

Original Research Article

Achievements and Implications of HIV Prevention of Mother-to-Child Transmission among Women of Reproductive Age: A Systematic Evaluation of HAF II Project in Kogi State, Nigeria

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Received: 14/12/2016

Revised: 23/12/2016

Accepted: 04/01/2017

ABSTRACT

Background: Despite increasing availability HIV counseling and testing (HCT) services in Nigeria, uptake among women of reproductive age has remained significantly low. Although, women are at greater risk of HIV infection many of them do not access HCT services. This intervention therefore designed to promote HIV prevention among women of reproductive age in Kogi State, Nigeria. Hence, this paper presents the achievements and implication of this programme.

Methods: The project was a two-year intervention project carried out from 2013 to 2015 by five civil society organizations. A total of 30,520 women of reproductive age within the ages of 15 and 49 years were reached in 10 out of 21 local government areas. The minimum prevention package intervention (MPPI) was used for the implementation of project activities. Data were documented using various monitoring and evaluation tools. This was entered into DHIS2 while analysis was carried out using Microsoft Excel. Data were presented using tables and charts.

Results: The total number of community dialogues/advocacy held was 116 during this intervention and 2354 influencers participated. The only income generation activity during this project was held in 2014 and 80 people benefitted. Out of the 64651 pieces of condoms distributed, 71.0% was distributed in 2015. A total of 97708 peers were registered and only 10770 (35.3%) were reached with all the three stages of MPPI and 12892 (42.2%) were reached with HCT. Among these, 568 (4.4%) were tested positive to HIV.

Conclusion: Many were reached with HIV minimum package prevention intervention however uptake of HIV counselling and testing services remains low. Understanding the hindrances affecting this is important in evolving appropriate and innovative approaches of reaching a significant proportion of them with the services.

Keywords: HAF II project, Prevention of mother-to-child transmission, Reproductive age, HIV/AIDS, Minimum prevention package intervention.

INTRODUCTION

HIV/AIDS continues to exact an enormous toll in a multitude of regions and countries throughout the world. [1] AIDS which is fatal disease is threatening people all over the world and has infected over 65 million people. About 25 million have also died since the disease was first identified in 1980s. [2] At the end of 2009, more than 33 million people were living with HIV and AIDS, of whom 820,000 were from Western and Central Europe, and 1.4 million were from Eastern Europe and Central Asia, [3] and in 2007 alone, 2.5 million people became newly infected with HIV and 2.1 million lost their lives to AIDS. [4] HIV and AIDS in Africa has been said to be one of the most important global public health issues of our time, and perhaps, in the history of mankind. In Africa, AIDS is one of the top causes of death. While only comprising slightly less than 15% of the total population of the world, Africans account for nearly 70% of those who live with HIV and are dying of AIDS. [5] Sub-Saharan Africa has the most serious HIV and AIDS epidemic in the world. In 2013, an estimated 24.7 million people were living with HIV, accounting for 71% of the global total. In the same year, there were an estimated 1.5 million new infections and 1.1 million AIDS-related deaths. [6] Globally, 15% of all women living with HIV aged 15 years and older are young women 15–24 years old. Of these, 80% live in sub-Saharan Africa. In this region, women acquire HIV infection at least 5–7 years earlier than men. [6] Nigeria is one of the countries contributing to the burden of HIV/AIDS globally. This has been buttressed through the national prevalence of 3.4% revealed during the 2012 National HIV and AIDS and Reproductive Health Survey (NARHS). Although, this showed a slight decline from the previous estimates of 2007 which was 3.6%, the prevalence was highest among those aged 35 to 39 (4.4%), and lowest among the 15-19 age group (2.9%). The prevalence for males aged 35 to 39 years

was highest at 5.3%, while women aged 30 to 34 years was 4.2%. [7]

Nigeria also accounts for the highest burden of mother-to-child-transmission (MTCT) in the Sub-Saharan region with HIV prevalence among antenatal care (ANC) attendees being 4.1% in 2010. [8] 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. [9,10] In response to the growing problem of MTCT of HIV infection in the country, the Federal Government of Nigeria commenced the National prevention of mother-to-child-transmission (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. [11] 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. [12-13] This article therefore presents prevention of mother-to-child transmission programme activities conducted among women of reproductive age in Kogi State, Nigeria. It also presents the implications for programming.

MATERIALS AND METHODS

Study Design and Scope

The project was a two-year (2013-2015) intervention study with corporative agreement between Kogi State Agency for the Control of AIDS (KOSACA) and World Bank. Five civil society organizations (CSOs) were tasked with the delivery of PMTCT services and they are Community Life Advancement Project (CLAP), Global Hope For Women And Children Foundation (GLOHWOC), Initiative for Grass Root Advancement (INGRA), Neighbours Without Borders (NEBO) and New Generational Destiny Initiative (NGDI). The CSOs with

support from KOSACA implemented a HIV Prevention program among women of reproductive age.

Study Area

Kogi State, the study area for this project is located in the North Central Geo-Political Zone of the country. The state was created in 1991 from parts of Kwara State and Benue State. According to National Population commission of Nigeria, the projected population for Kogi state as at 2011 was 3,850,400. The state has an area of 29,833 km² and density of 70/km² (180/sq mi). The state consists of three main ethnic groups and languages which are Igala, Ebira, and Okun as well as minorities like Bassa, a small fraction of Nupe, the Ogugu subgroup of the Igala, Gwari, Kakanda, Oworopeople, Ogori, Magongo, Idoma and the Eggan community under Lokoja Local Government Area (LGA). Kogi state consists of 21 local government areas. Some of these LGAs are Ajaokuta, Lokoja, Anka, Okene and Okehi.

Study Population and Sample size

The target population for this study were women of reproductive age within the ages of 15 and 49 years. The intervention was carried out in 10 out of 21 LGAs in the Kogi State. These include Kabba/Bunu, Adavi, Lokoja, Kogi, Olamaboro, Anka, Okene, Idah, Dekina and Igalamela LGAs. The estimated sample size for this project was 36,469.

Advocacy Visits to Stakeholders

Advocacy visits were made to primary health care, health departments and other stakeholders to inform them about the program and gained their support towards having a smooth project in their various communities. The advocacy visits were also used to make arrangement for discussions with some health personnel in order to inquire about the actual situation regarding the attitude of the community members towards accessing health care and ante natal services.

Intervention

The minimum prevention package intervention (MPPI) was used for the implementation of this project activities. The project monitoring team (PMT) through their peer educators (PEs) used selected strategies in reaching their peers as well as the key community influencers. These strategies were organized into three levels of interventions which were structural, behavioural and biomedical interventions.

Structural Intervention

Community dialogues were organized to engage key influencers to take key actions in their community and these dialogues were held by the CSOs in selected LGAs. The CSOs through these meetings were able to reach sufficient number of key influencers. The sessions targeted selected community stakeholders in syndicated meetings and discussed issues around gender discrimination, proper health seeking behaviors, women empowerment, stigmatization and discrimination and teenage pregnancy among others. The objective of the community dialogues held was to bring community stake holders together, properly intimate them about the project to be implemented, discuss possible success routes for the project, and start making efforts towards community ownership of the project.

Behavioral Intervention

Peer Education/Cohort Session was used to pass messages that covered the basics of HIV as it sought to enlighten them on the modes of transmission and the ways through which they can prevent themselves from getting the virus. Other messages included the basics of STI as they were exposed to the signs symptoms and types of STI as well as the management of STIs to avoid complications, the benefits of antenatal care, condom use and sexual networking/multiple concurrent sexual partnerships amongst others.

Capacity Building for Peer Educators

Following the conclusion of the entry level activities into the communities where CSOs had opted to implement the PMTCT programme, the logical planned action was the capacity building for selected peer educators (PEs).

Selection of participants

The peer educators were selected to meet criteria such as been able to read and write as well as communicate in the community best understood by the community members amongst so many other criteria. One of the most important criteria for a successful training session is the quality of selected participants. To ensure that the objectives of the training are met, the following criteria were adopted in the selection of the participants; they must be female of reproductive age (15-49 years), they must be resident within the project target community, they must be able to read and write, they must speak at least one of the languages in the target community, they must be available for the duration of the project (18 months minimum) and they must be referred by a community leader. Community Leaders in the target communities were contacted with the above criteria during the advocacy visits and persons were referred to CSOs for possible selection. After deliberations by the PMT, they were approved for participation in 5 days training.

Training of IPC volunteers for PMTCT

The training of inter personal communication (IPC) volunteers helped in building the capacity of participants on issues around basic facts about HIV and STIs, introductory aspects of human anatomy and physiology, human reproductive system, concepts of ovulation, menstruation and pregnancy. Other topics covered included stigma and discrimination in HIV/STI prevention, gender issues, Mother-to-child-transmission of HIV, IPC and the roles of community based volunteers in PMTCT. There were also sessions on HCT, community mobilization,

family planning. The last day sessions included concepts of MPPI in HIV prevention.

Biomedical Intervention

For biomedical intervention referrals were made for ART and STIs. In some communities the PMT went beyond referrals by organizing community HCT outreaches. Some peers also did condom forecasting for their peers and distributed the commodity which was made available by the PMT.

HIV Counseling and Testing (HCT)

Mobile HCT services were offered to registered peers that have been reached with behavioural aspect of MPPI. The HCT was conducted by trained HIV Counsellor Testers

Statistical Analysis

The data collected involved activities during the structural intervention, behavioural intervention and biomedical intervention. Data were documented using various monitoring and evaluation tools. This was entered into DHIS2 while analysis was carried out using Microsoft Excel. Data were presented using tables and charts.

RESULTS

The findings are presented based on the levels of intervention: structural, behavioural and biomedical interventions. The target reached during this intervention was 30,520 as against 36,469 which was an estimated sample size. This gave a target reached of 83.7%.

Structural Interventions

The total number of community dialogues/advocacy held was 116 during this intervention. Out of the 116 dialogues, 75.3% was held in 2014 while 24.7% was held in 2015. A total of 2354 influencers participated in the community dialogue held by CSOs. Majority (86.9%) of the influencers that participated in community dialogue did so in 2014 while 13.1% did so

in 2015. The only income generation activity (IGA) during this project was held in 2014. A total of 80 people benefitted for

IGA with 87.5% of these people benefiting in 2015 while just 12.5% of the people benefitted in 2014 (Table 1).

Table 1: Structural Interventions

Period	Number of community dialogues held n (%)	Influencers participating in comm. dialogue n (%)	Number of IGA held n (%)	No of persons that benefitted from IGA n (%)
2014	125 (75.3)	2045(86.9)	1(100.0)	10(12.5)
2015	41(24.7)	309(13.1)	0(0.0)	70(87.5)
Total	166	2354	1	80

Behavioral Intervention

A total of 64,651 pieces of male condoms were distributed during this intervention. Out of the total number of condoms distributed, 71.0% was distributed in 2015 while 29.0% was distributed in 2014. A total of 97,708 peers were registered and 69.3% were registered in 2015 while 30.7% peers were registered in 2014 (Table 2).

Table 2: Behavioural Intervention

Period	Number of condoms distributed (Male) (%)	Number of peers registered (%)
2014	18762 (29.0)	9370 (30.7)
2015	45889 (71.0)	21150 (69.3)
Total	64651	30520

Biomedical Interventions

Data on persons counselled, tested and got result (CTR) was also presented in table 3. A total of 12892 persons were CTR with 71.6% of that figure falling in 2015 and 28.4% falling in 2014. On the number of persons referred for STI services, a total of 514 persons were referred and 57.8% were referred in 2015. Data on number of persons who received STI services showed

that a total of 423 persons received STI services and 65.5% received STI services in 2015. A total of 378 persons went for STI follow-up. A total of 2191 women were referred for antenatal care during the programme with 87.8% referred in 2015.

Coverage of MPPI, HCT and Prevalence of HIV

A total of 10770 (35.3%) of the registered peers were reached with all the three stages of MPPI and 12892 (42.2%) were reached with HCT. Among these, 568 (4.4%) were tested positive to HIV (Fig. 1).

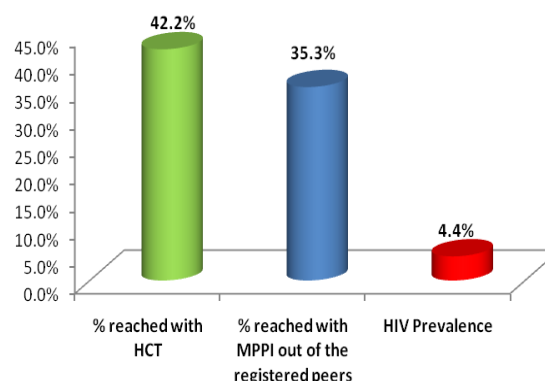


Figure 1: Coverage of MPPI, HCT and Prevalence of HIV

Table 3: Biomedical Interventions

Period	No Counseled, Tested and Received Result (CTR) (%)	No referred for ART (%)	No referred for STI(%)	No receiving STI services (%)	No of persons going for STI follow-up (%)	Pregnant women referred for antenatal
2014	3661(28.4)	278(48.9)	217(42.2)	146(34.5)	119(31.5)	267(12.2)
2015	9231(71.6)	290(51.1)	297(57.8)	277(65.5)	259(68.5)	1924(87.8)
Total	12892	568	514	423	378	2191

DISCUSSION

The community dialogues that took place during the course of the programme helped in facilitating the acceptance of behavioural and biomedical interventions. Community dialogue as seen in this study is vital in achieving the targets of PMTCT

programmes and this has helped in emphasizing the importance of prevention and acceptability of interventions. This is similar to the project by the Nelson Mandela Foundation which is titled ‘Community dialogues and community empowerment’ which was supported by the German Federal

Ministry for Economic Cooperation and Development. This was reported to provide a safe space for communities to tackle issues head-on which in turn enhanced informed decisions that was required in their particular circumstances. [14] Similarities in the programme could be as a result of the importance of community dialogues to health programming and particularly that of HIV/AIDS. Income generating activities was evident in this study and has been part of HIV/AIDS prevention programmes such as the one done by the Malawi National AIDS Commission. [15] A similar program was carried out by the National Agency for the Control of AIDS where a total of 78 vulnerable women were empowered to establish IGA. [16] It is expected that IGA will help people living with HIV, affected families and communities to lead a productive life, continue treatment, get adequate nutrition and take care of their families.

Condoms (male) were majorly distributed in 2015 which might be due to better access to resources by CSOs. Distribution of condoms is in line with the global AIDS response of Nigeria in which condom programming was a vital component of initiated HIV/AIDS programmes. [17] Condom provision will enable community members make informed decisions about their sexual and reproductive health in that with the condom they have a choice for safe sex which will in turn help reduce the exposure and spread of HIV/AIDS. However, there was no reported distribution of female condoms in this programme this could be attributed to no supply of female condoms. Less than half of the participants reached in this intervention were counselled, tested and got result. This was actually a very low uptake considering the importance of women of reproductive age. 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. [18] This is an indication that there is need for a strong commitment to achieving the elimination of MTCT in the

study area. The National HIV/AIDS Strategic Plan (2010-2015) is focused on attaining universal access goal of providing HCT services to 80% of the (eligible) population. [18] The fact that some of the participants referred for STI services were lost to follow up could be attributed to the 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. [19] In closing, the trend observed from this programme showed that CSOs had more coverage for the structural and behavioural intervention components as against biomedical interventions.

Implications for Programming

The results of this intervention have vital inferences for programming in that alternative methods could be used to address the challenges encountered during the programme. The opportunities and the little successes recorded during the programme need to be sustained. Some of the key challenges experienced by the CSOs during the implementation were issues with filling of data capturing tools, persistent health workers' strike in the state, the hostile attitude of health workers and inadequate staffs in most public PMTCT health facilities. These could all be addressed through capacity building of health personnel before the commencement of similar project, especially those who were involved in data documentation. 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 might actually be beneficial to increase the uptake. In a study on the coverage and uptake of PMTCT among women in Plateau State, Nigeria by Envuladu et al., [20] it was

reported that more women (84.4%) agreed to the group counselling and testing. On the successes achieved during the structural intervention such as improved relationship with target communities and improved relationship with health facilities in the LGAs of intervention, sustained partnership and dialogue is key to maintaining these positives relationships. This method could also be applied to similar programmes in future.

CONCLUSION

Many were reached with HIV minimum package prevention intervention and hence have contributed immensely to HIV prevention in the state. The prevalence of HIV from this survey showed that 4.4% of women of reproductive age were HIV positive which is higher than the state prevalence of 1.4%. Therefore the need for the expansion of the intervention to all part of the state and this expansion will require extending the intervention to the primary health care centre which has a direct link with the rural areas to help in the fight against HIV. Understanding current pattern and factors influencing uptake of HCT services among women of reproductive age is also important in evolving appropriate and innovative approaches of reaching a significant proportion of them with HCT services.

ACKNOWLEDGEMENT

The evaluation team wishes to acknowledge the World Bank and the National Agency for the Control of AIDS (NACA) for making available the funding for the evaluation and dissemination of this project intervention.

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How to cite this article: Adelekan AL, Musa G, Comfort A et al. Achievements and implications of HIV prevention of mother-to-child transmission among women of reproductive age: a systematic evaluation of HAF II project in Kogi state, Nigeria. *Int J Health Sci Res.* 2017; 7(2):267-274.
