



Assessing PMTCT service coverage in Southwest Nigeria: A step towards universal coverage

Abayomi J Afe^{*1}, Timothy Aknimurele¹, Abimbola Oduola¹, Olatoun Adeola¹, Ganiyu Agboola¹

ABSTRACT

As at the end of 2009, Nigeria accounted for 30% of the global burden of mother to child transmission of HIV. Only 13% of pregnant women in Nigeria accessed HIV testing and counseling in the context of PMTCT (Prevention of mother to child transmission of HIV) as at the end of 2008 and about 12% of those positive accesses ARV prophylaxis for PMTCT. Reasons for this low coverage include the non-availability of the PMTCT services at all maternity or birthing centers in the country and the failure of pregnant women and nursing mother to enroll at formal conventional health facilities where their chances of accessing PMTCT services is very high. As Nigeria is a signatory to the global call to eliminate mother to child transmission of HIV, there is need for a current mapping of health facilities for PMTCT services, as this will provide us with gaps that need to be filled towards the universal coverage of PMTCT services in the country. Hence this study done to map the availability of PMTCT services at all the registered health facilities in the Ondo and Ekiti states, southwest Nigeria. Availability of HIV counseling and testing in ante-natal clinic was far below universal coverage at 35% in Ondo state and 60% in Ekiti state and averagely at 44% in both states combined. Comprehensive PMTCT service was however present in just 25% health facilities in Ondo state and 15% of facilities in Ekiti state. The average PMTCT coverage for both states was 20%; which was above the national coverage of 13%. More public hospitals (52%-57%) provide HIV counseling and testing services in ante-natal clinic than private hospitals (38%-52%). Similarly, more public hospitals (21%-24%) offer comprehensive PMTCT service than private hospitals (1%-4%) in both states. There is an urgent need for a rapid scale up of HIV counseling and testing service and PMTCT services in the two southwestern states and the country as a whole to achieve universal coverage of PMTCT service in the country.

Keywords: PMTCT (Prevention of Mother to Child Transmission), HIV Counseling and Testing (HCT), Universal Coverage, Public, Private, Health Facilities

INTRODUCTION

As at 2013, there were about 35 million people living with HIV infection globally and 2.1 million were newly infected with HIV in that same year. Sub-Saharan Africa with about 25 million HIV infected population accounted for about 70% of the global burden. Of the global 6,000 new HIV infections that occurred daily in 2013, the sub-Saharan African accounted for 68%. Children less than 15 years constituted about 10% of

the global HIV burden with a population of about 3.5 million.¹ About 90% of HIV infection in children is via mother to child transmission of HIV infection. However with the use of the age-long proven four prongs approach of PMTCT, vertical HIV transmission rate can be brought to as low as 5% in breastfeeding settings and below 1% in non-breastfeeding situations.² Scaling up programmes for PMTCT and the use of more efficacious ARV combination

GJMEDPH 2016; Vol. 5, issue 1

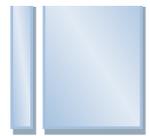
¹Equitable Health Access Initiative, Lagos, Nigeria

*Corresponding Author:

Abayomi Joseph Afe
Community Medicine, Equitable Health Access Initiative, Lagos, Nigeria
abayomiafe@yahoo.com

Conflict of Interest—none

Funding—none



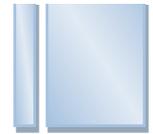
regimens have helped prevent HIV infection in more than 800 000 children between 2005 and the end of 2012.³ In the 21 African priority countries, which account for about 90% of all pregnant women living with HIV and new infections among children globally, mother-to-child transmission rates declined overall from an estimated 26% in 2009 to 17% in 2012.⁴ Despite the proven efficacy of ARV use in preventing mother to child transmission of HIV infection, only 65% of pregnant women living with HIV received ARV drugs for PMTCT in 2012, compared with 59% in 2011 and 49% in 2009 in these 21 African priority countries.⁴ Nigeria is the most populous country in Africa and has about 3.5 million people living with the HIV infection, thus making her the second country with the largest HIV burden in the world. As at the end of 2009, Nigeria accounted for 30% of the global burden of mother to child transmission of HIV. Only 13% of pregnant women in Nigeria accessed HIV testing and counseling in the context of PMTCT as at the end of 2008 and about 12% of those positive accessed ARV prophylaxes for PMTCT.⁵

Reasons for this low coverage include the non-availability of the PMTCT services at all maternity or birthing centers in the country and the failure of pregnant women and nursing mothers to enroll at formal conventional health facilities where their chances of accessing PMTCT services is very high. As at December 2009, while all tertiary health care institutions that provide maternity services, offer PMTCT services, only about 42% and 3% respectively of secondary and primary health care facilities with maternities offer PMTCT services.⁶ Hence the great majority of the Nigerian population (60%) living in the rural areas were left with no access to PMTCT services. Additionally as most private hospitals were left out in the mostly donor-driven PMTCT programme in the country, pregnant women patronizing these centers do not have access to full complement of the PMTCT services. Also only 58% of pregnant women in Nigeria registered for ANC at health facilities and about 35% delivered with skilled birth attendants in hospitals, the remaining 62% population of pregnant women delivered outside health

facilities (40% by TBA and 20% unassisted at home).^{6,7} As Nigeria is a signatory to the global call to eliminate mother to child transmission of HIV, there is need for a massive scale up of the PMTCT programme to provide access to the various categories of pregnant women who patronize the different centers mentioned earlier. In a bid to achieve this, there is need for a current mapping of health facilities for PMTCT services, as this will provide us with gaps that need to be filled for the universal coverage of PMTCT services in the country. Hence this study is done to map all the registered health facilities in Ondo and Ekiti states, southwest Nigeria.

BACKGROUND

Nigeria is the most populous country in Africa with a population of 140 million in 2006.⁸ The country is divided into 36 states and a Federal Capital Territory (FCT), which are further grouped into 6 geopolitical zones, based mainly on ethnic affinity. The southwest region, where this study was carried out is one of the regions. The country's health system is broad and heterogeneous comprising of the public, private for-profit, non-governmental organizations (NGOs), community-based organizations (CBOs), faith-based organizations (FBOs), and traditional health care providers. Broadly this can be grouped into formal and Non-formal sector. The formal sector consists of the public and private orthodox medical practice while the informal is mainly made up of the traditional healthcare providers. The formal sector is arranged in three tiers comprising of primary, secondary and tertiary levels of care. The Primary Health Care Development Agency estimates that there are a total of 22,726 health facilities in Nigeria. About 94% of these facilities are primary health care facilities, where majority of Nigerians access health services. There are about 21,431 primary health care facilities in the country ranging from health posts to Primary Health Care Centers with about 7,056 providing maternal and child health services and should be targeted for PMTCT services.⁶ About two-thirds of the national population lives in the rural areas and these are served mainly by the primary healthcare facilities. There are 972 secondary health care facilities in the country which provide maternity



services. There are 310 tertiary health care institutions in Nigeria but only 58 provide maternity services, sadly some of these centers do not offer PMTCT services. Though the country has made some progress in providing PMTCT services, yet there is still a wide gap in the coverage across the country especially in the rural areas.

As at 2003, only 11 tertiary health institutions in Nigeria offer PMTCT services, reaching less than 1% of women in need of PMTCT services. By December 2009, the number of PMTCT sites increased to 640 and it involved not only tertiary but secondary, primary, private and faith-based health institutions. But by December 2009, all tertiary health care institutions that provide maternity services were offering PMTCT services, only about 42% and 3% respectively of secondary and primary health care facilities with maternities offer PMTCT services. The national coverage of PMTCT was 13% of pregnant women accessing HIV testing and counseling in the context of PMTCT as at the end of 2008. The country subsequently set a goal of eliminating mother to child transmission of HIV (eMTCT) to reduce the MTCT rate to less than 5% and reduce new paediatric infections by 90% from baseline by 2015(6). To achieve this target, there is need for massive scale up of PMTCT services across the country .

METHODS

Study location

Ondo and Ekiti

Study period

March – May 2013 (3 months)

Study design

Field mapping of health facilities

Procedure

Composition of mapping teams comprising of staff of state HIV/AIDS control agencies, staff of state ministry of health and staff of a lead PEPFAR implementing partner in the states. Field teams for each of the Local government areas were also constituted comprising of Local Government M&E officers , Local government HIV/AIDS Agency Control officer, and the PHC coordinators. A central access

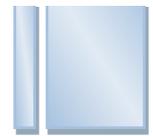
data base was created for the exercise and this was maintained at the state levels. Mapping tool in form of questionnaires was also developed for data collection at the level of health facility. One day training on proper filling of the mapping questionnaires was conducted prior to onset of field work. Validated lists of health facilities in the two states were obtained from the state government regulatory agencies and the association of private medical practitioners in the two states. These lists form the sampling frame for the survey. Completed mapping questionnaires were assessed for completeness at the local government and state government levels before they were entered into the access database for storage and analysis. Simple analysis using frequency distribution as carried out on the collated data.

RESULTS

A total of 1,335 health facilities were assessed during the study in the two southwestern Nigerian states. Of these, 97% (1,298) were functional; defined by ongoing healthcare service delivery at the centers. The other 3% (37) facilities have ceased to offer any healthcare service to the public again and therefore were classified as non-functional.

About 25% (330) of the functional health facilities were privately owned while a larger fraction of 75% (968) were government facilities. Also of the functional health facilities, 74% (961) were primary health care centers where first level of care was given to patients, 26% (334) were secondary health facilities serving as referral centers to the primary healthcare centers and only 3 were tertiary centers where the highest level of care is supposed to be rendered.

About 73 % (950) of the functional health facilities in the two states provide maternal services in form of antenatal care with or without delivery services for pregnant women while 27% (348) facilities do not offer any form of maternal services at all. Of the number that offer maternal health service 44% (414) offered HIV counseling and testing in ante-natal care while the remaining 56% (536) have no facility for HIV counseling and testing in the facilities. Of the number that offer HIV testing in ANC only 20% (81) health



facilities have comprehensive PMTCT services with antiretroviral drugs (ARV) supply and laboratory support. While more than 80% (333) do not offer

PMTCT service; they only test the women for HIV and refer appropriately to other centers. (Table 1).

Table 1 General Features of All Health Facilities Assessed

Features	Ekiti state		Ondo state		TOTAL
	Number	Percentage	Number	Percentage	
Total	472	100	863	100%	1,335
Functional	472	100%	826	96%	1,298 (97%)
Non-functional	0	0	37	4%	37(3%)
OWNERSHIP					
Private	103	22%	227	27%	330(25%)
Public	369	78%	599	73%	968(75%)
LEVEL OF SERVICE					
Primary	367	78%	594	72%	961(74%)
Secondary	103	22%	231	28%	334(26%)
Tertiary	2	0	1	0	3(0%)
MATERNAL SERVICE					
ANC service available	356	75%	594	72%	950(73%)
No ANC service	116	25%	232	28%	348(27%)
HCT SERVICE IN ANC					
HCT in ANC	214	60%	200	34%	414(44%)
No HCT in ANC	142	40%	394	66%	536(56%)
PMTCT SERVICE					
PMTCT service	32	15%	49	25%	81(20%)
No PMTCT service	182	85%	151	75%	333(80%)

However, in each of the two states, the fractions of functional health facilities range between 96% and 100%, with more than 70% of them owned by the government. Private ownership in each states account for less than 30% of the health facilities. Over 70% of the health facilities in each of the states were primary healthcare centers, secondary health facilities account for less than 30% and there were just 1 or 2 tertiary hospitals in each state. Maternal health service is available in more than 70% of the health facilities in each state and less than 30% of them do not offer any form of care to pregnant women. The number of health facilities with HIV counseling and testing in ANC settings was abysmally low at 35% (200) in Ondo state compared to Ekiti which had 60% (214) of the facilities with HCT in ANC settings. Comprehensive PMTCT service was however present in more centers in Ondo state 25% (49) than in Ekiti state 15% (32).

All the private health facilities in Ekiti state are secondary hospitals while 99% of the public health facilities are primary health centers and just 1% belongs to the tertiary healthcare level. Similar categorization of health facilities was also observed in Ondo state. About 69% of the public health facilities provide maternal service while 98% of the private health centers offer maternal care services in Ekiti state. The picture is not so different in Ondo state where 64% public and 93% private hospitals offer maternal care service respectively. In both states, however, more public hospitals (52%, 57%) provide HIV counseling and testing services in antenatal clinic than private hospitals (38%, 52%). Similarly, more public hospitals (21%, 24%) offer comprehensive PMTCT service than private hospitals (1%, 4%) in both states. (Table 2).

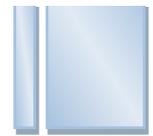


Table 2 Comparing Public and Private Facilities

Features	Ekiti state		Ondo state	
	Public	Private	Public	Private
Total	369	103	599	227
Functional	369	103	599	227
Non-functional	0	0	0	0
LEVEL OF SERVICE				
Primary	367(99%)	0	594(99%)	0
Secondary	0	103 (100%)	4(0.7%)	227(100%)
Tertiary	2(1%)	0	1(0.3%)	0
MATERNAL SERVICE				
ANC service only	255(69%)	101(98%)	384(64%)	210(93%)
No ANC service	114(31%)	2 (2%)	215(36%)	17(7%)
HCT SERVICE IN ANC				
HCT in ANC	145(57%)	53(52%)	200(52%)	79(38%)
No HCT in ANC	110(43%)	48(48%)	184(48%)	131(62%)
PMTCT SERVICE				
PMTCT service	30(21%)	2(4%)	48(24%)	1(1%)
No PMTCT service	115(79%)	51(96%)	152(76%)	78(99%)

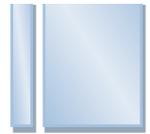
DISCUSSION

Universal health coverage generally implies making healthcare service available to as many people as possible; technically it implies reaching not less than 80% of the people in need of a particular healthcare service at a particular time. Universal access is about a social movement towards achieving renewed political commitment for health interventions that are equitable, accessible, affordable, comprehensive and sustainable. It is about strengthened accountability for results at every level of response.⁹

There have been many declarations towards achieving universal access to HIV interventions from 2005 when the G8 leaders expressed support towards the goal of universal access in the Gleneagles Communiqué during World Summit by pledging massive scaling up of HIV prevention, treatment and care.¹⁰ In 2006, at the meeting of the African Head of States in Abuja and at the high level meeting on AIDS in New York, countries committed themselves to reach universal access to HIV prevention, treatment, care and support for all people in need by 2010. Other declarations and commitments towards universal access include the 2001 Abuja Declaration, 2001 UN

General Assembly Special Session on HIV and AIDS (UNGASS) and the 2000 Millennium Development Goal. The deadlines set in all these declarations have come and gone without achieving most of the targets set in many countries including Nigeria. Though maternal health service is almost universally available (70% coverage) in the two southwestern states in Nigeria, where the study was carried out. Availability of HIV counseling and testing in ante-natal clinic was far below universal coverage at 35% in Ondo state and 60% in Ekiti state and averagely at 44% in both states combined. Comprehensive PMTCT service was however present in just 25% health facilities in Ondo state and 15% of facilities in Ekiti state. The average PMTCT coverage for both states was 20%; which was below the national coverage of 30%.⁵

Generally, private health facilities had lower coverage of HIV counseling and testing in ante-natal clinic (Ekiti-53%, Ondo 38%) and very low availability of PMTCT service (Ekiti -4%; Ondo 1%) when compared with public health facilities in both states of study. These figures are grossly inadequate for the two southwestern states with projected combined population of about 7 million as at 2012. These low



coverage rates are confirmations of UNAIDS estimates that in Nigeria 80% of people living with HIV do not have access to HIV treatment as at 2013.¹

A similar review of HIV/AIDS programme in a developing country which was conducted in Brazil by Greco et al showed that free of charge universal access to state of the art antiretroviral was very critical in ensuring the success of the HIV/AIDS programme in the developing nation.^{11,12} Another study on the scaling up of ART programme in low resources limited settings done in Uganda confirmed that though Africa has recorded great achievement compared with other global regions in expanding access to treatment and care for AIDS, challenges with continuing commitment of donor communities and affected governments to invest in the universal access to treatment, prevention, support and care by all those who need it still remains.¹³ And more damage will be done if the momentum of the intervention is not sustained or allowed to drop.

CONCLUSION

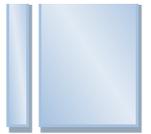
The present state of PMTCT service coverage in Nigeria is abysmally below the acceptable universal coverage. There is an urgent need for a rapid scale up of HIV counseling and testing service and Prevention of mother to child transmission of HIV (PMTCT) services in the two southwestern states and the country as a whole to achieve universal coverage of PMTCT service in the country. This is very important if the Nigerian national scale up plan towards elimination of mother to child transmission of HIV in Nigeria 2010 – 2015 is to be achieved.⁸ This will also impact on the UNAIDS global goal of ending the HIV epidemic by 2030 by reducing new HIV infection by 90%, reducing HIV related mortality by 90% and 90% reduction in stigma and discrimination associated with HIV.¹⁴

LIMITATIONS

The study was conducted in 2013; between then and now (2016) it is possible that additional health facilities with PMTCT services may have been activated.

REFERENCES

1. UNAIDS Global Fact sheet 2014 <http://www.unaids.org/en/resources/campaigns/2014/2014gapreport/factsheet>
2. WHO | Mother-to-child transmission of HIV. www.who.int/hiv/topics/mtct1 National Population Commission (Nigeria) & ICF Macro. Report. National Census 2006
3. WHO Global Updates on HIV Treatment 2013 pg.9
4. Global Plan towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive. Geneva, UNAIDS, 2011 (<http://www.unaids.org/believeitdoit/the-global-plan.html>, accessed 3 June 2013).
5. Nigeria Global AIDS Response Country Progress Report 2014, National Agency For the Control of AIDS 2014
6. Federal Ministry of Health, National Scale Up Plan Towards Elimination Of Mother To Child Transmission Of HIV In Nigeria 2010– 2015
7. Nigerian Health system assessment, 2008
8. National Population Commission (Nigeria) and ORC Macro. Nigerian Demographic and Health Survey 2003. Key Findings. Calverton, MD: National Population Commission and ORC Macro, 2004
9. Universal Access: Background, Global Commitment And Strategic Framework UNAIDS presentation at 5th National Conference On HIV & AIDS Abuja, Nigeria. 2nd – 5th May 2010
10. G8 (2005). The Gleneagles Communiqué. Gleneagles, United Kingdom.
11. Greco, Dirceu Ba; Simão, Mariangelab .Brazilian policy of universal access to AIDS treatment: sustainability challenges and perspectives. AIDS: July 2007 - Volume 21 - Issue - p S37–S45 doi: 10.1097/01.aids.0000279705.24428.a3
12. Berkman A, Garcia J, Muñoz-Laboy M, Paiva V, Parker R. A critical analysis of the Brazilian response to HIV/AIDS: lessons learned for controlling and mitigating the epidemic in developing countries. Am J Pub Health 2006; 95:1162–1172.
13. Katabira, Elly Ta; Oelrichs, Robert Bb. Scaling up antiretroviral treatment in resource-limited settings: successes and challenges. AIDS: July 2007 - Volume 21 - Issue - p S5–S10 doi: 10.1097/01.aids.000027970.93932.ef
14. UNAIDS. Press statement. Global leaders commit to ending the AIDS epidemic in cities by 2030. (20 July



2014) <http://www.unaids.org/en/resources/presscentre/pressreleaseandstatementarchive/2014/july/20140720cities>