



Journal home page: <http://www.journalijar.com>

INTERNATIONAL JOURNAL
OF INNOVATIVE AND APPLIED RESEARCH

REVIEW ARTICLE

Article DOI: 10.58538/IJAR/2526

DOI URL: <http://dx.doi.org/10.58538/IJAR/2526>

A REVIEW OF HIV POSITIVE MOTHERS TO WARDS EXCLUSIVE BREAST FEEDING

*Emmanuel Ifeanyi Obeagu¹, Getrude Uzoma Obeagu² and D.C. Nwosu³

1. Department of Medical Laboratory Science, Kampala International University, Uganda.
2. Department of Nursing Science, Kampala International University, Uganda.
3. Department of Medical Laboratory Science, Imo State University, Owerri, Nigeria.

Manuscript Info

Manuscript History

Received: 02 August 2023

Final Accepted: 08 September 2023

Published: September 2023

Abstract

Exclusive breastfeeding (EBF) involves not giving your newborn any other food or drink, including water, other than breast milk, except for drops or syrups made from vitamins, mineral supplements or prescribed medications. If This practice during the first six months of an infant`s life is a beneficial intervention to save the child's life. However, mothers known to be infected with HIV are at risk of transmitting the virus to their infants through breast milk, which has changed the infant feeding landscape in sub-Saharan Africa. Over the past decade, there has been an unprecedented increase in HIV infection rates among women attending antenatal clinics, leading to an increase in the number of HIV-infected children born to HIV-infected mothers worldwide. Mothers can gain knowledge about exclusive breastfeeding by visiting antenatal clinics for advice on infant feeding options and from midwives after birth. This knowledge will help HIV-infected mothers breastfeed properly without fear of transmitting the virus to their baby.

*Corresponding Author:- Emmanuel Ifeanyi Obeagu

Introduction:-

Exclusive breastfeeding means giving an infant breast milk only [1-2]. It is recognizable as the optimal mode of feeding for the first 6 months of life regardless of HIV exposure status [3]. Breastfeeding gives children the best possible start in life, said Ghebreyesus. Exclusive breastfeeding is recommended by UNICEF and the World Health Organization (WHO) for the first 6 months of life [4]. Breastfeeding plays a major role in nutrition, health and development for both HIV infected and non-HIV infected infants, due to the fact that human milk is the ideal nourishment for infants' survival, growth and development [5]. When the infants are exclusively breastfed for the first six months of life, there is stimulation of immune system and this goes hand in hand with protecting them from diseases like diarrhoea and acute respiratory infections, which are two of the major causes of infant mortality in the developing world [5]. When exclusive breast-feeding is practiced, there is a lower risk of HIV transmission than mixed feeding [6-8]. Exclusive Breast Feeding (EBF) is giving the infant no other food or drink, not even water, apart from breast milk (including expressed breast milk), with exception of drops or syrups consisting of vitamins, mineral supplements or prescribed medicine, if it is practice for the first six months of an infant's life, is a beneficial intervention in saving Children's lives [9-11].

Globally about 300,000 babies become infected with HIV through breast milk each year while at the same time 1.5 million children die each year if the women opt not to breast feed. The exclusive breastfeeding rate is 38%, however the World Health Assembly in 2012 set a target to increase the rate of exclusive breastfeeding by at least 50% by 2025 [12].

Breastfeeding is a way of providing ideal food for the healthy growth and development of infants and in some settings of the sub-Saharan Africa it is a customary way of feeding new-born babies [13-16]. However, mothers known to be infected with HIV risk transmitting the virus to their babies through breast milk, which has changed the landscape of infant feeding in sub-Saharan Africa [17-20]. Over the past decade, HIV prevalence among women attending antenatal clinics has unprecedentedly risen leading to an increase in HIV-positive children born to HIV-infected mothers' worldwide (Young, Mbuga & Chantray). It has been stated that 30-50% of women will pass the virus to their infants; and more than a third of all transmissions will occur during breastfeeding without appropriate interventions [21-24].

countries can be as high as 45 percent with prolonged breastfeeding of up to 24 months (DeCook

Knowledge of HIV positive mothers towards Exclusive Breastfeeding

Exclusive Breastfeeding is used to define initiating breastfeeding immediately after birth and not giving any other solid food (including water) to the infant [25]. Breastfeeding is the first fundamental right of the child (Chandra R.K). The knowledge of mothers towards exclusive breastfeeding can be acquired by the mothers through attendance of antenatal clinics during counseling on infant feeding options and from midwives after birth. This knowledge will help the HIV positive mother to properly breastfeed her baby without fear of transmitting the virus to her baby. Different researchers have tried to assess the knowledge of HIV positive mothers towards EBF and this is what was found out [26-28].

In a study carried out in West Oromia, Ethiopia, it showed that only 35.6% of the respondents knew and correctly answered the meaning of Exclusive breastfeeding (EBF). Significantly high proportion, 86.4% and 65.3% of the study participants had knowledge on the benefits of exclusive breastfeeding and its protective role against disease in infants respectively. Similarly, the majority (80.5%) of the study participants had knowledge that breast milk alone is enough for six months, while the remaining study participants believed wrongly that additional foods need to be introduced within 3 to 6 months of the infants' life [29].

In a study carried out in Ghana among HIV positive mothers with infants aged 0-12 months showed that 33 (83%) out of 40 HIV positive mothers interviewed had received counseling on MTCT of HIV and WHO recommended feeding options during either antenatal care or postnatal services. Thirty-six participants (90%) mentioned IFOs to include EBF and ERF. The Majority of participants correctly understood EBF and only 10% partially understood ERF [30].

According to a study done in south west Nigeria 23% of the mothers had ≥ 4 antenatal visits and 85.0% had infant feeding counseling. Infant feeding choice among the mothers were EBF (61.0%), ERF (26.0%) and mixed feeding (13.0%).

In another study carried out in Botswana showed 56.3% of respondents believed that an infant of an HIV-infected mother could become infected with HIV when breastfed, and 88.4% were concerned about AIDS stigma related to HIV and infant feeding choices. Only about half of the respondents had high knowledge about PMTCT and PMTCT-related practices related to breastfeeding. Less than one in five (19.8%) made the decision to exclusively breastfeed their babies [31].

Practice of HIV positive mothers towards Exclusive Breastfeeding

The practice of Exclusive Breastfeeding varies from culture to culture. The factors that influence the practice include family pressure and cultural beliefs surrounding infant feeding play a vital role in women's ability to successfully practice EBF for six months. Some women have not yet disclosed their HIV status to their partners so in order not to be pointed fingers at for not breastfeeding the baby they decide to breastfeed their infants. In some cultures, HIV positive mothers may have to go

against cultural norms that support early introduction of fluids and mixed feeding which is not recommended in Exclusive Breastfeeding.

Previous studies carried out in South Africa, Zimbabwe and Zambia clearly demonstrate that most women don't practice EBF for six months. Family pressure and cultural beliefs surrounding infant feeding has shown to play a vital role in women's ability to successfully practice EBF for 6 months [32].

According to a study out in Lagos south west Nigeria showed that Exclusive formula feeding (EFF) was the most common feeding practice of the mothers (86.4%). However, it decreased from 95.3 % before 2010 to 79.5% after 2010. Exclusive breastfeeding (EBF) was practised by only 9.0% of the mothers. Mixed breastfeeding practice increased from 1.1% pre-2010 to 4.1% post-2010. The provision of free infant formula was found not to influence significantly the EFF or EBF rates but the MBF rate. MBF rate decreased from 3.0% pre-free formula to 1.7% after the introduction of free infant formula [33].

In another study carried out in Congo indicates that 87.5% of infants were breastfed during maternity stay, but by six months only 2.8% of infants were exclusively breastfed.

Conclusion:-

HIV positive mothers have limited knowledge on Exclusive breastfeeding. Regarding associated factors it, mothers age, place of delivery, mode of delivery, marital status, religion, place of work has no association with practices of exclusive breastfeeding whereas educational level, occupation, mode of delivery had statistically significant with knowledge of HIV positive mothers on EBF.

References:-

1. Obeagu EI, Okwuanaso CB, Edoho SH, Obeagu GU. Under-nutrition among HIV-exposed Uninfected Children: A Review of African Perspective. *Madonna University journal of Medicine and Health Sciences* ISSN: 2814-3035. 2022 Nov 23;2(3):120-7. <https://www.journal.madonnauniversity.edu.ng/index.php/medicine/article/view/85>.
2. Obeagu EI, Obeagu GU. An update on survival of people living with HIV in Nigeria. *J Pub Health Nutri.* 2022; 5 (6). 2022;129. [links/645b4bfcf3512f1cc5885784/An-update-on-survival-of-people-living-with-HIV-in-Nigeria.pdf](https://doi.org/10.2196/links/645b4bfcf3512f1cc5885784/An-update-on-survival-of-people-living-with-HIV-in-Nigeria.pdf).
3. World Health Organization. Promoting proper feeding for infants and young children. 2008; Geneva
4. WHO, UNAIDS, UNFPA, UNICEF. WHO guidelines on HIV and infant feeding: an updated framework for priority action. Geneva. 2010.
5. UNICEF- Progress for children: A report card on Nutrition. 2009.
6. Chisenga M, Kasonka L, Makasa M, Sinkala M, Chintu C, Kaseba C et al. Factors Affecting the Duration of Exclusive Breastfeeding Among HIV-Infected and -Uninfected Women in Lusaka, Zambia. *Journal of Human Lactation.* 2008.
7. Omo-Emmanuel UK, Ochei KC, Osuala EO, Obeagu EI, Onwuasoanya UF. Impact of prevention of mother to child transmission (PMTCT) of HIV on positivity rate in Kafanchan, Nigeria. *Int. J. Curr. Res. Med. Sci.* 2017;3(2):28-34. 10.22192/ijcrms.2017.03.02.005 [links/592bb42f0f7e9b9979a97547/International-Journal-of-Current-Research-in-Medical-Sciences-Impact-of-prevention-of-mother-to-child-transmission-PMTCT-of-HIV-on-positivity-rate-in-Kafanchan-Nigeria.pdf](https://doi.org/10.22192/ijcrms.2017.03.02.005)
8. Obeagu EI. A Review of Challenges and Coping Strategies Faced by HIV/AIDS Discordant Couples. *Madonna University journal of Medicine and Health Sciences* ISSN: 2814-3035. 2023 Jan 1;3(1):7-12. <https://madonnauniversity.edu.ng/journals/index.php/medicine/article/view/91>.
9. Viola N, Kimono E, Nuruh N, Obeagu EI. Factors Hindering Elimination of Mother to Child Transmission of HIV Service Uptake among HIV Positive Women at Comboni Hospital Kyamuhunga Bushenyi District. *Asian Journal of Dental and Health Sciences.* 2023 Jun 15;3(2):7-14. <http://ajdhs.com/index.php/journal/article/view/39>.
10. Echendu GE, Vincent CC, Ibebuikwe J, Asodike M, Naze N, Chinedu EP, Ohale B, Obeagu EI. WEIGHTS OF INFANTS BORN TO HIV INFECTED MOTHERS: A PROSPECTIVE COHORT STUDY IN FEDERAL MEDICAL CENTRE, OWERRI, IMO STATE. *EUROPEAN JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH.* 2023,10(8), 564-568. [links/64dc897066f0e0067d9a22fe/WEIGHTS-OF-INFANTS-](https://doi.org/10.2196/links/64dc897066f0e0067d9a22fe/WEIGHTS-OF-INFANTS-)

BORN-TO-HIV-INFECTED-MOTHERS-A-PROSPECTIVE-COHORT-STUDY-IN-FEDERAL-MEDICAL-CENTRE-OWERRI-IMO-STATE.pdf.

11. Obeagu EF, Onyenweaku FC, Nwobodo HA, Ochei KC, Ochiabuto Ogochukwu MT, Onwuasoanya UF. Impact of HIV and hepatitis b virus coinfection on selected haematological markers of the patients in Umuahia, Abia State, Nigeria. *Ann Clin Lab Res.* 2017;5(2):175. DOI: 10.21767/2386-5180.1000175 [links/61630ec90bf51d481768798f/Impact-of-HIV-and-Hepatitis-B-Virus-Coinfection-on-Selected-Haematological-Markers-of-the-Patients-in-Umuahia-Abia-State-Nigeria.pdf](https://doi.org/10.21767/2386-5180.1000175)
12. BoatengMF. Knowledge, attitude and practice of exclusive breastfeeding amongmothers inTechiman, Ghana. *epublications.uef.fi/pub/urn_nbn_fi_uef.../urn_nbn_fi_uef-20180869.pdf*
13. LeshabariSC,BlystadA,MolandKM.Difficultchoices:InfantfeedingexperiencesofHIVpositivemothersin northernTanzania.*JSocAspHIV/AIDS.* 2008; 4:1.
14. Izuchukwu IF, Ozims SJ, Agu GC, Obeagu EI, Onu I, Amah H, Nwosu DC, Nwanjo HU, Edward A, Arunsi MO. Knowledge of preventive measures and management of HIV/AIDS victims among parents in Umuna Orlu community of Imo state Nigeria. *Int. J. Adv. Res. Biol. Sci.* 2016;3(10):55-65. 10.22192/ijarbs.2016.03.10.009 [links/592b0dc1aca27295a80b76cd/Knowledge-of-preventive-measures-and-management-of-HIV-AIDS-victims-among-parents-in-Umuna-Orlu-community-of-Imo-state-Nigeria.pdf](https://doi.org/10.22192/ijarbs.2016.03.10.009).
15. Ifeanyi OE, Obeagu GU. The values of prothrombin time among HIV positive patients in FMC owerri. *International Journal of Current Microbiology and Applied Sciences.* 2015;4(4):911-6. https://www.academia.edu/download/38320140/Obeagu_Emanuel_Ifeanyi_and_Obeagu_Getrude_Uzoma2.EMMA1.pdf.
16. Obeagu EI, Ogbonna US, Nwachukwu AC, Ochiabuto O, Enweani IB, Ezeoru VC. Prevalence of Malaria with Anaemia and HIV status in women of reproductive age in Onitsha, Nigeria. *Journal of Pharmaceutical Research International.* 2021 Feb 23;33(4):10-9.
17. Odo M, Obeagu EI, Ochei KC, Nkombe E, Olusola-Falae B, Effa E, Affirima B. Intensified TB Case finding in PMTCT settings in Nigeria should be reconsidered. *Int. J. Adv. Res. Biol. Sci.* 2016;3(2):85-92.
18. Ezimah UA, Obeagu EI, Ezimah CO, Ezimah A, Nto NJ. Diarrhoeal diseases of acquired immunodeficiency syndrome stimulate more depletion of total antioxidant status. *Int. J. Adv. Multidiscip. Res.* 2016;3(4):23-5.
19. Obeagu EI, Ibeh NC, Nwobodo HA, Ochei KC, Iwegbulam CP. Haematological indices of malaria patients coinfectd with HIV in Umuahia. *Int. J. Curr. Res. Med. Sci.* 2017;3(5):100-4.
20. Ifeanyi OE, Obeagu GU, Ochei KC, Ijeoma FO, Chioma UI. *International Journal of Current Research and Academic Review.* *Int. J. Curr. Res. Aca. Rev.* 2015;3(4):126-32.
21. Young SL,MbuyaNNM,Chantry JC.CurrentKnowledgeandFutureResearchonInfantFeeding in the Context of HIV Basic Clinical Behavioral and Programmatic. *PerspectivesAdvancesin Nutrition.*2011; 2:225–243.
22. Ifeanyi OE, Leticia OI, Nwosu D, Chinedum OK. A Review on blood borne viral infections: universal precautions. *Int. J. Adv. Res. Biol. Sci.* 2018;5(6):60-6.
23. Onyenweaku FC. Determination of levels of haematocrit and erythropoietin in persons living with HIV in Umuahia. *Int. J. Curr. Res. Med. Sci.* 2016;2(6):27-31. [links/5ae1b99ea6fdcc91399f5c8a/Determination-of-levels-of-haematocrit-and-erythropoietin-in-persons-living-with-HIV-in-Umuahia.pdf](https://doi.org/10.21767/2386-5180.1000175).
24. Leticia OI, Ugochukwu A, Ifeanyi OE, Andrew A, Ifeoma UE. The correlation of values of CD4 count, platelet, Pt, Aptt, fibrinogen and factor VIII concentrations among HIV positive patients in FMC owerri. *IOSR Journal of Dental and Medical Sciences.* 2014;13(9):94-101. [links/595e9f72aca2728c11469477/The-Correlation-of-Values-of-Cd4-Count-Platelet-Pt-Appt-Fibrinogen-and-Factor-VIII-Concentrations-among-HIV-Positive-Patients-in-FMC-Owerri.pdf](https://doi.org/10.21767/2386-5180.1000175).
25. Garg.M, Marriyah H and Deeksha K, Infant and young child Feeding(IYFC) practices in Udupidistrict,Karnataka.*JournalofNutritionResearch1(2015).biomedpharmajournal.org/.../knowledge-attitude-and-practice-towards-breastfeeding-a*
26. Queen E, Ifeanyi OE, Chinedum OK. The prevalence of human immunodeficiency virus, hepatitis B surface antigen and hepatitis C virus among pregnant women in port harcourt. *IOSRJPBS.* 2014;9:65-72. [links/595d2cb60f7e9b3aefadecce/The-Prevalence-of-Human-Immunodeficiency-Virus-Hepatitis-B-Surface-Antigen-and-Hepatitis-C-Virus-among-Pregnant-Women-in-Port-Harcourt.pdf](https://doi.org/10.21767/2386-5180.1000175).
27. Ifeanyi OE, Favour AA, Prayer NN. Updates on Human Immunodeficiency Virus and Platelets. *Int. J. Adv. Res. Biol. Sci.* 2020;7(6):1-7. 10.22192/ijarbs.2020.07.06.001 https://www.academia.edu/download/63944004/Updates_on_Human_Immunodeficiency_Virus_and_Platelets20200717-14299-qm2wai.pdf.
28. Ibebuik JE, Nwokike GI, Nwagu SA, Ezenwuba CO. Adolescent awareness of HIV/AIDS pandemic among secondary school students in Calabar, South-South Nigeria. *Int. J. Curr. Res. Med. Sci.* 2017;3(7):152-9.

- 10.22192/ijcrms.2017.03.07.022 links/5988951345851560584f8dfc/International-Journal-of-Current-Research-in-Medical-Sciences-Adolescent-awareness-of-HIV-AIDS-pandemic-among-secondary-school-students-in-Calabar-South-South-Nigeria.pdf.
29. Leticia OI, Andrew A, Ifeanyi OE, Ifeoma UE, Ugochukwu A. The effect of viral hepatitis on APTT, PT, TT, fibrinogen and platelet among blood donors at FMC, Umuahia. IOSR J Dent Med Sci. 2014;13:57-63. <https://www.academia.edu/download/34705230/M013855763.pdf>.
30. SuukAL, VeloshneeG. Factors influencing the choices of infant feeding in HIV positive mothers in Southern Ghana. The role of counselors, mothers, families and socio economic status. J. AIDS HIV Rev. 2011;3(7):129-137. Available at <https://www.academicjournals.org>.
31. Ndubuk J, Ndubuka N, Li Y, Marshall C, Mehirij. Knowledge, attitude and practices regarding infant feeding among HIV infected pregnant women in Gaborone, Botswana: a cross-sectional survey. BMJ Open 2013;3:e003749. doi: 10.1136/bmjopen-2013-003749
32. Doherty T, Chopra M, Nkoki L, Jackson D, Greiner T. A longitudinal Qualitative study of infant Feeding Decision making and practices among HIV positive women in South Africa. J. Nutri:136:2421-2426, 2009. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4948140/>
33. Agatha N, David L, Oliver CE, Aghahowa E, Ezechi LO, Musa ZS, Wapmuk, AE, Gbajabiamila TA, Idigbe I, Aigbe GO. Infant Feeding Practices of HIV Positive Mothers in Lagos, South-western Nigeria. 2017. [www.nutriweb.org.my/publications/mjn0023_2/9%20Oliver%20Final\(SP\).pdf](http://www.nutriweb.org.my/publications/mjn0023_2/9%20Oliver%20Final(SP).pdf)