

Prevalence of Exclusive Breastfeeding among Nursing Mothers in Afijio Local Government Area, Southwest, Nigeria: A Cross-sectional Study

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ABSTRACT

Background: Exclusive breastfeeding is public health intervention strategy for child health development and growth from birth to weaning period. It is recommended for nursing mothers during Health promotion sessions by Health Educators according to WHO AND UNICEF guidelines at various health facilities. Nigeria recorded 17.5% prevalence rate of exclusive breastfeeding despite regional variations.

This is relatively low to WHO recommendations. Hitherto no study has been conducted in Afijio Local Government, South west of Nigeria for prevalence of exclusive breastfeeding. Hence the aim of this study is to evaluate Knowledge, Altitude and Practice of exclusive breastfeeding by distribution of questionnaires to nursing mothers in Afijio Local Government areas.

Methodology: a cross sectional study of randomly selected 172 nursing mothers from Ilora, Awe, Jobele/ Akinmoorin and Fiditi of Afijio Local Government Area. Data analysis was employed by frequency, relative frequency and simple percentage.

Results: A total number of 172 nursing mothers were interviewed with mean age of 33 ± 4.0 years. The literacy level is 97%. The employment rate is 65%. Formal education received on knowledge of exclusive breast feeding by respondents (Prevalence) is 89.0 %. The altitude of the participants on benefits of exclusive breastfeeding is 78.5%. Finally, practice of breastfeeding especially within first hours of birth is 84%.

Conclusion: There is need for more support from local government's health authority on exclusive breast feeding in Afijio Local Government Areas. Thus training courses should be provided to skilled birth attendants for skilled support to breastfeeding mothers.

Keywords: Exclusive Breastfeeding, Nursing Mothers, Afijio Local Government Areas.

INTRODUCTION

Exclusive breastfeeding is accepted as natural feeding method for infant from mother's mammary gland on demand or when desired. Globally it is considerably low compare to constituted health authorities (WHO and UNICEF) recommendations.

Breast milk is the primary source of nutrition for newborn infants, comprising fats, proteins, carbohydrates, and a varying composition of minerals and vitamins. Breast milk also contains substances that help protect an infant against infection and inflammation, such as symbiotic bacteria and other microorganisms and immunoglobulin A, whilst also contributing to the healthy development of the infant's immune system and gut microbiome (1). Breast milk is free of charge and universally available, even in a low resource area. Yet less than 40% of infants in the developing world are exclusively breastfed. Common belief that breastfeeding is not enough to satisfy a growing infant has been claimed by nursing mothers. Besides cultural practices that require infants to be 'cleansed' with specific foods are myths held by some breast-feeding mothers. Aggressive marketing of infant formula; a lack of competent breastfeeding counsellors; and heavy workloads for mothers, including inadequate maternity leave provision have been attributed (2).

In sub-Saharan Africa, exclusive breastfeeding is not encouraging. Ghana Health Service and USAID shows exclusive breastfeeding at six months stands around 43% while early initiation of breastfeeding hovers around 50% (3). In Nigeria, Akinremi and Samuel, 2015 discovered 36.2% prevalence of exclusive breastfeeding among women in Ibadan. In Kware Kano, Oche et al., 2011 reported 31% of exclusive breastfeeding among lactating mothers, while Aniekam et al., 2014 reported 44.5% among antenatal attendees in Uyo, southern Nigeria. In Kano, Abdulmaleek and Musa, 2016 showed 47.2% prevalence of exclusive breastfeeding among multigravida women attending antenatal clinic in Aminu Kano Teaching Hospital, and in five rural communities in Savannah region of Nigeria. In Bayelsa state of Nigeria, Peterside et al., 2013, reported 44.8% exclusive breastfeeding prevalence and said that exclusive breastfeeding increased with age as well as higher maternal education. In a similar study in Yobe state, Bolanle, et al., 2013 revealed that 78.8% of the mothers initiated breastfeeding within one hour of delivery, 5.0% gave colostrum to their babies, while 39.0% of the mothers gave breast milk immediately after delivery. A study on breastfeeding Knowledge and Practices among mothers of children under 2-years of age living in a military barrack, reported that most respondents (97.3%) breastfed their babies, 56.5% of them initiated breastfeeding within an hour of delivery (Akinyinka et al., 2016). A study conducted in Edo State of Nigeria revealed that although, 82% of the women were breastfeeding their babies, only 20.0% did so exclusively for 6 months (Salami, 2006). And in Ille Ife, Osun State, Ojofeitimi et al., 2000, found a prevalence of 61.0% of exclusive breastfeeding among mothers (4).

In Afijio Local Government of Oyo State, southwest, Nigeria, there is no documented evidence or study conducted. Thus the objective of this study is to evaluate the prevalence of exclusive breastfeeding by self administered questionnaires distributed to recruited participants attending postnatal services in Ilora, Fiditi, Awe and Jobele/ Akinmoorin.

MATERIAL & METHOD

Study Area:

The study was conducted in 3 urban areas and 1 rural area of Afijio area council included Ilora, Awe, Jobele/ Akinmoorin, and Fiditi respectively. Afijio Local Government was officially established under autonomous political entity in May 1989. The administrative headquarter is Jobele. It occupies a land area of 800 square kilometers and population of 134, 173 according to 2006 census.

Afijio Local Government is bounded in the South by Akinyele Local Government; North, Oyo East Local Government; West, Iseyin Local Government. It shares common boundary with Ejigbo and Iwo Local Government Areas of Osun State. The geographical coordinate is 7°48' N 3°54' E (5).

Research Design:

A descriptive cross-sectional study of Knowledge, Altitude and Practice of Exclusive Breast feeding Among Nursing Mothers in Afijio Local area council was conducted.

Inclusion Criteria:

Nursing mothers within reproductive age group are recruited to participate. Besides they are resident of Ilora, Awe, Jobel/Akinmoorin and Fiditi for minimum of 6 months. Grandmothers, mothers –in-laws, and HIV mothers were excluded.

Study Population & Sampling Technique:

Every breastfeeding mother between the ages of 16-50 years regardless of the infant age attending immunization schedule according to National Program Immunization Schedule during postnatal service in selected health facilities within Afijio Local area council were employed for the study.

The respondents were selected using simple random sampling technique. Afijio Local area council was mapped into 4 study areas namely Ilora, Awe, Jobele/ Akinmoorin and Fiditi. Primary Health Care Centers in each area is further selected randomly and visited based on their days of postnatal clinic.

Target Population:

172 nursing mothers between the reproductive ages of 16-50 years regardless of the age of the infants residing in the study area were recruited.

Sample Size Determination: An appropriate sample size with of 172 nursing mothers using the formula: $n = \frac{Z^2 P (1-P)}{d^2}$ (Naing et al., 2006) with a confidence interval of 95% and precision of 5% (6). Where $Z = 1.96$ (Statistical constant), $P = 11\%$ (based on previous prevalence), $d = 5\%$ (marginal error). $n = \frac{Z^2 P (1-P)}{d^2} = \frac{(1.96)^2 \times 0.11(1-0.11)}{(0.05)^2} = 172$.

Questionnaires:

A self administered pre-tested questionnaire containing 24 items was used to collect data. The questions were used to gather information on mother`s sociodemographic status, Knowledge, Altitude and Practice of exclusive breastfeeding.

Data Analysis:

Data collected were analyzed using frequency, relative frequency and simple percentages.

Ethical Consideration:

Permission for the study was obtained from the official in charge of the designed health facilities, and department of health, Afijio Local Area Council while informed consent was obtained from the participants.

RESULTS

Sociodemographic Characteristics of the Nursing Mothers

Table 1 showed that of 172 Nursing mothers, the most childbearing age group is 21-30. Majority of the respondent are married (94 %); the literacy rate is high (97%), and they are low income earners (Traders) as shown in Figure 1.

Table 1 Sociodemographic Characteristics of the Nursing Mothers

Age Group	Frequency	Relative Frequency	Percentage
< 20	17	0.01	10%
21-30	91	0.53	53%
31-40	51	0.29	29%
41-50	13	0.08	8%/
Marital Status	Frequency	Relative Frequency	Percentage
Married	161	0.94	94%
Single	11	0.06	6%
Educational Status/ Level	Frequency	Relative Frequency	Percentage
No formal Education	5	0.03	3%
Primary	22	0.13	13%
Secondary	97	0.56	56%
Tertiary***	48		28 %
Occupation	Frequency	Relative Frequency	Percentage
Employed	112	0.65	65% /0.65
Profession			
Teaching	7	0.04	4%
Trading	59	0.34	34%
Hairdressing	12	0.07	7%
Tailoring	20	0.13	13%
Health Professional	10	0.05	5 %
Farming	4	0.02	2%
Unemployed	60	0.35	35 %

***It means University, College of Education and Polytechnique

Cross cradle Hold	26	0.15	15 %
Football Hold	7	0.04	4 %
Side lying Hold	42	0.24	24 %
Don't Know	36	0.21	21%

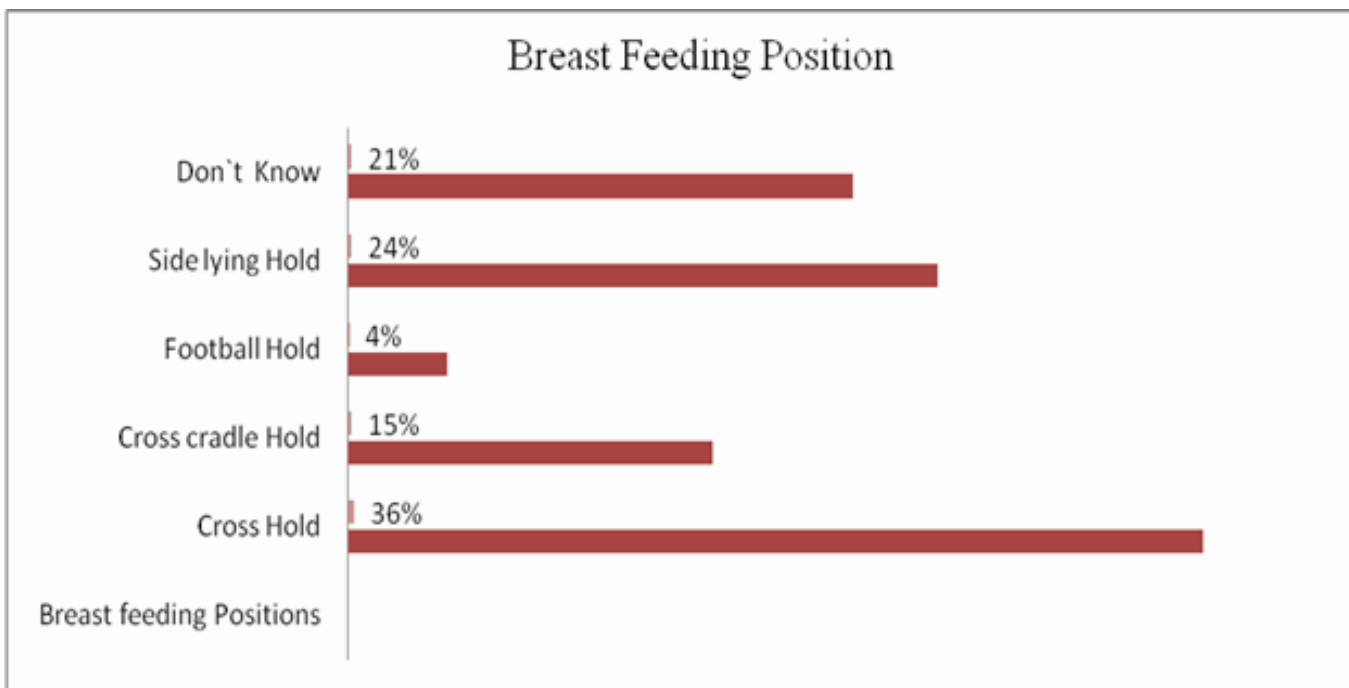


Fig 2: Breast Feeding Positions Used Among Nursing Mothers in Afijio Local Government Areas

Respondent Altitude toward Exclusive Breastfeeding:

The participants displayed positive attitude towards exclusive breastfeeding: They agreed that there are benefits of exclusive breastfeeding for child health development and growth. Besides they somewhat believed that breast feeding in public places offer no harmful effect (56 %) and challenges (65 %) respectively.

Table 3 Altitude towards Exclusive Breast feeding

Benefit of Exclusive Breast feeding	Frequency	Relative Frequency	Percentage
Agreed	135	0.78	78%
Disagreed	37	0.22	22%
Breast feeding in Public Places	Frequency	Relative Frequency	Percentage
Agreed	97	0.56	56 %
Disagreed	75	0.44	44 %
Challenges Faced on Exclusive Breast feeding	Frequency	Relative Frequency	Percentage
Yes	60	0.35	35%
No	112	0.65	65 %

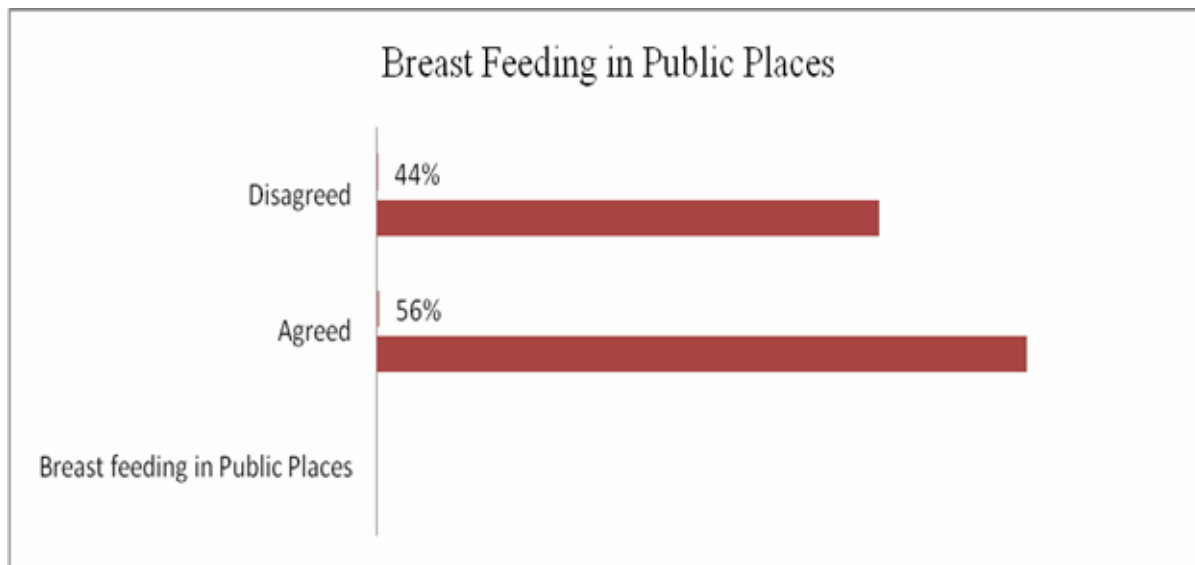


Fig 3: Breast Feeding in Public Places

Practice of Exclusive Breastfeeding:

This is well established among the breast feeding mothers within the first hours of birth (84%) with higher percentage of cleanliness (87%). Most of the breast feeding mothers practiced exclusive breast feeding within 6 months (51%) followed by 23% who did not as shown in **Fig 4**.

Quite number of participants (65 %) enjoyed support from local health workers from their various health facilities especially on weaning period and when to start complementary meal.

Table 4 Practice of Exclusive Breast feeding

Breast feeding within First Hour of Birth	Frequency	Relative Frequency	Percentage
Yes	144	0.84	84% / 0.84
No	28	0.16	16% / 0.16
Total	172		
Duration of Practiced Exclusive Breastfeeding	Frequency	Relative Frequency	Percentage
0-6 Months	87	0.51	51% / 0.51
6-9 Months	14	0.08	8% / 0.08
>9 Months	6	0.03	3% / 0.03
1-2 Years	25	0.15	15% / 0.15
Don't Practice Exclusive Breast feeding	40	0.23	23% / 0.23
Total	172		
Expressed Breast Milk for Storage	Frequency		Percentage
Yes	52		30%/ 0.30
No	120		70% / 0.70

Hand Washing Before Exclusive Breast Feeding or After Defecation	Frequency	Relative Frequency	Percentage
Yes	149	0.87	87% / 0.87
No	23	0.13	13% / 0.13
Support from Local Government Health Authority on Exclusive Breast Feeding	Frequency	Relative Frequency	Percentage
Yes	104	0.6	60 % / 0.6
No	68	0.4	40 % / 0.4

Fig 4: Practice of Exclusive Breastfeeding

DISCUSSION

Knowledge of Exclusive Breastfeeding:

In this study, Table 2, awareness of Exclusive breast\feeding (89.50%) is well established among nursing mothers of Afijio Local Government Areas. Based on Food Agricultural and Organization (FAO) guidelines thresholds suggestive of nutrition intervention, a knowledge score of $\leq 70\%$ could be urgent for nutrition intervention. Percentage score of $> 70\%$ in the knowledge tested were considered to have a high level of knowledge, and $\leq 70\%$ were considered as having a low level of knowledge (7)

The outcome of this study depicted that mothers with a high level of knowledge of exclusive breastfeeding knew that only breast milk was nutritionally important for the baby in the first six months. This result correlated to the previous studies conducted in Ghana (8) and Brazil (9) . These findings in maternal knowledge should be taken into consideration by health workers, policymakers, and health educators. However this survey identified knowledge gaps in breast feeding positions. Despite routine health promotion for breastfeeding on weekly basis during postnatal services, very few participants were aware of various breastfeeding positions with poor estimates recorded: Cross Hold 36 %, Cross cradle Hold 15 %. Football Hold 4 %, Side lying Hold 24 %, Don` t know 21 %. These unmet needs could be solved by provision of training for the skilled birth attendants, and free postnatal services, education and medication.

Attitude toward Exclusive Breastfeeding:

The survey emphasized the benefits of Exclusive breastfeeding as estimated in Table 3. .It showed the positive attitude similar to previous studies. The respondents agreed with the benefit of exclusive breast feeding (78 %) namely: Reduction of severe or fatal diarrhea; Cleanliness; It contains antibodies; Complete Food Inexpensive; Birth spacing; Bonding of the mother to her infants.

According to the FAO guide[1]lines thresholds suggestive of nutritional intervention, an attitude score of $\leq 70\%$ is considered urgent for nutrition intervention. All mothers who scored $> 70\%$ in the attitude test were considered to have a positive attitude and those scoring $\leq 70\%$ were considered to be less positive (10). The results of this research indicated that few mothers had a positive attitude towards exclusive breastfeeding and belief that exclusive breastfeeding was beneficial to the child and better than artificial feeding.

According to Samburu et al., (11). there is a correlation between good attitude towards exclusive breast feeding with the expected benefits associated with it.

Also a good number of the participants (56 %) support breastfeeding in public places such banking hall, place of worship like churches and mosques with no harmful challenges (65%).

Practice of Exclusive Breastfeeding:

Interviewed nursing mothers are acquainted with breast feeding within the hours of birth in this study. The results of this survey revealed that most of the mothers have breastfed their children, but only 51 % of mothers had exclusively breastfed their child for the first six months though most mothers were aware of it and considered it important for the health of the women and the baby. Findings from this research were higher compared with studies conducted in the developed countries such as Brazil 19% (12), China 6.2% (13), Italy 33.3% (14) respectively. It was discovered in addition that most participants (86.9%) started breastfeeding right after birth.

World Health Organization encourages commencement of breastfeeding during the first hour after birth and continues breastmilk without other feeds for the next 6months after birth. It has been observed that exclusive breastfeeding for the six month of infant life prevents instant death by 13% (15). A study was done in BPKIHS, Dharan on a similar subject-matter , and it was found that 41.5% of participants in that study started breastfeeding under an hour after delivery (16). Also similar research was done in a Teaching Hospital in Nigeria (Amino Kanu Teaching Hospital). This was done among multigravida women receiving AnteNatal Care Services to assess their knowledge, attitude and practice of exclusive breastfeeding (17).

Prevalence rate for duration of exclusive breastfeeding during this research are: 51 % for the first six months; 8% between 6-9 months; 3 % < 9 months; 15 % between 1-2 Years; 23 % did not practice exclusive breastfeeding. Contrary to the results of Silveira et al, 2008 (18) they found that exclusive breastfeeding initiation rates in Africa; in the first hour of infant life was less than 50%. Consequently higher percentages of early initiation of breastfeeding among the participants in our study resulted from availability of skilled birth personnel (60 %) and facilities especially primary health care centers.

CONCLUSION

This research supported overwhelming evidence of benefits of exclusive breastfeeding within the hours after deliveries. Nursing mothers from Afijio local Government Areas could not benefit considerably from it because of inability to correctly position the infant to the breast nipples.

Hence Breast feeding Training for Health workers at health facilities could be adopted and use of technology (Breast Feeding Organizer) for self learning by breast feeding mothers could be incorporated.

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