Increasing HIV Prevention Among People Who Inject Drugs In Nigeria: A Systematic Review Of HAF II Project

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ABSTRACT: Background: Injection drug use (IDU) is a vector for HIV on all continents, most notably in Asia, Eastern Europe and more recently, the Middle East and North Africa. However, little intervention has been carried out to reduce HIV risk among injection drug users. This study was an intervention study conducted among injection drug users in Nigeria to reduce their risk to HIV/ AIDS by providing access to HIV counselling, testing and its treatment. **Methods:** This project was an intervention effort focused on delivering evidence-based HIV prevention activities among injection drug users in the six-geopolitical zones in Nigeria. The estimated target population for the study was 5,406 injection drug users and this project used the Minimum Prevention Package Intervention (MPPI). Peer educators were selected and trained among the injection drug users to reach out to their peers using cohort sessions. Data were documented using various monitoring and evaluation tools, entered on the District Health Information Software version 2 and analysed using Microsoft Excel. **Results:** A total of 494 community dialogues were held with 2,265 influencers participating in the process. In addition, 246 injecting drug users were referred, while 260 persons benefitted from the income generating activities aimed at capacity building for injecting drug users. A total of 10897 injection drug users were counselled, tested and received results, with 662 persons referred. Most, 46.08% were receiving STI services and 28.3% were going for STI follow-up visit. Although 193227 condoms were distributed, these numbers was below the number of condoms required during the intervention. **Conclusion:** This intervention was a success. However, more needs to be done with regards to condom distribution and supply among injection drug users since there is a crucial role for injection drug users to play in the plot of reducing the prevalence of HIV in Nigeria.

Keywords: HAF II Project, HIV/AIDS, Injection Drug Users, Minimum Prevention Package Intervention

1.0 INTRODUCTION

HIV infection has spread over the last 30years and has a great impact on health, welfare, employment, and criminal justice sectors; affecting all social and ethnic groups throughout the world. An epidemiological data indicate that HIV remains a public health issue that persistently drains our economic sector having claimed more than 25 million lives over the last three decades (WHO Fact Sheet, 2014). HIV prevalence among adults in other countries is remarkably small (3.1%) compared to other sub-Saharan African countries such as South Africa (19.2%) and Zambia (12.9%), the size of Nigeria's population means 3.5 million people were living with HIV as Nigeria has the second largest HIV epidemic in the world [2]. Injection drug use (IDU) is a vector for HIV on all continents, most notably in Asia, Eastern Europe and more recently, the Middle East and North Africa. Drug use is known to be very common in African countries such as Kenya, Tanzania, Zanzibar, Nigeria, and South Africa [3]. About 3.4% of the Nigerian population is made up of sex workers, men who have sex with men and people who inject drugs and this group account for around 32% of new HIV infections in Nigeria [4]. It is thought that 9% of new HIV infections in Nigeria every year are among people who inject drugs (sometimes referred to as PWID) [5]. Poverty and drug taking are linked in a complex and mutually reinforcing manner which contributes to the spread of HIV. The majority of drug users, including people who inject drugs are relatively poor in the society in which they live. Poverty may mean people choose cheaper ways of taking drugs, such as sharing needles with others. In 2015,

NACA reported that around half (52.7%) of people who inject drugs share needles and syringes all the time and more than a third (36.4%) shared needles some of the time. Sharing needles syringes and other injection equipment is a direct route of HIV transmission. Moreover social and economic disadvantage is strongly associated with drug use disorder when recurrent drug use becomes a detriment to people's health, work, school or home life [6]. HIV prevalence is 28 times higher among people who inject drugs than among the rest of the population [7]. The road between Abidjan and Lagos forms a corridor frequented by 50 million people a year. It passes through five African capitals (in Cote d'Ivoire, Ghana, Togo, Benin and Nigeria) and is used for 65% of the region's trade. It is also a drug route, where a number of HIV-vulnerable communities converge, such as truck drivers, sex workers and migrants. Both injection and non-injection drug use are drivers of HIV infection among key populations. Drug use may lead to HIV transmission through shared syringes and drug equipment, unprotected sex while under the influence of drugs and the influence of drug use which can lead to heightened sexual activity and impaired judgement. [8,9]. Economic marginalisation may lead to behaviour associated with increased risk of HIV such as sex work or selling sex for drugs. Although people who inject drugs constitute a key group in themselves, there is also an overlap between drug addiction and those involved in sex work. Individuals who fall into both categories are particularly vulnerable to HIV. In Central Asia, Afghanistan and Mongolia, HIV prevalence among female sex workers who also inject drugs is 20 times higher than sex workers who don't inject drugs [10]. Based on all the risks associated with injection drug users, this study was an intervention study conducted among injection drug users in Nigeria to reduce their risk to HIV/ AIDS by providing access to HIV counselling, testing and its treatment.

2.0 METHODOLOGY

2.1 Study Design

This was an intervention study carried out among IDU's in six geopolitical zones in Nigeria. The HIV Programme Development Project (HPDP) aimed to improve the evidence-based targeting activities which reduce the incidence of new infections by focusing on factors that drive the spread of the epidemic among IDU's and to provide care and support for them.

2.2 Study Area

This study was carried out in six geopolitical zones in Nigeria.

2.3 Study Population

The study population used for this intervention consisted of IDU's who are randomly selected from the six political zones in Nigeria, which are: North-Central, North-East, North-West, South-South, South-East and South-West.

2.4 Sample Size

The estimated sample size for this intervention was 5406 Injection drug users.

3.0 DESCRIPTION OF THE INTERVENTION PROCESS

The minimum prevention package intervention (MPPI) was adopted in the implementation of this project. Project interventions are categorised under the three components of MPPI which are structural, behavioural and biomedical interventions. Activities carried out under each of the components are summarised below:

3.1 Structural Intervention

This area of intervention involves mobilising community and individuals with the purpose of creating adequate access to information and services among IDUs. This level of intervention focused mainly on community dialogues, advocacy and income generating activities amongst others.

3.1.0 Community dialogues

Efforts were made at addressing structural barriers within the community such as cultural beliefs and discriminatory practices which hinder IDU's from accessing and utilising appropriate HIV prevention, treatment and care services. This was achieved by bringing together the key actors, and gate-keepers within the communities to mobilise their people on HIV/AIDS and the risky behaviours which predispose them to it and the various services available for its prevention and treatment.

3.1.1 Advocacy

Advocacy visits were made to health departments and referral coordinators as regards to HIV prevention among IDU's.

3.1.2 Income generating activities

At this level, the intervention sought to provide means of livelihood for IDU's by engaging them in community-based programme with a view of rehabilitating them, whilst also providing them with alternatives to thrive outside drug use, provision of various entrepreneurial skills to engage them and to improve their livelihood.

3.2 Behavioural Intervention

Behavioural intervention targeted on individual and community levels through outreach and peer education to promote individual risk reduction. Outreach was used to make initial contact with the IDUs using interpersonal communication (IPC), condom distribution (both male and female condoms were distributed) and focus group discussions targeted at influencers, gate keepers, and potential peer educators to connect them with programmes and services. Peer education was the major approach employed which enable people to work with people of similar characteristics-age, social or occupational settings (peer group) making them become active players rather than passive recipients of a set message. Peer educators were selected and trained among the IDU's who in-turn selected peers to reach out to using cohort sessions.

3.3 Biomedical Intervention

Biomedical interventions implemented during this project include sexually transmitted infections (STI) screening and treatment. Trained counsellor testers carried out mobile HIV counselling and testing (HCT) for participants and those tested positive of HIV were referred and followed up for adequate management.

4.0 DATA COLLECTION

Data was collected using various data collection and reporting tools. HCT was documented using client intake form. Data were collected during peer education/cohort sessions by the peer educators. Also collated were the number of Injection drug users counselled and tested for HIV, and those who tested positive for HIV were followed-up on along with those that have STI.

4.1 Data Analysis

The data collected were entered into DHIS2 platform and later exported into Microsoft Excel. Data were presented using descriptive statistics such as percentage, simple proportion and frequency.

4.2 Ethical Consideration

Confidentiality was ensured during HIV counselling and testing and permission was adequately sought from various community leaders before approaching the community members. Clients intake form used during the HCT were also kept where only authorised people could gain access to it.

5.0 RESULTS

The findings are presented below, based on the levels of interventions: Structural Interventions, Behavioural Interventions and Bio-medical Interventions.

5.1 Structural Intervention

A total of 494 community dialogues were held during this intervention and a total of 2,265 influencers participated. Out of the 31 IGAs held, 16.13% was carried out in North East, 38.71% in South South and 45.16% in South East while no IGAs were held in North Central and in South West. In the whole country 246 injecting drug users were referred for IGAs and 260 injecting drug users benefitted from it.

Table1: *Structural Intervention*

Structural Intervention	**North Central N (%)**	**North East N (%)**	**North West N (%)**	**South South N (%)**	**South East N (%)**	**South West N (%)**	**Total**
Number of community dialogue held	39 7.9%	92 18.6 %	80 16.2 %	53 10.7 %	75 15.2 %	155 31.4 %	**494**
Number of influencers that participated in community dialogues	326 14.4%	518 22.9 %	524 23.1 %	237 10.5 %	187 8.3%	473 20.9 %	**2265**
Number of IGAs held	0 0.0%	5 16.1 %	0 0.0%	12 38.7 %	14 45.2 %	0 0.0%	**31**
Number referred for IGAs	0 0.0%	62 25.2 %	0 0.0%	12 4.9%	172 69.9 %	0 0.00 %	**246**
Number of persons that benefitted from IGAs	0 0.0%	62 23.9 %	0 0.0%	28 10.8 %	170 65.4 %	0 0.0%	**260**

5.2 Behavioural Intervention

A total of 19824 peers were registered by peer educators during this intervention of which a higher percentage (38.2%) comes from North East. Out of 457,379 condoms (male and female) required for the intervention, 199,321 were distributed. Few (3.1%) of female condoms were distributed while 96.9% of male condom were distributed. All through the intervention, a total number of 33,913 lubricants were required but 19.5% of it was distributed in the country.

Table 2: *Behavioural Intervention*

Behavioural Intervention	**North Central**	**North East**	**North West**	**South South**	**South East**	**South West**	**Total**
Number of peers registered	3,053 15.4%	7,565 38.2%	1,162 5.9%	3,007 15.2 %	919 4.6%	4,118 20.8 %	**19,824**
Number of peers contacted Old	1,965 29.8%	998 15.1%	718 10.9 %	2,258 34.2 %	476 7.2%	192 2.9%	**6,605**
New	2,317 15.9%	4,313 29.6%	1,919 13.2 %	1,294 8.9%	910 6.2%	3,841 26.3 %	**14,594**
TOTAL	**4282**	**5311**	**2637**	**3552**	**1386**	**4033**	**2,119**
Number of condoms required	27,230 6.0%	189,661 41.5%	68026 14.9 %	33,660 7.4%	38,997 8.5%	99805 21.8 %	**457,379**
Number of condoms distributed Male	12,579 6.5%	55,290 28.6%	23,130 12.0 %	27,414 14.2 %	8844 4.6%	65,970 34.1 %	**193,227**
Female	136 2.2%	1,140 18.7%	961 15.8 %	968 15.9 %	60 1.0%	2,829 46.4 %	**6,094**
TOTAL	**12,715**	**56,430**	**24,091**	**28,382**	**8,904**	**68,799**	**199,321**
Number of lubricants required	2,014 5.9%	16,392 48.3%	1,651 4.9%	7,172 21.2 %	204 0.6%	6,480 19.1 %	**33,913**
Number of lubricants distributed	504 7.6%	810 12.2%	18 0.3%	5,291 79.8 %	10 0.2%	0 0.0%	**6,633**

5.3 Biomedical Intervention

A total of 10897 injection drug users were counselled, tested and received result which included 4.37% in North West, 4.45% in South East, 10.94% in South-South, 12.30% in North East, 24.95% in North Central and 42.99 in South West. Out of 662 injecting drug users referred, 46.08% were receiving STI services and 28.3% were going for STI follow-up visits.

Table 3: *Biomedical Intervention*

Biomedical Intervention	North Central	North East	North West	South South	South East	South West	Total
Number of persons CTR	2,719 25.0%	1,340 12.3%	476 4.4%	1,192 10.9%	485 4.5%	4,685 43.0%	**10,897**
Number of persons referred for STI	39 5.9%	301 45.5%	153 23.1%	94 14.2%	69 10.4%	6 0.9%	**662**
Number of persons receiving STI services	50 16.4%	124 40.7%	15 4.9%	105 34.4%	5 1.6%	6 3.2%	**188**
Numbers of persons going for STI follow up.	29 15.4%	49 26.1%	6 3.2%	93 49.5%	5 2.7%	6 3.2%	**188**

6.0 DISCUSSION

Findings from the Intervention point to the fact that 495 community dialogues were used and majority of the influencers from the Northwest participated in the community dialogues. Many of the respondents benefitted from the income generating activities and capacity building embarked upon to provide them with trainings in vocational skill sets which could reduce their dependence on drug using as a way to boost their self-esteems. This is in line with a study carried out by Jurgens et al and UNODC [10], [11] which reported that intervention that are implemented in a variety of settings are effective in reducing risk behaviours, preventing HIV infections and accessing essential care and treatment services for injection drug users. A large number of IDU's were counselled, tested and received result. In North Central and South-South the number of people that received STI services were more than those referred for it. This shows that there have been adequate information passed from the peer educators who were recruited to educate their peers on injection drug use as this is based on the principle that peers can strongly influence an individual behaviour; that they share a level of trust and comfort with their peers that allow for more open discussion on sensitive topics.

7.0 CONCLUSION

This intervention demonstrated that minimum prevention package intervention is an effective tool in improving HIV knowledge and reducing high risk behaviours among IDU's. However, the low rates of HIV testing and overall low coverage of this, underscore the need for stronger interventions. It is recommended that continuous intervention programmes on HIV prevention practices among IDU's should be organised by non-governmental and governmental organisations to inform and protect them from the infection or exposure to new infections.

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