

## Challenges Confronting the Prevention of Mother to Child Transmission of HIV/AIDS in Offa Local Government Area, Kwara-State

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### Abstract

This study investigated the challenges confronting the prevention of mothers-to-child transmission of HIV/AIDS in Offa Local Government Area of Kwara State, Nigeria. The transmission of HIV/AIDS from mother-to-child has been a rampant phenomenon in Offa L.G.A. A descriptive research of survey type was used, the population for the study covered all the health workers in Offa Local Government Area, 145 respondents were sampled for the study. Three research questions were raised and three hypotheses were generated which were tested at 0.05 alpha level of significance. The research instrument used for the study was a questionnaire which was validated and tested for reliability. A reliability co-efficient of 0.76r was obtained; using Pearson product moment correlation. The instrument was administered by the researchers and some trained research assistant. A descriptive statistic of frequency count and percentage was used for the personal data while the inferential statistic of chi-square was used at 0.05 alpha level of significance to test the hypotheses set for the study. The null hypotheses set were rejected, the findings of this study revealed that challenges such as non-disclosure of HIV/AIDS status, inadequate staff training and inavailability of antiretroviral drugs are parts of the major challenges militating against the proper implementation of prevention of mother to child transmission of HIV/AIDS. It was recommended that there should be adequate staff training to improve their knowledge on the transmission of HIV/AIDS especially in the area of vertical transmission with appropriate treatment. Also, antiretroviral drugs should be available in Health centres and hospitals for the treatment of HIV/AIDS positive mothers and prevention of vertical transmission of the infection, lastly HIV status of pregnant women should be known in order to commence treatment immediately.

### Introduction

Mother to child transmission (MTCT) is also known as vertical transmission. It is the primary cause of HIV infection in children between conception and 2 years of age. Vertical (or mother to child) transmission refers to the situation where an infant of an HIV-infected mother acquires the HIV infection from the mother at one or more of the following stages. Transplacentally in the uterus during pregnancy, perinatally during the process of labor and delivery, and postnatally during breast feeding. Around 15-30 percent of babies born of HIV – infected mothers become infected with HIV during pregnancy and delivery, further 5-20 percent will become infected through breast feeding (Joint United Nation HIV/AIDS, 2011) (UNAID).

Nigeria currently has the highest burden of vertical transmission of HIV in the world due to poor coverage of the Prevention of Mother to Child Transmission (PMTCT) program partly as a result of poor knowledge of PMTCT interventions amongst healthcare providers in the country. (Nkwo, 2012). About 1,000 babies were infected with HIV every day during pregnancy, birth or breastfeeding, globally, there are approximately 1.4 million pregnant women living with HIV in low and middle income countries, only 26% of pregnant women living in these countries received HIV tests. In Eastern and Southern Africa, the region hit hardest by the epidemic, only half of pregnant women were tested for HIV. An estimated 53% of pregnant women living with HIV in the developing world received antiretroviral drugs to prevent them from transmitting the virus to their babies. Prevention of mother to child transmission (PMTCT) of HIV is a global interventional program initiated by the United Nations Organization to protect the children of the world from the scourge of the HIV pandemic. (National Agency for the control of AIDS, 2011) (NACA).

In 2010, around 390,000 children under the ages of 15 years became infected with HIV, mainly through Mother to child transmission of HIV/AIDS (MTCT) (UNAID, 2011). In 2011, UNAID produced the global plan towards the elimination of new infections among children and keeping their mother alive. The plan recognizes the need to consider different ways of preventing mother to child transmission of HIV/AIDS and to integrate HIV interventions into other family planning, maternal health and child health services. Mother to child transmission (MTCT) is the dominant mode of acquisition of HIV among young children worldwide resulting in at least 1700 new infectious each day or more than one pediatric infection every minute. (UNAIDS 2011).

Statistics showed that the prevention of mother to child transmission (PMTCT) services that commenced in Nigeria in 2001 in six tertiary health facilities has 46% HIV prevalence in antenatal clinic which

an estimated 85,450 HIV exposed infants at risk of MTCT annually. Owonola (2012) stated that out of 2.1 million children living with HIV globally in 2008, Nigeria accounted for 220,000 or over 10 percent. Most of these children were infected through MTCT. Pregnant women across the developing country must be tested for HIV. Prevention of mother to child transmission of HIV/AIDS programmes must be scaled up to include all mothers and babies no matter how impoverished or geographically isolated they may be, and where prevention of mother to child HIV transmission is accessible, it must be delivered consistently and with the most effective drugs available. The best chance for a child to survive is to have healthy parents. Medical, psychological and social support should thus be improved for infected mothers and other families. (FGN 2002).

The main challenges lay in the reluctance of women to be tested for HIV, incomplete follow-up of participants, non-disclosure of HIV status and difficulties with infant feeding for HIV positive mothers, staff training, provision of antiretroviral prophylaxis. HIV testing is critical because woman who do not know they are HIV positive cannot benefit from interventions, the rate of pregnant women who receive HIV testing and counseling in low and middle income countries increased by 9% between 2009 and 2010. (Lockman, Moffat, Moyo, Makhema & Essex, 2007).

According to NACA (2011) Nigeria Population is estimated to be 152.6m, where birth rate per annum is estimated to be 6,192.055. HIV prevalence in Ante-natal clinic (woman) is estimated to be 4.6% of the total population. Estimated number of HIV exposed infants at risk of (MTCT) mother to child transmission of HIV/AIDS annually is said to be 85,400.

According to Petrpolou & Katsambas (2006) another challenge of PMTCT is inadequate knowledge of HIV related issues by healthcare providers and general public and the resultant pervasive stigma associated with the disease. Undisclosure of HIV/AIDS status and availability of antiretroviral drugs is also part of the challenges facing PMTCT implementation. (Mephram, Zondi, Mbuyazi, Mkhwanali & Newli 2011). According to WHO (2011) non disclosure of HIV/AIDS is a challenge militating against the successful implementation of PMTCT. Fear of disclosure is a common reason why women are reluctant to return to their HIV clinic to continue treatment.

### **Statement of the Problem**

In many low and middle income countries health system are often poorly staffed and no enough resources, clinic struggle to provide existing services, as a result of this limited capacity, many clinics can not provide HIV – infected women with antiretroviral drugs. (WHO, 2011). Availability and access to treatment is also very important to ensure that those who test positive for HIV and those who deliver at home, have access to the necessary antiretroviral drug needed for PMTCT, including treatment for the infant. Another challenge is the short supply of skilled health workers which can affect the standard of care and capacity of clinics. (Avert 2012).

In 2011, around 330,000 children under the age of 8 became infected with HIV and an estimated 250,000 died from AIDS. Almost all of those infections were as a result of mother – to-child transmission of HIV/AIDS. Over the years since the first cases were identified the side of the global HIV/AIDS has unfortunately far exceeded all expectations. WHO (2011).

The rate at which the transmission of HIV/AIDS from positive mother to their children is increasing, prompted the researchers to look into the challenges facing positive mothers in the prevention of mother-to-child transmission of HIV/AIDS and also to make suggestions and recommendations to overcome the challenges.

### **Purpose of study**

1. To investigate the extent at which non disclosure of HIV/AIDS status of pregnant women affects the PMTCT program.
2. To examine how inadequate knowledge of health workers on HIV/AIDS affects the PMTCT program.
3. To find out how inavailability of antiretroviral drugs affect the PMTCT program.

### **Research Questions**

The following questions were asked to guide the study;

1. Does Non-disclosure of HIV status contribute to mother to child transmission of HIV/AIDS?
2. Does inadequate Staff training on knowledge of HIV/AIDS contribute to mother to child transmission of HIV/AIDS?
3. Does inavailability of antiretroviral prophylaxis contribute to mother to child transmission of HIV/AIDS?

### **Research Hypotheses**

The following hypotheses were formulated to guide the study;

1. Non-disclosure of HIV/AIDS status will not significantly affect the prevention of mother to child

- transmission of HIV/AIDS.
2. Inadequate staff training on the knowledge of HIV/AIDS will not significantly affect the prevention of mother to child transmission of HIV/AIDS.
  3. Inavailability of antiretroviral prophylaxis drug will not significantly affect the prevention of mother to child transmission of HIV/AIDS.

### Methodology

The research design adopted for this study was the descriptive research of the survey type. The population for this study consists of all the health workers in Offa Local Government Area of Kwara State, a total sample of 145 respondents was used, a purposive and stratified sampling technique was used to select government hospital and 7 health centres in Offa Local Government Area. The selected hospital and health centres include: General Hospital Offa, Lamodi Health Centre, Olomowewe Health Centre, Igbo-Oro Health Centre, Oluyemo Health Centre, Tawakalitu Health Centre and Abogunnugu Health Centre.

19 doctors that comprises of 15 male and 4 female were sampled, 97 nurses that include 92 female and 5 male, 29 Health Technologists that comprised 4 male and 25 female were sampled for the study. 66 respondents was sampled from General Hospital Offa, a total of 13 respondents from Lamodi Health Centre, 13 respondents from Olomowewe Health Centre, 12 from Igbo Oro Health Centre, 9 respondents were sampled from Oluyemo Health Centre. A total of 10 respondents from Tawakalitu Health Centre, 10 respondents from Owode Health Centre and Abogunnugun have a total of 12 respondent .

Three (3) research questions were raised, and three (3) hypotheses were formulated for the purpose of the study. The main instrument used for this study is a structured questionnaire tagged Challenges Confronting the Prevention of Mother to Child Transmission Of HIV/AIDS in Offa LGA, Kwara State. The questionnaire consists of two sections. Section A consists of demographic information such as: Name of Hospital and years of experience while Section B consist items to elicit responses on the challenges in PMTCT using a 4 point likert rating scale of Strongly Agree (SA) Agree (A) Disagree (D) Strongly Disagree (SD).

The instrument was validated by 3 experts in relevant field from the Department of Health Promotion and Environmental Health Education, University of Ilorin. The lecturers' suggestions and corrections were used to improve the instrument.

The reliability of the instrument was carried out using test re-test method, it was administered to 20 health workers at an interval of 2 weeks at Kwara State Children Specialist Hospital Ilorin. The data generated in each administration were correlated using Pearson product moment correlation. A correlation coefficient of 0.76r was obtained and this was considered appropriate for the study.

The questionnaire was administered to the respondents by the researchers and three (3) trained research assistants. Descriptive statistics of frequency counts and percentages was used to analyse the demographic data while inferential statistic of chi-square ( $X^2$ ) using statistical package of social sciences (SPSS) version 16.0 to test the set null hypotheses at 0.05 alpha level of significance.

## RESULT AND DISCUSSION OF FINDINGS

### Bio-data of Respondents

**Table 1:Sample used from Hospital and Health Centres used for the study.**

|                          |   | General Hospital Offa | Lamodi Health Centre | Olomowewe Health Centre | Igbo-Oro Health Centre | Oluyemo Health Centre | Tawakalitu Health Centre | Owode Health Centre | Abogunnugu Health Centre. | Total | Frequency  | Percentage %  |
|--------------------------|---|-----------------------|----------------------|-------------------------|------------------------|-----------------------|--------------------------|---------------------|---------------------------|-------|------------|---------------|
| Doctor                   | M | 6                     | 1                    | 2                       | 1                      | 1                     | 1                        | 1                   | 2                         | 15    | 19         | 13.10         |
|                          | F | 2                     | 1                    | -                       | 1                      | -                     | -                        | -                   | -                         | 4     |            |               |
| Nurse                    | M | 4                     | -                    | 1                       | -                      | -                     | -                        | -                   | -                         | 5     | 97         | 66.90         |
|                          | F | 46                    | 8                    | 7                       | 7                      | 5                     | 6                        | 6                   | 7                         | 92    |            |               |
| Community Health Workers | M | 3                     | -                    | -                       | -                      | 1                     | -                        | -                   | -                         | 4     | 29         | 20.00         |
|                          | F | 5                     | 3                    | 3                       | 3                      | 2                     | 3                        | 3                   | 3                         | 25    |            |               |
| <b>TOTAL</b>             |   | <b>66</b>             | <b>13</b>            | <b>13</b>               | <b>12</b>              | <b>9</b>              | <b>10</b>                | <b>10</b>           | <b>12</b>                 |       | <b>145</b> | <b>100.00</b> |

Table 1 shows the highest frequency distribution of 97(66.9%) respondents which were nurses while the lowest frequency distribution are 19 (13.1%) which were medical doctors .

**Table 2: Years of Experience of the Respondents**

| Years of Experience | Frequency  | Percentage |
|---------------------|------------|------------|
| 1-5years            | 64         | 44.10      |
| 6-10years           | 48         | 33.10      |
| 11 years and above  | 33         | 22.80      |
|                     | <b>145</b> | <b>100</b> |

Table 2 shows the highest years of experience of respondents used for the study 64 (44.10%) were between 1-5years experience, while the lowest years of experience 11years and above 33 (22.80%) respondents were used.

**Table 3: Chi-Square analysis of respondents responses on the challenges and its effects on Prevention of Mother to Child Transmission of HIV Aids**

N = 145

|   | Variable   | SA         | A          | D          | SD        | Total      | Cal X <sup>2</sup> Value | Df | Table X <sup>2</sup> value | Decision            |
|---|--|------------|------------|------------|-----------|------------|--------------------------|----|----------------------------|---------------------|
| 1. Non disclosure of HIV status and its effect on PMTCT           | 1 Positive HIV Pregnant women do not disclose their status due to fear of stigmatization.  | 69         | 36         | 28         | 12        | 145        | 17.77                    | 6  | 12.59                      | Hypothesis Rejected |
|   | 2 Positive HIV Pregnant women do not come back for treatment so that their HIV status will not be known by their spouse and family members | 58         | 57         | 21         | 9         | 145        |                          |    |                            |                     |
|   | 3 Many pregnant women visits the local traditional homes in order not to carry out HIV test.   | 48         | 42         | 43         | 12        | 145        |                          |    |                            |                     |
|   |  | <b>175</b> | <b>135</b> | <b>92</b>  | <b>33</b> | <b>435</b> |                          |    |                            |                     |
| 2. Inadequate staff training and its effects on PMTCT             | 4 Skilled Health workers in the area of HIV /AIDS to operate facilities of PMTCT are very few in clinics and hospitals.                    | 50         | 41         | 45         | 9         | 145        | 13.78                    | 6  | 12.59                      | Hypothesis Rejected |
|   | 5 There is no adequate training and workshop for staff to update their knowledge of PMTCT.   | 41         | 55         | 29         | 20        | 145        |                          |    |                            |                     |
|   | 6 Government do not sponsor staff for training   | 53         | 51         | 31         | 10        | 145        |                          |    |                            |                     |
|   |  | <b>144</b> | <b>147</b> | <b>105</b> | <b>39</b> | <b>435</b> |                          |    |                            |                     |
| 3. Inavailability of antiretroviral drugs and its effect on PMTCT | 7 There are no enough drugs in health centres and hospitals for HIV positive pregnant women.   | 43         | 50         | 42         | 10        | 145        | 13.36                    | 6  | 12.59                      | Hypothesis Rejected |
|   | 8 Drugs are not available for the continuation / follow up of treatment of positive HIV mother   | 56         | 43         | 24         | 22        | 145        |                          |    |                            |                     |
|   | 9 Drugs that are available are mostly for mothers and it is difficult to get drug for infants  | 50         | 53         | 28         | 14        | 145        |                          |    |                            |                     |
|   |  | <b>149</b> | <b>146</b> | <b>94</b>  | <b>46</b> | <b>435</b> |                          |    |                            |                     |

P ≤ 0.05

Table 3 shows the calculated value X<sup>2</sup> of 17.77 which is greater than the table x<sup>2</sup> value of 12.59 at df of 6 at 0.05 alpha level, since the calculated x<sup>2</sup> value is greater than table x<sup>2</sup> value, the hypothesis is rejected. This means that non-disclosure of HIV status significantly affect the prevention of mother-to-child transmission of HIV/AIDS.

Hypothesis 2 indicated that the calculated X<sup>2</sup> value of 13.78 which is greater than the table x<sup>2</sup> value of 12.59 and at df of 6 at 0.05 alpha level of significance. Since the calculated X<sup>2</sup> value is greater than table X<sup>2</sup> value the hypothesis is rejected, which means that inadequate staff training about knowledge of HIV/AIDS significantly affect prevention of mother to child transmission of HIV/AIDS. Hypothesis 3 shows the calculated X<sup>2</sup> value of 13.36 which is greater than the table X<sup>2</sup> value of 12.59 at df of 6 at 0.05 alpha level of significance. Since the calculated X<sup>2</sup> value is greater than the table X<sup>2</sup> value hypothesis is therefore rejected, this connotes

that inavailability of antiretroviral drugs in hospitals and health centres affect prevention of mother to child transmission of HIV/AIDS.

### Discussions of Findings

From the findings in hypothesis one, it was revealed that non-disclosure of HIV/AIDS status significantly affect successful implementation of prevention of mother to child transmission of HIV/AIDS, this is in agreement with Lockman Moffat, Moyo, Makhema & Essex (2007) who affirmed that the main challenges of prevention of mother to child transmission of HIV/AIDS include non disclosure of HIV status. Also, this is supported by Mephram, Zondi, Mbuyazi, Mkhwanali & Newli (2011) who sees undisclosure of HIV/AIDS status as a challenge in PMTCT program. Therefore, non-disclosure is one of the challenges in the prevention of mother to child transmission of HIV/AIDS,

Hypothesis two which findings revealed that inadequate staff training on knowledge of HIV/AIDS affects prevention of mothers to child transmission of HIV/AIDS. This findings corroborates the report of Petrpolou & Stratigos (2006) who stated that challenge of prevention of mother to child transmission of HIV/AIDS is the inadequate knowledge of HIV related issues by health care providers and general public. Also the finding is in line with Nkwo (2012) who reported that Nigeria currently has the highest burden of vertical transmission of HIV in the world due to poor knowledge of PMTCT infection among health care providers in the country. The finding is also in agreement with Avert (2012) that sees shortage supply of skilled health workers as a challenge of prevention of mother to child transmission on HIV/AIDS, lack of staff training affects the standard of care and capacity of clinics.

Hypothesis three revealed that inavailability of antiretroviral drugs significantly affect prevention of mother to child transmission of HIV/AIDS. This finding is in agreement with Mephram, Zondi, Mbuyazi, Mkhwanali & Newli (2011) who sees inavailability of antiretroviral drugs as a challenge facing prevention of mother to child transmission of HIV/AIDS program. Also, the findings corroborates with WHO (2010) who claimed that many clinics can not provide HIV infected mothers with antiretroviral drugs as this is one of the major challenges facing prevention of mother to child transmission of HIV/AIDS. Avert (2012) affirmed that HIV positive pregnant women should have access to anti retroviral drugs irrespective of their place of birth, as many women deliver at home.

### Conclusion

This study investigated the challenges facing prevention of mother to child transmission of HIV/AIDS program, outcome of the research concluded that there are non disclosure of HIV status among many pregnant women, inadequate staff training and inavailability of antiretroviral drugs are parts of the major challenges facing the proper implementation of prevention of mother to child transmission of HIV/AIDS (PMTCT).

### Recommendations

Based on the findings in this study, the following recommendations were made, that, for a successful implementation of prevention of mother-to-child transmission of HIV/AIDS and to overcome the challenges facing the PMTCT program.

1. HIV/AIDS status of pregnant women should be known in order for them to undergo treatment that will enable them to prevent the transmission of the infection to the unborn child, HIV victim should be ready to disclose their HIV status so as to reduce PMTCT.
2. The health care providers should have adequate knowledge about the infection in order to take appropriate steps in taking care of the HIV positive pregnant women; this can be achieved by training, symposium and workshops from Government and Non-Governmental Organizations.
3. Positive mothers should have access to drugs irrespective of their location and place of birth, be it rural or urban areas.

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