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A Study on the Effect of Sociocultural Factors on HIV/AIDS Prevalence amongst Adolescents and Youths in Niger State, Nigeria

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Abstract

Human Immunodeficiency Virus (HIV) which causes the disease, Acquired Immunodeficiency Diseases Syndrome, is one of the public health challenges facing both developing and developed nations.

This descriptive study was carried out to examine the effect of socio-cultural factors on the prevalence of HIV/AIDs amongst adolescent and youths attending the antiretroviral clinics of four general hospitals in Niger State, Nigeria. These were the general hospitals in Bida, Minna, Suleja and Kontagora.

In order to participate in the study, the participants must be within the age bracket of adolescent and youths and must be retroviral positive. The instrument for data collection was a pretested semi-structured questionnaire. Data analysis was carried out using both descriptive and inferential statistics.

Results: A total of 268 respondents were interviewed. More male participated in the study and majority of the participants were concentrated within the age bracket (21 – 25) years.

About 71.6 percent of respondents said alcohol intoxication did not lead them to indulge in unprotected sex whilst 79.9 percent respondents did not experience influence of watching pornographic file on their sex life.

Conclusion: The study showed, socio-cultural factors were found not to have had influence on HIV/AIDs prevalence.

From the finding, more awareness programs about HIV/AIDs should be carried out among adolescent and youths. Government and Nongovernmental organization should partner with the community, faith based organization, schools to implement these findings.

Keywords: *Human Immunodeficiency Virus, Adolescent, Youth, Socio-Cultural factors.*

Introduction

Background of study

Human Immunodeficiency Virus (HIV) which causes the disease, Acquired Immunodeficiency Disease Syndrome (AIDs) is one of the most common causes of disease burden globally (Fatasi, 2005).

HIV/AIDS is one of the public health challenges facing both developing and developed nations. The epidemic amongst adolescents is fast growing because of young people/adolescents vulnerability to becoming infected with the disease. Students in secondary schools who are commonly adolescents as well as young people who are at an age when sexual activity is just beginning or had already begun are potentially at risk of contracting HIV, unless they are properly informed to see themselves at risk and undertake safer sexual practices (Maluwa–Banda, 1999).

Adolescence is defined as the age from 10–19 years and young adult 15–24years (UNICEF, 2013) as a period many begin to explore their sexuality and so be able to have access to sexual and reproductive health information to guide him or her. Their limitation of access to this information because of their age, socio-economic status and beliefs, have led to the need for protection against HIV infection which perhaps is being underplayed by the family and society. Also, some adolescents experiment with drugs or their sexuality, while others are exploited sexually.

Young people are especially vulnerable to HIV infection because of the physical, psychological, social and economic attributes of the adolescence (Earl, 1995; Oppong and Oti–Boadi, 2012). Early and risky sexual activity increase adolescents and young people's vulnerability to HIV (UNAIDS 2007).

Youths are a very potential population subset that must be understood, and so it is necessary that studies be carried out which will focus on promoting desired positive behavior change among the adolescent age cohort, because of the physiological changes that drives them to engage in risky behavior that could make them contract HIV. Such studies may provide guidelines on how to promote desired behavior change among youths/adolescents to prevent them from contracting HIV/AIDS, especially now that no known and effective cure has been found for.

There are many religious and cultural ways which had helped to change sexual behaviors positively and which had helped to eliminate further spread of HIV. Moreover unprotected sexual contact is still the most frequent means of prevention of transmission of HIV.

The spread of HIV amongst adolescents has been linked to some societal and cultural practices. Socio-cultural factors were observed to influence the spread of HIV in Uganda by Asiimwe *et al* (2003), in their article titled "Focus group discussion on socio-cultural factors impacting on HIV/AIDs in Uganda". Abdulai, Zongkui and Junmei (2011), in their article titled socio–cultural factors affecting the spread of HIV/AIDs among adolescents in Sierra Leone, indicated that adolescent social practices that exposed them to HIV, included alcohol usage, video shows of pornographic contents, cultic practices, vulnerable sexual practices and blood swearing covenant. Also cultural practices such as rites of passage to adulthood, not circumcising boys, contraceptive strings and early marriage were noted as making adolescents more prone to contracting HIV/AIDs. The report of their study also showed that adolescent boys and girls are usually seen around the vicinity where pornographic films were shown and because of their experimental nature may take part in unprotected sexual intercourse. The consumption of alcohol is often forced upon them by peer groups. It is often reported that alcohol impairs judgment and loss of control amongst individuals with the likely possibility of engaging in unintended and un-protective sex.

In an article titled 'Male circumcision and risk for HIV transmission and other health conditions published in CDC HIV/AIDs science facts, updated in February 2008, observed that the cultural practice of not circumcising males on time was said to increase the transmission of HIV/AIDs. From research it has been documented that male circumcision had significantly reduced the risk of men being infected by HIV during penile–vagina sex (CDCHIV/AIDs Annual Report, 2008). Circumcision has been described as the surgical removal of some or the entire foreskin (prepuce) from the penis. Also, Roselinnes (2006), in her study observed that adolescent girls are more vulnerable to HIV because the teenage girl's vagina is not well lined with protective cells as that of a matured woman, as her cervix may easily be eroded potentially enhancing the risk of HIV infection.

According to Sengendo and Sekatawa (1999), a relationship has been established between alcohol drinking and sexual assault among young people which may lead to infection with HIV. Drinking of alcohol and alcoholism have been implicated in influencing the spread of HIV/AIDs (Velayati *et al.*, 2007).

Asiimwe *et al.*, 2003 noted that pornographic videos watched by adolescents enhance them to go into sexual intercourse exploration. According to him, some of the scenes became tempting, teaching them the acts of sexual intercourse, while those watching them with their boyfriends and girlfriends went into the act of sexual intercourse. Tattooing and other scarring methods have also been seen as agents for HIV transmission (Velayati et *al.*, 2007).

HIV prevention strategies in Nigeria had focused on designing programs for adolescents on Family Life and HIV Education. The lessons are to be incorporated into the Nigerian Secondary School Curriculum. A comprehensive list of topics related to HIV including basic facts about HIV transmission and prevention as well as issues on stigma are to be included in the school's curriculum (NACA, 2013

Much research has been carried out on the determinants and consequences of wrong sexual behavioral practices amongst adults, adolescents, even though adolescents have received little attention in some of our West African countries, including Nigeria.

This gap in knowledge regarding adolescents and youth sexual behavior has persisted. For example, not much has been reported about what motivates young people to initiate sexual practices outside marriage such as having multiple sexual partners, carrying out cultic practices that allows for sharing of un-sterilized needles and engaging in other socio-cultural practices that exposes them to being infected with HIV.

Studies on adolescents sexual behaviors carried out in other West African countries have shown that a range of factors including lack of reproductive health and HIV/AIDs information and services contributed to heightened risk of HIV among young people. Biglan *et al.*, 1990, Santelli *et al.,* 2000.

Several of these publications on social and behavioral factors associated with high risk sexual behavior among adolescents coupled with very few functioning programs on prevention of HIV/AIDs on adolescent and youth which will help in curbing the rising prevalence of HIV/AIDs are in place and not functional in this part of the country hence the need to carry out this study on the effect of socio-cultural factors on prevalence of HIV/AIDs amongst Adolescents and Youth in Niger State, with the objective as:

To determine the influence of sociocultural factors on the spread of HIV/AIDs amongst adolescents and youths in Niger State, to examine the effect of prior knowledge of HIV/AIDs on the transmission of the disease and to ascertain influence of positive lifestyle changes in behavior on the prevalence of HIV/AIDs amongst adolescents and youths in Niger State.

The findings from this study may be used to assist in implementation of the already existing Nigeria National Adolescent Health Policy of 1995 (yet to be reviewed till date), as it relates to the area of HIV/AIDs among Adolescent and Youth in Niger State in particular and Nigeria in general. It may also guide and help to design functional preventive programs on HIV/AIDs with special focus on adolescent and youth.

Limitation of the study

This study was limited to adolescent/youths in Niger State who are retroviral positive and attends the antiretroviral clinics of the four hospitals used for the study.

Methodology

Study location

Niger State of Nigeria, the location of the study was created on 3rd February, 1976 from the old North Western State of Nigeria. The state lies on latitude 8^0 to 11^0:30^1North and longitude 03^0 30^1 to 07^0 40^1 East. The state is bordered to the North by Zamfara State, west by Kebbi State, South by Kogi State, South west by Kwara State, North – East by Kaduna State and South East by Federal Capital Territory. The state also has an International Boundary with the Republic of Benin along Agwara and Borge LGAs to the North West. It covers a land area of 76,469.903 square kilometers which is about 10% of the total land area of Nigeria out of which about 85% is arable.

The state presently has 25 (twenty five) local government area. The people of Niger State are predominantly Muslims and Christian with very few traditional religious practitioners.

Although there are three major ethnic group (Nupe, Gbagyi and Hausa) in the state, other tribal group include – Kadara, Koro, Baraba, Kakanda, GanaGana, Dibo, Kambari, Kumuku, Pangu, Dukkawa, Gwada and Ingwai.

Economic activities are fast growing in the state, with good infrastructure as roads, electricity, water and communication facilities to make way for interested investors. Natural and Mineral resources found in the state include, Gold, Ball Clays, Silica, Marble, Copper, Iron, Limestone, Kaolin, Lead etc. There are three Hydro Electric power stations in the state and they are situated at Kainji, Jebba, and Shiroro.

Niger State has some tourist attraction such as Zuma Rock, Gurara Falls, Baro Empire Hill, Lord Lugard Colonial Runs at Zungeru, Nagwamatse Well and Kainji Lake National Park.

Niger State is divided into six (6) health zones which are Minna, Kontagora, New Bussa, Mokwa, Suleja and Bida. Each of this headquarter town of these health zones has a general hospital. It is worthy of note that the four general hospitals where i carried out this study are in the headquarters of the health zone which are General Hospital Bida, General Hospital Minna, General Hospital Kontagora and General Hospital Suleja. These hospitals are among those facilities registered that offer antiretroviral services.

The four General Hospital Bida, Minna, Kontagora and Suleja are strategically located in the three senatorial zones the state is divided into as zones A, B and C. While General Hospital Bida is located in zone A, General Hospital Minna and Suleja are located in zone B and General Hospital Kontagora is located in zone C.

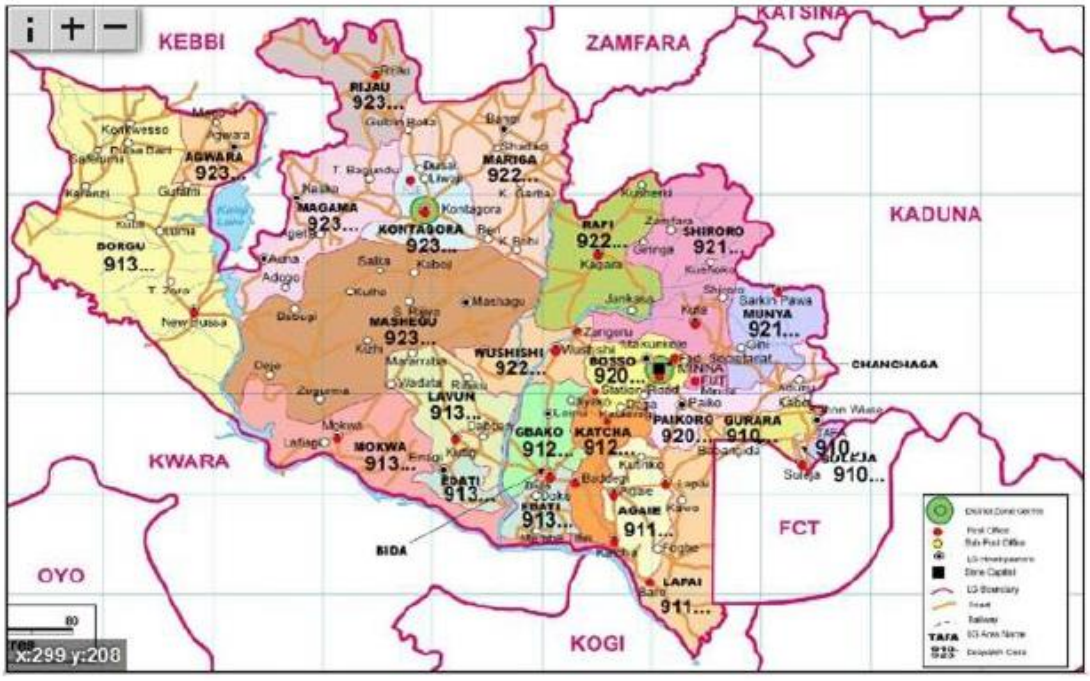
Study population

The population for this study included the adolescents and youths attending various antiretroviral clinics of the four general hospitals located in Minna, Bida, Suleja and Kontagora

It is worthy of note that the population of Niger State as of 1961 was 1,194,508. This rose to in 2,421,581 in 1991 and as at 2006 census population exercise the figure was put at 3,950,249 (There has not been another census conducted since the 2006 census).

The populations of the various local governments where the General Hospitals are located and in which the study took place are as follows:

LGA	Land areas	Population no.	Population density
Bida	50km^2	188,181	3,764
Minna	73.4 km^2	201,429	2,744
Suleja	153.4 km^2	216,578	1,412
Kontogora	2179.3 km^2	151,944	70



Map 1. Map of Niger showing various local government inclusive of the four local government where the study took place.

Design of study

A descriptive study was carried out to determine the factors which influence the prevalence of HIV/AIDS among adolescents and youth in Niger State, Nigeria. This is because the study was non experimental as the researcher did not manipulate any variable and there were no control variables used (Bamise and Adedigba, 2011).

The descriptive study also tried to obtain information on whether there was relationship between socio-cultural factors, knowledge about HIV, positive lifestyle and the prevalence of HIV/AIDS among adolescent and youth in Niger State.

Sample size determination

Using the formula

$n = \frac{Z^2pq}{d^2}$ (Araoye, 2014)

Where:

n=Desired Sample size

z=Standard normal deviate usually set at 1.96

p=the proportion in the target population estimated to

Have a particular characteristic with p as 4.6%

q=1.0 – p

d=Degree of accuracy desired usually set at 0.05

From an update on the HIV/AIDs Epidemic and Response in Nigeria, the National Agency for Control of AIDS, facts sheet 2011 quoted the prevalence for HIV/AIDS amongst adolescents as at 2011 to be 4.6% which represents p which is the proportion in the target population with a particular characteristic.

Therefore

z=1.96

p=0.046

q=1 – 0.046 = 0.954

d=0.05

$$n = \frac{Z^2pq}{d^2} = \frac{(1.96)^2 \times 0.046 \times 0.954}{(0.05)^2}$$

$$= \frac{3.8416 \times 0.046 \times 0.954}{0.0025}$$

$$= \frac{0.16858477}{0.0025} = 67.43$$

n = 67.43

Therefore if n = 67.43 Minimal sample size = 67.43.

In the research if n Minimal sample size from calculation is 67, then if 67 subject was allotted to each of the four hospitals, then total sample size is 67 x 4 for all four hospital = 268.

Sampling technique

A multistage random sampling technique was used in the study. First stage involved the random selection of the four general hospitals used for the study from among the health facilities in the state. These four general hospitals which located in Minna, Bida, Kontogora and Suleja are strategically located and registered as large facilities offering antiretroviral services. The General Hospitals in Minna and Suleja are located in the state senatorial zone B, General Hospital Bida, in senatorial zone A while General Hospital Kontagora is located in senatorial zone C

The second stage involved the selection of participants at the various four general hospitals selected for the study. Participants were randomly selected from the attendees at the hospital antiretroviral clinics. The inclusion criteria were participants who must be HIVAIDs positive and fell within the age range of adolescents and youths.

Instrument for data collection

Pretested questionnaire was drawn and the questions asked reflected the objective of the study. Questions on socio-cultural factors which influence prevalence of HIV/AIDs amongst adolescents and youths were asked. Content validation of the questionnaire which involved checking through all the questions asked to ensure they were correct and measured what was supposed to be measured.

About four assistants were trained on how to administer the questionnaires after they had understood the content. The assistants were divided in two groups each containing two assistants which accompanied me to administer the questionnaires to the participants recruited for the study at the four general hospitals.

Data processing and analysis

Data processing and analysis were carried out using both descriptive and inferential statistics. After checking for completion of filled questionnaire, and checking for mistakes. The questionnaire was well sorted. The descriptive statistics carried out included presentation in tables and percentage analysis while the inferential statistics included analysis of variance.

Ethical consideration

Ethical approval was sought and obtained at the Niger State health management board to carry out the study in the four general hospitals.

Permission was also obtained from the management of the various hospitals to carry out the study at their various antiretroviral (ART) clinics.

Consent of the participants which were recruited for the study was sought for, and the purpose of the study explained to the various participants. The participants were told there will be no harm done to them during the study. The participants were also informed that their response will be kept confidential between me and my supervisor/guide. They were also informed of their freedom to opt out of the study at any stage of the study if they decided they could no longer continue to participate in the study. A sample copy of consent form signed by the participants can found in the appendix section of this work.

Results

The results of the analysis of the study are presented below.

The demographic data analyzed included the respondents Sex, Age, Marital Status, Educational Background and Occupation.

Gender of respondents

Table 1. Distribution of respondents by gender

Gender	Frequency	Percentage
Male	146	54.5
Female	122	45.5
Total	**268**	**100.0**

From table 1, it can be observed that the total respondents who participated in the study were268 out of which 146 or 54.5 percent were males while 122 or 45.5 percent were females. The number of male participants is slightly higher than those of the female participants.

Table 2. Distribution of respondents by age

Age Group	Frequency	Percentage
11 – 15 years	30	11.2
16 – 20years	80	29.9
21 – 25years	158	58.9
Total	**268**	**100.0**

From Table 2 it can be observed that majority of respondents fall within the age bracket of 21 to 25yrs.

Table 3. Distribution of respondents by marital status

Marital Status	Frequency	Percentage
Married	137	51.1
Single	120	44.8
Widow	10	3.7
Widower	1	0.4
Total	**268**	**100.0**

This analysis reveal that more than half of the total respondents are married, furthermore that 55.2 percent of the respondent have one form or another of legal partner at some time in their life.

Table 4. Distribution of educational qualification

Educational Qualification	Frequency	Percentage
Primary School	20	7.5
Secondary School	109	40.7
Tertiary Institution	135	50.4
Not Schooled	04	1.5
Total	**268**	**100**

From the results in Table 4 it can be seen that majority of the respondent's precisely98.5 percent are literate, that is can read and write in English language.

Table.5. Distribution of Respondents by Occupation

Respondents Occupation	Frequency	Percentage
Employed	112	41.8
Unemployed	112	41.8
Student	44	16.4
Total	**268**	**100**

From Table 5 it can be seen that 112 respondents representing 41.8 percent are employed, 112 respondents also representing 41.8 percent are unemployed while 44 or 16.4 percent of the total respondent are students.

Table 6. Distribution knowledge of HIV/AIDs

Knowledge of HIV/AIDs	Frequency	Percentage
Yes	256	95.5
No	12	4.5
Total	**268**	**100.0**

From Table6, it can be seen that 256 respondents representing 95.5 percent have heard about HIV/AIDs while 12 respondents representing 4.5 percent have not heard about HIV/AIDs. This implies that awareness of HIV/AIDs is very high.

Socio – cultural factors influencing HIV/AIDS

In this sub-section, the study gives results of descriptive analysis carried out on the Socio – Cultural habits of the respondents as they influence the prevalence of HIV/AIDs.

Consumption of alcohol

Table 7. Distribution of consumption of alcohol

Consume Alcohol	Frequency	Percentage
Yes	35	13.1
No	233	86.9
Total	**268**	**100.0**

From Table 7, it can be observed that 35 respondents representing 13.1 percent say they consume alcohol while 233 respondents representing 86.9 percent say they do not consume alcohol. The rate recorded for the consumption of alcohol could be attributed to the predominantly Muslim environment where the study was conducted.

Table 8. Distribution of respondents on alcohol intoxication and indulgence in unprotected sex

Response	Frequency	Percentage
Yes	39	14.6
No	192	71.6
Don't Know	37	13.8
Total	**268**	**100.0**

From Table above it can be observed that majority of respondents claimed alcohol intoxication did not led them to indulged in unprotected sex.

Table 9. Distribution of respondents on pornographic

Response	Frequency	Percentage
Yes	47	17.5
No	221	82.5
Total	**268**	**100.0**

From Table 9, it can be observed that 47 respondents representing 17.5 percent watch pornographic films while 221 respondent or 82.5 percent say they do not watch pornographic films.

Table 10. Pornographic film influence sex life.

Response	Frequency	Percentage
Yes	55	20.5
No	213	79.5
Total	**268**	**100.0**

Majority of respondents representing 79.5 percent say pornographic film does not influence their sex life.

Cultic practices involving indiscriminate sex

The responses by the respondents are presented in Table 10

Table 11. Cultic Practices involving indiscriminate sex with others

Response	Frequency	Percentage
Yes	29	10.8
No	239	89.2
Total	**268**	**100.0**

Majority of respondents or 89.2 percent say they do not belong to cultic groups that promote indiscriminate sexual practice with others.

Table 12. Distribution of respondents on initiation with tattoos and sharing same needles

Response	Frequency	Percentage
Yes	30	11.2
No	203	75.7
Don't Know	35	13.1
Total	**268**	**100.0**

A higher proportion of respondents or 75.7 percent say they have never been involved in age group initiation involving tattoos or sharing same needles.

Blood covenant

The results obtained for this is presented in Table 13.

Table 13. Distribution of respondents on blood covenant

Responses	Frequency	Percentage
Yes	29	10.8
No	224	83.6
Total	**268**	**100.0**

Majority of respondents or 83.6 percent say they have never been involved in love relationship where blood covenant is taken.

Table 14. Distribution of respondents at Ceremonies where needles are shared leading to HIV/AIDs

Response	Frequency	Percentage
Yes	193	72.0
No	42	15.7
Don't Know	33	12.3
Total	**268**	**100.0**

From Table 14, it can be observed that 193 respondents or 72 percent representing majority of respondents say ceremonies where needles are shared could lead to HIV/AIDs transmission.

Discussion

Findings from the study showed more males participated in the study as shown in table 1. This could be as a result of the explorative nature of the male adolescent and youth.

A larger proportion of the respondents were within the age bracket (21 – 25 years) as shown in table 2. This result is similar to a study by (lwelamira *et al.*, 2012) which reported that most of the new HIV/AIDs infections are heavily concentrated among the young aged (15 – 24 years). Youths are said to have accounted for more than 60 percent of people living with HIV/AIDs (Joint United Nations program on HIV/AIDs, 2006, Okouta, 2007; Bankola *et al.,* 2007; Lwelamira *et al.,* 2012).

A higher proportion 137 (51.1 percent) of the total number of respondents were married. This was attributed to cultural practice of early marriage in the area where the study was carried out (table 3).

Majority of the respondents (98.5 percent) were literate as they had one form of education or the other (Table 4). This suggests a tremendous improvement in the literacy level in Niger State, Nigeria.

However, it is not surprised that less than half of the total number of respondents (41.8 percent) are employed, especially in the face of a level of unemployment rate in Nigeria. (Table 5).

On Awareness of HIV/AIDs, the study revealed respondents' knowledge about HIV/AIDs was very high, with 95.5 percent of total respondent having heard about HIV/AIDS. This finding support the study carried out by Wodi (2005) on knowledge, attitude and opinion about HIV/AIDs among adolescents, in which 93 percent of respondents in that study had heard about HIV/AIDs. Another study by Omoyeni, AKiyemi and Fatusi (2012) which supported this study found out that about 75 percent of sexually active adolescent had high knowledge of HIV/AIDs.

Socio-cultural factors were also noted to influence contraction of HIV/AIDs infection. The study revealed that 86.9 percent of respondents did not ingest alcoholic beverage and also, 71.6 percent of respondents responded negatively to the question whether alcohol intoxication led them to have indulged in unprotected sex. This result supports the fact that there is sharia law in place in some area of northern Nigeria which prohibits alcohol ingestion and so the level of alcoholic beverage ingestion is low.

This finding is in contrast however to a Uganda study by Asiimwe et *al.,* (2003) on focus group discussion on socio-cultural factors impacting on HIV/AIDs in Uganda, listed alcohol intoxication as one of the social factors that influenced the spread of HIV/AIDs. Another similar study whose findings contrasted with the findings from this study was an article by Abdulai, Zongku and Junmai (2011) on Socio-cultural factors affecting the spread of HIV/AIDs amongst adolescent in Sierra Leone revealed that adolescent social practices that exposed them to HIV infection included alcoholic usage, watching of pornographic films, cultic practices and blood swearing covenant.

Further findings from this study that are in contrast to the Abdullahi, Zongkiu and Junmai (2011) on socio-cultural factor affecting HIV spread are:- 82.5 percent of total respondents from the study did not watch pornographic film and 79.5 percent of respondents had not experienced the influence of watching pornographic film on their sex life.

However, Segendo and Sekatawa, (1997) established the relationship between alcoholic ingestion and sexual assault which could lead to HIV infection in young people and this findings is in contrast to that from this study.

Another contrasting finding to this study was a study by Asiimwe et *al.,* (2003) which showed that pornographic videos watched by adolescent enhanced them to go into sexual exploration.

This study also showed that 89.2 percent of respondents had not been involved in cultic practices that promoted indiscriminate sex (Table11), whilst 75.7 percent of respondents had not been involved in age group initiation involving tattoos or same needles sharing (Table 12). Further findings from this research showed 72.0 percent of respondents accented positively that ceremonies where needles were shared led to HIV/AIDs transmission because of their increased awareness. (Table 14).

Conclusion

The study set out to examine the effect of socio-cultural factors on the prevalence of HIV/AIDs among adolescents/youths in Niger State.

From the results in the study, it was found out that Socio-cultural factors do not have influence on the spread of HIV/AIDs amongst adolescents and youths in Niger State and this is commendable as most of the sociocultural factor mentioned in the study were not commonly noted to have had a bearing on their becoming HIV/AIDs positive. Also noted from the study was a high level of awareness about HIV/AIDs disease amongst adolescents and youths in Niger State.

Recommendations

More awareness programs about HIV/AIDs should be created amongst adolescents and youths. There should be a directorate of adolescents and youths created, with certain positions reserved for the adolescents and youths to help them be part of all programs initiated and implemented for them.

There should be a revised curriculum for the schools which must include courses on sex education, to be taught to all students.

Various non-governmental agencies specialized in adolescents and reproductive health should be set up to partner with government, religious bodies, private schools etc.

Government must improve partnership with various communities, organizations as a way of improving adolescents and youth's knowledge on HIV/AIDs.

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