# Achievements and Implications of HIV Prevention Programme among Long Distance Drivers: A Systematic Evaluation of HAF II Project in Kogi State, Nigeria

Ademola L. Adelekan<sup>1,5\*</sup>, Gabriel Musa<sup>2</sup>, Shaibu Moses<sup>3</sup> Mahmoud Atta<sup>4</sup>, Williams Shaibu<sup>2</sup>, Patrick Adah<sup>2</sup>, Adeyimika T. Desmennu<sup>5</sup>, Oladipupo S. Olaleye<sup>1,5</sup>, Atinuke Agunloye<sup>1,6</sup>, Olusegun Adeoye<sup>7</sup>, Michael Olugbile<sup>7</sup>

<sup>1</sup>Blue Gate Public Health Promotion Initiative, Ibadan, Nigeria

<sup>2</sup>Kogi State Agency for the Control of AIDS, Lokoja, Nigeria

<sup>3</sup>Development of Female Gender Initiative, Lokoja, Nigeria

<sup>4</sup>Rural Women Empowerment and Youth Development Foundation, Lokoja, Nigeria

<sup>5</sup>Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan, Ibadan, Nigeria

<sup>6</sup>Department of Radiology, University College Hospital, Ibadan, Nigeria

<sup>7</sup>HIV Programme Development Project, World Bank, Abuja, Nigeria

\*Corresponding Author: Ademola L. Adelekan

Blue Gate Public Health Promotion Initiative, Ibadan, Nigeria

\*ademola.adelekan@gmail.com, +234-803-067-6992

## **ABSTRACT**

**Background:** Due to the high mobility of Long Distance Drivers (LDDs), many HIV interventions programmes have not been very successful among them thus the HIV Minimum Prevention Package Intervention (MPPI) was introduced to reach them. This paper therefore presents the achievements and implications of HIV prevention among LDDs in Kogi State, Nigeria.

**Methods:** This intervention was carried out among LDDs in major trailer parks in 6 out of 21 Local Government Areas (LGAs) in Kogi State were purposively selected. A total of 1473 participants were reached in this intervention and was carried out in the year 2014 and 2015. Data were documented using various monitoring and evaluation tools and entered in the DHIS2 platform. The data were exported into Microsoft Excel and analysed using same.

**Results:** A total of 131 community dialogues were held with 2877 participants; two income generating activities (IGAs) were carried out benefitting four participants. In 2015, more than 63.0% of the total male condoms were distributed, 61.8% of the participants were counseled, tested and received result for HIV. About 50.0% of the peers registered were reached in each year. With regards to persons reached with the total package of HIV prevention education, 46.0% and 54.0% in 2014 and 2015 respectively of individuals were reached. A total of 1184 (80.4%) of the registered peers were reached with all the three stages of MPPI and 1312 (89.1%) were reached with HCT. Among these, 41 (3.1%) were tested positive to HIV.

**Conclusion:** The HIV prevalence rate observed among the tested participants was higher than the overall state prevalence, the result calls for concern as it showed that the population of truckers is a potential high risk group in Kogi State. Safe sex and use of condom therefore have to be energetically promoted among long distance truck drivers.

**Key words**: HAF II; HIV infection, Long distance drivers; Minimum prevention package for intervention,

{Citation: Ademola L. Adelekan, Gabriel Musa, Shaibu Moses, Mahmoud Atta, Williams Shaibu, Patrick Adah, Adeyimika T. Desmennu, Oladipupo S. Olaleye, Atinuke Agunloye, Olusegun Adeoye, Michael Olugbile. Achievements and Implications of HIV Prevention Programme among Long Distance Drivers: A Systematic Evaluation of HAF II Project in Kogi State, Nigeria. American Journal of Research Communication, 2017, 5(2): 49-58} www.usa-journals.com, ISSN: 2325-4076.

## **INTRODUCTION**

In spite of all the efforts targeted at controlling the dreaded Human Immuno-Deficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS), its burden has remained high in Nigeria with 3.3 million people living with the disease and 22,000 deaths from it in 2009 [1]. About 80% of all infections in Nigeria have been estimated to be transmitted by heterosexual relationship and transport workers, especially the Long Distance Drivers (LDDs) together with other high risk groups were estimated to account for about 40% of new infections [2-3]. Long distance drivers have been identified by several studies as an important occupational risk group. It was observed from the studies that the drivers become very vulnerable to non-marital sex, extramarital sex and sexual intercourse with female sex workers because they were constantly away from home [4-5]. Work in the transport sector can be physically taxing and dangerous, may require long hours, infrequent breaks, limited access to food and water, and frequently uncomfortable conditions and dangerous roads. The death of transport workers due to HIVrelated illnesses can lead to serious declines in transport sector productivity, loss of earnings, and the attrition of skills and experience. The spread of HIV in the transport industry is especially significant for the economy because truck drivers are largely responsible for transporting produce, raw materials, supplies needed for daily subsistence, and import and export products [6]. Long distance truck drivers, due to nature of their profession, have to stay away from home for long periods of time as well as traverse the length and breadth of the country. Being in the sexually active age group exposure to commercial sex workers becomes a frequent sexual practice. These factors make them an epidemiologically important risk group as far as transmission of HIV infection is concerned. Thus changing their sexual behaviour is of paramount importance to protect these drivers as well as have a major impact on spread of HIV infection [6]. There is therefore an urgent need to target HIV prevention and research efforts to this vulnerable group.

The introduction of Minimum Prevention Package Intervention (MPPI) in the national response between 2007 and 2010 by the National Prevention Technical Working Group (NPTWG) marked a significant shift from numbers to quality service delivery [7]. Interestingly, successes were achieved as a result of the paradigm shift as shown in the prevalence rate which reduced from 4.6% to 4.1% from 2008 to 2010 respectively [8-9]. Behavioral, biomedical and structural interventions are a critical component of the MPPI. A combination of these 3 interventions is necessary in order to achieve a comprehensive prevention intervention. In line with the goal of reducing the risk of HIV infections in Kogi State by scaling up prevention interventions and to increase access to and utilization of HIV counseling, testing, care and support services, Kogi State HIV/AIDS Programme Development Project (HPDP) II under the Public Sector, HIV/AIDS Funds (HAF) and the Institutional architecture components coordinated an HIV interventions among LDDs between the year 2013 and 2015. This paper therefore presents the achievements and implications of this intervention in Kogi State, Nigeria.

## **METHODOLOGY**

## Study Design

This is an intervention study carried out in six local government areas in Kogi State, Nigeria where clusters of long distance drivers were identified in the various major parks within the State. Development of Female Gender Initiative (DEGENDER) and Rural Women Empowerment and Youth Development Foundation(RWEYDF), Lokoja, Nigeria were the two civil society organizations (CSOs) engaged by Kogi State Agency for the Control of AIDS and funded to implement this intervention under the HIV/AIDS Funds (HAF) II of the World Bank.

# Study Area

Kogi State was created on 27th August, 1991. It is made up of part of the old Kabba Province (that remained in Kwara) and the one that was part of Benue State. Kogi State has its headquarters situated in Lokoja. Kogi State, is situated in the North Central geo-political Zone of Nigeria. The State has a total land area of 28,313.53 square kilometers and a population of over 3 million people. It is an agrarian community with majority of people practicing farming and other ancillary trades. The State has three major ethnic groups namely: Igalas, the Ebiras and the Yorubas (Okun), while the other ethnic groups include Ogoris, Nupe, Kakanda, Hausas, and the Bassas, etc.The State is bordered by the following States; Enugu (South East), Benue (East), Nasarawa(North East), Ondo(South West); Edo (and East), Anambra (South); and Ekiti (South-West). It has a land mass of 30,354.74. square kilometers. 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. The State also has 21 Local Government Areas.

## Study population

The project was conducted in 6 out 21 LGAs in the state, including Lokoja, Ankpa, Idah, Kabba/Bunu, Kogi and Adavi. All consenting drivers in these LGAs participated in the preliminary data collection and the project implementation process.

# Study Setting

Long distance drivers were identified in their parks where most of them stop over to off load their vehicles and pass the night before commencement of their journey. Most of the parks have naturally grown to inhabit other occupants who worked closely with the drivers or who partook in the maintenance of the vehicles. These included; the mechanics, vulcanizer, welders, auto rewiring personnel, battery chargers, panel beaters, petty traders and food vendors. In most case, some of the shops also served as brothel for female sex workers (FSWs) who provide sexual services to the truck drivers as required.

## Sampling

Purposive sampling technique was used to recruit participants (peer educators and peers reached). The estimated target population of 1500 was set for this intervention. All consenting long distance drivers were included in the project.

## Data collection procedure and project activities

Programme activities were carried out in line with the intervention structures of the MPPI which are structural, behavioural and biomedical interventions. These are outlined as:

## **Structural Intervention**

# Dialogue session with stakeholders

The dialogue session with the stakeholders was a platform for community entry where permission of the gatekeepers was sought to carry out the project. It was also used as a medium in which the gatekeepers were updated on the progress of the programme and challenges encountered to proffer possible solutions to such challenges. The stakeholders included the representatives of the traditional rulers, the police, general hospitals, ART clinics, brothel owners, leaders of NURTW LACA coordinators and other stakeholders visited in the advocacy.

## Community Outreach

Community outreach was one of the activities targeted at other members of the community aside the targeted beneficiaries. Outreaches were carried out amongst petty traders in the park, touts and National Union of Road Transport workers (NURTW), non-driving staff of these groups and close associate that interact with the drivers. Major highlights of the activities include HCT, condom distribution and demonstration etc. Furthermore, due to the transit and transfer nature of the target group, some selected members of the community were trained to further train others. This is to enhance the sustainability plans for the programme.

## **Behavioural Intervention**

## Peer sessions

The Peer (Cohort) sessions were facilitated by the Peer Educators (PEs) with their peers or cohorts who were registered into the programme. The cohort sessions were held in a minimum of 2 times or maximum of 3 times in a month in an interval of 15 or 10 days respectively to discuss HIV and other related issues including sexual and reproductive health as contained in their training manual. After a minimum 6 contacts, between 8-12 weeks the peers were provided with HCT and are graduated having completed the

modules in the manual. However, this does not deter them from joining in the meetings if they so wish as they are intended to form a club or group at the end of the programme for sustainability purposes.

## Interactive Sessions

The Interactive sessions/FGD is an activity designed to create an atmosphere for result-oriented discussion. This comprised of all PEs, peers, chairladies of brothels and other relevant stakeholders. The objective of the activity is primarily to share experiences, create room for valuable discussion, highlight challenges and proffer solution. The impact of the programme on the participants is commendable as they take ownership and see their contributions valuable to the success of the programme.

## **Biomedical Intervention**

# HIV Counselling and Testing (HCT)

The entry point of all HIV and AIDS intervention is a comprehensive advocacy, however with regards to biomedical intervention phase of the programme, HCT is a major initial step. This is a programme where mobile HCT was carried out for all our Peer Educators and their interested cohorts as well as other members of the community. Those tested positive are referred to health facilities for care and support while others are counselled to adopt a non-risky behavioural style of life.

# **Monitoring**

A routine check of programmes or activities carried out to ensure that results reflect the actual plan was observed. This responsibility rests on the M&E officers with support from 2 other staff. All activities were monitored especially the peer sessions in collaboration with the Service Support Organization (SSOs). Data were collected using various data collection and data reporting tools. Reports were entered in the relevant reporting templates which were later entered into the DHIS2 platform.

## **Data Analysis**

Data collected with output indicators were cleaned using data reporting tools and entered into the DHIS 2The data were exported into Microsoft Excel and analysed using same. Data were analysed using descriptive statistics and represented in tables and charts.

## **Ethical Consideration**

Prior to the commencement of the research, the proposal was subjected to a two stage review and ethical approval to conduct the research was obtained from the National State Ethical Review Committee, Federal Ministry of Health, Nigeria after an in-depth review of the proposal for compliance with ethical guidelines. Also, permission was obtained from the leaders of the identified groups where necessary. The criteria for selection of samples included voluntary declaration for participation in the study and the ability for transmission of information. Informed consent was obtained from all participants in the study; this included statements of assurance of confidentiality of the all information collected from the participants.

## RESULTS

The findings are presented based on the levels of intervention: structural, behavioural and biomedical interventions. The overall target population reached during this intervention was 1473 given a target reached of 98.2%.

## Structural Intervention

The total number of community dialogues held during this project was 131. More than half (55.7%) were held in 2015 which was the second and final year of the project. With regards to community influencers, a total of 2877participants participated in the community dialogues. Among these, 67.6% were recorded in the second year of the project (2015). Two income generating activities (IGA) were held and four people benefitted from it (Table 1).

**Project Indicators** Year of Assessment Influencers who No of persons that benefitted dialogues held participated in No of IGA held Numbers of community Number of community dialogue. 58 (44.3) 931 (32.4) 0(0.0)0(0.0)2014 2015 73 (55.7) 1946 (67.6) 2 (100.0) 4 (100.0) 131 2877 2 4 Total

**Table 1: Structural Intervention indicators** 

## **Behavioural Intervention**

A comparison of number of peers registered and those reached in 2015 and 2014 were almost the same. About 50.0% of the peers were reached in each year. With regards to persons reached with the total package of HIV prevention education, 46.0% and 54.0% in 2014 and 2015 respectively of individuals were reached.

Year of Assessment	Indicator				
	Number of peers registered n (%)	Persons reached with HIV prevention education n (%)			
2014	734 (49.8)	637 (46.0)			
2015	739 (50.2)	749 (54.0)			
Total	1473	1386			

Table 2: Behavioural Intervention indicators

## **Biomedical Intervention**

A comparative analysis of these activities showed a great improvement in 2015 over the data of 2014. In 2015, over 63.0% of total male condoms were distributed, 61.8% of the participants were counseled, tested and received result for HIV and all the individuals receiving STI services were referred for ARV in 2015. A total of 199 persons were referred for STI services and among these, only 23.1% were going for STI follow up (Table 3).

	INDICATOR							
Year of	n (%)							
Assessment	Number of Female condoms distributed	Number of male condoms distributed	Number counselled, tested and Received results for HIV	Number of persons referred for STI	Number of persons receiving STI services	Number of person referred for ARV	Number of persons going for STI follow-up	
2014	3515	34863	501	199	166	41	46	
	(36.7)	(31.1)	(38.2)	(100.0)	(100.0)	(100.0)	(100.0)	
2015	6059	65552	811	0	0	0	0	
	(63.3)	(68.9)	(61.8)	(0.0)	(0.0)	(0.0)	(0.0)	
Total	9574	100415	1312	199	166	41	46	

**Table 3: Biomedical Intervention indicators** 

# Coverage of MPPI, HCT and Prevalence of HIV

A total of 1184 (80.4%) of the registered peers were reached with all the three stages of MPPI and 1312 (89.1%) were reached with HCT. Among these, 41 (3.1%) were tested positive to HIV (Fig. 1).

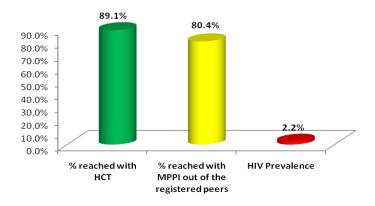


Fig. 1: Coverage of MPPI, HCT and Prevalence of HIV.

## DISCUSSION

The structural intervention indicators with regards to this intervention included community outreaches, advocacy and community dialogue meetings and number of participants in the meetings. This is in line with a study carried out in Benue state by [10] where it was reported that the gate keepers support were gained through advocacy and community dialogue. There appears to be a progressive improvement in this aspect of the project implementation programming over years. Behavioural indicators from this evaluation revealed that a comparison of number of peers registered and those reached were almost the same in both years; 2014 and 2015. This could be an indication for a need to improve or change programme implementation approach among this group of people in order to realize a marked increase in the achievement of programme targets. It is also a pointer to the need for a more strategic approach to the operationalizing of the minimum package among the most at risk population as documented in the study among the Burmese reported by USAID [11].

Biomedical intervention in this project included distribution of both male and female condoms, HIV Counselling and Testing (HCT) including collection of results, referral and treatment of sexually transmitted infections. A finding reported in Uganda showed that long distance truck drivers and other MARPs have inadequate access to prevention programmes, voluntary counselling and testing (VCT), ART and basic health services [12]. This gap is attributed to poor targeting, inadequate services and weak coordination. An IOM study of OSBPs, including posts on the Uganda/Rwanda, Rwanda/Uganda and South Sudan/Uganda borders, showed that crossborder populations in East Africa had health and epidemiological profiles characterised by disease, and other social and economic vulnerabilities [13]. A lot of condom distributions were made to participants during this intervention. There is overwhelming evidence to show that condoms are not easily accessible to MARPs. A study by International Organization for Migration found that long distance truck drivers and sex workers find it difficult to access condoms, especially at night; poor access to condoms leads to unnecessary unprotected sex. The existing distribution mechanisms do not guarantee a continuous condom supply to MARPs [13]. Though Matovu and Ssebadduka [14] reported that knowledge of condom use as an HIVprevention strategy is generally high and attitudes towards use were generally favourable among long distance truck drivers. Morris and Ferguson (2005) also reported that 84% of the 381 long distance truck drivers surveyed reported using condoms during their last commercial sexual contact. However, the use of condoms with occasional partners was 71%. The HIV prevalence rate observed among the tested participants was 3.1%. This is smaller than what was reported in Uganda, where HIV prevalence rate ranges between 25-30% which is significantly higher than the national average prevalence of 7.3%.

## **Implications for Programming**

An in-depth analysis of the evaluation of the HIV prevention programme in Kogi State has revealed some gaps in the programming and implementation process. These are confirmed by the listed challenges which the programme faced at different points in the implementation process, this included: the delays in the World Bank bureaucratic processes which reduced the effectiveness of implementation agencies in delivering the first and second semester results of the programme, poor ownership of HIV and AIDS interventions implementation leading to the non-release of funds from the State Government for HIV and AIDS and improper coordination

of the line ministries working on the project. Others include lateness in the introduction of DHIS 2.15 reporting tool and inadvertent lateness in the training of the personnel responsible for uploading the data, dearth of qualified personnel for key programme areas such as monitoring and evaluation, poor quality leadership, commitment and self-sacrifice from stakeholders and the government in the achievement of results and lateness in the provision of recording tools and HCT materials.

In view of the above mentioned short falls in the programming process, the following are recommended for improved programming of future HIV and AIDS prevention programmes in order that the burden of this disease would be controlled: more integration of services and decentralization to PHCs and rural communities, strengthening of Monitoring and Evaluation of HIV and related interventions, aggressive scaling up of prevention activities in a cost-effective manner and scale up of ART programme as a prevention strategy and to stem more AIDS-related deaths. There should be more engagement at all levels to engender political commitment and ownership of the HIV response (including State & LGA levels) with a view of ensuring sustainability through increased funding, brainstorming and synthesizing of ideas for alternative/innovative ways of mobilizing resources for the HIV response at all levels, the State Government should take ownership of the programme by providing ARV drugs, requisite infrastructure, adequate staffing and the capacity building of health care providers at the primary health care level.

## **CONCLUSION**

Effective implementation of the minimum prevention package for intervention in the prevention of HIV programme in Kogi State that focuses on individuals and community behaviour showed significant improvement in 2015 over 2014 when the indicators for the three levels of prevention were compared. Evidence from this intervention suggests that mobile populations in Kogi State are at a higher risk of HIV infection than the general population. For instance, HIV prevalence rate observed among the tested participants (3.1%) was higher than the overall state prevalence (1.4%), the result calls for concern as it showed that the population of truckers is a potential high risk group in Kogi State. Safe sex and use of condom therefore have to be energetically promoted among long distance truck drivers by involving transport company owners, truck drivers unions, and nongovernmental organization. There is also need to extend this type of programme to other local government areas not captured to ensure every long distance driver in the state is reached with HIV prevention. It would be of great advantage to integrate services and decentralization of minimum prevention package for intervention activities to primary health care centers and rural communities, stepwise supervision and monitoring of HIV prevention activities should be strengthened and engagement of all tiers of governance to engender political commitment and ownership of the HIV response (including State and local government area (LGA levels) with a view to ensure the sustainability of these programmes.

## 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 conduct of the evaluation programme, the dissemination of results and the writing up of the article.

## References

- 1. Awosan, K.J Ibrahim, M.T.O, Arisegi, S.A and Erhiano, E.E (2014). Knowledge of HIV/AIDS, risk perception, sexual lifestyle and condom use among drivers in Sokoto, Nigeria. J. Infect. Dis Immu 6 (3): 19-25
- 2. Federal Ministry of Health (FMoH). (2012). HIV Sentinel Surveillance report (2012). HSS HIV national sentinel surveillance result
- 3. UNAIDS (2012) World AIDS Day Report-Results. Joint United Nations Programme on HIV/AIDS, Geneva, Switzerland.
- 4. Dude A, Oruganti G, Mayer K.H, Yeldandi V, Schneider J.A (2009). HIV infection, genital symptoms and sexual risk behaviours among indian truck drivers from a large transportation company in south india. J. Glob. Infect. Dis. 1(1): 21-28
- 5. Ramjee G and GouwsE (2002). HIV among South African Truck Drivers. Sexually Transmitted Diseases; 29 (1): 44-49
- 6. KMCC Uganda, Most at Risk Populations Long Distance Truck Drivers and HIV/AIDS in Uganda: Synthesis of Information and Evidence to Inform the Response. Synthesis Report, 2014.
- 7. National Agency for the Control of AIDS (NACA), Government of Nigeria, Programme Coordination Department (2015). Minimum package intervention (MPPI): A simple implementation guide.
- 8. Federal Ministry of Health (FMoH). (2008). National HIV and Syphilis Sentinel survey of 2008
- 9. Federal Ministry of Health (FMoH). (2010). National HIV and Syphilis Sentinel survey of 2010
- 10. Songu, G. S (2013). Minimum prevention package intervention; A workable strategy for achieving behaviour change amongst vulnerable population and most at risk population (MARPS) in Benue State. J. AIDS. Clin. Res; 4:9
- 11. USAID (2007). Evidence for a successful implementation of the minimum package of HIV preventions interventions in Burma. A report prepared by Bessinger R, Chan MMN, Longfield K, Aung T and Rahman H. USAID
- 12. Uganda AIDS Commission. (2009). Uganda HIV Modes of Transmission and Prevention Response Analysis. Uganda AIDS Commission
- 13. International Organization for Migration. (2013). A Rapid Assessment of Access to Health Care at Selected One-Stop Border Posts (OSBP) in East Africa. International Organization for Migration.
- 14. Matovu, J., & Ssebadduka, N. (2013). Knowledge, attitudes & barriers to condom use among female sex workers and truck drivers in Uganda: a mixed-methods study. African Health Sciences, 13(4), 1027–33.