

Original Research Article

Achievements and implications of HIV prevention programme among uniform service personnel: a systematic evaluation of HAF II project in Kogi state, Nigeria

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ABSTRACT

Background: Considering HIV pandemic among uniform service personnel (UPS), a lot of HIV intervention programmes designed to mitigate the spread have not been very successful thus the introduction of the HIV minimum prevention package intervention (MPPI). This paper therefore presents the achievements of HIV prevention programme among UPS in Kogi State, Nigeria including its implications for programming.

Methods: This project was implemented among uniform service personnel who are in army, police, custom and prison in Kogi State. A total of 2676 was an estimated sample size for this intervention and MPPI was used for implementation of project activities. Data were entered on DHIS2 platform and later exported and analyzed using Microsoft Excel.

Results: Out of the total number of 67 community dialogues/advocacies carried out during the project period, 56.7% were done in 2014 and a total of 187 participants participated with a participating rate of 62.0% and 38.0% in 2014 and 2015 respectively. The total number of condoms distributed during the entire project was 7,387 and 3038 peers were registered during the project. A total of 82.6% and 71.6% were reached with HIV counselling and testing and MPPI respectively while the prevalence of HIV was 5.3%.

Conclusions: This intervention successfully scaled-up demand creation for condoms and HIV counselling and testing among uniform service personnel. More engagement at all levels to engender political commitment and ownership of the HIV response with a view of ensuring sustainability through increased funding should therefore be encouraged.

Keywords: HIV/AIDS, HAF II project, Minimum prevention package intervention, Uniform service personnel

INTRODUCTION

According to the 2012 Joint United Nations Program on HIV/AIDS (UNAIDS) report on the state of the HIV epidemic globally, Nigeria is among the 12 countries that experienced a stable (i.e., less than 25% change up or down) rate of HIV infection within the decade 2001-2010 [1]. However, several neighboring countries to Nigeria have experienced drops in their incidence rates from 2001 to 2010 of at least 25% and others e.g., Central African Republic and Ghana have greater than 50% drop in incidence rates.¹ The uniformed services, especially young men and women, are highly vulnerable to HIV/AIDS because of their work environment, mobility, age and other factors that expose them to higher risk of infection than their civilian counterparts. This was first recognized by the Security Council when it adopted Resolution 1308 in July 2000 expressing concern over the potentially damaging impact of HIV/AIDS on the health of international peacekeeping personnel. This concern was further emphasized through the adoption of the UN Declaration of Commitment on HIV/AIDS (June 2001), in which the international community and UN member states committed themselves to address HIV/AIDS among uniformed services personnel. Nwokoji and Ajuwon explored the HIV related risk behaviors among military personnel in Nigeria and they revealed that 41% of the respondents did not use a condom during their last sexual encounter with a commercial sex worker and posting on international assignments was a positive predictor of lack of condom use.² Similarly, Essien et al., examined the determinants of HIV risk behaviors among Nigerian military personnel and found a direct correlation between alcohol and marijuana use and HIV risk perception.³ Their study also showed that knowledge of how to correctly wear a condom and male gender were positive predictors of intent to wear a condom. From a broader perspective, other investigators have shown a positive relationship between alcohol and marijuana use and inconsistent condom use among Nigerian military personnel.^{2,4}

A few other reports have addressed the issue of HIV transmission among Nigerian military personnel. Most soldiers are young and sexually active with a sense of invulnerability that may lead to risky sexual behaviors and reduced condom use.⁴ Soldiers are often deployed from home for extended periods of time, have a regular income and the opportunity for casual sex.⁵ For instance, it has been reported that almost half of the military personnel that participated in the various peacekeeping operations admitted having sexual partners during their time away from home and with these sexual partners, only half of the respondents used condoms.⁶ In addition, societal norms that do not support condom use have been known to also contribute to the efficiency of HIV transmission among Nigerian military personnel.⁷

Kogi State with an approximate population of 3.2 million has a prevalence rate of 5.8% thus, making it the fifth

highest in the North Central zone.⁸ It is also above the national average of 4.4%, a situation which is worrisome.⁸ HIV prevention efforts to date have overwhelmingly focused on reducing individual risk, with fewer efforts made to address structural factors social norm and cultural believes that increase vulnerability to HIV. HIV prevention efforts have neglected police and other law enforcement and uniformed services personnel, including customs, navy, immigration and corrections.⁹ Kogi State HIV and AIDS Fund (HAF) under the HIV programme development project (HPDP) II coordinated an intervention among uniform service personnel (USP) between the year 2013 and 2015. This paper therefore presents the achievements of HIV prevention method among uniform service personnel in Kogi State, Nigeria including its implications for programming.

METHODS

Study design and scope

This is an intervention study conducted to scale up HIV prevention among USP in Kogi State. Kogi State Agency for the Control of AIDS (KOSACA) in partnership with two Civil Society Organizations (CSOs) namely Initiative for Grass Root Advancement (INGRA) and Community Life Advancement Program (CLAP) were tasked and funded under the HAF II to deliver HIV Prevention program among uniform service personnel. The project has a life span of sixteen months and it's divided into three tranches. The first tranche covers six months, eight months for second tranche and four months for the third tranche.

Study area

The project was carried out in seven out of the twenty-one local government areas (LGAs) in Kogi State. Kogi State is the most centrally located of all the states of the federation sharing boundaries with 10 other states. Thus it shares boundaries with Niger, Kwara, Nasarawa and The Federal Capital Territory to the north. To the east, the state is bounded by Benue state, to the south by Enugu and Anambra States, and to the west by Ondo, Ekiti and Edo states. Through this unique characteristic of several bounding states, Kogi state is a corridor state and a very important transit point between southern Nigeria and northern Nigeria. This predisposes the population to increased risk of HIV transmission as reflected in higher state's prevalence rate of 5.8% as against the national average of 4.1% (FMOH, 2010). Among the vulnerable groups in the state are Sex Workers, Transport Workers, Migrant Workers, In and Out of School Youth, Uniformed Service Men and Women, and Students of tertiary institutions. Kogi State has a projected population of 3 million people who are mainly farmers. Politically, Kogi State has its administrative and political capital located in Lokoja.

Sample size

A total of 2676 USP was an estimated sample size for this project.

Study population

Uniform service personnel in army, police, custom, civil defense and prison in Idah, Ankpa, Kogi, Kabba/Bunu, Yagba East, Adavi and Lokoja Local Government Areas (LGAs) of Kogi State, Nigeria were used for this intervention.

Description of intervention

HAF II project supported the expansion of the response of the civil society to the HIV/AIDS epidemic. The project created an enabling environment for reducing the spread and mitigating the negative impact of HIV/AIDS through empowering CSOs to deliver community-based HIV/AIDS-related services.

Data collection and project activities

The Minimum Prevention Package Intervention (MPPI) which comprised of three phases intervention which are structural, behavioural and biomedical interventions were used for this project activities.

Structural intervention

This area of intervention involves mobilizing community and individuals to address structural barriers such as cultural believes and practices that hinder most at risk populations (MARPs) access and utilization of appropriate HIV prevention, treatment and care services. It includes advocacies, dialogues and sensitization among others.

Advocacy visits to primary health care (PHCs), health departments, gatekeepers and referral coordinators

The two implementing organizations paid a series of advocacy visits to various PHCs, health departments and other relevant authorities such as Barrack Commander and other stakeholders across all the project locations to intimate them on KOSACA project with the aim of sensitizing and seeking their support for programme implementation. The project team solicited for the support of the leaders and gatekeepers of the target communities to mobilize their members for a dialogue session with the aim of sensitizing community stakeholders on the HIV/AIDS situation around them. The advocacy effort to PHCs and health departments also aimed at creating an avenue for linkages and referrals when the project starts fully. The authorities were notified of how KOSACA will be implementing her project which aimed at strengthening response to integrated HIV/AIDS services among uniform service personnel to have access to HIV/AIDS information,

decreased risky behavior, creating room for already infected individual for quick commencement of treatment and care.

Community dialogue and sensitization

Having solicited for the support of the leaders and gatekeepers of the target communities to mobilize their members for a dialogue session, the implementing organizations organized a series of community dialogues, sensitization and awareness creation across all the project communities with the aim of sensitizing community stakeholders on the HIV/AIDS situation around them and to recruit community volunteers among them to be trained as male peer educators. This session attracted a number of influencers who also participated in various awareness programs. They were introduced to the basics of HIV/AIDS which includes the mode of transmission and prevention as well as the cycle of HIV (how untreated HIV becomes AIDS). The aim 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.

Behavioural intervention

This aspect involves change in behavior aimed at influencing beneficiaries to adopt healthy behaviors so as to reduce their risk for HIV infection. Such behaviors include partner reduction, correct and consistent use of condom, good health seeking behavior for prompt treatment of STIs, treatment referral, follow-up and HCT. Behaviors of the USP in the course of this project were targeted to be modified through the use of Peer Education (PEs) and condom distribution.

Identification and capacity building for peer educators

Peer education takes a form of organized learning activities among peers. It is a process that involves selecting, training and supporting members of a specific group to educate members of their peers about HIV and related topics. The A, B, C approach was used for USP which include abstinence from sex, been faithful to a sexual partner and consistence and correct use of condoms. The implementing organizations identified and trained eighty-four voluntary peer educators among the USP who also reached a number of their peers on HIV/AIDS related issues using inter personal communication

Selection criteria for peer educators

The USP registered as PEs met certain criteria such as been resident within the project community, been able to read and write and availability within the project community for a period of 18 months.

Condom distribution

In order to achieve a change in attitude and behavior among USP, both the biomedical (HIV counseling and testing session) and structural (mounting of 2 condom outlets and 2 condom dispensers within the uniform service personnel communities) aspects of the intervention were explored. Condom messages were given on the importance and need for consistent and correct condom use. Proper and correct use of condoms was demonstrated and a number of condoms distributed. Some PEs also did condom forecasting for their peers and distributed the commodity which was made available by the project management team (PMT).

Biomedical intervention

HIV counseling and testing (HCT)

HIV counseling and testing was an opportunity for taking a comprehensive individual risk assessment and for accurate referrals to more intensive services. This has three distinct components: risk assessment and counseling before the blood or oral sample is taken, testing of the sample, and counseling and referral with the test results. These three components were properly followed in this project. The implementing organizations trained ad hoc tester and peer educator volunteers who conducted mobile HIV/AIDS counseling for USP and their families during peer sessions. In addition to this, some project management staff also organized community HCT outreaches. A total of Eight (8) trained ad-hoc tester and peer educator volunteers conducted mobile HIV/AIDS counseling for USP and their families and during peer session.

Referral, tracking and escort services

Several referrals were made for STIs and HIV/AIDS for care and treatment in various health care facilities by Ad-hoc testers and trained volunteers. Clients diagnosed with HIV and other STIs were tracked and escorted to the health facilities for care/treatment.

Project management meeting (PMM)

The PMM was organized among the key actors of the implementing organizations including Project Officer,

Monitoring and Evaluation (M&E) officer and Account Officer to discuss issues like strategies development for implementation, analysis of progress, identification and training of uniform service personnel volunteers in various project thematic areas, re-coaching of trainees on peer educator tracking forms, mentoring visit during peer sessions, field /data collection, preparation/submission of tranche reports, M&E checklist for tool documentation and target achievements. During this period, 18 PMTs were conducted by each CSO totaling 36 PMTs with average of one meeting in a month for each organization.

Review meetings

Several review meetings were held during this intervention to help improve on best practices by the implementing CSOs and other stakeholders. Project achievements were discussed with respect to target, experience and challenges. This was an avenue to address the challenges of peer educators and to ensure correctness and consistency of their data for good and proper reporting.

Data analysis

Data were entered on DHIS2 platform and later exported and analyzed using Microsoft Excel. Data were presented using descriptive statistics such as percentage, simple proportion and frequency

RESULTS

The findings are presented based on the levels of intervention: structural, behavioural and biomedical interventions. The target reached during this intervention was 3038 given a target reached of 113.5%.

Structural intervention

Out of the total number of 67 community dialogues/advocacies carried out during the project period, 56.7% were carried out in 2014 and 43.3% in 2015. With regards to community influencers, a total of 187 participants participated in the community dialogues with 116 (62.0%) and 71 (38.0%) in 2014 and 2015 respectively (Table 1).

Table 1: Result of structural intervention.

Period	Number of community dialogues/Advocacy visit n (%)	No of influencers participating in community dialogue n (%)
2014	38(56.7%)	116(62.0%)
2015	29 (43.3%)	71 (38.0%)
Total	67	187

Behavioural intervention

The total number of condoms distributed during this project was 7,387 and out of this, 33.2% was distributed in 2014 while almost twice this quantity (66.8%)

distribution was achieved in 2015. Only 1 lubricant was distributed in 2015. A total number of 3038 peers were registered during the project period with 41.8% and 58.2% registered peers in 2014 and 2015 respectively (Table 2).

Table 2: Result of behavioral intervention.

Period	No of condoms distributed	No of lubricant distributed	No of peers registered
2014	2449 (33.2%)	0 (0.0%)	1270 (41.8%)
2015	4938 (66.8%)	1 (100%)	1768 (58.2%)
Total	7387	1	3038

Biomedical intervention

In 2015, 55.4% of persons were counseled, tested and received result (CTR) as compared to 44.6% in 2014. One hundred and thirty-two persons were tested positive

to HIV and were referred for treatment with all these referrals occurring in 2014. A total number of 4 persons were referred for STI and all these referrals occurred in 2015. Only 1 person received STI services during this period and this occurred in 2015 (Table 3).

Table 3: Result of biomedical intervention.

Period	No of persons *CTR	No of persons tested positive	No of persons referred for STI	No of persons receiving STI services
2014	1118 (44.6%)	132 (100.0%)	0 (0.0%)	0 (0.0%)
2015	1391 (55.4%)	0 (0.0%)	4 (100.0%)	1(100.0%)
Total	2509	132	4	1

*CTR= Counseled, Tested and received Result.

Coverage of MPPI, HCT and prevalence of HIV

A total of 2175 (71.6%) of the registered peers were reached with all the three stages of MPPI and 2509 (82.6%) of the participants were reached with only HCT. Among these, 132 (5.3%) were tested positive to HIV (Figure 1).

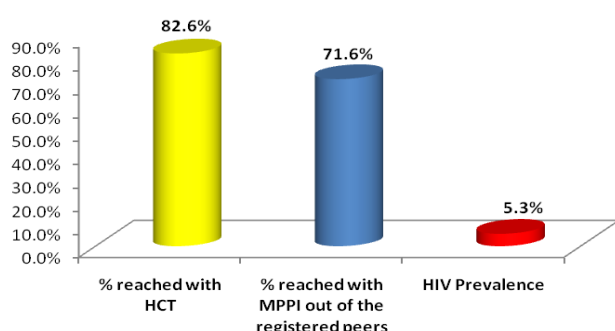


Figure 1: Coverage of MPPI, HCT and prevalence of HIV.

DISCUSSION

Larger number of influencers participating in 2014 community dialogue could have been responsible for more community dialogues taking place during this

period as compared to 2015. Higher registration rate of peers and larger quantity of condom distribution that took place in 2015 can be attributed to better access to resources by the implementing partners. Condoms, both male and female, are the principal line of defense for most uniformed personnel. New recruits in particular are less likely to be married or have regular partners, less inclined to abstain from sex and more likely to engage in unprotected sexual relations with casual partners. Responsibility for protecting the safety and health of personnel is part of the uniformed services' tradition.¹⁰

A reliable supply and distribution system of condoms during this project period provided accessibility and availability through mass distribution and vending machines in strategic places thus promoting uptake of the commodity. The use of peer educators in this project facilitated interactions between condom use and HIV prevention by communicating information on the effectiveness of condoms and by ensuring a sufficient and regular supply of condoms for those who require them. Condom promotion and distribution has been credited with large-scale successful programs in the developing world to control HIV/AIDS as noted in Thailand nationwide condom program aiming for 100% condom use in sexual encounters with sex workers. The program according to Levine which provided condoms free of

charge, provided education and promotion of condoms, and carefully monitored incidences of sexually transmitted infections to identify locations that weren't in compliance with the initiative noted that sexually transmitted infections fell significantly and reported rapid rise in condom use.¹¹ A similar trend was observed in Uganda where a significant decline in HIV infection rates was recorded after implementing a national HIV program which promoted sales of condoms at subsidized rates and free distribution in some places. The program also encouraged condom use among men who sought treatment for sexually transmitted infections.

Almost all the participants were counseled, tested and received result in 2015. People need to understand that they are at risk. Even then they may reject the idea of testing for fear of finding out they are infected. If they can be made aware of the benefits of early testing and the fact that many more people are found to be HIV-negative than HIV-positive when tested they will be more likely to volunteer. Personnel will also be more willing to be tested if uniformed services are not seen to have policies that discriminate against those who are HIV-positive. It is important to ensure that HCT services are available to meet the demand.¹⁰

Some of the participants were tested positive to HIV and were referred for treatment. Access to antiretroviral drugs enhances length and quality of life for HIV-positive people. Some uniformed services in non-industrialized countries have developed programmes that allow personnel to obtain affordable antiretroviral drugs. Therapeutic solidarity funds are established which function like insurance schemes in which many people contribute but only a few ends up needing the benefits.¹⁰ HIV prevalence of 5.3% was recorded among participants of this project. This is relatively smaller than what was reported by a study funded by the United States Naval Health Research Center where 15.0% Seroprevalence rate among Nigerian military personnel.¹² As the most populous country in Africa (Population >130 million) and one of the most populous countries in the world, even a small increase in the HIV/AIDS prevalence rate in Nigeria would represent a significant share of the global HIV/AIDS burden.¹³

Implications for programming

Uniformed services have been recognized both as a key population at higher risk of HIV exposure and as important partners in the response to AIDS. Interventions addressing uniformed services are considered a major opportunity for promoting behavioural change, especially reducing stigma and discrimination and preventing violence against the populations most vulnerable to HIV. The structural intervention aspect of this program promoted mutual understanding of underlying structural factors of HIV including HIV prevention knowledge, discussion of HIV between sex partners, and effect of having multiple sex partners. However, it is critical that

understanding of underlying structural factors of HIV as the preferred approach are not promoted with condoms as a last resort thereby stigmatizing condom use. People vulnerable to HIV infection must have access to the full range of prevention options, provided in a manner that is free of judgment.

Considering that the program recorded great number of people reached with counseling and testing, it is evident that outreach workers and peer counselors/educators can be an important and effective resource to help clients identify needs and plan successful referrals. However, to enhance successful completion of referral and follow up, it is important to incorporate post-test support and services that advice those who test HIV-positive on the meaning of their diagnosis, and on referral to the treatment, care and support and prevention programmes and services available to assist them. This may go a long way in changing the attitude of people referred (as evident by poor follow up recorded in this project) for STI to do proper follow up and complete their referrals.

CONCLUSION

Kogi state HIV and AIDS Fund II project working with civil society organizations successfully scaled-up demand for condoms and HIV counseling and testing among uniform service personnel through a mix of structural, behavioral and biomedical interventions. The minimum package prevention intervention provided suitable strategy for scaling up of the uptake of HCT, HIV peer education and condom promotion services. More engagement at all levels to engender political commitment and ownership of the HIV response (including State and LGA levels) with a view of ensuring sustainability through increased funding should also be encouraged. The relevant authorities of the uniform service personnel should conduct regular and sustained STD and HIV prevention education programs among their personnel and their families in the barracks and schools to reinforce health promoting behaviors. Such programs should include HIV prevention self-efficacy, and also the addition of an HIV positive peer educator should be considered.

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REFERENCES

1. Joint United Nations Program on HIV/AIDS (UNAIDS). Report on the state of the HIV epidemic globally. 2012.
2. Nwokoji UA, Ajuwon AJ. Knowledge of AIDS and HIV risk-related Sexual Behavior among Nigerian Naval Personnel. *BMC Public Health*. 2004;4:24.
3. Essien EJ, Ogungbade OO, Ward D, Ekong E, Ross MW, Meshack A, Holmes L. Influence of educational status and other variables on HIV risk perception among military personnel: A large cohort finding. *Mil Med*. 2007;72(11):1177-81.
4. Okulate GT, Jones OB, Olorunda MB. Condom use and other HIV risk issues among Nigeria soldiers: challenges for identifying peer educators. *AIDS Care*. 2008;20(8):911-6.
5. Yeager R, Hendrix C, Kingma S. International military HIV/AIDS policies and programs: strengths and limitations in current practice. *Mil Med*. 2000;165:87-92
6. Ekong E. HIV/AIDS and the Military. In: Adeyi Olusoji, Kanki Phyllis, Odutolu Oluwale, Idoko John., editors. *AIDS in Nigeria*. Harvard University Press; 2006.
7. Aniekwu NI. Gender and Human Rights Dimensions of HIV/AIDS in Nigeria. *Afr J Reprod Health*. 2002;6(3):30-7.
8. Federal Ministry of Health (FMoH) Abuja: 2010. Technical report on the National HIV Sero-prevalence sentinel Survey Among Pregnant Women Attending Antenatal Clinics in Nigeria.
9. UNAIDS. 2011. A review of programmes that address HIV among international peacekeepers and uniformed services 2005–2010.
10. UNAIDS. 2003. A guide to HIV/AIDS/STI programming options for uniformed services. *Engaging Uniformed Services in the Fight against HIV/AIDS Document 1*.
11. Levine, Ruth. 2007. Case 2: Preventing HIV and sexually transmitted infections in Thailand (PDF). In *Case Studies in Global Health: Millions Saved*. Sudbury, MA: Jones and Bartlett.
12. UNAIDS. 2009. *Engaging Uniformed Services in the Fight Against HIV/AIDS*. Available at: <https://uniformedservices.unaids.org>.
13. Kaiser Family Foundation. The HIV/AIDS Epidemic in Nigeria. *HIV/AIDS Policy Fact Sheet*. 2005 October.

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