may be the age at which non-breast milk is introduced rather than duration of breastfeeding. Atopic dermatitis, the most common form of eczema, can be reduced through exclusive breastfeeding beyond 12 weeks of individuals with a family autopsy, but when breastfeeding beyond 12 Weeks is combined with other foods, incidents of eczema arises irrespective of family history.

The American academy of pediatrics, AAP, identified some economic benefits of breastfeeding to include reduction in the cost of health care among exclusively breastfed babies. Significantly, lower incidence of illness in the exclusively breastfed infants also allows parents more time for attention to siblings, other family duties and reduces parental absence to work and loss of income (Paul. 2006).

Although the health benefits of exclusive breastfeeding to newborns may be generally overwhelming, the nursing mothers in Isobo community have little or no good knowledge of such benefits, so they lack the right approach to this practice due to high illiteracy level, lack of proper awareness and increased poverty rate. For this reasons, there is increased level of illnesses among mothers and children, and high infant mortality rate in this Area. So far little or no work on the subject matter has being recorded. It was on this basis that the researcher considered it necessary to carry out this research titled; exclusive breastfeeding and health benefits of newborns in Isobo, Cross River State, Nigeria, West Africa. The specific objectives were based on three sub-variables (sex, age and immunization status).

METHODOLOGY

The researcher adopted descriptive survey design for the study. Descriptive survey design was used because it clearly explains the present situation as it concerns exclusive breastfeeding and benefits on the health of newborns in Isobo. This study was conducted in Isobo community, a tropical rain forest zone in Obubra Local Government Area of Cross River State, Nigeria, West Africa. The area of study is made of five villages-Ndeonulus, Ndeohorikpa, Ndeotuma, Ndeonkash, and Ndemgbogid. The researcher preferred this area of study because the people there have little or no knowledge of exclusive breastfeeding. The researcher wanted to device a means of educating the people properly on the subject matter.

The population of the study was made of 600 nursing mothers and newborns from three villages in Isobor. 40 newborns were selected from each of the three units to arrive at a sample size of 120 newborns. Three research questions were formulated for the study. Closed ended

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(Structured) questionnaire was the instrument used to collect Data from the 120 respondents comprising of nursing mothers. Simple random technique was used to select the sample for the study. The instrument was validated to ensure that the items in the questionnaire represented the subject of interest and were accurate. The test-retest method of reliability was used in ensuring reliability of instrument. The simple random technique was used to select the sample for the study. Simple percentage was used to analyze data obtained. The

findings revealed that exclusive breastfeeding has significant health impact on newborns of Isobo community.

RESULTS

The result of the data analysis carried out on data collection on demographic information was done using frequencies and percentages. The analyzed demographic variables are presented in tables 1-5.

Table 1: Total unit to be sampled.

| Random number | Number of units |
|---------------|----------------------------|
| 01 | Ndeonulus Village Isobo |
| 02 | Ndeohorikpa Village, Isobo |
| 03 | Ndeotuma Village, Isobo |
| 04 | Ndeonkash Village, Isobo |
| 05 | Ndemgbogid Village |

Table 2: Actual Sampling of Units Using Simple Random Sampling Technique.

| Random number | Name of villages | Selected units |
|---------------|----------------------------|----------------|
| 01 | Ndeonulus Village Isobo | X |
| 02 | Ndeohorikpa Village, Isobo | |
| 03 | Ndeotuma Village, Isobo | X |
| 04 | Ndeonkash Village, Isobo | |
| 05 | Ndemgbogid Village | X |

Table 3: Showing only selected communities.

| Random number | Selected communities |
|---------------|-------------------------|
| 01 | Ndeonulus Village |
| 02 | Ndeotuma Village, Isobo |
| 03 | Ndemgbogid Village |

Table 4: Population of only the selected villages.

| Random number | Selected communities | Population of responses |
|---------------|----------------------|-------------------------|
| 01 | Ndeonulus Village | 200 newborns |
| 02 | Ndeotuma Village | 200 newborns |
| 03 | Ndemgbogid Village | 200 newborns |
| | Total | 600 newborns |

Table 5: Sample size for the study.

| Random number | Selected communities | Population of responses |
|---------------|----------------------|-------------------------|
| 01 | Ndeonulus Village | 40 newborns |
| 02 | Ndeotuma Village | 40 newborns |
| 03 | Ndemgbogid Village | 40 newborns |
| | Total | 120 newborns |

Table 1 shows all the five different villages that make up Isobo community being the area of study. They are Ndeonulus, Ndeohorikpa, Ndeotuma, Ndeonkash, and Ndemgbogid.

Table 2 shows actual sampling of units using simple random sampling technique. Three villages were selected out of the community. The respondents were therefore selected from the three sampled villages.

Table 3 shows only the three selected villages from the five villages that make up Isobo community. They are Ndeonulus, Ndeotuma and Ndemgbogid.

Table 4 shows the population of only the selected villages. There are 200 newborns in each of the selected villages, making a total of 600 newborns in the three sampled units.

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Table 5 shows the sampling percentage used in selecting sample since the total population of newborns (population of study) being six hundred is large, 20% was used to select sample.

Using 20% sample, the researcher determines the sample size for the study to be one hundred and twenty newborns approximately.

i.e. $\binom{20\%}{100} \frac{x}{1} = 120$ newborns and their mothers

Research question 1: To what extend does exclusive breastfeeding benefit newborns in Isobo by their sex?

Table 6: Percentage analyses of health benefits of exclusive breastfeeding of newborns by their sex.

| Questionnaire | | Yes | | No | | | |
|----------------|---------|---------|--|---------|---------|---------------|--|
| item on unit 1 | Male | Female | Total | Male | Female | Total | |
| Item 1 | 32(27%) | 39(33%) | 71(59%) | 28(23%) | 21(18%) | 49(41%) | |
| Item 2 | 47(39%) | 35(29%) | 82(68%) | 20(17%) | 18(15%) | 38(32%) | |
| Item 3 | 33(28%) | 35(29%) | 68(57%) | 32(27%) | 20(17%) | 52(43%) | |
| Total | | | 221 | | | 139 | |
| Mean | | | $\underline{x}\underline{x} = \underline{221}$ | | | $_{x}$ £x=139 | |
| Mean | | | n 3 | | | n 3 | |
| Scores | | | = 74 | | | =46 | |

Table 6 addressed research question one; to what extend does exclusive breastfeeding benefit newborns by sex in Isobo?

The table particularly looked at unit one (1) of the questionnaire and showed responses on exclusive breastfeeding and benefits on newborns by their sex.

For "item 1" which said exclusive breastfeeding makes a child to be knowledgeable. A total of 71 respondents answered yes (32 males being 27%, 39 females being 33%).

For "item 2" which said exclusive breastfeeding helps in family planning. A numbers of 82 respondents answered YES (47 males being 39% and 35 females being 29%)

while a total of 38 said NO (20 males being 17% and 18 sales being 15%).

For "item 3" which said exclusive breastfeeding helps to boost immunity, a total of 68 respondents said yes (33 males being 28% and 35 females being 29%) while the total of 52 respondents answered NO (32 males being 27% and 20 females being 17%).

The total number of respondents who said YES were 221 while those who said NO were 139, since the total respondents who said yes is 221 with a mean score of 74 was higher than the 139 respondents who said no with a mean score of 46, it was agreed and concluded that exclusive breastfeeding benefits newborns by their sex.

Reseach Question 2: Does exclusive breastfeeding improve the health of children by their ages in Isobo?

Table 7: Exclusive breastfeeding and health benefits of newborns by their age. Responses

| Questionnaire | Yes | | | | No | | | |
|-----------------|---------|---------|----------|---------------|---------|---------|----------|-------------------|
| item on, unit 1 | 0-6m | 7-18m | 19-above | Total | 0-6m | 7-18m | 19-above | Total |
| Item 1 | 35(29%) | 30(25%) | 15(13%) | 80(67%) | 17(14%) | 8(7%) | 15(13%) | 40(33%) |
| Item 2 | 30(25%) | 28(23%) | 32(27%) | 90(75%) | 10(8%) | 12(10%) | 8(7%) | 30(25%) |
| Item 3 | 19(16%) | 27(23%) | 22(18%) | 68(57%) | 12(10%) | 30(25%) | 20(17%) | 52(43%) |
| Total | | | | 238 | | | | 122 |
| Mean | | | | $_{x}$ £x=238 | | | | $_{x}$ £ x =122 |
| | | | | n 3 | | | | n 3 |
| Scores | | | | = 79 | | | | = 41 |

Table 7 addressed research question 2; Does exclusive breastfeeding affect the health of children by their ages in Isobo?

Unit Two of the questionnaire showed responses on breastfeeding and benefits on the health of newborns by their age. For "item 1" which said exclusive breastfeeding makes a child to be knowledgeable. A total of 80 respondents answered YES (35, 0 – 6ms being 29%, 30, 7 – 18 months being 25% and 15, 19 –above months being 13%) while a total of 40 respondents answered NO (17, 0 – 6 months being 14%, 8, 7-18 months being 7% and 15, 19 – above months being 13%).

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For "items 2" which said exclusive breastfeeding helps in family planning. A total of 90 respondents answered YES (30, 0-6 Months being 25%, 28, 7-18 Months being 23% and 32, 19-above being 27%. While a total of 30 respondents answered NO (12, 0-6 Months being 8% 12, 7-18 Months being 10% and 8, 19 – above Months being 7%).

For "item 3" which said exclusive breastfeeding helps to boost immunity. A total of 68 respondents answered YES (19, 0-6months being 16%, 27, 7-18 Months being

23% and 22, 19-above months being 18%) while a total of 52 respondents answered NO (12, 0-6 months being 10%, 30, 7-18 months being 25% and 20, 19-above months being 17).

The total numbers of people who said YES were 238 while those who said NO were 122, since the total number of nursing mothers who said YES being 238 with a mean score of 79 was higher than the 122 respondents who said NO with a mean score of 41, it was agreed and concluded that exclusive breastfeeding benefits newborns by their age.

Research Question 3: Does exclusive breastfeeding improve the immunization status of newborns in Isobo?

Table 8: Exclusive breastfeeding and health of newborns by their immunization status. Responses

| Questionnaire | naire Yes | | | No | | | | |
|-----------------|-----------|-----------|-------------|---------------|---------|-----------|-------------|--|
| item on, unit 1 | RBCG | Ob's' Imm | Y comm. Imm | Total | RBCG | Ob's' Imm | Y comm. Imm | Total |
| Item 1 | 35(29%) | 40(33%) | 20(17%) | 95(79%) | 12(10%) | 8(7%) | 5(4%) | 25(21%) |
| Item 2 | 35(29%) | 50(42%) | 15(13%) | 100(83%) | 6(5%) | 6(5%) | 8(7%) | 20(17%) |
| Item 3 | 27(23%) | 30(25%) | 20(17%) | 77(64%) | 13(11%) | 15(13%) | 15(13%) | 43(36%) |
| Total | | | | 272 | | | | 88 |
| Mean | | | | $_{x}$ £x=272 | | | | $_{x}\underline{\pounds x} = \underline{88}$ |
| Mean | | | | n 3 | | | | n 3 |
| Scores | | | | = 91 | | | | = 29 |

Table 8 above addressed research question three, Does exclusive breastfeeding improve the immunization status of newborns in Isobo?

Unit 3 of the questionnaire showed responses on breastfeeding and benefits on the health of newborns by immunization status.

For item 1, which said exclusive breastfeeding enhances the childs immunization status, a total of 95 respondents answered YES (35, RBCG being 29%, 40, ob's' imm being 33% and 20, Y com imm being 17%) while a total of 25 respondents answered NO (12, RBCG being 10%, 8 Ob 's' imm being 7% and 5, Y com imm being 4%).

For 'item 2' which said exclusive helps in family planning? A total of 100 respondents answered yes (35,RBCG being 29%, 50, Ob 's' imm being 42% and 15%, Y comm. Imm being 13%) while 20 respondents answered no (6, R BCG being 5%, 6, Ob 's' imm being 5% and 8, Y com imm being 7%.).

For 'item 3' which said exclusive breastfeeding boost immunity? A total of 77 respondents answered yes (27, RBCG being 23%,30, ob 's' imm being 25% and 20, Y comm. Imm being 17%) while a total of 43 respondents answered No (13, RBCG being 11%, 15, ob 's' imm being 13% and 15, Y com imm being 13%).

The total number of people who said YES were 272 while those who said No were 88, since the total numbers of nursing mothers who said YES being 272 with a mean score of 91 was higher than the 88

respondents who said NO with a mean score of 29, it was agreed and concluded that exclusive breastfeeding benefits newborns by their immunization status.

DISCUSSION OF FINDINGS

Research question 1; to what extend does exclusive breastfeeding benefit newborns by sex in Isobor? This research question addressed unit one of questionnaire. Unit one of the questionnaire had 3 items. The research question was analyzed using the respondent's personal characteristics that were age factor). The total number of respondents who said YES were 221 while those who said NO were 139, since the total respondents who said YES is 221 with a mean score of 74 was higher than the 139 respondents who said NO with a mean score of 46, it was agreed and concluded that exclusive breastfeeding benefits newborns by their sex. Thus support the findings of Mayer-Davis, 2008 that exclusive breastfeeding also appears to protect against diabetes mellitus type 2, at least in part due to its effect on the child's weight.

Research question 2; Does exclusive breastfeeding affect the health of children by their ages in Isobo? Unit Two of the questionnaire showed responses on breastfeeding and benefits on the health of newborns by their age. The total numbers of people who said YES were 238 while those who said NO were 122, since the total number of nursing mothers who said YES being 238 with a mean score of 79 was higher than the 122 respondents who said NO with a mean score of 41, it was agreed and concluded that exclusive breastfeeding benefits newborns by their age. These findings supported the notion of Greer, 2008 that age is the key factor that brings about a delay or

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reduction in the risk factor of having allergy during breastfeeding. The outcome is also in line with the discovery of Bartick, 2010 that the longer the duration of breastfeeding, the longer the protection and the greater the benefits to a child.

Research question 3; Does exclusive breastfeeding benefits the immunization status of newborns in Isobo? Unit 3 of the questionnaire showed responses on breastfeeding and benefits on the health of newborns by immunization The total number of people who said YES were 272 while those who said No were 88, since the total numbers of nursing mothers who said YES being 272 with a mean score of 91 was higher than the 88 respondents who said NO with a mean score of 29, it was agreed and concluded that exclusive breastfeeding benefits newborns by their immunization status. This finding also strengthens the notion of Kramer, 2001 that Exclusive breastfeeding reduces infant mortality rate that stems from illnesses such as diarrhea or pneumonia, and enables quick recovery from sicknesses.

CONCLUSION

Exclusive breastfeeding is a practice capable of improving the health of children and limiting the chances of diseases in newborns and nursing mothers. In the course of this research study the researchers observed that any amount of breast milk given to the child is still helpful to them. Data obtained from the 120 copies of questionnaire administered to the mothers since the newborns cannot provide information, were analyzed and the following findings made- Exclusive breastfeeding is beneficial to the health of the newborns in Isobor.

RECOMMENDATION

Based on the conclusion, the following recommendations were made; nursing mothers should practice exclusive breastfeeding in order to promote the health of their children. Health personnel should carry out campaign on exclusive breastfeeding to improve the attitudes of nursing mothers toward breastfeeding in Isobo. Government should provide means of encouraging nursing mothers on exclusive breastfeeding practice.

Suggestion for further study

The researcher suggests that further research works be carried out on exclusive breastfeeding in this area.

REFERENCES

- Agostoni, C. and Haschike, F., Infant formulas recent developments and issues. Washington: Minerva Publishing Company, 2003.
- 2. Allison M. and Lewis S. The complete guide to pregnancy baby care and baby food. United Kingdom: Anness publishing Limited, 2009.
- 3. Awatef, M, olfa, G, Imed, H, et al. Breastfeeding reduces breast cancer risk. Tunisia: cancer causes and control company, 2010.

4. Bartick, M. and Reinhold, A., The burden of soboptimal breastfeeding. New York: cost analysis Ltd., 2010.

- 5. Gartner, L. M, Morton, J, Lawrence R. A, et al. Breastfeeding and use of human milk. Kaduna: Breastfeeding institution, 2005.
- 6. Greer, F. R, Sicherer, S. H, Burks, A. W., Effects of early nutritional interventions on the development of atopic disease in infants and children. Kaduna: Infant formula feeding company, 2008.
- 7. Kramer, M. S. and Kakuma, R., Optimal duration of exclusive Breastfeeding. Journal of infant development, Washington: stve publishing company, 2002; 34(2): 21-24.
- 8. Mayer- davis E, Dabelea, D. D, Lamichane, A. P, etal., Breastfeeding and type 2 diabetes in the youth of three ethnic groups. Ilorin: Rajah Dynamic printer, 2008.
- 9. Ministry of women and child development affair\UNICEF. Unpublished material. University of Ibadan, 2012.
- 10. Montgomery, S. M, Ehlin, A, Sacker, A., Breastfeeding and resilience against psychological stress. Canada: Government printer press, 2006.
- 11. WHO 2014. "Infant and young child feeding Fact sheet N°342". 2014. Retrieved 8 February 2015.
- 12. WHO 2015."Are there any special conditions or situations in which I should not breastfeed?" 19 December 2013. Archived from the original on 8 July 2015. Retrieved 27 July 201.