

Full length research paper

# Coverage and uptake of PMTCT services in Primary health care centres in Plateau state, Nigeria

Envuladu E.A<sup>1\*</sup>, Tagurum Y.O<sup>1</sup>, Bello D.A<sup>1</sup>, Audu S<sup>1</sup>, Magaji F.A<sup>2</sup>, Zoakah A.I<sup>1</sup>

<sup>1</sup>Department of community Medicine Jos University Teaching Hospital Jos, Plateau State, Nigeria

<sup>2</sup>Plateau AIDS Control Agency

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**Well over 90% of new infections among infants and young children occur through mother-to-child transmission, so the survey was set out to determine the coverage and the uptake of the prevention of mother to child transmission (PMTCT) services in Plateau State. A cross sectional survey of all Primary Health Care facilities in all the Local Government Areas (LGAs) in the State was carried out using a facility survey questionnaire, a desk review of the facilities' records and an in-depth interview guide. Data was analysed using Epi Info version 3.5.1 statistical software. A total of 888 PHCs in the State were surveyed out of which only 75(8.5%) were offering PMTCT services. The overall PMTCT service coverage in the state was between 3.5% to 17.8% and only 2(11.8%) of the LGAs had a coverage rate of 15-20%. The result of the desk review showed that 19,935(55.2%) had individual pre-test counselling, 32,987(91.4%) accepted HIV testing and 1,866 (5.7%) were HIV positive. Partner notification was 23.7% of which 10.7% were found to be HIV positive. Most (92.3%) got their Anti retroviral drugs (ARVs) from the secondary health care facilities. The coverage of PMTCT services, partner notification and counselling on infant feeding was found to be low in Plateau State.**

Keywords: coverage; uptake; PMTCT; Primary Health Care Centre

## Introduction

The emergence of the Human immune Deficiency Virus (HIV) infection has increased the already heavy burden of disease and death among women and children in low- and middle-income countries.<sup>1</sup> Pregnant women living with HIV are at high risk of transmitting HIV to their infants during pregnancy, birth or through breastfeeding and without any interventions, between 20% and 45% of infants may become infected with an estimated risk of 5-10% during pregnancy, 10-20% during labour and delivery, and 5-20% through breastfeeding. (WHO, 2007) In some regions of the world, women currently represent the population with the most rapid increase in HIV infection rates and in the hardest-hit countries of sub-Saharan Africa, women, infants and young children account for more than 60% of all new HIV infections (UNAIDS, 2010).

Nigeria accounts for the highest burden of MTCT of HIV in the Sub-Saharan region with HIV prevalence among ANC attendees being 4.1% in 2010. (FMOH, 2010) There are an estimated 1.72 million women infected with HIV in Nigeria. Each year, around 57,000 babies in Nigeria are born with HIV and in the absence of interventions; between 15% and 45% of infants born to HIV infected mothers in the country will acquire the infection during pregnancy, delivery or through breast feeding. (UNGASS, 2010; FMOH, 2007). In response to the growing problem of MTCT of HIV infection in the country, the Federal Government of Nigeria commenced the National PMTCT of HIV infection Programme in 2002 with the overall goal of reducing transmission of HIV infection from positive mothers to their infants by 50% by the year 2010. (FMOH, 2003). Programme evaluations from a number of countries in Africa have reported deficiencies in various components of PMTCT programmes including uptake of antenatal HIV testing, receipt of test results, uptake of ARV prophylaxis and postnatal mother-infant follow up (Doherty *et al.*, 2005; Stringer *et al.*, 2003; WHO, 2008).

\*Corresponding Author E-mail: [esvula@yahoo.com](mailto:esvula@yahoo.com);  
+2348034517244

**Table 1:** uptake of PMTCT services among ANC attendees in Plateau State

Parameters	Yes	No	Total
GPTC	30,466(84.4%)	5,626(15.6%)	36,092
IPTC	19,935(55.2%)	16,157(44.8%)	36,092
HIV Testing	32,987(91.4%)	3,105(8.6%)	36,092
HIV positive	1,866(5.7%)	31,121(94.3%)	32,987
PTC-positives	1,759(94.3%)	107(5.7%)	1,866
PTC-negatives	29,529(94.9%)	1,592(5.1%)	31,121
<b>Infant feeding</b>			
counselling	5,878(16.3%)	30,214(83.7%)	36,092
Received ARVs	1,564(83.8%)	302(16.2%)	1,866

\*key: GPTC-Group pre-test counselling; IPTC-Individual pre-test counselling; PTC-positives-post-test counselling for HIV positives; PTC-negatives-post-test counselling for HIV negatives

The objective of this survey is to determine the number of PHC in the State that offer the complete package of PMTCT services and the uptake of PMTCT services by the women in Plateau State.

## Methodology

**Study design:** It was a cross-sectional survey of all the Primary Health Care (PHC) facilities in all the local government areas in Plateau State

**Study population:** The study covered all the PHCs (888) in the State and 36,092 pregnant women who registered for ANC in the 75 PHCs offering PMTCT services in the State.

## Data collection

Data was collected using a facility survey questionnaire, a desk review of the facilities' records and an in-depth interview guide. The data was collected by the research assistances who were doctors, nurses and community health officers. An in-depth interview was used to collect information on the health facilities that offer PMTCT services, a desk review of the records in the PHCs that offer PMTCT services was done to ascertain the various PMTCT coverage which should cover the four elements of comprehensive PMTCT and they were: HIV counselling and testing, Family planning services, Antiretroviral prophylaxis and treatment, Anti natal care (ANC), safe delivery practices, post-natal care, infant feeding counselling, partner notification, partner counselling and testing and care and support for infected mothers and family. Uptake of PMTCT services was determined for HIV counselling and testing (HCT) for the pregnant women and their partners, ARVs and Infant Feeding counselling. Quantitative data was analyzed

using Epi Info version 3.5.1 statistical software. Descriptive statistical analysis were done for PMTCT services coverage in the State, HIV counseling and testing, partner notification, proportion of HIV positive who received ARVs and infant feeding counseling.

## Results

### PMTCT service coverage in the State

A total of 888 PHCs in the State were surveyed out of which only 75(8.5%) were offering PMTCT services. The overall PMTCT service coverage in the state was between 3.5% to 17.8% and only 2(11.8%) of the Local Government Areas had a coverage rate of 15-20% while 7(41.2%) had a coverage rate of 5-10% and 4(23.5%) had a coverage rate of <5%.

### Counseling and testing at PMTCT site

A total of 36,092 pregnant women registered for ANC, 30,466(84.4%) had a group pre-test counselling (GPTC), while 19,935(55.2%) had individual pre-test counselling (IPTC), 32,987(91.4%) of them accepted HIV testing and 1,866 (5.7%) were found to be HIV positive (see table 1 above). Among those who had individual pre-test counselling, some had a group pre-test counselling while others did not. All those who agreed to HIV testing had either a group pre-test counselling or an individual pre-test counselling.

### Partner notification

Partner notification was 23.7% , of the partners that were informed, 7,342(93.8%) had a pre-test counselling while 6,508(88.6%) accepted HIV testing out of which 697(10.7%) were found to be HIV positive (See table 2).

**Table 2:** partner's notification and uptake of services

Parameters	yes	no	Total
Partners notified	7,825(21.7%)	28267(78.3%)	36,092
Pre-test Counselling	7,342(93.8%)	83(6.2%)	7,825
HIV testing	6,508(88.6%)	834(11.4%)	7,342
Partners HIV positive	697(10.7%)	5811(89.3%)	6508

### Proportion of HIV positive who received ARVs

Eighty three percent of HIV positives were given ARVs and mostly (92.3%) from the secondary health care facilities though.

### Breastfeeding counselling

Counselling on breastfeeding was not well covered in the PMTCT sites, only 5,878(16.3%) of the pregnant women were counselled on infant feeding.

## DISCUSSION

### Local Government Area facility coverage of PMTCT services

While almost all HIV infected women in the developed countries will receive good PMTCT care, on an average, less than ten percent of women receive even the most basic PMTCT services in developing countries. (Onyango, 2008) Nigeria like most African countries are battling with the uneven distribution and low coverage of PMTCT services making it inaccessible to most of the beneficiaries especially in the rural areas. Only few LGAs had a facility PMTCT service coverage rate of 15-20% in the entire State which is far lower than expected in reaching a target of 50% reduction of HIV in infants by 2010 based on the declaration of the United Nations General Assembly Special Sessions on HIV/AIDS in 2001 (Attawell, 2008). The low coverage rate especially in the PHCs could be because of the concentration of health workers mostly doctors and nurses in the secondary and tertiary health centres in the urban areas leaving the PHCs with inadequate man power to provide PMTCT services in the PHCs. This finding is similar to that of Ethiopia where 62% of mothers were receiving ANC services at non-PMTCT sites because of non-availability of PMTCT services in the district health centres. (Nigatu and Woldegebriel, 2011)

### Uptake of PMTCT services in PMTCT sites

In this survey, it was observed that while 55.2% of the

pregnant women agreed to individual HCT similar to what was seen in Northern part of Nigeria, (Mbonye, 2009) the concept of the group counselling and testing with the aim of getting more women to be counselled for HIV and to reduce stigma and discrimination which allow more women to come out for HCT was actually beneficial here as more women (84.4%) agreed to the group counselling and testing. Never the less, the uptake of HIV testing was more than the counselling as more women agreed to the HIV testing probably because it is presented to them as part of the routine investigations for ANC. (NACA, 2011) The prevalence of HIV from this survey showed that 5.7% of the pregnant women were HIV positive which is higher than the national prevalence of 4.6% (UNICEF, 2008) and therefore the need for the expansion of the services to all part of the state and this expansion will require extending the services to the PHCs which has a direct link with the rural areas to help in the fight against HIV. It has been suggested by some researchers that male partners should be involved early in the PMTCT programme to encourage support and practices that will further prevent the spread of the virus and disclosure of HIV test results to partners will make it easier for women to access the complete package of PMTCT services and it gives less potential for blame and discrimination. (Moses *et al.*, 2009; Farquhar *et al.*, 2004; UNICEF, 2003)

This survey showed that only a few of the positive patients got ARVs from the PHCs while others were referred to the secondary health care centres. It is a well-known fact that not all who are referred for treatment from the rural to the urban centre actually get there and for the few that eventually go there, for lack of funds and the distance, they eventually either stop coming or are not regular with their visits and are finally lost to follow up. This has also been agreed by other studies to be a contributory factor to the low coverage of ART therefore the need for upgrading the PHCs with the resources to offer PMTCT services including ART, (UNICEF, 2008) .It was also found that counseling HIV-positive mothers on infant feeding and provision of breast milk substitutes is limited at primary health care facilities (USAID, 2008) and this survey also concurred with the result as counselling on infant feeding was not well covered in the PMTCT sites despite the advantages of breastfeeding that was enumerated by many researchers even though the low knowledge of infant feeding in HIV among health workers could be a contributing factor.

## CONCLUSION

The survey revealed that the coverage of PMTCT services in the State was low and while the uptake of PMTCT services among those reached was high with the exception of partner notification and counseling on infant feeding which was found to be low, access to ARVs was mainly in the secondary and tertiary health care centres.

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