Breastfeeding Practices among Mothers in a Gwiwa Community in Sokoto Town

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Abstract

Background: Breast feeding is the optimal nutritional source for infant. Optimal breastfeeding practices have been a challenge in our community and have contributed to poor nutritional status, increasing infant morbidity and mortality.

Objectives: To determine the exclusive breastfeeding practices and the nutritional status of the young children in a semi-urban community in Sokoto.

Methods: A cross-sectional study carried out in Gwiwa community, Wammakko LGA, Sokoto state between January 1st and June 30th, 2019. Three hundred mothers with children aged less than 24 months were interviewed using structured interviewer questionnaire. Socio-economic status was determined using Oyedeji's classification. The nutritional status was determined using WHO classification of malnutrition. Data was analysed using SPSS version 20.0.A p-value ≤0.05 was considered as significant.

Results: One hundred and forty (46.7%) of the respondents were aged 15 – 24 years and 158 (52.7%) were of low socio-economic class. Sixty-eight (22.7%) of the mothers commenced breastfeeding within the first hour of the delivery and 55 (18.3%) of the children were exclusively breastfed. One hundred and fifty-nine (53.0%) of the mother studied initiated complementary feeding in their infants at 6-8 month of age with the mean age of 5.7(±2.6) months. Two hundred and fifty-four (84.7%) used home-made cereal gruel. The median age of cessation of breast feeding was 17 months. The maternal age, educational and socio-economic statuses significantly related to the optimal breastfeeding practice ($p< 0.05$).

Conclusion: The practice of exclusive breastfeeding and expressed breast milk is very low in this community. There is need for community sensitization towards improving exclusive breastfeeding practices.

Key words: Complementary, Feeding, Practice, Nutritional, Status, Under-5.

Introduction

Breastfeeding is an optimal source of infant nutrition. Breastmilk is the ideal nourishment for infants with the three fundamentals of sound nutrition – food, health and care.[1,2] It contains all the

necessary nutrients present in a bioavailable and easily digestible form needed for normal growth and development of infants.[1-3] It contains carbohydrates, proteins, essential fatty acids immunological factors needed for the infant's growth and resistance against infections during the first two years of life. Optimal breastfeeding practices include exclusive breastfeeding for the first 6 months of life, followed by complementary foods while breastfeeding continued for up to at least 2 years of age.[3] It is recommended that newborn is initiated on breastmilk within the first hour of life as a result pre-lateal feed should be discouraged. The exclusive breastfeeding is the situation in which the infants receive only breast milk from their mother or a wet nurse, or expressed breast milk and no other liquids, or solids, with the exception of drops or syrups consisting of vitamins, minerals, supplements, or medicines.[1-3] As a component of child survival strategies, exclusive breastfeeding is the most effective strategy in reducing infant morbidity and mortality with a potential of saving 1.3 million lives every year.[4] Colostrum is the form of breastmilk produced first after delivery. It contains immunoglobulins, including secretory IgA. This helps in protecting the new born while the neonates' immune matures and start functioning properly. It also has laxative effect which helps in evacuating meconium hence reducing the potentials for developing breastfeeding jaundice.[1,2] Exclusively breastfed infants have a lower chance of becoming ill or dying from childhood diseases such as diarrhoea, pneumonia than those who were not exclusively breastfed. Breastfeeding increases oxytocin levels which also contribute to maternal-child bonding, lowering the risk of developing uterine cancer, osteoporosis, type 2 diabetes and breast cancer in women.[1,2,5,6] It reduces healthcare costs, parental employee

absenteeism, and the associated loss of family income.[7-10]

Optimal breastfeeding practices and indeed exclusive breastfeeding practices is low globally while the situation in developing countries is pathetic.[4,9] Globally, about 40% of infants are exclusively breastfed worldwide with an average of 33% among developing countries.[9] According to the National Demographic and Health Survey conducted in 2018 in Nigeria, 98% of children were breastfed with a prevalence of exclusive breastfeeding of 17% and average duration of breastfeeding reported to be 18 months and complementary foods was observed not have been introduced timely.[11] These could have contributed to the poor nutritional status and unacceptably high infant and under-5 morbidity and mortality rates in the country.

Globally, efforts are being made to improve childhood nutrition, reduce malnutrition and attendant morbidities and mortalities and the compliance with the recommended feeding practices. Presently, Sustainable Development Goals will enhance breastfeeding practices, improve child nutrition and reduce the mortality rate among under-5. In view of the importance of breastfeeding and suboptimal breastfeeding practices observed in developing countries, an insight into the breastfeeding practices and the factors associated with the suboptimal practices will be useful in designing and carrying out successful interventions. This study aimed at determining the breastfeeding practices and to examine the socio-demographic factors associated with exclusive breastfeeding among mothers in this semi-urban community in Sokoto.

Materials and Methods

A descriptive cross-sectional study carried out in Gwiwa community, Wammakko

LGA, Sokoto state, North-western Nigeria between January and March, 2019 during the weekly medical outreach program by Islamic Medical Association of Nigeria (IMAN), Usmanu Danfodiyo University and Teaching Hospital, Sokoto Branch at the Gwiwa primary health care centre, Gwiwa. The community is a semi-urban community within Sokoto town though under Wammakko LGA. There are three other LGAs that are partly within Sokoto town. These are Sokoto-North, Sokoto-South and Dange-Shuni.

Approval was obtained from the health department of the Wammako local government area and consent was taken from the mothers and Ethics and Research Committee of Usmanu Danfodiyo University Teaching Hospital, Sokoto, Nigeria. Confidentiality of the information obtained was maintained within the members of the research team. Mothers who were breastfeeding or had breastfed and with children aged 0 - 24 months were consecutively recruited for the study during free medical outreach clinics. Information was obtained from the participants by interviewing using structured interviewer questionnaire. The data obtained include the mother's age, education and occupational statuses of parents, exclusive breast-feedingstatus, age of commencement of complementary feeding, and age when breast feeding was stopped. The socio-economic status was determined using Oyedeji's socio-economic classification scheme.[12] Data was analysed using SPSS version 20.0.The results were presented in frequency tables. Chi-square was used to assess the association between the rate of malnutrition and related variables. A p-value ≤ 0.05 was considered as significant.

Results

A total of 300 mother-children pairs participated in the study. One hundred and

forty-three (47.7%) of the respondents were aged 15 – 25 years, 156 (52.0%) had Islamic Education and 180 (60.0%) were of low socio-economic class as shown on Table I. All the respondents were breastfeeding or had breastfed their children. Sixty-eight (22.7%) of the mothers commenced breastfeeding within the first hour of the delivery, 126 (42.0%) 1-12 hours, 94 (31.3%) 12 – 24 hours and 12 (4.0%) after 24 hours. Two hundred and thirty-four (78.0%) used pre-lacteal feeds for varying number of days, the commonest being cow milk and water (Figure 1). Fifty-five (18.3%) of the children were exclusively breast fed (Figure 2). One hundred and fifty-nine (53.0%) of the mother studied introduced their children to complementary feed at 6-8 month of age with the mean age of 5.7(±2.6) months. One hundred and thirty-six (45.3%) used home-made cereal gruel fortified with various nutrients sources such as soya bean powder, crayfish or groundnuts, 128 (42.7%) used home-made plain millet gruel and 36 (12%) used commercially available complementary cereal feeds. The median age of cessation of breast feeding was 17 months with 14 (4.7%), 49 (16.3%) and 11 (3.7%) of the children weaned off breastfeeding at 12 months, 18 months and 24 months of age respectively (figure 3). The maternal age (p= 0.01), educational (p=0.03) and socio-economic statuses (p= 0.02) significantly related to the optimal breastfeeding practice. The rate of optimal breastfed was 17.5%, among mothers aged 15 – 25 years, 14.7% among mothers aged 26 – 35 years and 29% among mothers aged above 35 years. The difference was statistically significant (p= 0.01). The rate of optimal breastfed was 18.4% and 18.2% among mothers who had non-formal and formal education respectively. The difference was not statistically significant (p= 0.03). The rate of optimal breastfeeding was 33.3%, 19.2%

and 14.4% among mothers of upper, middle and lower socioeconomic background respectively. The difference was statistically significant (p= 0.02).

Table I: Socio-demographic characteristics of the mothers studied.

Variables	Number	Percentage
Age of the Mothers		
15.0 – 25.0	143	47.7
25.1– 35.0	109	36.3
> 35.0	48	16.0
Total	**300**	**100**
Mother's Education		
None	54	18.0
Islamic	156	52.0
Western	90	30.0
Total	**300**	**100**
Socio-Economic Status		
Upper	43	14.3
Middle	79	26.3
Lower	178	59.3
Total	**300**	**100**

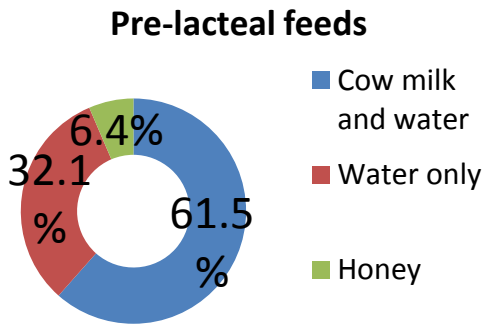

Figure 1: Pre-lacteal feeds used among the mothers in Gwiwa community in Sokoto.

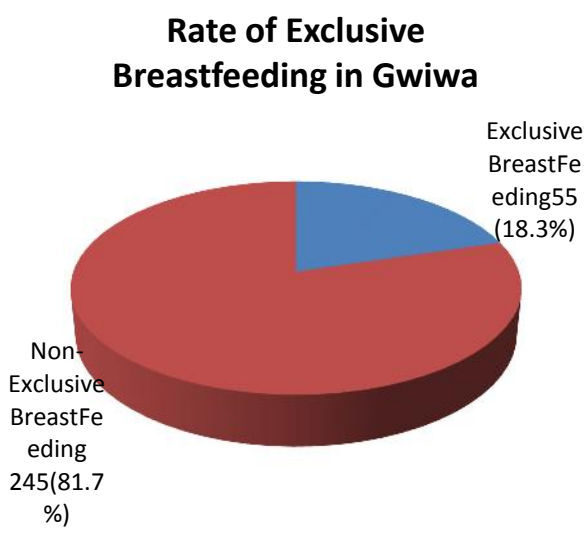

Figure 2: The rate of Exclusive breastfeeding in Gwiwa community in Sokoto.

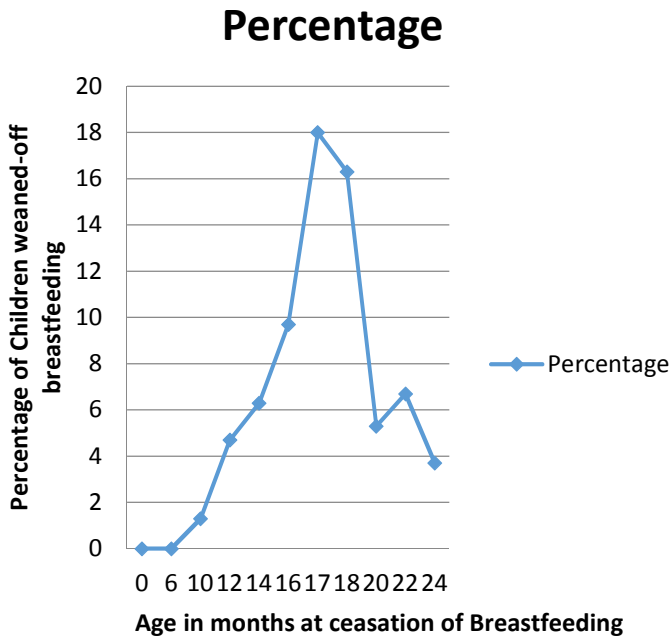

Figure 3: Duration of breastfeeding among mothers in Gwiwa community in Sokoto.

Discussion

Breastfeeding is the cornerstone of infant nutrition.[1,3,6,13] It has been shown to have numerous benefits for the infants, mothers, family and the community at large. This study has depicted the breastfeeding practices among mothers in a semi-urban community in Northwestern Nigeria. Majority of the mothers in this series were young mothers, had Islamic education and from poor socio-economic background. These are the peculiarities of this part of the world. These factors can be improved upon and harnessed to have positive impact on the breastfeeding practices, nutritional and health indices of this region. The young mothers are full of strength with adequate nutritional education, which are also contained in the Islamic doctrines, and empowerment, will nurture their young ones appropriately and adequately. A vast majority of the respondents in this series breast fed their children. This is similar to the reports from earlier studies within and outside Nigeria.[14-17] This suggests that breastfeeding is a culture of the people of this region and indeed humans in general as obtained in most of the communities in the sub-Saharan Africa.

The guidelines on infant and young children recommend initiation of breastfeeding immediately after delivery or within first hour of birth.[18] The timely initiation of breastfeeding is low (22.7%) in this study. In related studies in Taiwan,[19] India[20] and Osogbo,[15] Southwest Nigeria, where 15%, 23.5% and 28.6% of the mothers, respectively, initiated breastfeeding within an hour of life. This finding was however lower compared to the findings reported from Lagos,[21] Nigerian health and Demographic Survey,[11] Ghana,[16] Ethiopia[22] and Nepal[23] where majority of the mothers initiated breastfeeding within an hour of birth. Late initiation of neonates on breastfeeding in this series may be

connected to the cultural belief of colostrum being dirty from its appearance. Therefore, there is need for cultural reorientation through nutritional education to the mothers and even the grandparents in the community. Early initiation of breastfeeding protects the newborn from acquiring infections, through the immunological benefits of colostrum, and therefore, reduces neonatal mortality rate. It also increases the mother to child bonding, regulates infant breathing, temperature and enhances prolongation of breastfeeding.[24]

The Optimal breastfeeding practices include exclusive breastfeeding for the first 6 months of life, followed by complementary foods while breastfeeding continued for up to at least 2 years of age or beyond.[2,18] The prevalence of exclusive breastfeeding in this series is 18.3% which is low. The 2018 Nigerian Demographic and Health Survey reported the National average of 29%.[11] A study earlier in a rural community in Sokoto[26] reported exclusive breast feeding rate of 31% while rates of 16.4%, 82%, 66% and 60.8% were reported among mothers in Osogbo,[15] Lagos,[21] Ghana[16] and Ethiopia[22] respectively. This suggests the rate of exclusive breastfeeding varies within the cultures, countries and continent at large. The low rates of timely initiation of breastfeeding and exclusive breastfeeding in this series suggest that significant proportion of these children did not receive colostrum and such were denied the nutritive, physiologic and immunologic benefits of early and exclusive breastfeeding. Exclusive breast feeding for the first 6 months of life has numerous benefits for the infant and the mother. These include reduced risk of diarrhoea, respiratory and urinary tract infections, hence improving the child's growth and improve survival while it helps the mother to return to her pre-pregnancy weight rapidly and reduced risk of breast and uterine cancers, osteoporosis and type 2

diabetes mellitus.[2,8,9] The practice of exclusive breastfeeding was found to be commoner among mothers with formal education, upper socio-economic class and maternal age. This finding is in consonance with earlier reports.[14-16,20,22] This may be related to the improved awareness and empowerment associated with these group of mothers. This, therefore, further emphasizes the role of improving awareness of breastfeeding practices and empowerment of mothers in improving optimal breastfeeding practices and by extension, infant and young children nutrition in our community.

Complementary feeding is the introduction of other foods other than breastmilk or infant formula in the form of liquid, semi-solid while breastfeeding continues in order to supply nutrients to augment nutrients from breastmilk for normal growth and development of an infant.[1,26] It is a cornerstone to infants and young children nutrition.[27] For it to be successful, it has to be timely, appropriate in texture, adequate in quality, affordable and safe from contamination.[9,18,26,27] The rate of timely initiation of complementary feeding in this study was 53%. This is similar to reports from earlier studies from within and outside Nigeria.[15,20,23,28-30] However, the quality and diversity of the complementary foods were suboptimal. This is situation in most of the developing countries and hence, the poor state of nutrition of the under-5s in these communities. This has been associated with low level awareness of complementary feeding practices, level of poverty and lack of knowledge of the nutritional values of the locally available nutrients sources. There is need for creation of more public awareness among mothers through the media, religious bodies and support groups in the community. This information on childhood nutrition needs to be inculcated to school

children and women of reproductive age group.

The breastfeeding on demand is expected to be continued till 2 years or beyond while the child is on optimal complementary feeding as contained in the recommendations for infant and young children nutrition.[9,18] The median duration of breastfeeding in this study is 17 months with 16.7% and 3.7% of children breastfed till 18 months and 24 months respectively. About 28% of the children were being breastfed by 2 years according to the 2018 NHDS with a median duration of breastfeeding being 18.5 months.[11] This finding is similar to that reported in the literatures[15,23,29] and may be related to the perception that children at these ages are old enough to stop breastfeeding and milk insufficiency. The breast milk provides quality nutrients and protection against ARIs for the growing even after introduction of complementary feeding, hence its critical role in infant and young child nutrition.

Conclusion: The practice of exclusive breastfeeding and expressed breast milk is very low in this community. There is need for community sensitization towards improving exclusive breastfeeding practices in our community. Hence, the mothers in our communities should be encouraged to improve exclusive breastfeeding practices through health education, family support and the religious/community leaders. This will impact positively on the nutritional status, reduce under-5 morbidity and mortality in the community, and raise the hope for a healthy and productive future generations.

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