

Hosted by



Health Benefits of Exclusive Breastfeeding on Children as Perceived by Pregnant Women in Ilorin South LGA, Kwara State, Nigeria



Ibrahim Ologele*, Baba Dare Abubakar, K.A. Jidda3, Q. O. Abdulrasaq, Folakemi Iyinoluwa Gideon, I.I. Kperogi

Department of Health Promotion and Environmental Health Education, Faculty of Education, University of Ilorin, Ilorin, Nigeria

Corresponding author: Ologele.i@unilorin.edu.ng

Tel:+234(0)8063679928

DOI 10.53974/unza.jabs.7.3.1150

ABSTRACT

Breastfeeding aids general health growth and development in the infant. This study examined the impact of exclusive breastfeeding on the health of children as perceived by nursing mothers in Ilorin South LGA, Kwara State. The objective of the study was to examine if exclusive breastfeeding reduces infant mortality or promotes rapid growth and development in children as perceived by pregnant women in Ilorin South LGA, Kwara State, Nigeria.

A descriptive research design of the survey type was adopted. A multistage sampling technique was used for the study. Four hundred (400) respondents were sampled for the study. A researcher-structured questionnaire, which was validated and tested for reliability, was adopted for the study. The instrument was administered by the researchers and supported by the research assistants. The data collected for the study was analysed using the inferential statistics of chi-square was used to analyse the hypotheses postulated for this study at 0.05 alpha level.

The findings revealed that exclusive breastfeeding reduced infant mortality as perceived by pregnant women with the calc. χ^2 value of 881.17 is > the critical value of 16.92 at the degree of freedom of 9 @ 0.05 alpha level. Exclusive breastfeeding promotes physical growth and development in infants as perceived by pregnant women with the calc. χ^2 value of 856.62 is > the critical value of 16.92 at the degree of freedom of 9 @ 0.05 alpha level. Based on the findings, it was concluded that exclusive breastfeeding reduced infant mortality and promoted physical growth and development. The researchers

recommended, among others, that the Primary Health Care Development Agency in Ilorin South Local Government should create specific programmes aimed at educating pregnant women about the advantages of exclusive breastfeeding. This is to decrease the rate of infant mortality in the area under study.

Keywords: *Health-benefits, Exclusive, Breast-feeding, Pregnant-women, Children.*

INTRODUCTION

Exclusive breastfeeding refers to the practice of feeding an infant solely with breast milk or expressed breast milk, without the inclusion of water, breast milk substitutes, other liquids, or solid foods. Exclusive breast feeding, as defined by the World Health Organisation (WHO) and the United Nations Children's Fund (UNICEF), refer it to the practice of feeding a newborn solely with breast milk, either directly from the mother or a wet nurse, or through expressed breast milk. The World Health Organisation advises that newborns should be exclusively breastfed for the first six months of life, and that breastfeeding should be continued for at least two years after delivery. It is also suggested that safe, suitable, and sufficient supplemental foods be introduced at the age of six months. According to the American Academy of Paediatrics (2012), human milk is considered species-specific and superior to any other breast milk substitutes.

The beneficial impacts of breastfeeding on both the newborn and the mother have been observed in both developed and developing nations. Studies have suggested that promoting higher breastfeeding

rates could potentially avoid 1.3 to 1.45 million lives in 42 countries with high mortality rates (Jones *et al.*, 2003; Lauer *et al.*, 2006). Exclusive breastfeeding refers to the practice of feeding newborns just breast milk without any addition of water, other liquids, tea, herbal remedies, or food during the first six months of life, except for vitamins, mineral supplements, or medicines (Nkala & Msuya, 2011). Exclusively breastfeeding an infant for the first six months of life has several advantages. It reduces the likelihood of the infant developing gastrointestinal infection, pneumonia, otitis media, and urinary tract infection. Additionally, mothers who breastfeed exclusively tend to regain their pre-pregnancy weight quickly and have a lower risk of developing type 2 diabetes (Kramer & Kakuma, 2012; Bai *et al.*, 2009).

The United Nations Children's Fund and the World Health Organisation have highlighted that more than 70 per cent of newborns in Nigeria are not receiving exclusive breastfeeding. In times of crises, such as those occurring in Afghanistan, Yemen, Ukraine, the Horn of Africa, and the Sahel, nursing provides a secure, nourishing, and easily available source of sustenance for infants and young children. It provides a robust protection against diseases and several types of child malnutrition, including wastage. Breastfeeding serves as a first immunisation for infants, safeguarding them against prevalent childhood ailments. Only 9 per cent of organisations in Nigeria have a workplace breastfeeding policy, suggesting that mothers do not have the necessary conditions to nurse their newborns to the fullest extent. Nevertheless, they urged governments to commit additional resources to advance, safeguard, and bolster breastfeeding policies and programmes, particularly for the most susceptible families residing in emergency contexts (Adejoro, 2022).

According to Joseph and Earland (2019), nursing is the most beneficial, uncomplicated, and cost-effective method of feeding for nearly all newborns, because it meets their nutritional requirements. Although there is compelling evidence supporting Exclusive Breast Feeding (EBF) for the initial six months of an infant's life, its global prevalence has remained low.

Providing infants with exclusive breastfeeding during the initial six months of their lives enhances their growth, health, and survival, making it a very effective and natural type of preventative medicine. Exclusive breastfeeding (EBF) is crucial for ensuring the best possible health and growth of newborns. It is linked to a reduced likelihood of various diseases and ailments that occur in early life, such as otitis media, respiratory

tract infection, diarrhoea, and early childhood obesity (Chung *et al.*, 2007 & WHO, 2008).

Childhood a crucial stage for growth and development. The age range of 0-5 years, commonly referred to as the "Golden Age", will undergo a significant and swift growth during this era. The Golden Age is a pivotal phase in the progression of maturation and advancement, wherein prompt identification of any irregularities becomes imperative. Children's growth and development disorders significantly impact their future competitiveness on a worldwide scale. Breastfeeding serves the dual purpose of nourishing the baby and playing a crucial part in the child's development. An initiative aimed at enhancing baby development is the practice of exclusive breastfeeding. According to Abidah and Novianti (2020), breast milk is both an environmental component and a necessity for proper care.

The study aimed to investigate the impact of exclusive breastfeeding on infant mortality and the rate of growth and development in infants, as perceived by expectant women in Ilorin South LGA, Kwara State, Nigeria.

APPROACH

The study employed a survey-based descriptive research design. The study cohort comprised the entire group of pregnant women residing in Ilorin South Local Government Area, located in Kwara State, Nigeria. It focused on pregnant women who were receiving ante-natal care services in the study area. It employed a multi-stage sampling approach. During the initial step, a basic random selection method was employed to choose ten out of the total fifteen wards in the study area. In stage two, the purposive sampling strategy was employed to choose one health centre from each ward that had the greatest number of registered pregnant women in the past three months within the study area. In stage three, a convenience sampling method was employed to pick 40 respondents who had enrolled for ante-natal services in each of the chosen centres. A total of 400 respondents took part in the study. The decision to employ the convenience sampling method to choose 400 participants for the study was supported by the guidelines outlined by the Research Advisor (2006). According to these guidelines, a sample size of 384 is adequate to accurately represent a population of 10,000 or more with a confidence level of 95 per cent and a margin of error of 5 per cent. Hence, the study utilised a sample size of 400 respondents. The study employed a researcher-developed questionnaire that underwent validation by three experts in the relevant topic. The reliability of the instrument was established

using a test-retest approach. The instrument was delivered twice, with a three-week interval, to a consistent group of pregnant women at Alanamu Health Centre in Ilorin West Local Government Area, Kwara State, Nigeria. The Pearson product-moment correlation coefficient was employed to determine the instrument's dependability, yielding a correlation coefficient of 0.77. Two hypotheses were formulated and subsequently examined in the study. The chi-square inferential statistics were utilised to assess the outcomes of the stated hypotheses at a significance level of 0.05 alpha. The research study was conducted from 10th, January, 2022 to 20th May, 2022. The health workers provided pregnant women with information about the health advantages of exclusive breastfeeding for their children, mothers, fathers, and the community as a whole. This information was conveyed during health talk sessions conducted by the healthcare providers at the antenatal care centres, where the pregnant women also completed questionnaires.

FINDINGS AND ANALYSIS

The study's findings were presented in the tables below, displaying the outcomes.

The primary aim of the study was to investigate if exclusive breastfeeding has a mitigating effect on infant mortality rates within the designated geographical region. The outcome derived from this investigation will allow the researchers to determine whether the expectant women in the designated region endorse the practice of exclusive breastfeeding for infants, particularly during their initial six months of life. This practice safeguards the child from premature mortality and functions as the primary immunisation the child receives from their mothers against numerous prevalent childhood ailments.

Table 1: Health benefit of exclusive breastfeeding on infant mortality.

| S/N | ITEMS | SA | A | D | SD | ROW TOTAL | Df | CAL χ^2 VALUE | TABLE | REMARK VALUE |
|--------------|--|-----------------|----------------|----------------|----------------|----------------|----|--------------------|-------|----------------------|
| 1. | Breastfeeding a child exclusively for six months is an effective preventive intervention for reducing the death rate among infants. | 187 (46.25%) | 130 (32.5%) | 55 (13.75%) | 30 (7.5%) | 400 | | | | |
| 2. | Feeding infants with breast milk only from birth increases survival chance of infants. | 192 (48.0%) | 120 (30.0%) | 47 (11.75%) | 41 (10.25%) | 400 | | | | |
| 3. | Exclusively breastfeeding infants immediately from birth up to six months can help protect them from life-threatening and deadly diseases. | 160 (40.0%) | 150 (37.5%) | 52 (13.0%) | 38 (9.5%) | 400 | 9 | 881.17 | 16.92 | H01 REJECTED D |
| 4. | Breastfeeding helps reduce the rate of mortality among infants by reducing the risk of chronic illnesses. | 173 (43.25%) | 134 (33.5%) | 53 (13.25%) | 40 (10.0%) | 400 | | | | |
| COLUMN TOTAL | | 710 (44.4%) | 534 (33.4%) | 207 (12.9%) | 149 (9.3%) | 1600 (100%) | | | | |

@0.05

Based on Table 1, the result of the table revealed that the calculated chi-square value of 881.17 is higher than the critical table value of 16.92 at the degree of freedom of 9 and 0.05 level of significance. Based on the results obtained, the pregnant women in Ilorin

South LGA, Kwara State, support the use of exclusive breastfeeding for children less than six months old, which helps in reducing child mortality in the study area

The second objective raised for the study investigated if exclusive breastfeeding promotes the growth and development of children in Ilorin South LGA, Kwara State. The result realised helped the researchers ascertain if the pregnant women in the study area supported the use of exclusive breastfeeding, which promotes growth and development among children in the study area provided at no cost, and contributes significantly to the child's physical and mental maturity.

Table 2: Health benefit of exclusive breastfeeding on physical growth and development of infants.

| S/N | ITEMS | SA | A | D | SD | ROW TOTAL | Df | CAL χ^2 VALUE | TABLE | REMARK VALUE |
|---------------------|--|------------------------------|------------------------------|------------------------------|-----------------------------|------------------------------|----|--------------------|-------|------------------|
| 13. | Breastfeeding provides all the necessary nutrients, vitamins and minerals, which promote rapid physical growth and development in infants. | 226 (56.5%) | 120 (30.0%) | 30 (7.5%) | 24 (6.0%) | 400 | | | | |
| 14. | Breastfeeding helps the cells and tissues to form and grow properly which promotes healthy growth and development in infants. | 218 (54.5%) | 114 (28.5%) | 38 (9.5%) | 30 (7.5%) | 400 | | | | |
| 15. | Breast milk ensures proper heat production and adipose tissue development for normal growth and development. | 178 (44.5%) | 140 (35.0%) | 53 (13.25%) | 29 (7.25%) | 400 | 9 | 856.62 | 16.92 | H0 REJECTED D |
| 16. | Breastfeeding helps to hasten biochemical reactions, enzymes and hormone production for rapid growth and development. | 159 (39.75%) | 125 (31.25%) | 70 (17.5%) | 46 (11.5%) | 400 | | | | |
| COLUMN TOTAL | | 781 (80.0%) | 499 (31.2%) | 191 (11.9%) | 129 (8.1%) | 1600 (100%) | | | | |

@0.05

Based on Table 2, the result of the table showed that the calculated chi-square value of 856.62 is higher than the critical table value of 16.92 at the degree of freedom of 9 and 0.05 level of significance. Based on the results obtained, the pregnant women in Ilorin South LGA, Kwara State, support the use of exclusive breastfeeding for children less than six months old, which helps in promoting physical growth and development in infants in Ilorin South LGA, Kwara State.

DISCUSSION OF FINDINGS

According to the research study conducted, a significant majority of pregnant mothers (77.8% or 881.17 chi-square value) agreed that exclusively nursing infants under six months old reduced infant mortality in the study area. The conclusion of the study aligned with the outcome of Victora *et al.*'s (2016) findings, which indicated that breast milk provides vital nutrients that safeguard newborns from infections, illnesses, and mortality. Furthermore, this discovery aligns with the perspective of Agho *et al.*, (2011), who contended that exclusive breastfeeding has been approximated to decrease newborn death rates by as much as 13 per cent in low-income nations. A comprehensive longitudinal study conducted in rural Ghana determined that implementing immediate breastfeeding for all newborns within the initial hour after birth has the potential to reduce neonatal mortality by 22 per cent. Based on a recent review, inadequate breastfeeding, particularly not exclusively breastfeeding in the first six months of life, leads to 1.4 million fatalities and contributes to 10 per cent of the overall health issues in children under the age of 5 in low-income and middle-income nations.

Furthermore, this discovery aligns with the perspective of the World Health Organisation (2021), which suggests that undernutrition is responsible for around 2.7 million child fatalities each year, accounting for 45 per cent of all child deaths. Nevertheless, a significant number of newborns and youngsters do not acquire the most advantageous nourishment. Specifically, throughout the period of 2015-2020, a mere 44 per cent of infants aged 0-6 months around the globe were solely nourished through breastfeeding. Enhancing infant and young child feeding is a crucial domain for enhancing child survival and fostering optimal growth and development. The initial two years of a child's life are crucial, as providing the best possible nutrition during this time decreases illness and death rates, lowers the chances of long-term health issues, and promotes overall better growth and progress. The importance of optimal breastfeeding cannot be overstated, because it has the potential to prevent the deaths of more than 820,000 children under the age of 5 years annually.

Furthermore, a majority of the participants in the study agreed that providing exclusive breastfeeding to infants under six months of age enhances the physical growth and development of children in Ilorin South Local Government Area of Kwara State. The result of this discovery supports the perspective of Chung *et al.*, (2007), who argued that providing infants with exclusive breastfeeding throughout the initial six months of their lives enhances their growth, health, and survival, and is considered one of the most innate and effective methods of preventive healthcare. Exclusive Breastfeeding (EBF) is crucial in establishing the ideal health and growth of children and is linked to a reduced likelihood of several diseases and ailments that occur in early life, such as otitis media, respiratory tract infection, diarrhoea, and early childhood obesity. Furthermore, the findings of this study align with the results of a cross-sectional study conducted by Abidah and Novianti (2020) in the Wonokromo district of Surabaya, during the period of June to July 2020. A purposive sample strategy was employed to specifically choose a group of 40 children who were under the age of two years. The growth and development of youngsters were the dependent variables. The data on children's growth was obtained by accessing measurements of weight-for-age, length/weight-for-age, and head circumference. Data pertaining to the development of children was gathered through the utilisation of an updated prescreening development questionnaire. Exclusive breastfeeding was considered as an independent variable. The data collected was analysed using the chi-square test. The results of the study revealed that children who were exclusively breastfed (96.8%) demonstrated superior growth and development compared to children who did not get exclusive nursing (11.1%). This difference was shown to be statistically significant ($P < 0.001$).

CONCLUSION

The study revealed that a substantial proportion of pregnant women accepted the notion that exclusively nursing children under six months of age provides them with protection against preventable childhood diseases, ultimately leading to a decrease in infant mortality rates in the study area. In addition, certain participants in the study concurred that providing exclusive nursing to infants from birth to the age of six months, without introducing water or solid food, can enhance the child's growth and development, leading to sustained excellent health. Based on the study's results, the authors suggested that the Primary Health Care Development Agency in Ilorin South Local Government should create specific programmes aimed

at educating pregnant women about the advantages of exclusive breastfeeding. This is to decrease the rate of infant mortality in the area under study. Additionally, the Local Government Health Department should implement outreach efforts to educate pregnant women about the advantages of exclusive breastfeeding for infants under six months. This initiative aims to enhance the growth and development of children during this critical period.

Funding

No specific funding was received for this study

Conflict of Interest

No conflicts of interest to declare

Acknowledgements

The authors thank all the healthcare providers, of the selected ante-natal healthcare centres, for their support during the process of questionnaire administration to the selected respondents. They also appreciate the cooperation of the respondents who participated in the study.

REFERENCES

Abidah, S.N. & Novianti, H. (2020). Effect of exclusive breastfeeding on growth and development of infants aged 0-24 months. https://www.researchgate.net/publication/354635135_EFFECT_OF_EXCLUSIVE_BREASTFEEDING_ON_GROWTH_AND_DEVELOPMENT_OF_INFANTS_AGED_0-24_MONTHS

Adejoro, L. (2022). Over 70 per cent of Nigerian infants denied exclusive breastfeeding. Available at: <https://punchng.com/over-70-of-nigerian-infants-denied-exclusive-breastfeeding/>

Agho, K.E., Dibley, M.J., Odiase, J. J. & Ogbonmwan, S.M. (2011). Determinants of exclusive breastfeeding in Nigeria. <https://bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/1471-2393-11-2>

American Academy of Pediatrics. (2012). Human Milk In Pickering LK. Red Book: 2003 Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics; 12(8):16-32. Bai, J., Middlestadt, I., Peng, T. & Fly, R. (2009). Breastfeeding reduces the risk of gastrointestinal infection. *Committee on Nutrition*, 41, 2, 223.

Chung, M., Raman, G., Chew, P., Magula, N., DeVine, D., Trikalinos, T., Lau, J. (2007). Breastfeeding and maternal and infant health outcomes in developed countries. [<http://www.ahrq.gov/downloads/pub/evidence/pdf/brfout/brfout.pdf>] Jones, I., Steketee, I., Black, L., Bhutta, A. & Morris, E. (2003). Exclusive breastfeeding and its benefits. *European Journal of Pediatrics*. Doi:10.1002/14651858.CD003517. pub2. PMID 22895934.

Joseph, F., I., Earland, J. (2019). A qualitative exploration of the socio-cultural determinants of exclusive breastfeeding practices among rural mothers, North West Nigeria. <https://internationalbreastfeedingjournal.biomedcentral.com/articles/10.1186/s13006-019-0231-z>

Kramer, M.S. & Kakuna, R. (2012). Optimal duration of exclusive breastfeeding. *The Cochrane Database of Systematic Reviews*. 8(8): CD003517. Doi:10.1002/14651858.CD003517. pub2. PMID 22895934. Lauer, Y., Betrán, E., Barros, E. & de Onís, T. (2006). Influence of breastfeeding on mortality rates. *Am J Clin Nutr*; 60:189–94.

Nkala, M. & Msuya, J. (2011). Exclusive breastfeeding: meaning. *Breastfeeding Review: Professional Publication of the Nursing Mothers' Association of Australia*; 14(1):15-23.

Research Advisor (2006). Sample size table. Available at: <https://www.researchadvisors.com/tools/samplesize.htm>.

Victora, C.G., Bahl, R., Barros, A.J., Franca, G.V., Horton, S., Krasevec, J., Murch, S., Sankar, M.J., Walker, N. & Rollins, N.C. (2016). Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. *Lancet*. 387 (10017): 475-90. Doi:10.1016/s0140-6736(15)01024-7. PMID 26869575.

World Health Organisation (2021). Infant and young child feeding. Available at: <https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding>.