



Research Paper

Achievements and Implications of HIV Prevention Programme among Female Sex workers: A Systematic Evaluation of HAF II Project in Plateau State, Nigeria

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ABSTRACT

Background: Plateau State, Nigeria with HIV prevalence rate of 7.7% as at 2010 had among the highest HIV and syphilis levels in Nigeria, earning itself a reputation of being one of the 12 + 1 states contributing the highest HIV prevalence in Nigeria and described as “hot zone” of HIV infections. Factors responsible for this were not unrelated to the high-risk activities of Female Sex Workers (FSWs). This paper therefore presents achievements and implications HIV prevention among FSWs in Plateau State, Nigeria

Methods: This project was an intervention effort focused on delivering evidence-based HIV prevention activities among FSWs in 3 local government areas within the State. The estimated target population for the study was 460 and this project used the minimum prevention package intervention (MPPI). Peer educators were selected and trained among the FSWs to reach out to their peers using cohort session. Data were documented using various monitoring and evaluation tools, entered on the District Health Information Software version 2 and analyzed using Microsoft Excel.

Results: A total of 68 community dialogues were held with 1,466 influencers participating in the process. In addition, 601 peers were registered, while 18 persons benefitted from 27 income generation activities aimed at capacity building for FSWs. A total of 642 persons were counseled, tested and shown their results, with 15 persons tested positive resulting in HIV prevalence of 2.3%. Although 10,560 condoms were distributed however, 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 FSWs since there is a crucial role for FSWs to play in the plot of taking the HIV prevalence of Plateau State even further down.

Keywords: Female sex workers, HIV/AIDS, Minimum prevention package intervention, HAF II project

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I. INTRODUCTION

Nigeria being the 'giant of Africa' is not left out of the scourge of HIV/AIDS. Gomwalk et al. [1] noted that the impact is greater on Nigeria given that one out of every five Africans is a Nigerian, so much so that an estimated 3.7% of Nigerians representing between 3.2 and 3.8 million persons are living with HIV, and the country is ranked second place to only South Africa among the countries with the highest burden of HIV [2]. Gomwalk et al [1] also warned that the incidence of HIV in Nigeria is bound to rise even further. The PEPFAR report [3] showed that despite the above-stated statistics condom use with non-marital partners was generally low (49%) across the nation, with the least use being reported in the North-East, North-Central and North-West zones of the country. The roles of female sex workers (FSWs) as bridging groups and major drivers of the HIV epidemic across the globe cannot be over-emphasized, particularly in countries within the Sub-Saharan region where the epidemic has reached a maturity [4-6]. Ogbe et al [7] described the FSW population as reservoirs of HIV and other sexually transmitted infections (STIs). Studies on the prevalence of HIV among female sex workers who provide sexual services to paying clients in Nigeria revealed increasing rates of 17.5% in 1991 to 35.6% in 1995. Imade et al [8] in a survey conducted in Jos found among 398 FSWs an alarmingly high prevalence of 48%.

Hesketh et al. [5] highlighted the factors which make FSWs vulnerable as conduits of HIV and AIDs to include: low levels of risk awareness, the frequency of sexual intercourse with clients, their condom usage, STI prevalence, amidst other factors. Ntozi et al., [9] revealed that the high risk of infection among FSWs extends beyond the fact that they usually have multiple partners. According to these scholars, a bevy of other factors which may be socio-economic as well as personal often add to the vulnerability of FSWs. These factors which often make them prone to having unprotected sex include poverty, low educational levels, low levels of knowledge about STI and HIV/AIDS prevention, gender inequalities and limited ability to negotiate condom use. The IBBSS 2010 FCT proxy report on HIV Prevalence among Key Populations in Plateau State pegged the prevalence among FSWs (both Brothel-based and Non-Brothel based) at 56%, while risk perception among FSWs was also significantly low according to the report, with as much as 78.6% of the FSWs being out of sync in terms of their vulnerability [10]. The 2012 report of The National HIV and AIDS and Reproductive Health Surveys (NARHS) however revealed a downward trend of HIV prevalence from 7.7% to 2.3% among the general population, hinting as well that there have been significant declines in the rate of new infections due to several intervention efforts, some of which have concerned FSWs [11]. The current study was an intervention study conducted among FSWs in Plateau state, Nigeria to increase the adoption of safer sexual practices, provide access to HIV counselling and testing (HCT), promote good health seeking behaviour for prompt treatment of STIs, reduction in the number of sexual partners, increase in condom use, among other social norms and values. This article thus presents the results of the HIV prevention programme carried out among FSWs in Plateau State, Nigeria, including the achievements and implications for programming.

II. METHODOLOGY

Study Design

This was an intervention study carried out among FSW in Plateau State. Plateau State is one of the recipients of the HIV and AIDS Programme Development Project (HPDP) across the country. While MARPs were not covered in the scope of the first phase of HPDP which ended in March, 2010, the second phase of the initiative (HPDP II) has HIV/AIDS Fund (HAF II) as one of its components to reduce the incidence of new infections, while ensuring a reduction in risky sexual behaviour among MARPs.

Study Area

This intervention was carried out in 3 purposively selected Local Government Areas (LGAs) in the State. Plateau State is one of the states in the North-Central geo-political Zone of Nigeria. The state is bounded in the North East by Bauchi State, North West by Kaduna State, South East by Taraba State and to the South and South West by Nasarawa State. Plateau state has a total population of 3,206, 531, which comprises 1,598,998 males and 1,607,533 females with an annual growth rate of about 2.7%. The State has three senatorial zones and 17 Local Government Areas (LGAs) with a land area of 30,913km² [12].

Study Population

The study population are female sex workers with a minimum age of 15 years in Jos North, Jos South and Mangu LGAs.

Sample Size

The estimated sample size for this intervention was 460 FSWs.

The Intervention Process

This intervention was carried out between 2013 and 2016 by six civil society organizations (CSOs) engaged by Plateau State Agency for the Control of AIDS. These CSOs were Women in Agriculture and Youth Empowerment (WAYE) Foundation, Inter Gender Development Centre (IGDC), Country Women Association of Nigeria (COWAN), Youth Adolescent Reflection and Action Centre (YARAC), Scripture Union West Africa (SUWA), and Manna Resource Development Centre (MRDC). The three components of HIV Minimum Prevention Package Intervention (MPPI) which are *structural*, *behavioural* and *biomedical* interventions were used for this project activities.

Structural Interventions

The structural level of the intervention included promotion of community-based interventions with the purpose of creating adequate access to information and services among FSWs. This level of intervention focused mainly on income generation activities (IGA), community dialogues and advocacy.

Advocacy

Advocacy visits were made to stakeholders particularly the gate-keepers and the brothel owners to seek their support as regards HIV prevention among FSWs.

Community dialogues

Efforts were made at addressing structural barriers within the community such as cultural beliefs and discriminatory practices, policies and legislation that hinder FSWs and their clients from accessing and utilizing appropriate HIV prevention, treatment and care services. This was achieved by bringing together the key actors, and gate-keepers within the communities, and FSW communities to discuss critical issues.

Income generation activities

At this level, the intervention sought to provide alternative means of livelihood for FSWs by engaging them in community-based programmes with a view of rehabilitating them, whilst also providing them with alternatives to thrive on outside of sex work. The CSOs engaged FSWs by providing capacity-building in different entrepreneurial skills, teaching them finance-management in business, marketing strategies, as well as how to maintain effective customer relations.

Behavioural Intervention

Behaviour change communications (BCCs) were aimed at influencing beneficiaries to adopt healthy behaviours, whilst reducing their risk for HIV infection. The BCC was carried out by Peer Educators (PEs) selected among FSW. These selected PEs recruited peers among FSW who they reached out to during cohort session using the MPPI. Cohort sessions were held at the individual level of BCC with PEs discussing HIV with their peers. Issues discussed during cohort session included partner reduction, correct and consistent use of condom, good health seeking behaviour for prompt treatment of STIs, treatment referral, follow-up and HCT. The PEs were members of the FSW group who had been previously selected, trained and supported to educate members of their peer group about HIV and related topics, the condom negotiation (both male and female) and lubricant use. Other areas of focus during the peer to peer education included: issues revolving round stigma and discrimination, human anatomy, reproductive system, stages of human development, self-esteem and other life skills, value system, and getting treatment for STIs. A maximum of 3 and minimum of 2 cohort sessions were held monthly in 10 and 15 days interval respectively. The intervention was conducted in a period of 3 months with 6 to 9 contacts after which the cohort were graduated.

Biomedical Intervention

The biomedical level of interventions was with the aim of increasing access to HIV prevention, treatment and care services. It is within this level that the issues pertaining to the strengthening of the referral system to provide quality STIs treatment and increase in the uptake of HCT services by the FSWs ensued. HIV counseling and testing (HCT) services by trained counsellor testers were provided to the participants and condoms were distributed while referral were made for those tested positive and other STIs treatment.

Data Collection

Data collection was done using various data collection and reporting tools. HCT was documented using the client intake form. Data were collected during peer education/cohort sessions by the peer educators. Also collated were the number of FSWs counselled and tested for HIV, those followed-up for incidence of STIs, as well as those who tested positive for HIV.

Data Analysis

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Data were entered into District Health Information Software (DHIS2) and checked for errors and other inconsistencies before being exported and analyzed using Microsoft Excel.

Ethical Issues

Prior to the commencement of the intervention, the proposal was subjected to a two-stage review and ethical approval to conduct the research was obtained from the National and the State Ethical Review Committee, Federal Ministry of Health, Nigeria. Also, permission was obtained from the brothel owners and chairlady of the FSWs Association. The criteria for selection of FSWs included voluntary declaration of participation in the project and the ability for transmission of information. The HIV tests were done under HCT tents within the community, with only one client attended to at a time to ensure privacy of the client. The HIV client intake forms were kept in a safe place to ensure confidentiality. Those that tested positive were referred for appropriate treatment.

III. RESULTS

The findings are presented based on the levels of intervention: structural, behavioural and biomedical interventions. The target reached during this intervention was 601 given a target reached of 130.7%.

Structural Intervention

Out of the 68 community dialogues held, 30 (44.1%) took place in the 2014 calendar year, 28 (41.2%) took place in 2015, and only 10 (17.7%) in year 2016 (Table 1). A total of 1466 influencers were involved with percentages of 11.9, 87.7 and 0.4 in 2014, 2015 and 2016 respectively. Eight IGAs were held in 2015 and 2016 with 18 persons benefiting from the activities. There was no IGA conducted in 2014 (Table 1).

Table 1: Structural Intervention

Period	Number of community dialogues held	Influencers participated in community dialogue	Number of IGA held	No of persons referred for IGA	No of persons that benefited from IGA
2014	30 (44.1%)	174 (11.9%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
2015	28 (41.2%)	1,286 (87.7%)	7 (87.5%)	12 (44.4%)	15 (83.3%)
2016	10 (17.7%)	6 (0.4%)	1 (12.5%)	15 (55.6%)	3 (16.7%)
Total	68	1,466	8	27	18

Behavioural Intervention

The distribution of condoms began in 2014, with 183 female condoms and 705 male condoms distributed the same year (Table 2). The total number of condoms distributed during the intervention period was 4,528 female condoms and 6,032 male condoms. There were 66 lubricants distributed throughout the duration of the intervention, all of these being distributed in the second year of the intervention. A total of 601 peers were registered, a figure exceeding the estimated target population by 30.7%. Most (68.6%) of them were registered in 2015 while the number of FSWs reached with complete HIV education was 547 out of the 601 registered peers, representing 91.0%. The total number of condoms, both male and female, required across the duration of the intervention totaled 32,918, while only 10,560 condoms (male and female) were distributed representing 32.1% of condoms required (Fig. 1)

Table 2: Behavioural Intervention

Period	No of female condoms distributed	No of male condoms distributed	No of lubricants distributed	No of peers registered	No of peers reached with complete HIV education
2014	183 (4.0%)	705 (11.7%)	0 (0.0%)	92 (15.3%)	74 (13.5%)
2015	3785 (83.6%)	2500 (41.4%)	66 (100.0%)	419 (69.7%)	398 (72.8%)
2016	560 (12.4%)	2827 (46.9%)	0 (0.0%)	90 (15.0%)	75(13.7%)
Total	4528	6032	66	601	547



Fig 1: Condom required and distributed

Biomedical Intervention

A total of 642 FSWs were counseled, tested, and received results; this included 32 persons in 2014, 545 in 2015 and 65 persons in 2016 respectively. Furthermore, 15 persons representing 2.3% of participants were tested positive and referred for further services. The total percentage of the estimated population that was tested for HIV was 128.1%. Thirty two persons were currently receiving STIs services while 247 persons were also referred (Table 3).

Table 3: Biomedical Intervention

Period	No Counseled Tested and Received Result	No of persons who tested positive	No of persons currently receiving STI services	No of persons referred for STI	No going for STI follow-up
2014	32 (5.0%)	5 (33.3%)	7 (21.9%)	27 (10.9%)	7 (22.6%)
2015	545 (84.9%)	10 (66.7%)	19 (59.4%)	214 (86.6%)	19 (61.3%)
2016	65 (10.1%)	0 (0.0%)	6 (18.8%)	6 (2.4%)	5 (16.1%)
Total	642	15	32	247	31

Coverage of MPPI, HCT and Prevalence of HIV

A total of 528 (87.9%) of the registered peers were reached with all the three stages of MPPI and 642 (139.6%) of the estimated sample size were reached with HCT. Among these, 15 (2.3%) were tested positive to HIV (Fig. 2).

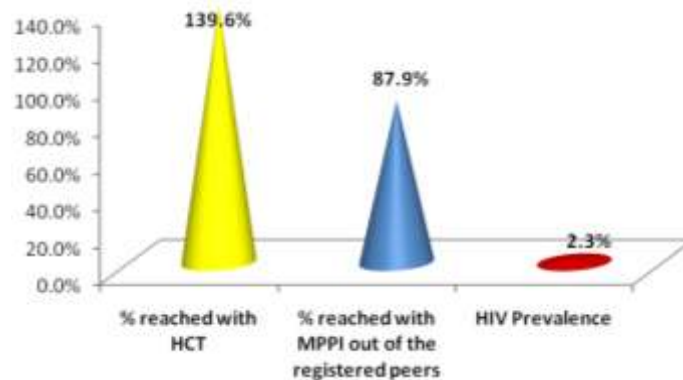


Figure 2: Coverage of MPPI, HCT and Prevalence of HIV

IV. DISCUSSION

The findings of the intervention point to the fact that 2015 was the major implementation year for the bulk of the intervention, and as such was the most active year for the CSOs, the preceding and succeeding years 2014 and 2016 were less active years in terms of programme indicators, due to preparatory activities in 2014, and programme winding-down in 2016. At the structural level of the intervention, 2015 served as the year for conducting community dialogues, and conducting income generation activities. In both the behavioural and biomedical intervention levels, CSOs in 2015 distributed more condoms, reached more peers, and conducted HCT services on more persons, having laid the groundwork in the preceding year.

The income generation activities and capacity building of the FSWs were thus embarked upon to provide the sex workers trainings on vocational skill sets which could reduce their dependence on commercial sex activity, as well as what they perceive as the need to cater to the whims and caprices of customers with the zest for risky sexual behavior. This is due to the belief as captured by Gungul and Audu [13] on the subject of

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HIV prevalence in Nigeria that it is driven by the low risk perception, high risk behavior and sexual networks amongst FSWs and their clients, as well as poor STIs management and vulnerability, which all arise from economic challenges, and the absence of choice alternatives. The findings of this study reiterates the position of PEPFAR [3] that HIV prevalence was higher among persons who have exchanged sex for gifts than among persons who do not do so. This is easily observed by contrasting the HIV prevalence among FSWs in the state with the 2012 report of the National HIV and AIDS and Reproductive Health Surveys (NARHS) which revealed a downward trend from 7.7% to 2.3% among the general population [11]. However, despite the increasing numbers of FSWs, there has been a decline in HIV prevalence among FSWs in the state in recent years. This was a key finding in the study conducted by Ogbe et.al [7], and further attested to by the findings on the HIV prevalence on FSWs within the state from this intervention. The low knowledge of HIV-related issues as well as the socio-economic context limited the sexual bargaining among FSWs according to the NDHS report [14], and although the socio-economic context of the nation has barely improved since then, it must be noted that there are appreciable differences in terms of risk knowledge and condom negotiation. These differences may well be attributed to HIV prevention programming efforts, such as HAF II, geared at increasing condom negotiation skills as well as risk knowledge among FSWs.

It is important that risk knowledge and condom negotiation are brought to the fore as topical issues amongst those who engage in transactional sex, particularly in light of the fact that condom use among FSWs and their clients were generally low (49%) across the nation with the North-Central being one of such areas of interest [3]. To deal with the issue of condom negotiation, access to condoms among FSWs was considered, bearing in mind that Massiah [15] revealed that most FSWs in Plateau State considered the cost of purchasing condoms regularly as being on the high side, leading many to engage in unprotected sex with their clients with resultant increase in the cases of STIs. These FSWs as he noted also engaged in self-medication frequently, using penicillin-based creams as antibiotics (and lubricants) in their treatment of STIs. At the time, many of the FSWs who claimed never to have seen anyone infected, also believed that HIV was not a 'black man's ailment' [15]. Thus, condom distribution as occasioned during this intervention proved a necessity in a bid to increase the correct and consistent use among FSWs and their clients. However, it must be pointed out herein that that the number of condoms provided during this intervention fell short of the number required, and this could have a negative effect on the process of condom negotiation among FSWs. It is also crucial to note that the consequences of not providing as much condoms as required might be dire. This is because such a failing can draw many of the FSWs into the pit of unprotected sex as a result of economic and financial hardship.

Implication for Programming

The HPDP II initiative under the aegis of the HAF II targeted FSWs in a bid to block the transmission of HIV epidemic to the general population. It considered the health and human rights of FSWs as key to the overall goal of HIV prevention. As such, the income generation activities and capacity building of the FSWs were embarked upon to provide the sex workers with alternatives to sex work. This is due to the belief as captured by Gungul and Audu [13] on the subject of HIV prevalence in Nigeria that the epidemic in Nigeria is driven by factors arising as consequences of the harsh economic realities in the country. A comprehensive HIV prevention programme as the HPDP II shows that the HIV prevalence among FSWs can be brought even lower than the 2.3% witnessed in this intervention, and that other site-based intervention strategies that promote safer sex, diagnosis and treatment of STIs and access to HIV treatment, care and support should be prioritized, and integrated into the State Government's health plans. Also condoms distributed in this study fall way short of condoms required, and as such condom distribution would need to be improved significantly in subsequent interventions. Furthermore, as Ogbe et.al [7] suggests, the integration of rapid diagnostic technologies which may improve the effectiveness of such programmes should be pursued, alongside other intervention programmes aimed at providing life-long antiretroviral therapy for all HIV infected FSWs and pre-exposure medication for HIV negative FSWs.

V. CONCLUSION

This study showed that the HIV prevalence of 2.3% among FSWs at the time of the intervention is low compared to previous years, it also points out that while FSWs and their activities may be considered social evils, there is however a crucial role for FSWs to play in the plot of taking the HIV prevalence of Plateau State even further down, as noted in the use of FSWs as Peer Educators, and the uptake in sex negotiation practices, and the resultant decline in HIV prevalence. Thus, the health of FSWs must be seen as important to the overall process of HIV prevention, and the sex workers themselves, a part of programming solutions to the epidemic. While the intervention can to a fairly large extent be deemed a success, it must be noted that similar programmes should be extended to other LGAs not covered in the current programme so as to capture other FSWs in the State.

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