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Breastfeeding Practices Adopted By HIV/AIDS Infected Nursing Mothers in Anambra State

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Abstract

This study determined breastfeeding practices of nursing mothers infected with HIV/AIDS. It also determined challenges faced by the mothers and their coping strategies. The population was made up of 100 HIV/AIDS infected mothers attending postnatal clinic of the Anambra State teaching hospital, Awka. Questionnaire was used for data collection. Data analyses were by frequency count and percentage. The major findings were that the mothers were breastfeeding their babies, some add water, vitamin and mineral supplements including herbal teas. Only a small number of mothers do not add any other thing to breast milk.

Keywords: Breastfeeding, HIV/AIDS, Mothers, Antiretroviral, Prophylaxis, Exclusive.

Introduction

Breastfeeding is an important component of the well being and survival of children, particularly in resource-poor settings. Breast milk provides optimal nutrition, contains antibodies that protect infants from infection. It is unlikely to become contaminated (Kafulafula, Hutchinson, Gennaro & Guttmacher 2004). In a review of data on child mortality, (Black, Morris & Bruce 2003), found that 41% of child deaths occur in sub-Saharan Africa and 34% in South Asia. It was also found that 90% of all child deaths globally, occurred in 42 countries, which included Nigeria. Unsafe environments, ingestion of unsafe water, inadequate availability of water for hygiene, and lack of sanitation constituted the major risk factors for childhood morbidity and mortality in these countries (Black *et al*, 2003). Local and international studies have examined the relationship between exclusive breastfeeding, childhood and maternal health. Over all, exclusive breastfeeding was associated to significantly reduced childhood incidence of gastrointestinal, respiratory, eye and malarial infections (Kafulafua, *et al* 2014).

Furthermore, exclusively breastfed children have a reduced risk of mortality (WHO, 2000 & Betran, Onis, Lauer and Villar, 2001). Exclusive breastfeeding provides a six fold

protection against gastrointestinal and almost a three-fold protection against acute respiratory infection in less develop countries (WHO, 2000). In developing countries, exclusive breastfeeding for the first six months and then continued breastfeeding up to 11 months has been associated with approximately 13% reduction in childhood deaths (Kafulafula, *et al* 2014). Similarly, in Latin America, Betran et al 2001 found that half of infants' deaths from gastrointestinal and acute respiratory infections are preventable by exclusive breastfeeding.

The HIV and AIDS epidemic has complicated breastfeeding practices because breast milk carries HIV in infected mothers (De Cock, Fowler, Mercier, de Vincenzi, Saba, Hoff, Alnwick, Rogers and Shaffer 2000). Immune deficiency syndrome caused by the Human Immune Deficiency Virus (HIV) is one of the greatest public health and social problems threatening the human race globally. Acquired Immune Deficiency Syndrome (AIDS) is now the fourth leading cause of mortality. Available report indicate that 3.1 million deaths have been attributable to AIDS in 2002 alone, of which 1.2 million occurred in women (Nancy, Hessol, Monica, Gandhi, Ruth & Greenblatt, 2005 & Fekadu, 2014). An earlier report by joint United Nations Committee on HIV/AIDS (UNAIDS, 2014) had that estimated 38 million people worldwide were living with HIV in 2003 of which 5 million were newly infected. More than 95 percent of HIV-infected people live in the developing world, mostly in sub-Saharan Africa (Nancy, Hessol, Monica, Gandhi, Ruth and Greenblatt 2005).

Globally, HIV and AIDS in children is one of the most serious health crises facing the world today. A disproportionate burden has been placed on women and children, who in many settings continue to experience high rate of new HIV infections and HIV-related illnesses and death. In 2009, 33.3 million individuals were living with HIV of which 15.7 million were women and 2.1 million were children under 15 years of age (Federal Ministry of Health, 2010). It has been estimated that in 2009, there were 370,000 new pediatric infections with sub-Saharan African accounting for about 90 percent of these figure (FMOH, 2010 and UNAIDS, 2012). In Nigeria, the prevalence rate among young persons was 5.6 percent especially among the age group of 25-29 years of which heterosexual transmission accounts for nearly 80% while mother-to-child-transmission (MTCT) and use off unsterilized sharps, infected blood and blood products accounts for 10% each (FMOH, 2010 and Demographic Health Information Survey, 2013). MTCT occurs during pregnancy, Labour and delivery or during breastfeeding. In the absence of intervention, the risk of such transmission is 30 – 45% (FMOH 2010 and National Agency for the control of AIDS, 2013). Transmission of HIV through breast milk has been well documented.

However, other reasons for variation in transmission rate, such as maternal nutritional status, state of HIV disease and possible differences in transmission of HIV subtype cannot be excluded (Palasanithiraim, Zieger, and Stewart, 1993). In the past three decades, strategies to reduce child mortality and promote family health have resulted in considerable improvements in child health. The prevention of infant mortality and other infant related childhood diseases such as diarrhea, pneumonia, neonatal sepris, acute otitis media and malnutrition was introduced by world health organization (NACA 2013, Jaco *et al* 2010, WHO, 2004 and Oganah, 2010). In 2001 the world health organization in collaboration with UNAIDS, UNFPA and UNICEF developed a feeding guideline for infants of HIV infected mothers in a meeting in Geneva and was reviewed in another update meeting in Geneva in 2006. The general principles and recommendation gave explanation to the key points with respect to breastfeeding, infant nutrition, HIV transmission infection in infancy including prevention and control of vertical transmission, formular feeding and practice guideline (WHO, 2001; and WHO, 2006). The meeting on breastfeeding practice guideline in Geneva revealed the research evidence regarding HIV and infant feeding particularly the research evidence that antiretroviral (ARV) intervention to the HIV infected mother and HIV exposed infant can reduce significantly the risk of post natal transmission of HIV through breastfeeding. The major principles and recommendation made was that HIV infected mothers should breastfeed their babies exclusively for the first six months using ARV prophylaxis for mother and child. In 2009, October 22-23, in Geneva, an update of this review guideline was held with major interest in infant and young child feeding. The main point reviewed was the risk-benefit of breastfeeding and replacement feeding to improve HIV-free survival of HIV exposed infants, taking into account interventions to improve maternal health and prevent postnatal transmission of HIV. The duration of breast feeding and access of ARV prophylaxis which is a drug used against HIV infections was discussed thereby justifying the 1990 innocent declaration which empowers all women to breastfeed their babies exclusively for the first six months of life followed by introduction of appropriate complementary food with continued breastfeeding to twelve months as the standard feeding practice (Global AIDS Report, 2012; FMOH 2007, Hans, 1998; and Joint Annual Review, 2011). ARV prophylaxis is triple drug combination which have remarkable effect on reducing HIV viral load of people living with HIV. The therapy was introduced in 1996. ARV option B+ is a life-long HIV triple therapy if initiated at the earliest possible time of diagnosis, prenatally or post-natally slows down progression, increase

survival and reduces mother to child transmission of HIV.

Exclusive breastfeeding is giving a baby only breast milk or expressed breast milk with the exception of any other drugs, syrups such as vitamins, mineral supplement or water. Exclusive breastfeeding provides so many benefits to both mother and child which include reduced infant and young child morbidity and mortality rate as a result of malnutrition. Kafulafula, *et al* (2014) reported that despite the HIV epidemic, mothers in their study still regarded exclusive breastfeeding as an important component for an infant's biophysical and psychological well being. Malnutrition is one of the major clinical manifestations resulting from HIV infection especially in infants. If adequate care is not taken in their feeding both in food intake and nutrient absorption, complex metabolic alternations which result in weight loss and wasting many occur and this may lead to delay in recovery from illness or cause death (WHO, 2004). Infant feeding is a critical aspect of child care and appropriate feeding practices especially exclusive breastfeeding stimulate bonding with mothers and leads to improved nutrition and physical growth, reduced susceptibility to common childhood diseases and infection. If HIV positive mothers avoid breastfeeding completely, they eliminate the risk of transmitting the HIV infection to their infants in the post-natal period. However, the percentage of infants and young children who would die from infections other than HIV as a result of not being breastfeed is much higher than that of children who would become infected with HIV virus through breastfeeding. Infants who are not breastfed during the first 6 months of life are at much higher risk of dying of infectious diseases than infants who are breastfed (WHO, 2000).

According to Jaco, David, Alex Willi, Cellina, Bernarel. Robert, Samuel, Jordan and Jonathan (2010), when HIV positive mothers breastfeed exclusively during the first few months of life, the rate of mother-to-child transmission of HIV is lower and the level of HIV –free survival among their infants is higher than among the infants of HIV positive mothers who mix breastfeeding with substitutes (Jaco *et al*, 2010) Some of the perceived benefits as revealed by Kafulafula et al, (2014) on exclusive breastfeeding and HIV shows that exclusive breastfeeding promotes good nutritional habit for mothers. Exclusive breastfeeding is self-satisfying for mothers because it gives HIV-positive mothers a sense of satisfaction regarding their motherhood experiences. Exclusive breastfeeding prevents pregnancy as the mothers admitted that when they are breastfeeding they do not get pregnant. Exclusive breastfeeding prevents mother to child transmission of HIV. Exclusive breastfeeding help to protect the baby from diarrhea and prevents the virus from penetrating the gastro-intestinal tract (Kafulafula

et al, 2014). Kafulafula et al (2014) also revealed that exclusive breastfeeding is an expression of mothers maternal love for her baby as it promotes bonding. The feeding practices of nursing mothers with HIV/AIDS as recommended by UNICEF/WHO.UNAIDS (Joint United Programme, 2010) on breastfeeding were to breastfeed and receive ARV intervention for both mother and child. This principle will allow mothers known to be HIV positive whose infants are HIV uninfected or of unknown HIV status to exclusively breastfeed their infants for the first six months of life, both mother and child will be on antiretroviral drugs for this period until one week after breastfeeding cessation (WHO, 2010). The major challenges include weak health infrastructure, limited human resources, limited management capacity and lack of funding; lack of ARV prophylaxis and high cost of ARV's prophylaxis during time of scarcity; fear of side effects on babies, mothers may be too weak to breastfed due to ill health and fear of getting the baby infected through cracked nipples (WHO, 2010). Ugboaja, Ignegbe and Obi Nwosu (2014) reported that the major challenges confronting postnatal care of the infected mother in Anambra State are issues of having their deliveries outside formal health facilities. Therefore, making it difficult to reach them with the health facilities. Agunbiade and Ogbuleye (1999) reported that only a small proportion of their respondents practice exclusive breastfeeding (19%) and Ugboaja et al (2014) reported (35.9%). The major constraints were the perception that babies continued to be hungry (29%); pressure from mother-in-law (25%); breast pain (25%) and need to return to work (24%). Anambra State Teaching Hospital, Awka, South East Nigeria is a teaching hospital that runs a Heart to Heart Centre for HIV infected persons and it is a baby friendly centre with a post-natal clinic for HIV infected nursing mothers. It is the only teaching hospital situated in the capital territory of Anambra State. During the time of the study the Clinic started to practice exclusive breastfeeding for HIV-infected mothers. The major challenges were that the mothers were not getting the vaccines frequently due to scarcity of the drugs. They also do not get proper counseling from the health workers on correct feeding practices.

Purpose of the Study

The main purpose of the study was to investigate the breastfeeding practices of nursing mothers living with HIV/AIDS attending post natal clinic of the Anambra State Teaching Hospital. Specifically, the study determined:

1) breastfeeding practices of nursing mothers infected with HIV/AIDS.
2) perceived benefits of breastfeeding by nursing mothers infected with HIV/AIDS
3) challenges faced by nursing mothers infected with HIV/AIDS in breast feeding their babies.

4) ways the nursing mothers could be helped in their breastfeeding practices

Methodology

***Area and Design of the Study*:** This study was carried out in Anambra State. It was a survey. Anambra State University Teaching hospital was used because it is a hospital with heart-to-heart centre for HIV infected persons. It runs a baby friendly centre with a post-natal clinic for HIV infected nursing mothers.

***Population for the Study*:** The population comprised of 200 HIV/AIDS nursing mothers attending postnatal clinic of Anambra State University Teaching Hospital. The age range of the mothers was between 16 – 55 years. Only 22.89 percent of the respondents had secondary education while 22.9 percent had Tertiary education, 20.41 percent had primary education, while 12.59 percent had no formal education (Medical Records of Anambra State Teaching Hospital, Awka, 2013).

***Sample and Sample Technique*:** A random sample of 100 mothers was drawn from the 200 HIV/AIDS nursing mother who were attending the postnatal clinics in Anambra State University Teaching Hospital (ASTH). These were selected through simple random sampling technique. This is because simple random sampling is the best method of sampling technique and is void of bias.

***Instrument for Data Collection*:** The instrument for data collection in the study was the questionnaire. The questionnaire was in four sections and was developed based on the specific purposes of the study and literature review. It was validated by three midwives in the hospital. The respondents were required to respond either "yes" or "no" to each item of the questionnaire.

***Method of Data Collection and Analysis*:** Copies of the instrument were administered to the respondents by hand. The questionnaire also served as interview schedule for illiterate respondent. The researcher with the assistance of two research assistants were there to explain the items in the questionnaire as requested by the respondents. Out of 100 copies of the questionnaire administered, 98 were correctly filled and used for the research. Data collected were analyzed using frequency and percentage and results in tables.

Results

The following findings were made:

Demographic Characteristics of Respondents

The age bracket of the mothers ranged 16-55 years, with majority (57.14%) falling between 26-35 years, 26.53 percent between 36-45 years, while 2.04 percent were between 46-55 years. Majority (83.3%) of the mothers were married while 8 percent were divorced and 2.08 percent widowed. Majority (71.4%) of the mothers were self-employed, while 16.06 percent were civil servants. Similarly, 22.89 percent had secondary education while 22,92 percent tertiary education,

20.41percent had primary education while 12.59 percent had no formal education. The result of the diagnosis revealed that 71.4 percent were diagnosis with HIV for the period of 1-5years ago, 18.36% had it less than one year ago; 6-10 years was 7.5 percent while 5 percent were more than 10 years ago.

Table 1: Percentage Response on Breast feeding Practices.

Breast feeding Practices	Frequency/Responses F(%)
Do you express and heat treat breast milk before feeding	18(6.57%)
Breastfeed and receive ARV intervention both mother and child	80(29.20%)
Exclusively breastfeed your baby?	98(35.77%)
Breastfeeding with water	6(2.19%)
Breastfeeding with Vitamins	10(3.64%)
Breastfeeding with Mineral supplements	2 (0.73%)
Breastfeeding with Drugs (herbal medicine)	60(21.90%)
Duration of Breastfeeding	
0-3 months	68(69.39%)
0-6 months	30(30.61%)
0-12 months	-
12 months and above	-
Duration of exclusive Breastfeeding with AVR intervention at least	
0-3 months	68(69.39%)
0-6 months	30(30.61%)
0-12 months	

Table 1 reveals that 98(35.77%) of the nursing mothers breastfed their babies exclusively on breast milk. 80(29.20%) breastfed their babies while receiving the ARV intervention for both mother and child. It was also revealed that 18(6.57%) expressed and heat treat breast milk before feeding their babies.

Table 1 also shows that though some mothers exclusively breastfed their babies, they added either drugs, or water to the milk before feeding their babies. The result reveals that 60(21.9%) added herbal drugs to the breast milk; 10(3.64%) added vitamin; 6(2.19%) added water while 2(0.73%) added mineral supplements.

On the duration of breastfeeding the result revealed that 68(69.39%) of nursing mothers on AVR intervention breastfed their babies for up to 6 (six) months.

Table 2: Percentage Responses on Perceived Benefits of breastfeeding by mothers infected with HIV

Benefits of Breastfeeding	Frequency/Responses F(%)
No special preparations needed	35 (35.72%)
Promotes bonding between mother and child	7 (7.14%)
Reduces stigmatization of the mothers	6 (6.12%)
Protects babies from diarrhea, pneumonia and other infectious diseases	15 (15.32%)
Reduces the risk of passing HIV from mother to child	10 (10.20%)
Reduces malnutrition for children	7 (7.14%)
Less expensive than artificial milk	8 (8.16%)
Helps mother space her pregnancies	10 (10.20%)
Total	**98 100%**

Table 2 shows percentage response on perceived benefits of breastfeeding. The results revealed that no special preparation was needed for breastfeeding as revealed by 35.72% of the respondents. This was followed by 15.32% who believed that breastfeeding protected babies from diarrhea and other infectious diseases; 10.20% believed that it reduces the risk of passing HIV from mother to child, and helped mothers space their pregnancies. Also 5.16% said it was more economical while 7.14% said it promote bonding and reduces malnutrition for children. The last benefit was that it reduces stigmatization with 6.12%.

Table 3: **Percentage Response on Challenges faced by Nursing Mothers**

Challenges of use of ARV	Frequency Responses F(%)
Lack of ARV in post natal clinics	5 (5.10%)
Lack of proper counseling on the use of ARV	7 (7.14%)
Not affordable	3 (3.06%)
Not always available	5 (5.10%)
Will have some side effects on babies	1 (1.03%)
No response	77 (78.57)
Total	**98 (100%)**

Table 3 shows that 7% of the respondents agreed that lack of proper counselling on the use ARV was one of the challenges they faced. Five percent of the respondents agreed that lack of and scarcity of ARV were among their challenges. Only 1.03% of the respondents agreed that side effect of the ARV was a challenge. Unfortunately, 78.57% of the respondents did not give any response.

Table 4: Percentage Responses on ways of helping the women in their Breast feeding activities

S/N	Ways of helping women breastfeeding	Percentage Responses Yes	No
1.	Proper counseling on correct feeding practices	74 (75.51)	24(24.49)
2.	Teaching the women correct method of breastfeeding to avoid having sure or cracked nipples	72 (73.47)	24(26.53)
3.	Educating them on coping skills in areas where they are stigmatized	90 (91.84)	8(8.16)
4.	Free access to health care services	96 (97.96)	2(2.04)
5.	Making Anti-retroviral drugs free and always assessable to the women	98 (100)	- -
6.	Nurses, doctors and counselors should visit them at home to make sure they are using correct feeding practices	48(48.98)	50(51.02)
7.	Reducing the cost of antiretroviral drugs by government	96(97.96)	2(2.04)

Table 4 shows the ways of helping mothers in breast feeding activities. Only item 6 (nurses, doctor and counselors should visit them at home to make sure they are using correct feeding practices) had more negative (51.02%) responses than positive responses. All other items had more Yes than No. The rating can be done using the percentages. Item 5 which is that anti-retroviral drugs should be free and always assessable has the highest rating of 100% while 97.96% indicated that they should have free access to health care services. Similarly, 91.84% indicated that the mothers should be educated on coping skills in areas where they are stigmatized.

Discussion of Findings

The study revealed that the entire respondent practiced breastfeeding. Majority of the women indicated that they practiced exclusive breastfeeding. This is in line with Ugboaja *et al*, (2014), report that 35.9% of their respondents practiced exclusive breastfeeding. This agrees with the 1990 innocent-declarations that all women should breastfeed their babies exclusively for the first six months of life (Hans, 1998). The mothers claimed to exclusively breastfeed their babies but they added different things such as water, mineral supplements, vitamins and even drug such as herbal medicines. This is in line with Oganah's, (2010) report that mothers gave herbal teas and water. Oganah reported that the mothers' perception was that breast milk alone cannot satisfy the infant and quench thirst. This is not in line with WHO/UNICEF guideline that mothers should exclusively breastfeed their babies for the first six months of life.

The result also revealed that 69.39% of the nursing mothers breastfed for 3 months while 30.61% breastfed exclusively for 6 months. This is not in line with the report of Ugboaja *et al* (2014) that the practice of exclusive breastfeeding was poor among the mothers in their studies as only 35.9% of the women did exclusive breastfeeding. According to Jaco *et al* (2010) when HIV positive mothers breastfeed exclusively for the first six months of life, the rate of mother-to-child-transmission of HIV is lower and the level of HIV free survival among their infants is higher.

The study revealed that no special preparation was needed (35.72%) for breastfeeding and that breastfeeding protected babies from diarrhea, pneumonia and other infectious diseases (15.32%), reduced the risk of passing HIV from mother to child and helped mothers space her pregnancies (10.20%) as some of the perceived benefits of breastfeeding. This is in line with the views of Kafulafula *et al* (2014) that exclusive breastfeeding prevented pregnancy, prevents MTCT of HIV, promoted child well-being and promotes good nutritional habits for mothers. Exclusive breastfeeding provides a six-fold protection against gastrointestinal and almost a three-fold protection against respiratory infection (WHO, 2010 and Betran et al, 2001).

The study revealed the major challenges of using ARV prophylaxis as lack of proper counselling on the use of ARV (7.14%), and lack of ARV in postnatal clinics (5.10%). This is in line with the reports of Ugboaja et al (2014) and Kafulafula et al (2014) that limited human resources such as counsellors, limited management capacity, lack of ARV prophylaxis in postnatal clinic and fear of side effect on babies were the major challenges. Generally the result revealed the ways of helping the mothers to be that antiretroviral drugs should be free and always accessible (100%), educating them on coping skills in areas where they may be stigmatized (91.84%), free access to health care services (91.84%), proper counseling on correct feeding practices (75.51%) and teaching the woman correct method of breastfeeding to avoid cracked nipples (73.47%).

Conclusion

Based on the findings, the nursing mothers do breastfeed their babies. They claim to exclusively breastfeed their babies but where not doing it correctly as majority of the mothers included water, vitamins, mineral supplements and herbal teas. The result revealed that some of the challenges faced by nursing mothers to include lack of ARV prophylaxis, lack of proper counseling and fear of the side effect of ARV prophylaxis on their babies. Proper counseling on correct feeding practices, free access to health care services, making ARV prophylaxis free and accessible and educating them on coping skills in areas where they may be stigmatized.

Recommendations

Sequel to the findings and conclusion of the study, it is recommended that

1. Proper counseling on correct feeding practices should be given to the nursing mothers by the health workers during antenatal and postnatal visits.
2. Government should make sure that ARV prophylaxis is always available and accessible to the mothers for optional achievement of the WHO feeding guidelines.
3. Government should make health care services free and assessable for HIV/AIDS infected mothers.

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