

Knowledge and practice of exclusive breastfeeding among antenatal attendees in Uyo, Southern Nigeria

Uyo, Güney Nijerya'daki antenatal katılımcıların sadece anne sütü ile besleme ile ilgili bilgi ve uygulamaları

Aniekan M. Abasiattai¹, Etiobong A. Etukumana², Eno Nyong³, Ukeme E. Eyo⁴

¹Department of Obstetrics and Gynecology, Faculty of Clinical Sciences, University of Uyo, Uyo, Nigeria

²Department of Family Medicine, Faculty of Clinical Sciences, University of Uyo, Uyo, Nigeria

³Department of Pediatrics, Faculty of Clinical Sciences, University of Uyo, Uyo, Nigeria

⁴Department of Physical and Health Education, Faculty of Education, University of Uyo, Uyo, Nigeria

Abstract

This cross sectional study was conducted at the maternity unit of the University of Uyo Teaching Hospital, Uyo. The aim was to assess the knowledge and practice of exclusive breastfeeding among women receiving antenatal care in the teaching hospital. Semi-structured questionnaires were administered to two hundred women in the antenatal clinic. Majority of the respondents (69.5%) were between 25-34 years of age, 57.0% were multiparous and 67.7% had attained tertiary level education. Eighty-four women (42.0%) were able to define exclusive breastfeeding correctly while just 7.0% of the respondents knew the ten steps to successful breastfeeding. Only 44.5% of the women practiced exclusive breastfeeding. None of the women belonged to a breastfeeding support group and the most common source of information on exclusive breastfeeding was the antenatal health talks (81.0%). The level of knowledge and practice of exclusive breastfeeding by women in our centre is poor. There is need for large scale health enlightenment of members of the public on exclusive breastfeeding. There is also the need for periodic retraining of relevant health workers on the practice of exclusive breastfeeding and strategies introduced for its regular monitoring and evaluation.

Keywords: Antenatal attendees; exclusive breastfeeding; Southern Nigeria; Uyo

Özet

Bu kesitsel çalışma Uyo'daki Uyo Üniversitesi Eğitim Hastanesi'nin annelik biriminde gerçekleştirilmiştir. Amaç, eğitim hastanesinde antenatal bakım alan kadınlarda sadece anne sütü ile besleme ile bilgi ve uygulamaların değerlendirilmesi idi. Antenatal klinikteki 200 kadına yarı-yapısal anket uygulanmıştır. Katılımcıların çoğunluğu (%69.5) 25-34 yaş arası, %57'si multiparöz ve %67'si dördüncü seviye eğitilmişti. Seksen dört kadın (%42) sadece anne sütü ile beslemeyi tanımlayabilirken, sadece %7'si başarılı emzirmenin on adımını biliyordu. Sadece %44.5 yüzdesindeki kadın sadece anne sütü ile beslemeyi tatbik etmişti. Kadınların hiçbiri emzirme destek gruplarına katılmamıştı ve sadece anne sütü ile besleme ile ilgili en yaygın bilgi kaynağı antenatal sağlık konuşmaları idi (%81). Merkezimizdeki kadınların sadece anne sütü ile besleme ile ilgili bilgi seviyeleri ve uygulamaları zayıftır. Toplum üyelerinin sadece anne sütü ile besleme ile ilgili geniş ölçekli bilgilendirilmelerine gereksinim vardır. Ayrıca, uygun sağlık çalışanlarının sadece anne sütü ile besleme ve bunun düzenli izlenmesi ve değerlendirmesi stratejileri ile ilgili tekrar eğitilmelerine gereksinim vardır.

Anahtar kelimeler: Antenatal katılımcı, sadece emzirme, Güney Nijerya, Uyo

Introduction

Breastfeeding is an unequalled way of providing ideal food for the health, growth and development of infants and the most natural way of feeding them in all traditions (1). It is an integral part of the reproductive process with important implications for the health of the mother (1). Human milk is the most appropriate of all available types of milk that is uniquely adapted for infant nutrition as its components consistently adapt to the child's need and environmental challenges (2). Breast milk contains virtually all the nutrients, antibodies and anti-oxidants an infant needs to thrive for the first six

months of life (3).

Exclusive breastfeeding (EBF), refers to the exclusive intake of breast milk or expressed breast milk by an infant without the addition of any other liquids or solids, with the exception of oral drops, or syrups containing vitamins, mineral supplements or medicines (4). EBF is being advocated the world over as the optimal mode of feeding for young infants in the first six months of life, followed by breast milk and complimentary feeds thereafter till two years of age or beyond (4).

Correspondence: Aniekan M. Abasiattai, Department of Obstetrics and Gynecology, Faculty of Clinical Sciences, University of Uyo, Uyo, Nigeria
Tel:+234 802 3174734 animan74@yahoo.com

EBF leads to a reduction in infant morbidity and mortality from systemic infections, diarrheal diseases and allergies and has been described as the



single most important intervention for preventing child deaths (5). A global increase of 8% in EBF is estimated to have reduced infant mortality by 1 million (2). EBF also confers cognitive benefits and improves intelligence, reduces childhood obesity, stimulates the immune system and enhances response to vaccination (6).

Other advantages of EBF include reduction in post partum bleeding, improvement in bone status later in life and protection against breast and ovarian cancers (7). Other benefits include lactational amenorrhea which enhances child spacing, early mother-infant bonding and reduction in infant abandonment and child abuse (8,9). EBF also provides social and economic benefits to the family and the nation as well as a sense of satisfaction to most women (7).

Following the Innocenti Declaration, the World Health Organization (WHO) and United Nations International Children's Emergency Fund (UNICEF), launched the Baby Friendly Hospital initiative (BFHI) in June 1991; an initiative that is designed to promote, protect, support and propagate the good ideals of EBF through the implementation of ten policy or procedural statements (the ten steps to successful breastfeeding) in hospitals (7).

The BFHI aims to provide a supportive environment for breastfeeding. The initiative also encourages mothers to know and practice the ten steps to successful breastfeeding (SBF) as well as enables them develop positive attitude towards the practice of EBF (10,11).

The BFHI received enormous support from stakeholders and has been endorsed and adopted by Governments, leaders and health authorities around the world leading to the expected implementation of the ten steps to successful breastfeeding in all baby friendly hospitals and clinics (12).

The Federal Government of Nigeria launched the BFHI in 1991 and since then using the "ten steps to successful breastfeeding" as a standard, over 100 health facilities in the country have been designated baby friendly (12). The University of Uyo Teaching Hospital is a 450 bed capacity tertiary Hospital located in Uyo, the capital of Akwa Ibom state in the South-South geo-political zone of Nigeria. It is the only tertiary health care facility that offers specialist care to the people in the state and its environs. Since the baby friendly initiative was implemented in the Teaching Hospital in August 2000, there has not been any study that has evaluated the practice of EBF. This cross sectional study seeks to assess knowledge and practice of EBF among women receiving antenatal care (ANC) in the centre.

Materials and Methods

This study was carried out at the maternity unit of the University of Uyo Teaching Hospital, Uyo between 1st May 2012 and 31st July 2012. A target sample size of 188 subjects was estimated using 2% exclusive breastfeeding practice rate and a sampling error of 2% (13). Two hundred consecutive consenting pregnant women who had delivered previously and were attending the antenatal clinic of the hospital were recruited into the study. An informed consent was obtained from all those who participated in the study after explanation of the study objectives and assurance of confidentiality of information. The study was approved by the Ethical Review Committee of the hospital.

Copies of semi-structured questionnaires were administered to the consenting women by trained resident doctors in the Department of Obstetrics and Gynecology during antenatal clinic sessions. The questionnaires contained questions on the socio-demographic characteristics of the women, and their knowledge and practice of EBF. Health workers (doctors, nurses, pharmacists and medical laboratory scientists), nulliparous women and severely ill pregnant women were excluded from the study.

Statistical analysis

Data entry and analysis were done with Epi-info 3.2.2 CDC Atlanta Georgia, USA statistical software. The frequencies of variables, odd ratios (OR) and P values were determined. All P-values less than 0.05 were considered significant.

Results

Socio-demographic characteristics of the respondents

The socio demographic characteristics of the respondents are shown in Table 1. Their ages ranged from 17 to 46 years with the majority belonging to the 25-34 years age group (69.5%). Most (97.5%) of the respondents were married, 57.0% were multiparous, 99.5% were Christians and 67.7% had attained tertiary level education. Seventy-four (37.1%) of the respondents were civil servants while 24.0% were full time housewives (Table 1).

Knowledge of exclusive breastfeeding

One hundred and fifth three of the respondents (75.6%) knew about the BFHI while 47 (23.5%) had never heard of the initiative [OR=10.60 (95% CI 6.51-17.31) P<0.0001]. This shows a decrease in the risk of having respondents who had not heard of BFHI and it was statistically significant.

Eight four women (42.0%) were able to define exclusive breastfeeding correctly, while 116 (58.0%) were unable to do so [OR=0.52(95% CI 0.35-0.80), P=0.0013]. This shows an increase in the risk of having respondents who were unable to define EBF correctly and it was statistically significant.

Table 1. Sociodemographic characteristics of the respondents

Variable	No. (%)	95% CI
Age group (years)		
< 20	13 (6.5)	3.5 - 10.9
20 - 24	29 (14.5)	9.9 - 20.2
25 - 29	78 (39.0)	32.2 - 46.1
30 - 34	61 (30.5)	24.2 - 37.4
35 - 39	13 (6.5)	3.5 - 10.9
40 - 44	5 (2.5)	0.8 - 5.7
>45	1 (0.5)	0.0 - 2.8
Parity		
1	78 (39.0)	32.2 - 46.1
2 - 4	114 (57.0)	42.1 - 74.9
≥5	8 (4.0)	0.8 - 12.1
Educational Status		
None	1 (0.5)	0.0 - 2.8
Primary	10 (5.0)	2.4 - 9.0
Secondary	54 (27.0)	21.0 - 33.7
Tertiary	135 (67.5)	60.5 - 73.9
Marital Status		
Married	195 (97.5)	94.3 - 99.2
Single	4 (2.0)	0.5 - 5.0
Widowed	1 (0.5)	0.0 - 2.8
Occupation		
Civil servant	74 (37.0)	30.3 - 44.1
Housewife	48 (24.0)	18.3 - 30.5
Student	27 (13.5)	9.1 - 19.0
Business	22 (11.0)	7.0 - 16.2
Skilled worker	17 (8.5)	5.0 - 13.3
Petty trader	8 (4.0)	1.7 - 7.7
Public servant	4 (2.0)	0.5 - 5.0

One hundred and thirty seven women (68.5%) were aware that the Teaching Hospital where they received ANC was designated as a baby friendly hospital. The rest of the 63 women (31.5%) were unaware (27.5%), or thought it was not (8.0%) [OR=4.73 (95% CI 3.04-7.38), P<0.0001]. This shows a decrease in the risk of having respondents who were unaware of the centre being designated a baby friendly hospital and it was statistically significant.

Fourteen of the respondents (7.0%) knew the ten steps to successful breastfeeding (SBF) while 186 (93.0%) did not [OR=0.01(95% CI 0.00-0.01), PR<0.0001]. This shows an increase in the risk of having respondents who did not know the ten steps to successful breastfeeding and it was statistically significant.

Eight-three women (41.5%) knew that Nigeria had a national policy that promotes exclusive breastfeeding, while 117 women (58.5%) either did not know (47.5%) or thought Nigeria did not have a National policy on exclusive breastfeeding (11.0%) [OR=0.50 (95% CI 0.33-0.76), P<0.001]. This shows an increase in the risk of having respondents who did not know that Nigeria had a national policy that promotes EBF and it was statistically significant.

Seventy four (37.0%) women knew there was a written policy on EBF in the teaching Hospital where they were currently obtaining ANC. The remaining 126 women (63.0%) either did not know (55.0%) or thought there was no such policy (8.0%) [OR=0.34 (95% CI 0.22-0.53), P<0.0001]. This shows an increase in the risk of having pregnant women who did not know that there was a written policy on EBF

in the Teaching Hospital and this was statistically significant.

Practice of exclusive breastfeeding

Eight-nine (44.5%) women practiced EBF for six months while 111 (55.5%) of the women did not [OR=0.64 (95% CI 0.42-0.97), P=0.03]. This shows and increases in the risk of having pregnant women who did not practice EBF for six months and it was statistically significant.

Eight-nine (44.5%) of the respondents initiated breastfeeding immediately (within 30 minutes of delivery). Twenty one (10.5%) initiated theirs within six hours after delivery, 14 (7.0%) initiated after 12 hours, twenty (10.0%) did not remember when they initiated breastfeeding. Fifty six (28%) of the women initiated breastfeeding 24 hours after delivery.

Ninety-four (47.0%) of the respondents gave their new born babies water to drink whenever the babies cried while 106 (53.0%) did not [OR=0.79 (95% CI 0.52-1.19), P=0.23]. This shows a decrease in the risk of having respondents who gave water to their crying newborn baby and it was not statistically significant.

One hundred and seventy one respondents (85.5%) gave their babies teats and pacifiers whenever they cried while 29 (14.5%) did not [OR=34.77 (95% CI 19.26-63.32), P<0.001]. This shows an increase in the risk of having respondents who gave teats/pacifiers to their babies when they cried and this was statistically significant.

One hundred and thirty women (65.0%) breastfed on demand, while the rest of the seventy women (35.5%) breastfed as follows; whenever their babies cried (31.0%), at fixed periods (2.0%), and at any time (2.0%) [OR=3.45 (95% CI 2.24-5.32), P<0.0001]. This shows a decrease in the risk of having pregnant women who breastfed on demand and it was statistically significant.

None of the patients belonged to a breastfeeding support group.

The main source of information on exclusive breastfeeding was the antenatal health talks (81.0%). Other sources of information included the mass media (8.5%), formal lectures (3.5%), work exposure (0.5%) and seminars/workshops (0.5%) (Table2).

Table 2. Sources of information on exclusive breastfeeding

Source	No (%)	95% CI
Antenatal health talks	162 (81.0)	74.9 - 86.2
Mass media	17 (8.5)	5.0 - 13.3
Formal lectures	7 (3.5)	1.4 - 7.1
Seminar/workshop	1 (0.5)	0.0 - 2.8
Work exposure	1 (0.5)	0.0 - 2.8

Discussion

This study has revealed the level of knowledge and practice of exclusive breastfeeding among pregnant

women in our centre. Though two thirds of the women were aware of EBF, only 40% of the respondents were able to define EBF correctly. The proportion of women who had adequate knowledge of EBF in this study was significantly small when compared to findings from researches conducted in other parts of the country. A cross sectional study from Jos, North Central Nigeria (12) revealed that 82.3% of the study population was able to define EBF, while a study conducted in Enugu, Nigeria (14) showed that 94.0% of the study population was able to define EBF correctly. This low rate of knowledge of EBF in our centre is surprising since about three quarters of the women had attained tertiary level of education. In addition, the meaning and need for EBF is discussed by midwives during booking and also at every antenatal visit. EBF is also discussed at the pediatric clinics, the immunization centre and also during the postnatal clinics.

This low knowledge is also reflected in the fact that despite the teaching hospital being designated as a BFH, less than 10% of the women knew the ten steps to SBF and less than 40% of them knew there was a written policy on EBF in the Teaching Hospital. This happened in spite of the fact that posters containing accurate information on EBF, including the ten steps to SBF are pasted in the antenatal clinic and other strategic locations in the maternity unit of the Hospital. Several studies have shown that knowledge of the ten steps to SBF significantly influences the practice of EBF (11,15). The more knowledgeable mothers are about the ten steps to SBF, the more they exclusively breastfeed their infants (11,15). In accordance with the Innocenti declaration and the National policy of the Federal Government of Nigeria, all baby friendly hospital and clinics are required to have and implement a written breastfeeding policy as one of the ten steps to successful breastfeeding (7).

About 40% of the women knew that Nigeria has a national policy that promotes exclusive breastfeeding. Nigeria was represented at the WHO/UNICEF policymakers meeting on breastfeeding in the 1990s where the Innocenti declaration was made and Nigeria also signed the necessary resolutions (7). Nigeria was also one of the 12 countries chosen to pioneer the BFHI upon ratification of the declaration by the World Health Assembly in 1991 (7). In addition to the promulgation of a decree to regulate the marketing of breast milk substitutes, Nigeria has produced and published her National breastfeeding policy (16) which is aimed at supporting and propagating the concept of EBF.

EBF has been described as the single most important cost effective intervention to reduce infant mortality particularly in developing countries (17). It is estimated that sub-optimal breastfeeding especially non-exclusive breastfeeding in the first six months of

life results in 1.4 million deaths and 10% of diseases in under fives (18). However, in this study, only 44.5% of the women had practiced EBF as recommended (4). Despite the strong evidence and wide publicity on the benefits of EBF, the practice among our women was abysmally low. This rate is however higher than the figures from the latest Nigerian Demographic and Health Survey (19) and also slightly higher than the rates observed from other Nigerian studies and indeed studies from other developing countries (20-25). Iliyasu et al. (20) in their study in Gwale, Kano State reported EBF rates of 22.0%, while 21.2% and 31.0% were reported from Enugu (14) and Kware, Nigeria (21) respectively. EBF rates of 40.0%, 28.0%, 34.5% and 10.0% have all been reported from Bangalore (22), Iran (23), Bangladesh (24) and Lebanon (25) respectively.

Several studies have demonstrated that maternal education is one of the strongest determinants of the practice of EBF because educated women are much more likely to practice EBF than those who are uneducated (26-29). However, in contrast to other Nigerian studies where majority of the women had low level education (11,12,20,21,35) most of the women in our study were well educated.

Other factors that have been known to influence EBF rates and contribute to the low level of practice in Nigeria and other developing countries include unhealthy hospital practices, unemployment, lack of support for breastfeeding mothers, perceived lactational insufficiency, illiteracy and ignorance of the benefits of EBF (11,30,31). Others are adverse cultural practices, resistance to change, fear of maternal depletion syndrome, urbanization, working mothers, poor attitude of health workers, beliefs relating to the use of colostrums and sexual practices during breast feeding as well as aggressive advertising and marketing of breast milk substitutes (32-34).

The BFHI was designed to ensure mothers initiate breastfeeding early (immediately after birth), newborns are given only breast milk unless medically indicated, mothers breastfeed on demand and artificial teats or pacifiers are not given to breastfeeding infants (2). This is intended to promote EBF and ensure it is established early and sustained. However, this study has revealed that the breastfeeding practices of a significant proportion of the women were at variance with the ten steps to SBF. More than half of the women initiated breastfeeding after 6 hours of delivery, 47.0% gave their new born babies water whenever they cried and most of the women also gave their babies teats and pacifiers. This is hardly surprising as only 7.0% of the mothers knew the ten steps to SBF.

The tenth step to SBF request for the establishment of breastfeeding support groups in order to ensure

EBF is supported and promoted beyond the walls of health facilities (35). The presence of established peer support groups have also been shown to improve EBF rates (12,35). However, in our study, none of the women belonged to any support group probably because there were none in the environment. Peer support groups have been shown to help re-enforce mother's belief and confidence in the superiority of breastfeeding over other forms of infant feeding, and enable women reach their goals in terms of duration and exclusivity (36). Peer support groups also results in more mothers evaluating their breast feeding experiences more positively leading to higher maternal satisfaction (36).

Majority of the women in this study obtained their information about EBF from antenatal health talks. This is similar to findings from other Nigeria studies (20,35). However, despite these health talks which are usually delivered by midwives and nutritionists during every antenatal clinic session, their knowledge and practice of EBF was relatively poor. Hence, the content of the health talks and the understanding of the messages by the women require evaluation as previous studies have shown significant gaps in knowledge of EBF among health care workers (31,37). This study has also shown the very poor contribution other vehicles of health information like the electronic and print media play in disseminating relevant and accurate health information about EBF to members of the public.

This study was hospital based and therefore focused on women who presented for ANC. Results obtained from this study may therefore not be representative of what obtains at the community level. This realization perhaps has made the need for a community based study become imperative in order to explore the breastfeeding practices of women at that level.

In conclusion, majority of the women in our study were young, multiparous and well educated but the level of knowledge acquired by them and their practice of EBF was poor. Therefore, there is need for large scale health enlightenment of members of the public on EBF and its benefits to the infant, mother and society at large. The content of antenatal health talks with respect to EBF and it understanding by women requires evaluation. There is also the need for periodic retraining of relevant health workers on the practice of EBF and strategies introduced for regular monitoring and evaluation of the practice.

References

- Otaigbe BE, Alikor EAD, Nkanginieme KEO. Growth pattern of exclusively breastfed infants in the first six months of life: A study of babies delivered at the University of Port Harcourt Teaching Hospital, River State, Nigeria. *Nig J Med* 2005;14(2):137-45.
- Labbok M. Breastfeeding: a woman's reproductive right. *Int J Gynaecol Obstet* 2006;94(3):277-86.
- Okechukwu AA, Otokpa GA. Pattern of growth of exclusively breastfed infants born at the University of Abuja Teaching Hospital, Gwagwalada, Nigeria. *Mary Slessor J Med* 2008; 8(2):34-41.
- Innocenti Declaration on the Protection, Promotion and Support of Breastfeeding. WHO/UNICEF policymakers' meeting on "Breastfeeding in the 1990s: A Global Initiative." Spedale degli Innocenti, Florence, Italy, 30 July-1 August, 1990. http://www.unicef.org/nutrition/index_24807.html (Accessed on 2 February 2014).
- Setegn T, Belachew T, Gerbaba M, Deribe K, Deribew A, Biadgilign S. Factors associated with exclusive breastfeeding practices among mothers in Goba district, South East Ethiopia: a cross-sectional study. *Int Breastfeed J* 2012;7(1):17.
- Moore SE. Nutrition, immunity and the fetal and infant origins of disease hypothesis in developing countries. *Proc Nutr Soc* 1998;57(2):241-7.
- Worugji IN, Etuk SJ. The National Breastfeeding Policy in Nigeria: the working mother and the law. *Health Care Women Int* 2005;26(7):534-54.
- Vekemans M. Postpartum contraception: the lactational amenorrhea method. *Eur J Contracept Reprod Health Care* 1997;2(2):105-11.
- Lvoff NM, Lvoff V, Klaus MH. Effect of the baby-friendly initiative on infant abandonment in a Russian hospital. *Arch Pediatr Adolesc Med* 2000;154(5):474-7.
- Aghaji MN. Exclusive breast-feeding practice and associated factors in Enugu, Nigeria. *West Afr J Med* 2002;21(1):66-9.
- Nwosu UM, Eke RA. Knowledge and Practice of Exclusive Breast Feeding: Effects of Health Promotion Intervention in Nigeria. *TAF Prev Med Bull* 2011;10(6):657-64.
- Ogbonna C, Daboer JC. Current knowledge and practice of exclusive breastfeeding among mothers in Jos, Nigeria. *Niger J Med* 2007;16(3):256-60.
- Federal Ministry of Health/ UNICEF evaluation of the impact of baby friendly Hospital initiative in Nigeria. Report. March, 2006; 6-7.
- Uchendu UO, Ikefuna AN, Emordi JJ. Exclusive breastfeeding - the relationship between maternal perception and practice. *Niger J Clin Practice* 2009;12(4):403-6.
- Owoaje ET, Oyemade A, Kolude OO. Previous BFHI training and nurses' knowledge, attitudes and practices regarding exclusive breastfeeding. *Afr J Med Med Sci* 2002;31(2):137-40.
- Federal Ministry of Health. National breastfeeding policy. Federal Republic of Nigeria. 1990;12.
- World Health Organization. Global strategy for infant and young child feeding. The optimal duration of exclusive breastfeeding. Geneva, WHO, 2001. http://apps.who.int/gb/archive/pdf_files/WHA54/ea54id4.pdf (Accessed on 2 February 2014).
- Black RE, Allen LH, Bhutta ZA, Caulfield LE, de Onis M, Ezzati M, et al. Maternal and child undernutrition: global and regional exposures and health consequences. *Lancet* 2008;371(9608):243-60.
- Nigeria Demographic and Health survey 2008. National Population Commission. Federal Republic of Nigeria, Abuja, Nigeria. <http://www.measuredhs.com/pubs/pdf/FR222/FR222.pdf> (Accessed on 2 February 2014).
- Iliyasu Z, Kabir M, Abubakar IS, Galadanci NA. Current knowledge and practice of exclusive breastfeeding among mothers in Gwale local Government area of Kano State. *Niger Med Practitioner* 2005; 48(2);50-5.
- Oche MO, Umar AS, Ahmed H. Knowledge and practice of exclusive breastfeeding in Kware, Nigeria. *Afr Health Sci* 2011; 11(3):518-23.
- Madhu K, Chowdary S, Masti R. Breastfeeding practices and newborn care in rural areas: a descriptive cross sectional study. *Indian J Community Med* 2009;34(3):243-6.
- Olang B, Farivar K, Heidarzadah A, Strandvik B, Yngve A. Breastfeeding in Iran: prevalence, duration and current recommendations. *Int Breastfeeding J* 2009;4:8.

24. Mahrshahi S, Ichikawa N, Shuaib M, Oddy W, Ampon R, Dibley MJ et al. Prevalence of exclusive breastfeeding in Bangladesh and its association with diarrhoea and acute respiratory infection: results of the multiple indicator cluster survey 2003. *J Health Popul Nutr* 2007;25(2):195-204.
25. Batal M, Boulghourjian C, Abdallah A, Afifi R. Breast-feeding and feeding practices of infants in a developing country: a national survey in Lebanon. *Public Health Nutr* 2006;9(3):313-9.
26. Dubois L, Girard M. Social determinants of initiation, duration and exclusivity of breastfeeding at the population level: the results of the Longitudinal Study of Child Development in Quebec (ELDEQ 1998-2002). *Can J Public Health* 2003;94(4):300-5.
27. Venancio SI, Monteiro CA. Individual and contextual determinants of exclusive breast-feeding in São Paulo, Brazil: a multilevel analysis. *Public Health Nutr* 2006;9(1):40-6.
28. Heck KE, Braveman P, Cubbin C, Chávez GF, Kiely JL. Socioeconomic status and breastfeeding initiation among California mothers. *Public Health Rep* 2006;121(1):51-9.
29. Okolo SN, Adewunmi YB, Okonji MC. Current breastfeeding knowledge, attitude, and practices of mothers in five rural communities in the Savannah region of Nigeria. *J Trop Pediatr* 1999;45(6):323-6.
30. Chudasama RK, Amin CD, Parikh YN. Prevalence of exclusive breastfeeding and its determinants in first 6 months of life: A prospective study. *Online J Health Allied Scs* 2009;8(1):3.
31. Sadoh AE, Sadoh WE, Oniyelu P. Breastfeeding practice among medical women in Nigeria. *Niger Med J* 2011;52(1):7-12.
32. Onayade AA, Abiona TC, Abayomi IO, Makanjuola RO. The first six month growth and illness of exclusively and non-exclusively breast-fed infants in Nigeria. *East Afr Med J* 2004;81(3):146-53.
33. Agho KE, Dibley MJ, Odiase JI, Ogbonmwan SM. Determinants of exclusive breastfeeding in Nigeria. *BMC Pregnancy Childbirth* 2011;11:2.
34. Sinniah D, Chon FM, Arokiasamy J. Infant feeding practices among nursing personnel in Malaysia. *Acta Paediatr Scand* 1980;69(4):525-9.
35. Egbuonu I, Ezechukwu CC, Chukwuka JO. Breastfeeding practices in Onitsha, South East Nigeria-2 years after the baby friendly initiative. *Tropical Journal of Medical Research* 2004;8(2):26-31.
36. Dennis CL, Hodnett E, Gallop R, Chalmers B. The effect of peer support on breast-feeding duration among primiparous women: a randomized controlled trial. *CMAJ* 2002;166(1):21-8.

How to cite:

Abasiattai AM, Etukumana EA, Nyong E, Eyo UE. Knowledge and practice of exclusive breastfeeding among antenatal attendees in Uyo, Southern Nigeria. *Gaziantep Med J* 2014; 20(2):130-135.