

# Assessing Health Benefits Of Exclusive Breastfeeding On Infants And Its Impact On Sustainable Development

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## Abstract

The study assessed the health benefits of exclusive breastfeeding on infants and its impact on sustainable development. Exclusive breastfeeding is the practice of feeding an infant with breast milk (including expressed breast milk) only, without any food or drink, nor even water except drops or syrups consisting of vitamins, minerals' supplements or medicines when medically prescribed. This global strategy for infant and young child feeding that promotes, protects and supports the good health of the infant and mother has not been well studied in Ekiti State. Data were collected from five hundred (500) respondents. Chi-Square ( $\chi^2$ ) was used to test the hypotheses at 0.05 alpha level. The findings of the study revealed that there was significant awareness of nursing mothers on health benefits of exclusive breastfeeding towards sustainable development in Ekiti State. The findings further revealed that there was significant impact of exclusive breastfeeding on the wellbeing of infants towards sustainable development in Ekiti State. The researchers recommended that government should employ more health educators to the maternity centres in other to educate nursing mothers on the awareness of health benefits of exclusive breastfeeding habit on the infants for sustainable development.

**Keywords: Breastfeeding, Exclusive, Health benefits, Infants, Nursing mothers**

## Introduction

A healthy nutrition is essential for normal growth and development during childhood and is central to establishing the foundation for healthy living (Sadon & Oniyelu, 2011). Leviniene et.al (2009) asserted that it is widely agreed that breast milk is the real food for the human infant. World Health Organisation [WHO], (2011) recommended that mothers worldwide should exclusively breastfeed their children for six months to achieve optimal growth, development and health.

Breastfeeding, also known as nursing, is the feeding of babies and young children with milk from a woman's breast. Health professionals recommend that breastfeeding begin within the first hour of a baby's life and continue as often and as much as the baby wants. Exclusive

breastfeeding is defined as an infant's consumption of human milk with no supplementation of any type (no water, no juice, no nonhuman milk and no foods) except for vitamins, minerals and medications (Collins et al, 2016).

Exclusive breastfeeding protects the health of women by reducing the risk of breast and ovarian cancer, diabetes, and heart disease. Increased breastfeeding rates could prevent 20,000 maternal deaths each year from breast cancer alone. Exclusive breastfeeding also contributes to gains in education and economic development, reductions in poverty, and sustainable development (Sustainable Development Goals 1, 4, 8, and 10). There is as much as a 3 to 4 point IQ increase among children and adolescents who are breastfed, which leads to better performance in school and greater productivity in the workplace. Breastfeeding provides essential nutrition. Among its other known health benefits are some protection against common childhood infections and better survival during a baby's first year, including a lower risk of Sudden Infant Death Syndrome (American Academy of Pediatrics [AAP], 2012).

The most obvious benefit of breastfeeding is that it provides optimal nutrition for newborns and infants, regardless of whether they live in high- or low-income countries. It acts as a baby's first vaccine and when done exclusively for the first six months of an infant's life, as recommended by the World Health Organization, it can significantly improve the health, development and survival of children. Increasing breastfeeding worldwide would prevent over 820,000 child deaths each year (Elder, 2016).

Feldman-Winter and Goldsmith (2016) opined that exclusive breastfeeding may reduce the risk of certain allergic diseases, asthma, obesity, and type 2 diabetes. It may also help improve an infant's cognitive development.

Kawu (2018) argued that increasing breastfeeding rates could add 150 million dollars to Nigeria's economy over a one year period, as a result of increased productivity, as well as save a large chunk of the 11 billion naira households spend on breastmilk substitutes in the first six months of children's lives. Breastmilk is free as it is produced at no extra cost to the mother, and simply requires that the mother be healthy and nourished herself.

Kawu (2018) further pointed out that over 100,000 child deaths in Nigeria could be prevented if children are exclusively breastfed in the first six months of their lives and slowly introduced to other complementary foods for the next two years. The available evidence indicates that breastfeeding without any substitutes for six months prevents 72% of hospital admissions for diarrhoea and other common childhood infectious diseases. Feeding infants nothing but breast milk for the first six months of life helps babies grow, prevents under nutrition, promotes brain development and reduces the risk that children will become overweight when they get older (Alade & Bamidele, 2020).

Exclusive breastfeeding is a crucial component of the World Bank Group's recent push to invest in the early years of every child's life to support the development of "gray matter infrastructure" and contribute to the cognitive and socio-emotional skills that are crucial to prepare children for the jobs of tomorrow. It was on this view that the researchers tend to assess health benefits of exclusive breastfeeding and its implication on sustainable development.

### **Objectives of the study**

The specific objective of the study was to investigate the following:

1. The awareness of nursing mothers on health benefits of exclusive breastfeeding on infants towards sustainable development.
2. The impact of exclusive breastfeeding on infants towards sustainable development.

### **Hypotheses**

The following hypotheses were tested for this study.

1. There is no significant awareness of nursing mothers on health benefits of exclusive breastfeeding on infants towards sustainable development.
2. There is no significant impact of exclusive breastfeeding on infants towards sustainable development.

### **Methodology**

Survey design of the descriptive type of research was used for this study. This is considered as appropriate because the researchers did not manipulate any of the independent variables that is measured. The area of the study was Ado Ekiti local government area of Ekiti state.

The population of this study covered seven thousand five hundred (7500) nursing mothers and medical personnel in government maternal and child care clinics in the study area. The sample size for this study was five hundred (450) nursing mothers and fifty (50) medical personnel. Purposive sampling technique was used to select ten (10) health centres, while simple random sampling technique of fish bowl method without replacement was used to select the respondents used for the study. The instrument for data collection was a self-structured close ended questionnaire.

In order to validate the instrument, drafts of the questionnaire was prepared by the researchers and were given to experts to vet in order to establish face, content and construct validity. Based on the suggestions that were made by these experts, the items were restructured where necessary and the corrected draft of the questionnaire was used for this study.

The reliability of the instrument was established using test-re-test method of reliability. The researchers administered the instrument to twenty (20) respondents from one of the health centres that was not used for this study. After two (2) weeks, the same instrument was re-administered to the same respondents. Pearson Product Moment Correlation Coefficient (PPMCC) was used to determine the value of (r) at 0.05 level of significance. Reliability coefficient of 0.96 was obtained. The questionnaire was administered to the respondents with the help of two (2) trained research assistants and completed questionnaire were retrieved from the respondents on the spot after filling.

The completed questionnaire was collected, coded and analysed. Inferential statistics of Chi-Square ( $\chi^2$ ) was used to test the hypotheses set for this study at 0.05 level of significance.

## Results

**Hypothesis 1:** There is no significant awareness of nursing mothers on health benefits of exclusive breastfeeding on infants towards sustainable development.

**Table1: Chi-Square analysis of data on awareness of nursing mothers on health benefits of exclusive breastfeeding on infants towards sustainable development**

| S/N | Items   | Yes            | No             | Total | df | $\chi^2_{cal}$ | $\chi^2_{cri}$ | Result |
|-----|---|----------------|----------------|-------|----|----------------|----------------|--------|
| 1.  | Does exclusive Breastfeeding have a relative influence on the growth and health status of infants?                                  | 385<br>(77.00) | 115<br>(23.00) | 500   | 4  | 85.78          | 9.49           | S      |
| 2.  | Can breastfeeding contribute to children's psychological adjustment in short and long terms?  | 379<br>(75.80) | 121<br>(24.20) | 500   |    |                |                |        |
| 3.  | Does exclusive breastfeeding help the infants in the process of development, thereby adjusting them toward sustainable development? | 345<br>(69.00) | 155<br>(31.00) | 500   |    |                |                |        |
| 4.  | Does exclusively breastfed infant have healthier brain development than complementary fed child?                                    | 424(84.80)     | 76<br>(15.20)  | 500   |    |                |                |        |
| 5.  | Do non-exclusively breastfed infants have neurological dysfunction than exclusively breastfed children?                             | 277<br>(55.40) | 223<br>(44.60) | 500   |    |                |                |        |

Table 1 above shows the Chi-Square analysis of data on awareness of nursing mother on health benefits of exclusive breastfeeding on infants towards sustainable development. The Chi-Square calculated value was 85.78, the Chi-Square critical value was 9.49 and degree of freedom is 4 at 0.05 level of significance. Since the  $\chi^2$  calculated value was greater than the  $\chi^2$  critical value, hypothesis 1 which stated that there is no significant awareness of nursing mothers on health benefits of exclusive breastfeeding on infants towards sustainable development was rejected. Therefore, the result is significant. The researchers concluded that, there was awareness of nursing mother' son health benefit of exclusive breastfeeding towards sustainable development among nursing mothers in Ado local government area of Ekiti state, Nigeria.

**Hypothesis 2:** There is no significant impact of exclusive breastfeeding on infants towards sustainable development.

**Table 2: Chi-Square analysis of data on impact of exclusive breastfeeding on infant towards sustainable development.**

| S/<br>N | Items  | Yes            | No             | Total | df | $\chi^2_{cal}$ | $\chi^2_{cri}$ | Result |
|---------|--|----------------|----------------|-------|----|----------------|----------------|--------|
| 6.      | Does exclusive breastfeeding reduce the risk of breast cancer in nursing mother?                                   | 413<br>(82.60) | 87<br>(9.81)   | 500   | 5  | 51.28          | 11.07          | S      |
| 7.      | Does the production of breastmilk from the nursing mothers increase the country's economy?                         | 216<br>(43.20) | 284<br>(56.80) | 500   |    |                |                |        |
| 8.      | Will exclusive breastfeeding increase intelligence and educational attainment at latter years?                     | 389<br>(77.80) | 111<br>(22.20) | 500   |    |                |                |        |
| 9.      | Does exclusively breastfeeding lead to good health and wellbeing as included in the sustainable development goals? | 402<br>(80.40) | 98<br>(19.60)  | 500   |    |                |                |        |
| 10      | Does exclusive breastfeeding help to reduce infant mortality?  | 372<br>(74.40) | 128<br>(25.60) | 500   |    |                |                |        |

Table 2 above shows the Chi-Square analysis of data on impact of exclusive breastfeeding on infants towards sustainable development. The Chi-Square calculated value was 51.28, the Chi-Square critical value was 11.07 and degree of freedom is 5 at 0.05 level of significance. Since the  $\chi^2$  calculated value was greater than the  $\chi^2$  critical value, hypothesis 2 which stated there is no significant influence of exclusive breastfeeding on infant towards sustainable development was rejected. Therefore, the result is significant. This implies that exclusive breastfeeding has impact on infant towards sustainable development among nursing mothers in Ado local government area of Ekiti state, Nigeria.

**Discussion**

The findings of the study was in line with the submission of Holmeet.al. (2010) who asserted that, direct contact of the mother and the baby that occurs during exclusive breastfeeding is believed to cause mental and emotional activation and bonding, which contributes to growth advantages. In terms of infant behaviour, there are some suggestions that in the first few weeks of life, breastfed babies may be characterized by improved alertness and other aspects of neurobehavioral functioning. Also the finding of the study was in agreement with the finding of Metiboba et.al. (2017) who asserted that good proportion of mothers had good level of awareness of the benefits of exclusive breastfeeding. This is in keeping with finding from similar studies carried out in Kogi and Ogun states of Nigeria where majority of mothers had good knowledge of the benefits of breastfeeding. The finding of this study supported the previous study of Alade and Bamidele (2020) which was carried out in Ondo State. They opined that nursing mothers in the study area has high knowledge of health benefits of

exclusive breastfeeding on infants and thereby increased their awareness on the need for exclusive breastfeeding towards sustainable development.

The finding of the study also gave a strong support to that of Renfrew et al. (2012) who opined that women who breast feed make a substantive, direct and positive contribution to the economy through their supply of breast milk. The economic impact of infant feeding is extensive and multifaceted. Low rates of breast feeding impact on costs borne by the health service and families, through disease and its treatment as well as expenditure on breast milk substitutes. Nevertheless, the evidence from industrialised countries suggests that increasing breastfeeding rates could be a cost-saving policy. Breastfeeding is associated with higher intelligence quotients (IQs) (Horta et al, 2015) and, in the longer term, with enhanced labor market and economic outcomes (Lutter, 2016; Rollins et al. 2016). The current low breastfeeding rates globally are estimated to result in economic losses of about \$302 billion annually, or 0.49 percent of world gross national income (Victora et al. 2016). The evidence of the health, nutritional, cognitive, and long-term economic benefits of breastfeeding is clear and persuasive. Breastfeeding has protective effects for newborns and young children that prevent common diseases such as diarrhea and pneumonia, which are major causes of child mortality (Victora et al. 2016).

### **Conclusion**

Based on the results from the study, the researchers concluded that the awareness of nursing mothers on the health benefits of exclusive breastfeeding on infants was high, it was also concluded that exclusive breastfeeding brings significant impact towards sustainable development.

The researchers recommended that government should employ more health educators to the maternity centres in order to educate nursing mothers on the awareness of psychological and health benefits of exclusive breastfeeding habit on the infants for sustainable development. We must make sure that healthcare providers deepen their knowledge on the benefits of exclusive breastfeeding and equip them with the skills to counsel mothers and caregivers. Policy makers must put in place interventions to ensure breastfeeding mothers are protected and cared for in their workplaces, so they are supported to breastfeed appropriately.

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