

**ASSESSMENT OF AWARENESS OF HIV/AIDS, CAUSES / RISK FACTORS, MODE OF TRANSMISSION AND PREVENTION, AMONGST PRISON INMATES IN BENIN CITY, SOUTH-SOUTH, NIGERIA**

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**ABSTRACT**

The Human Immune Deficiency Virus /Acquired Immune Deficiency Syndrome (HIV/AIDS) was first reported in 1981 and has evolved into a global pandemic. Prisoners constitute a vital group among the various vulnerable groups of HIV/AIDS because of the risky sexual practices among inmates and inadequate HIV prevention, care and support services. These coupled with the attitudinal factors of inmates make them a peculiar groups. The elevated rates of HIV infection found in prisons are not solely a concern for inmates but also for the society. This public health crisis goes beyond the confines of prisons, and also reaches the communities to which they return upon completion of their term. The aim of this study was to assess the awareness of causes of HIV/AIDS, risk factors, mode of transmission and prevention among the prison inmates in Benin City, South-South Nigeria. A descriptive cross sectional study was conducted using questionnaire. One hundred (100) questionnaires were administered randomly on prison inmates. Fifth (50) to men and fifth (50) to female, making a total of 100 prisoners interviewed. The questionnaire consisted of 23 questions relating to general knowledge of HIV/AIDS, causes/risk factors, mode of transmission and prevention. Scores were awarded for correct answer and no score was awarded for incorrect response. The total score obtainable was seven (7) for causes and risk factor, ten (10) for mode of transmission and six (6) for prevention of HIV/AIDS. The awareness of HIV/AIDS among prison inmates in Benin City was 54.0% while 9.0% had a fair knowledge of the mode of transmission. Pearson Product Correlation analysis was used to determine the level of awareness of causes/risk factors and mode of transmission of HIV/AIDS.  $X^2$  (p-value) < 0.05 indicates significant relationship between awareness on causes/risk factors, transmission and prevention of HIV/AIDS among prison inmates in Benin City, thus, there was a significant level of awareness. But misconceptions about HIV/AIDS are still rife among the prisoners and educational programs would be required to correct this problem, prison inmates should be given the opportunity to know their status. It is expected that, if the goal of eradication is to be achieved, the prison population which has hitherto been neglected in research and implementation programs should be given necessary attention.

**Keywords:** HIV/AIDS, Prison inmates, Benin City.

**INTRODUCTION**

Human Immunodeficiency Virus / Acquired Immunodeficiency Syndrome (HIV/AIDS) was first reported in 1981 and has become a global pandemic. It has brought devastating challenges to human dignity, public health,

threat to sociocultural and economic growth, reduction in life expectancy and heightened poverty level particularly in underdeveloped countries of the World [1]. Globally, many studies on HIV/AIDS have been undertaken by various government and non-governmental Organizations. There are high risk groups like prisoners in well-defined but restricted settings who are usually left out

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from the interventions they deserve [2], especially in underdeveloped countries. Prisoners worldwide have significantly higher prevalence of HIV than in the out-side world [3, 4], therefore, they are at a high risk of HIV infection because of overcrowded prisons, unprotected sex and sexual assault, occurrence of sexual practices that are risky to health, unsafe injecting practices, and inadequate HIV prevention care and support services [5]. Generally in Sub-Saharan Africa, existing data on HIV/AIDS in prisons are not accurate enough to provide a real picture of the current situation [6]. However, there is growing concern over the HIV status of inmates in Nigeria prisons, as a report showed that there is an increase in the number of prisoners who are affected with the disease [7]. Conversely, studies have shown high awareness of HIV/AIDS among prison inmates in Nigeria [2–4]. However, despite the high awareness, misconceptions of various degrees exist in Nigeria and other African Countries [8–9]. HIV prevalence in the prisons is usually higher than that in the population at large. It could be five, six, or even as much as ten times higher than the values obtained in the general population [10–11]. A rapid assessment on HIV/AIDS in Nigeria prisons revealed a prevalence rate of 8.7% compared to the national figure of 4.6%. Some other countries in Africa have higher prevalence; Cote d'Ivoire (27.5%), Zambia (26.7%), and South Africa (15%) [11]. The purpose of this study is to assess the knowledge and awareness of HIV/AIDS, causes / risk factors, mode of transmission

and prevention, amongst prison inmates in Benin City, South-South, Nigeria

## **MATERIALS AND METHODS**

### **Study Area**

Benin City is located between latitude 6°17' and 6°21' and longitude 6°31' and 5°41' East. It is the capital of Edo State. There are two prisons located in Benin City. The Sapele Road Prison where the study was carried out and Oko Prisons along Oko-Ogba Road.

### **Description of Questionnaire**

This consists of demographic data like sex (male or female), marital status (married, single, divorced, separated and widowed) and religion (Christianity, Islam and Traditional). It also included twenty-three (23) questions in which seven (7) were on causes of HIV/AIDS and risk factors, ten (10) on transmission of HIV and six (6) on prevention of HIV/AIDS. Questions were to be responded to by answering YES or NO. Each question was scored one mark with a total of twenty-three (23) marks.

### **Study Design and Data Collection**

The study was carried out in Benin Prisons, Sapele Road, Benin City, Nigeria. The study was a descriptive cross sectional survey conducted in 2013. A sample size of 100 prisoners, consisting of 50 males and 50 females was selected. One hundred (100) questionnaires were randomly administered to them, with 23 questions relating to general knowledge/causes of HIV/AIDS, risk factors, mode of transmission and prevention. A score was awarded for correct answer and no score was awarded for incorrect answer. The total obtainable score were seven (7) for causes and risk factors, ten (10) for mode of transmission and six (6) for prevention of HIV/AIDS.

### **Inclusion Criteria**

1. Only Adult male and Female inmates
2. Those who consented to participate
3. Only those who met the inclusion criteria were included in the study

**Ethical Consideration**

Approval for the study was sought from the Ethical Committee of College of Medicine, University of Benin, Benin City. Edo State, Nigeria. Permission to interview the inmates was obtained from the National Immigration Service before the interview. Consent was also obtained from the inmates. They were also told that the study was voluntary and that individuals who agreed to participate will be allowed to withdraw from the study at any stage of the research. The inmates' confidentiality were maintained throughout the study.

**Data Analysis**

The data collected were transcribed and translated where appropriate, coded and then presented as tables, chi - square and in narrative quotation. The Pearson Correlation Analysis was used to analyze the data.

**RESULTS**

The result of the study was therefore based on the findings from 100 respondent.

Level of awareness	Cause and risk factor No of Respondent (%)	Transmission No of Respondent (%)	Prevention No of Respondent (%)	General knowledge No of Respondent (%)
Poor	1	4	0	12
Fair	11	28	15	32
Good	45	56	33	49
Very Good	43	12	52	7

The level of awareness was based on the percentage (%) of respondent for each category

**Table 2:**

Table 2: Shows the relationship in proportion of respondents across the category of awareness of Causes/ risk factors, transmission and prevention of HIV/AIDS.

Score	Cause/Risk factor	Transmission	X <sup>2</sup> (p-value)
Poor	1	4	X <sup>2</sup> = 127.951 df = 48, P = <0.001
Fair	11	28	
Good	45	56	
Very Good	43	12	
Score	Cause/Risk factor	Prevention	X <sup>2</sup> (p-value)
Poor	1	0	X <sup>2</sup> = 48.676 df = 30, P = 0.017
Fair	11	15	
Good	45	33	
Very Good	43	52	

P-value (<0.05): there is significant relationship between the level of awareness on the causes/risk factors of HIV and their knowledge on prevention and transmission. Causes/risk factors were used as a determinant for the different category of awareness to determine the relationship.

This revealed that the knowledge of inmates on the causes and risk factors of HIV can affect the transmission and prevention. Twenty-five (25) females and nineteen (19) males had misconception such as *Staphylococcus aureus*, sharing same utensils and been biting by insect e.g. mosquito bites could result in the spread of HIV/AIDS. While thirty-one (31) males and 25 females had the knowledge on the transmission of HIV/AIDS.

## DISCUSSION

This study revealed that HIV awareness in Nigerian prisons is significant. The level of awareness could be due to jingles on radio, television by the widespread dissemination of information on HIV/AIDS on bills boards, posters, handbill and stickers, health lectures in public places and information circulated in pamphlets. The level of awareness among prison inmates in this study is an indication that majority of the respondents had good understanding of HIV/AIDS, although there were still some misconceptions in the mode of transmission and the correct meaning of the acronym HIV/AIDS. Very few respondents admitted to prior information about HIV/AIDS from their spouses or family members. This is a reflection of the low level of family life education among same respondents [17].

Elsewhere in Africa and other prisons in the world, there are noticeable misconceptions of various degrees that were also documented in this study [18, 19, 20]. Unprotected sex, remains the most single important means of contracting HIV [21]. Furthermore the lack or unavailability of condom to prison inmates may compound HIV/AIDS transmission [12].

In a study in Lagos, Nigeria, it was found out that despite the fact they knew the correct modes of transmission, many still indulged in risk behaviors for AIDS transmission [13]. Studies showed that the use of unsterilized clippers for barbing hair, unsafe injecting practices among drug users and the use of non-sterile needles, and other sharp instruments is common [14, 15]. This public health crisis reaches beyond the confines of prisons, and also reaches the communities to which they return upon completion of their prison terms [1].

The study also reveal that a large proportion (54%) of the respondents had good knowledge of HIV/AIDS, however, misconceptions regarding the mode of transmission included: mosquito bites, *Staphylococcus aureus* and sharing of meal with infected person, can lead to transmission respectively.

The prospect for HIV/AIDS control depend largely on recognizing the scale of the threat and implementing policies to counter it [16], HIV/AIDS testing could be encourage upon entry and voluntary HIV testing provided periodically. Centers for Disease Control and prevention (CDC) recommends that HIV education and prevention counseling be made available to inmates in correctional facilities. All inmates with HIV should have access to appropriate HIV medical care and treatment [1].

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