ASSESSMENT OF KNOWLEDGE OF HIV/AIDS PREVENTION STRATEGIES AMONG COMMERCIAL SEX WORKERS IN KANO METROPOLIS, KANO STATE, NIGERIA

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Abstract

This study assessed Knowledge of HIV/AIDs prevention strategies among commercial sex workers in Kano metropolis, Kano state. This study aimed to assess knowledge of HIV/AIDs prevention strategies among commercial sex workers in Kano Metropolis. A survey research design was adopted for this study. The sample size of the study was 400 and respondents were sampled using multi-stage sampling techniques of purposive, proportionate sampling and simple random sampling. Data was collected with the use of a validated questionnaire. Inferential statistics of one-sampled t-test was used to analyse the data. The findings of this study reveal that the respondents possessed knowledge of HIV/AIDs prevention strategies and also concluded that, the knowledge of HIV/AIDs prevention strategies was significant. Based on the findings the researcher recommended that the prospective health education agencies in the state should prepare health promotion programme to improve the knowledge of HIV/AIDs prevention strategies among commercial sex workers in the state

KEYWORD: HIV/AIDs, Prevention Strategies and Commercial sex workers.

Introduction

Human Immunodeficiency Virus (HIV) infection and Acquire Immune Deficiency Syndrome (AIDs) remain a major public health challenge (Gallant, 2017). HIV is a virus that attacks the body's immune system. If HIV is not treated, it leads to AIDS (Centre for Disease and Control, 2023). Abay, Wossen and Osman (2020) stated that AIDs is a pandemic disease caused by HIV that destroys disease resistance of the body. Knowledge of HIV/AIDs Prevention Strategies: -is a fact, information, and skills acquired through experience or education about HIV/AIDs among commercial sex workers in Kano Metropolis, Kano state. According to Herbst (2018), society is more susceptible to the effects of the epidemic due to a lack of education and awareness regarding HIV prevention. On the other hand, controlling and preventing the spread of HIV requires adequate, accurate, and clear understanding and awareness of HIV prevention. In this context, educating people about HIV/AIDS and its effects is an important component of any effort to stop the spread of the virus in society.

Adequate knowledge about HIV/AIDs is a powerful means of promoting positive attitudes and practice in engaging safe practices and a cornerstone in the fight against HIV/AIDs, commercial sex workers are especially vulnerable because they have limited or no historical knowledge of the beginning of the epidemic, limited current knowledge of the disease, poor attitudes toward HIV infected commercial sex workers, and little practice with prevention (Shehu et al., 2015; Beebwa et al., 2021).

The Commercial sex workers and Spreads of HIV/AIDs: - is a female sex worker who has sexual intercourse with several sexual partners more or less daily, in Kano Metropolis Kano, Kano state. Kazeem (2017) stated that Commercial sex work is an age-long profession. It is the practice of providing sex for money or other material and Non-material benefits. Commercial Sex workers generated more HIV infections and other routes of transmission among men to married women infected through commercial sex. Patricio et al. (2018), Commercial sex workers know about the importance of having safe sex, but they are influenced by the desire of their sexual partners and by the lack of negotiating power for condom use. Other factors may lead these women to have unprotected sex, such as better remuneration, emotional involvement, confidence in the partner and the effect caused by the use of alcohol or drugs. Commercial Sex workers and their clients have anal sex, but a relatively high proportion of customers insist on not using condoms, generating a greater risk of contracting HIV and transmitting it to other sexual partners, either men or women. It is important to consider the need for safe anal sex and incorporate this theme into prevention programme.

Statement of the Problem

The biggest issue with this study is that Commercial Sex Workers have a significant chance of contracting HIV/AIDS in Kano Metropolis. According to Godwin (2012) residents of Kano, the Nigerian Centre of Commerce are currently in big fear following a recent report released by Hisbah officials (Sharia Police) indicating that, 44 out of 93 commercial sex workers otherwise known as (ashawo) arrested at (kwanar Gafan) are infected with HIV/AIDs. One of the statements of the above reported by Hisbah official (Sharia Police) in Kano state, aroused the interest of the researcher to assess knowledge of HIV/AIDs Prevention strategies among commercial sex workers in Kano metropolis, to provide proper solutions to these problems in the State at large, Because most of HIV/AIDs cases comes from commercial sex centres, but knowingly or unknowingly people having sex relation with commercial sex workers that are living within the commercial sex community which indicates there is every tendency of the activities of commercial sex workers to affect the way people relate with them. Hence, there is a need to research on it.

Purpose of the Study

The purpose of this study is to assess the knowledge of HIV/AIDs Prevention Strategies among commercial Sex workers in Kano Metropolis Kano state, Nigeria.

Research Question:

What is the Knowledge of HIV/AIDs Prevention Strategies among commercial sex workers in Kano Metropolis, Kano state, Nigeria?

Research Hypotheses

The Knowledge of HIV/AIDs Prevention Strategies among Commercial Sex Workers in Kano Metropolis, Kano state, Nigeria is not significant.

Methodology

This study adopted a survey research design. The design seeks to identify the existence of a variable or the extent to which a variable exists in a phenomenon. It is a research design that establishes the extent of existence of one variable on the other. It collects relatively large data from a relatively small sample. In survey research, information is gathered on a representative sample from which descriptive generalizations can be made as to the whole population. This study, therefore, used a survey research design to assess knowledge of HIV/AIDs Prevention strategies among commercial sex workers in Kano metropolis, Kano state, Nigeria. The population for the study consisted of the commercial sex workers of Kano metropolis. The Population of commercial sex workers in Kano Metropolis is 7,682. (Kano State Hisbah Commission, 2023). The distribution of the commercial sex workers in the eight local government areas in the study area is shown in Table 1.

Table 1 Distribution of commercial sex workers in the study area

S/N	Local Government	Population
1.	Dala	443
2.	Kano Municipal	397
3.	Fagge	3763
4.	Ungogo	376
5.	Tarauni	197
6.	Gwale	378
7.	Nasarawa	1803
8.	Kumbotso	327
	Total	**7,682**

(Kano State Hisbah Commission, 2023).

The sample size for this study consisted of Three Hundred and Sixty-Five (365) from a population of 7,682 at a confidence level of 95.0% and a margin error of 0.05 (Research Advisor). The researcher, however, added attrition in case of losses or copies of the questionnaire filled incorrectly, and for generalization of the findings on the population. To understand a group of participants that

are selected from the general population and are considered as true representatives of the whole population for the specific study. For this research, the researchers added 10% making the sample size four hundred (400) Samples based on an increase made by researchers for attrition. The researchers used multi-stage sampling procedure in selecting respondents for this study as follows:

Stage I: Purposive sampling technique was used to select two (2) local government areas out of the Eight (8) Local Government areas in Kano Metropolis which are; Fagge, Kumbotso, Nasarawa, Kano Municipal, Dala, Gwale, Tarauni and Ungogo respectively.

The two (2) local government areas of Kano metropolis were purposively selected based on the higher population of commercial sex workers in the local government areas which are Fagge and Nasarawa respectively.

Fagge is the first selected local government area been that it has the highest population of three thousand seven hundred and sixty-three (3,763) among the eight (8) local governments and Nasarawa is the second selected local government area with about the highest population of one thousand eight hundred and three (1,803). Most commercial sex workers in Nasarawa local government area are residents of Hotels.

Stage II: Simple random sampling techniques were used to sample two commercial sex centres from each two local governments in Fagge and Nasarawa respectively. Two containers are used, each one representing a local government. The names of commercial sex centres are written on pieces of paper, folded and dropped into the corresponding container, The researcher shook the containers one at a time and then asked the four (4) research assistants to pick one piece of paper from each container at a time and the name of commercial sex centres on the pieces of paper is written down. These are; the Church Road Sabon Gari and Yaruba Road commercial sex centres from Fagge local government. Ni'ima Hotel and Tahir Guest Palace Hotel from Nasarawa local government area, Kano state.

Stage III: Proportionate sampling was used to calculate the proportion of sample size per local government, by dividing each local government population by the total sample local government population multiplied by the sample size.

Stage VI: Proportionate Sampling was also repeated on the selected commercial sex centres to calculate the proportion of sample size per commercial sex centre based on the sample size allocated to each local government, by dividing commercial sex centres population by L.G.A Population multiplied by the local government sample size.

Stage V: Convenient sampling technique was used to select commercial sex workers found in the sampled commercial sex centres at their convenient time, accessibility and availability in their commercial sex centres according to their sitting arrangement through a first come first serve method until the number allocated for each commercial sex centres were completed. This technique was used to give an equal chance to the sample selected to each respondent.

The instrument that was used for data collection in this study was a researcher-structured closed-ended questionnaire. The questionnaire was divided into two (2) sections A and B. Section A contains three (3) statements on the demographic characteristics of the respondents. Section B consists of ten (10) statements on knowledge of HIV/AIDs prevention strategies among commercial sex workers. To calculate the mean scores of responses as shown by the respondents, the modified four (4) points Likert rating scale will be used as follows: Strongly Agree (SA) – 4, Agree (A) – 3, Disagree (D) – 2 and Strongly Disagree (SD) – 1. Therefore, any mean score of response that is 2.5 or above was regarded as positive, while any mean score of response less than 2.5 was regarded as negative. The researcher-developed instrument tagged 'Assessment on knowledge of HIV/AIDs Prevention strategies among commercial sex workers Questionnaire''. Four (4) copies of the questionnaire were given to four (4) experts in the Department of Human Kinetics and Health Education, Ahmadu Bello University, Zaria to check the appropriateness of the instrument, and whether it measures what is expected to measure.

A letter of introduction was collected from the Department of Human Kinetics and Health Education, Faculty of Education, Ahmadu Bello University, Zaria was given to Kano state Hisbah Command, ward heads and Police outpost near commercial sex centres to inform them about preparation to research 'assessment knowledge of HIV/AIDs Prevention strategies among commercial sex works in Kano Metropolis.'' The first and second visits were prepared to collect data from the commercial sex workers. Categorically, during the first visit to sampled commercial sex centres, the researchers introduced themselves to the house leader which was known as Magajiya, and informed the purpose of the visit in detail to convince her, that all derived information would be used for academic purposes only. During the second visit, the researcher was again obtaining permission to collect data from

the respondents that is commercial sex workers from the selected sampled centres. The researchers and the research assistants proceeded to each sampled commercial sex centre for the second visit to meet with commercial workers and administer the research instrument to commercial sex workers.

After collecting and sorting out copies of the questionnaire, a coding scheme was developed and each questionnaire was reviewed and coded into a computerized database using Microsoft Excel spreadsheet. The descriptive statistics of frequencies, percentages mean and standard deviation were used to describe the demographic variables and to answer the research question respectively. The inferential statistic of one sample t-test was used to test the formulated hypothesis at 0.05 level of significance.

Result

Analysis of the respondent's demographic characteristics is presented in Table 2

Table 2 Demographic characteristics of the respondents

Variable	Variable option	Frequency	Percentage
Age	15-18 years	58	16.2
	19-25 years	89	24.9
	26-32 years	108	30.2
	33-39 years	67	18.7
	40 years and above	36	10.1
	Total	**358**	**100**
Marital status	Divorced	98	27.4
	Window	65	18.2
	Single	195	54.5
	Total	**358**	**100**

As presented in Table 2, of the total respondents, (16.2%) were below 18 years, (24.9%) were between 19 and 25 years, and (30.2%) were in the age bracket of 26 to 35 years, representing the highest percentage of the subjects among the age groups. Moreover, (18.7%) of the subjects are in the range of 33-39 years and only (10.1%) in the older age of 40 years and above, representing the lowest percentage of the subjects among the age group in the entire population. By their educational qualification, (12.6%) had no formal education, and (11.2%) had only primary education. Those with secondary education represent (46.1%) of the respondents, and (30.2%) had tertiary education. The distribution of the respondents in terms of their educational qualification shows that (76.3%) of the entire population of the respondents had either secondary or tertiary education; this implies that the subject could be said to be educated to provide valid information. Regarding their marital status, Table 2 shows that (27.4%) were divorced, and (18.2%) were widows. The table's results also show that more than half of the respondents (54.5%) were single.

Research Question: What is the Knowledge of HIV/AIDs prevention strategy among commercial sex workers in Kano metropolis, Kano state?

Table 3 Mean scores on knowledge of HIV/AIDs prevention strategies among commercial sex workers in Kano state.

S/N	Knowledge of HIV/AIDs	Mean	Std. Dev.
1	Antiretroviral medication can reduce the likelihood of contracting HIV/AIDs.	2.17	1.00
2	Pre-exposure prophylaxis can prevent HIV/AIDs infection	1.98	1.06
3	The use of condoms reduces the risk of HIV/AIDs	2.90	1.00
4	Voluntary male medical circumcision is another option for preventing HIV/AIDs infection	2.16	1.09
5	HIV/AIDs spread through the sharing of infected sharp object	2.97	0.91
6	Behaviour change programme intervention can reduce the dangers of contracting HIV/AIDs	2.48	1.09
7	HIV/AIDs can be transmitted through sexual contact with an infected person	3.03	0.90

8	HIV/AIDs can be transmitted to newborns by infected pregnant mother	2.96	0.96
9	Counselling and testing can reduce the spread of HIV/AIDS	2.65	1.06
10	Early medication can prevent the progression of AIDs	2.69	1.02
Aggregate		2.60	0.96

(Benchmark mean =2.5)

Table 3 revealed that the respondents were aware that the use of condoms could reduce the risk of HIV/AIDs with a mean score of (2.90). Moreover, the respondents were aware that HIV/AIDS can be contracted through the sharing of infected sharp objects with a mean score of (2.97). The respondents knew that HIV/AIDs can be transmitted through sexual contact with an infected person with a mean score of (3.03). The participants had adequate knowledge that HIV/AIDs can be transmitted to newborn babies by infected pregnant mothers with a score mean of (2.96). In addition, the respondents had a slide mean (2.65) on counselling and testing to reduce the spread of HIV/AIDs and also had a slide mean (2.69) on early medication can prevent progression to AIDs. However, the respondents show a lack of knowledge that antiretroviral medication can reduce the likelihood of contracting HIV/AIDs with a below mean score of (2.17) and that pre-exposure prophylaxis can prevent HIV/AIDs infection with a below mean score of (1.98). Furthermore, the respondents are not aware that voluntary male medical circumcision is another option for preventing HIV/AIDs infection with a below mean score of (2.16), and behaviour change programme intervention can reduce the dangers of contracting HIV/AIDs with a below mean score of (2.48). The aggregate mean score of 2.60 with a standard deviation of 0.96 which is higher than the benchmark (2.50) implied that the subject could be said to Slide knowledge of HIV/AID prevention strategies.

Test of Hypothesis

Hypothesis: The Knowledge of HIV/AIDs Prevention Strategies Among Commercial sex Workers in Kano Metropolis, Kano state, Nigeria is not significant.

Table 4 Results of one sample t-test for Knowledge of HIV/AIDs Prevention Strategies Among Commercial Sex Workers.

Variables	N	Mean	Std. Dev.	Std. Error	t-value	df	p-value
Knowledge	358	2.60	0.96	0.05	1.96	357	0.04
Test mean	358	2.50					

Results in Table 4 revealed that expressed knowledge of the subjects on HIV/AIDs prevention strategies was significant. The t-value obtained from the test was 1.96 with a p-value of 0.04 at the 357 degree freedom. These observations implied that the expressed knowledge was significant. The null hypothesis that knowledge of HIV/AIDs prevention strategies among commercial sex workers in Kano metropolis is not significant is therefore rejected. The table revealed that the knowledge of HIV/AIDs prevention strategies among commercial sex workers is significant.

Discussion

The study assessed Knowledge of HIV/AIDS prevention strategies among commercial sex workers in Kano metropolis. This study found that commercial sex workers in Kano metropolis lacked knowledge of HIV/AIDS prevention strategies. A similar study conducted by Ikpeama, Onuzulike, Ikpeama & Igbineweka (2019) on the assessment of knowledge of sexually transmitted infection (HIV/AIDs) among commercial sex workers in Sokoto Metropolis, Sokoto State, Nigeria, findings are in line with this study. A cross-sectional form of descriptive survey research design was used for this study. The populations of this study were estimated to be one thousand (1,000) commercial sex workers in Sokoto metropolis. The data obtained for the study was collected from one hundred (100) commercial sex workers with a structured questionnaire into two sections A and B. Section A, was made up of three questions on demographic data (age, level of education and year of prostitute). Section B contained twelve (12) questions on knowledge of HIV/AIDs. Chi-square 732.4829 is greater than the critical value 55.758, df=40, there is a statistically significant relationship between the age of the commercial sex workers and the knowledge of HIV/AIDs. Chi-square 775.09 is greater than the critical value 55.758, df=40 there is a statistically significant relationship between the educational level of commercial sex

workers and the knowledge of HIV/AIDs. Chi-square 1338.669 is greater than the critical value 55.758, df=40 there is a statistically significant relationship between the years of being commercial sex workers and the knowledge of HIV/AIDs rejection null hypothesis. The researcher also recommended that the study showed commercial sex workers in this study area, possessed very good knowledge of sexually transmitted infections (HIV/AIDs).

Conclusions

Based on the findings the following conclusions were made as follows:

1. The commercial sex workers in Kano metropolis Kano State had slide knowledge of HIV/AIDS prevention strategies.
2. The study also concluded that the commercial sex workers in Kano metropolis are aware of six (6) prevention strategies and not aware of four (4) important prevention strategies.

Recommendations

Based on the conclusion of this study, the following recommendations were made;

1. The respective health agencies of the state government should periodically embark on enlightening the public on the dangers associated with the inappropriate use of condoms during sex, and engage commercial sex workers in discussions and Workshops to reinforce their positive knowledge and address any misconceptions.
2. The health educators in the State should prepare a health promotion campaign to improve knowledge and change poor practice of HIV/AIDs prevention strategies among commercial sex workers through health talks, conferences, town hall meetings and other public fora in the state aimed to reduce likelihood of contracting with HIV/AIDs and Health education intervention to focusing on areas where knowledge gaps are identified to ensure comprehensive understanding among commercial sex workers and conduct regular assessments and training sessions to keep the knowledge levels up-to-date and address any emerging gaps.
3. The Kano State Centre for Disease Prevention and Control should tailor interventions that cater specifically to the health needs of commercial sex workers to improve their knowledge and discourage them from engaging in indiscriminate sexual activities, therefore, reducing cases of HIV/AIDS.

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