

Analysis of Spatial Spread of HIV/AIDS and its Awareness between Rural and Urban Areas of Kano

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ABSTRACT

The paper analysis of spatial spread of HIV/Aids and awareness between rural and urban areas of Kano examines the spatial distribution of HIV/Aids virus between rural and urban areas of Kano with a view to find out the causes of the nature of the trends. Awareness of the disease among the rural and urban people was also assessed due to the socio-cultural differences that exist spatially. Mapping of health services are employed to ascertain the catchment areas of the patients. Interviews and Focus Group Discussion (FGD) is adopted to seek responses from Health personnel, patients and their relatives. Findings show high spread in urban areas than in the rural environment. Some of the reasons include low level of awareness and poverty as well as high cultural stigmatization in the rural areas. Middle class people are more affected than the corresponding high and low class income earners. Infections are more common to unmarried people than among polygamous or monogamous couples. Age also displays significant contribution in the spread of the disease where youths of age between 20-35years constitute the modal class. The study recommends improvement in the awareness campaign especially in the rural areas to reduce the problem of stigmatization.

Keywords: Mapping, environment, patient, poverty, polygamy and stigma

INTRODUCTION

To be candid, with the discovery of HIV/AIDSs nearly 40 years ago, it has infected millions of people globally and 3.8 million are reported in Nigeria (UNAID, 2002). Nigeria due to its population is one of the countries expected to experience a great wave of the epidemic driven by young people. Studies by UNFPA (2009) made us to understand that several factors exacerbate the spread and impact of HIV/AIDS. Some of those factors include amongst others sexual activity, high level of promiscuity, prostitution. Sexual recklessness has open up the floodgate to high incidence of ill-health that has contributed to the rise in adult death-rates especially in developing countries. The spread of HIV/Aids as well as its awareness by the people has some conceptual underpinning. The spread and the knowledge of the disease as well as how it is handled are innovations that move from one place to another and between persons of different demographic variables.

Diffusion centers on the conditions which increase or decrease the likelihood that a new idea, product, or practice will be adopted by members of a given culture. Diffusion of innovation theory predicts that media as well as interpersonal contacts provide information, influence opinion and judgment. Studying how innovation occurs, E.M. Rogers (1995) as quoted by Lambu (2013) argued that it consists of four stages: invention example the evolution of HIV/Aids, diffusion (or communication) through the social system, time and consequences. The information flows through networks. Innovation of diffusion explains the variables that influence how and why users adopt a new information medium, such as the use of drugs and preventive techniques.

This study investigates the level of spread of HIV/AIDS and awareness among people of Kano metropolis (urban centre) and Tofa town (rural centre) Tofa L.G.A of KanoState. High risk of sexual behavior has been identified as the overwhelming modes of transmission in sub-Saharan African particularly hetero-sexual intercourse, changing behavior remain the viable or practicable options for combating the spread of HIV/AIDS. The impact of HIV/AIDS on contemporary life is profound; globally epidemic is generally complex issues with far-reaching implication for the world and its peoples. The challenges posed by HIV/AIDs is most critical in Sub-Saharan Africa were nearly two-thirds of all those infected with the disease are found (Daine, 1994) in Lambu (2012). Sub-Saharan Africa was also home to nine-tenths of the estimated 3.8 million, children under age 15 years who were living with HIV in 1997, in 1999 alone, over two million AIDS related deaths occurred in the countries of Africa with infectious rates of five or more percent (UNAIDs, 2000). The study helps to measure and assess the awareness of HIV/AIDs in study areas. It will help in knowing the best response to go with the HIV/AIDS awareness campaign in other local government in Nigeria. The research will also give a clear picture to non-governmental organizations (NGOs) in knowing the best strategy to take in improving the awareness campaign in different local government area of Nigeria.

HIV/AIDs has infected different social group of people to varying degree (Alubo, 2002) initially, the disease was not taken seriously in many African countries. It was considered a Western disease of decadence because the prevalence was limited to high risk population. However, the rapid spread of HIV/AIDs drove home destructive stigmatization potential of epidemic. Out of the 40 million infected people worldwide, 70% are in Africa, Nigeria has 8% of the global infection (UNAID, 2002). Intervention efforts frequently rely on educational standards and expand the behavioral change among high risk groups and public. This is the consensus pending the development of effective vaccine therapy for HIV/AIDs, thus, behavioral change is the only means of averting the continued spread of the disease.

It is assumed that the provision of information about HIV/AIDS and its consequences are enough to make individuals change their sexual behavior. People between the ages of 10 – 24 years account for over 50% of HIV infection occurring worldwide and several cultural, biological and environmental factors places people from local environment at increased risk (WHO/UNAIDS, 2000). In the light of the above, the study is not only important but a necessity so that the state of the affairs of the disease is brought to light.

CONCEPTUAL AND THEORETICAL UNDERPINNING

Many people have heard of the theory that AIDs is man-made. Thirty percent of New York City blacks polled by the New York Times (January, 1993) actually believe AIDs is an ethnic weapon designed in a laboratory to infect and kill black people. Some people even assumed that, AIDs conspiracy theory is more plausible than the African Green Monkey promoted by the leading AIDs scientists. Actually, the monkey theory was proven wrong by researcher as far back as 1988, but most AIDs educators continued to promote it to the public until recently. In a media blitz in 1999, the green monkey theory was totally replaced by the chimpanzee “out of Africa” theory and the chimp origin of AIDs were fully accepted by the scientific community. A phylogenetic “firmly tree” of primate viruses (which few people could understand) was presented to prove that HIV was descended from a primate viruses in the African bush analysis of virus genetic data performed by the supercomputer at los Alamos in new Mexico indicated that HIV had jumped species from a chimp to a human around the year 1930 in Africa.

Early research on sexual behavior paid special attention on its effects on fertility. Little attention was paid to the disease transmission, implications of sexual networking (Oruboluge, 1992) AIDs pandemic calls for reorientation of research in the direction of examining sexual networking (Owuaranam, 1995). This early student according to Owuaranam was conducted from psychological perspective. He preferred a sociological explanation that will take into cognizance, the sexual explosion of the time decline of cultural regulation as well the economic stability of the individual. A study conducted in Dare Salaam covering a random selection of 57 school students revealed those 62 primary schools boys and 35 percent girls had sexual experience by the age 14 (Shabari, 1988) in Molly (2014), later study by (Wilula,et'al 1996) indicated that Coital experience continued to be high, 23 percent for boys, 6.6 percent for girls in the age bracket 11-13 and 14-15 years respectively, in Tanzania one out of every five, male under fifteen year had sexual experience and the corresponding female proportion was over one in every ten, for both sex the median age at first was 14-8 years, other studies in Kampala (Rwabukwah, 1998), and Nigeria, (Adeokun, 1999) also supported this findings. Massive cultural decadence as a result of globalization affected people living taste, induced sexual desire from western films (Blue film) and late marriage accentuates sexual recklessness. Spread of Sexually Transmitted Diseases (STD) HIV/Aids inclusive conflagrates the life of youths who are at productive age and hence threat the future prospect of the society. Young adults learn sexual experience at pre-marital state as a result of poverty, seduction or terror (rape). Adherence to cultural rules especially religious injunction on adultery and fornication have been weakened due to western acculturation by mass media which erode the cultural values like decency, piety and chasteness. Political unrest throughout the globe shattered the strength of laws thereby exposing the weaker members of societies like women and girls to all form of intimidation like raping and commercial sex. As a result of all these, spread and transmission of diseases like HIV/Aids are on the increase especially in the developing countries of poor health service mechanisms. Climatic problems affected many nations where food

MATERIALS AND METHODS

The Study Area

The Kano metropolis in this study consists of six fully urbanized LGAs namely Dala, Fagge, Gwale, Municipal, Nassarawa and Tarauni as in figure 1 below. It has population figure from the 2006 census of 2,166,179 people. The early settlers settled around Dala hill (in the walled city of Kano) from where expansion began. Kano city (metropolis) has been the capital of the state since its creation in 1967 from the defund Northern Region, located between lat $10^{\circ}30'$ to $12^{\circ}30'N$ and long $7^{\circ}30'$ to $9^{\circ}25'E$ about 840km from the edge of the Sahara desert. It has a mean height of 472.45m above sea level with average temperature of $24.4^{\circ}C$ (range between 15.8 to $33^{\circ}C$). Its mean monthly values for temperature range from $21^{\circ}c$ in coolest month and $33^{\circ}C$ in the hottest month. The average rainfall in a normal situation is about 1000mm in southern Kano and 800mm around the metropolis (Olofin, 1987).

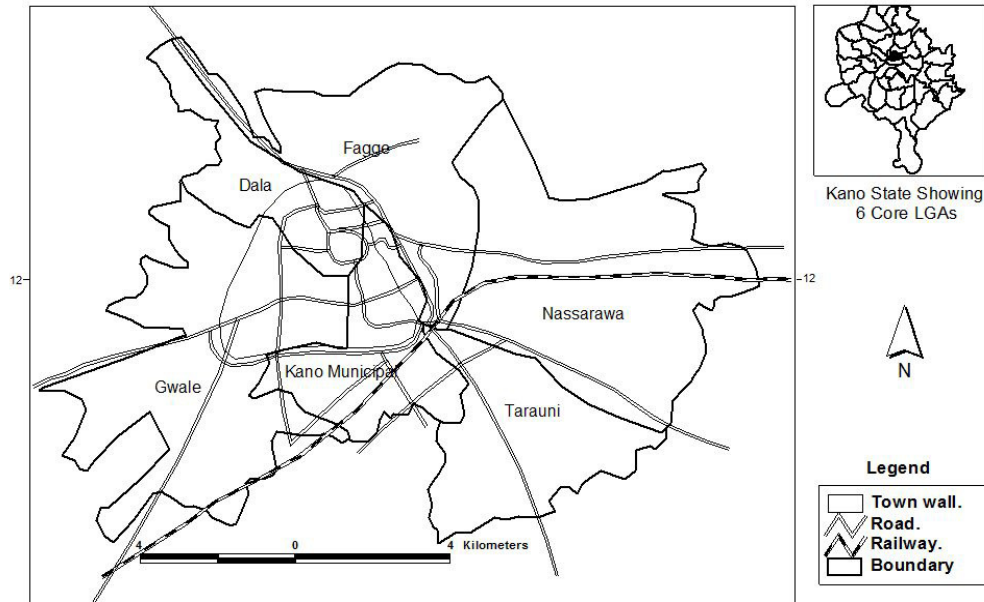


Figure 1. KANO Metropolis (6 Core LGAs)
Sources: Drawn@ the Department of Geog. BUK (2011)

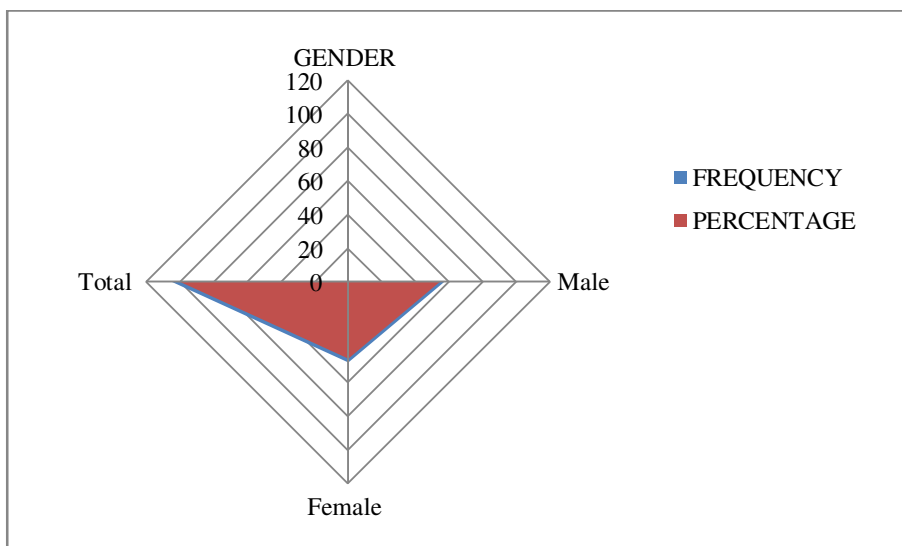
Data Collection

The data for this research work was collected both through primary and secondary sources, data collected through the primary was made possible by mapping, interviews and Focus Group Discussion (FGD).

The study adopted purposive sampling techniques in the process of data collection. This method is relevant here because it helps in hitting the target population. Hospitals that cover the services of HIV/Aids patients are wholly sampled in order to interview 20% of the patients, health workers and the relatives of the affected persons. The 20% are adequate as opined by (al Umar 2006) as quoted by Lambu 2013.

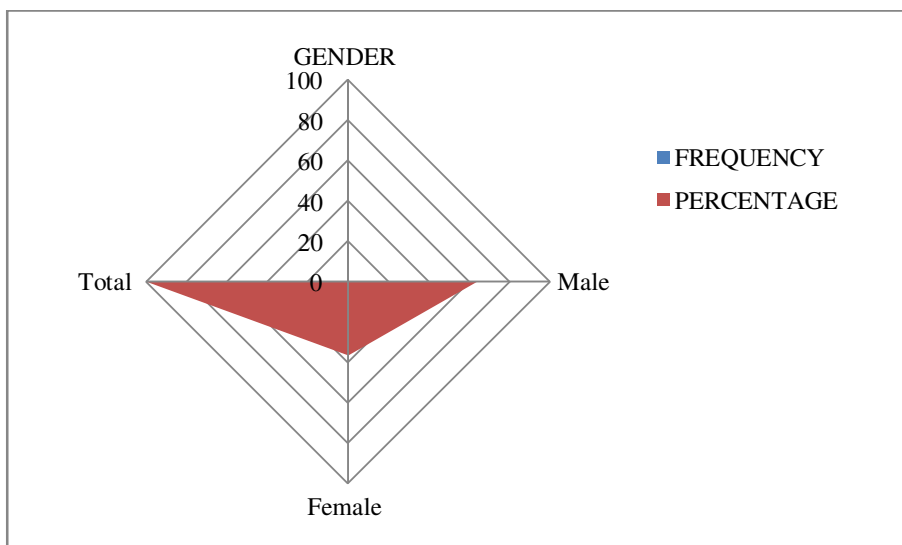
RESULTS AND DISCUSSIONS

The sex distribution below shows that from the population of 105 Patients been interviewed out of this number, 62 or 59% are males. In effect, the reason may not be unconnected to the culture of the environment where some females are at home only their husband or relatives collect the drug for them. Many women due to the stigma they refused given audience for the interviews and FGD. The culture of the environment also encourage avoidance of talking with married women without the consent of their husbands hence only 48% were interviewed as compared to males as displayed in chat 1 below.



Chat 1. Showing sex composition of infection in both rural and urban areas
Source: Field work 2013

The spread in term of sex has less spatial disparities between rural and urban areas. Males appeared to be the modal class as per as infection are concern. Under close assessment, many females refused to disclose their infection in fear of stigmatization. Some of the Health service personnel explained that males are more recessive and shows the symptom much earlier than their females counterpart whom due to different physiological and genetic makings.

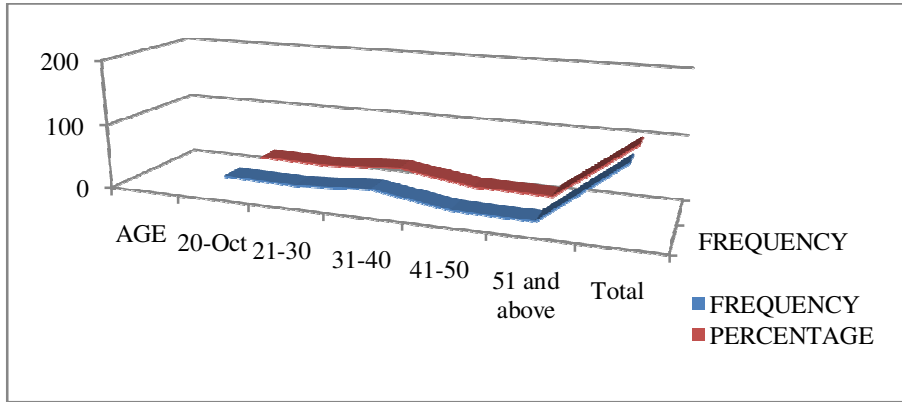


Chat 2. Infection of HIV/Aids based on Gender

Rural Gender Infection of HIV/Aids

Age Distribution

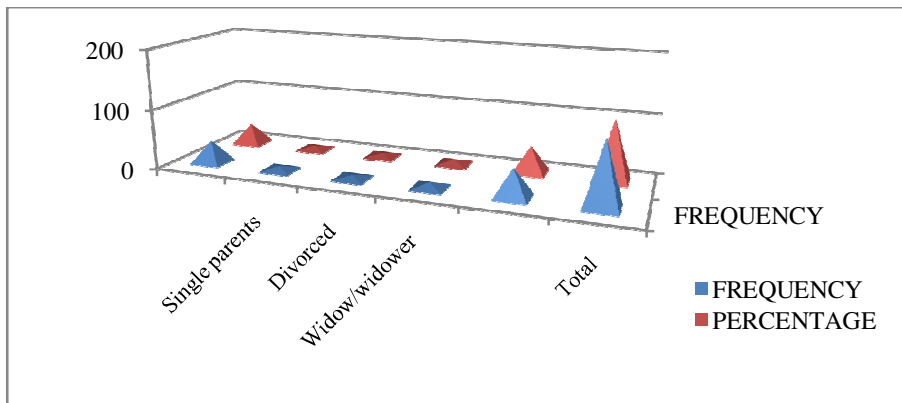
The information on the age distribution of respondents shows that those aged 31-40 form the highest category, accounting for 31 or 29.5% followed by those aged 10-20 which account for 24 or 22.8%. Those aged 41-50 account for 13 or 10.5% of the sampled respondents.



Chat 3. Infection of the disease based on age category

Marital Status of Respondents

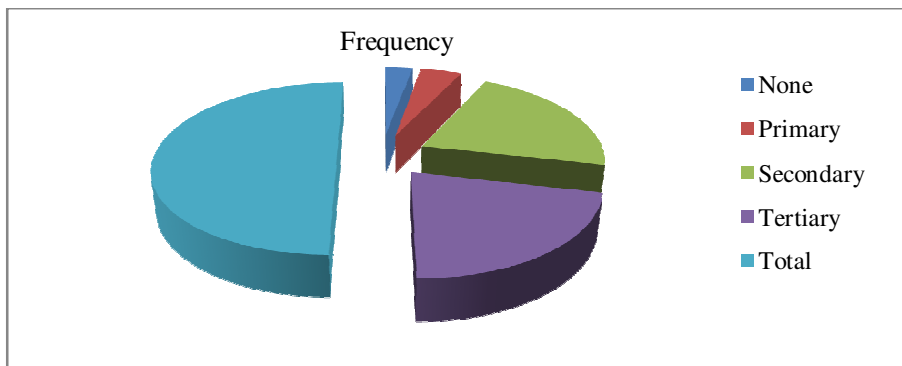
The marital status of the respondent is shown on table 3. It is represented by single; never married, which accounts for 37 or 35%, single parent, 7 or 6.7%, divorced which account for 6 or 5.7% while widow/widower account for 9, or 8.6 while married with their wives and husbands not separated not by death or divorce account for 46 or 43.8%.



Chat 4. Marital status of infected persons

Occupational Status of Respondents of Gombe LGA

Occupational status of respondents shows that out of 105 interviews, 41 or 39% were farmers, 29 or 27.6% are civil servant, 28 or 26.7% are business men/women, and private workers which accounted for 5 or 4.8% only 2 or 1.9 of the respondents were engaged in other occupation



Chat 5. Infection of the disease base on Educational status

Educational qualification of the respondent out of the 105 people interviewed 6 or 5.7 have never being to school, 9 or 8.6 account for those in primary, and 45 or 42.9, account for those in secondary school, and 45 or 42.9 account for those in tertiary level, that shoed most of the people interview have gone to school.

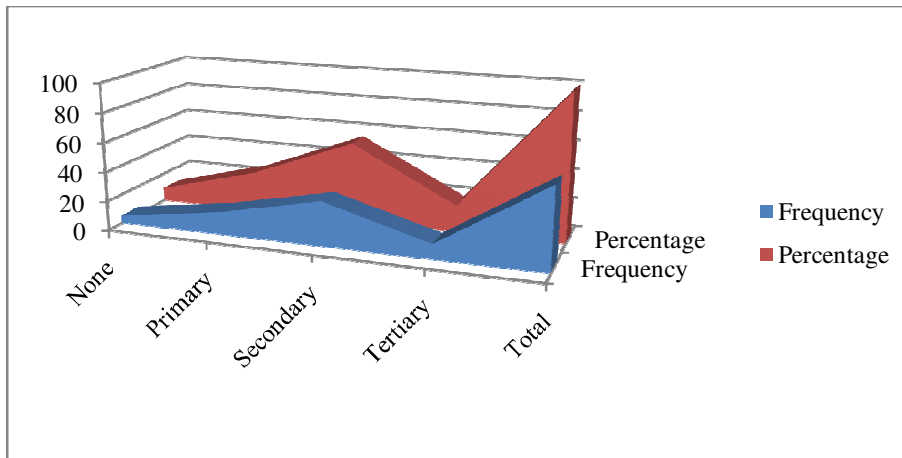


Chart 6. Frequency and Percentage Distribution Of Selected

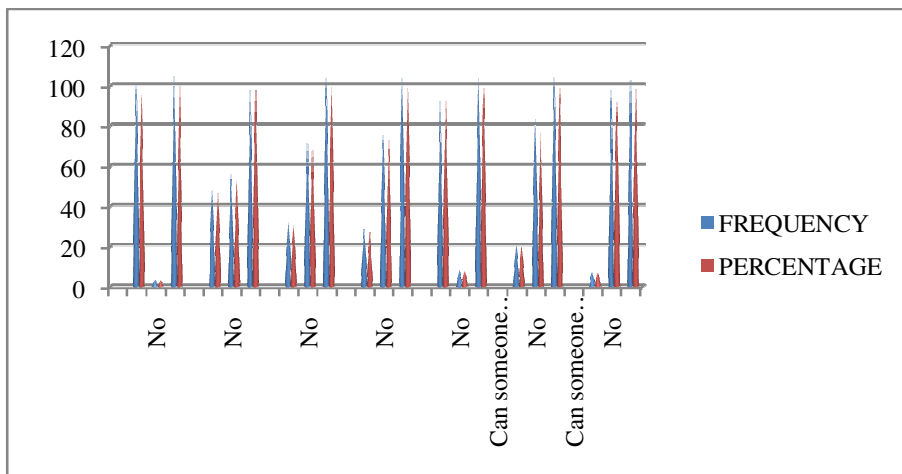


Chart 7. Characteristics and Hiv/Aids Awareness in Gombe LGA

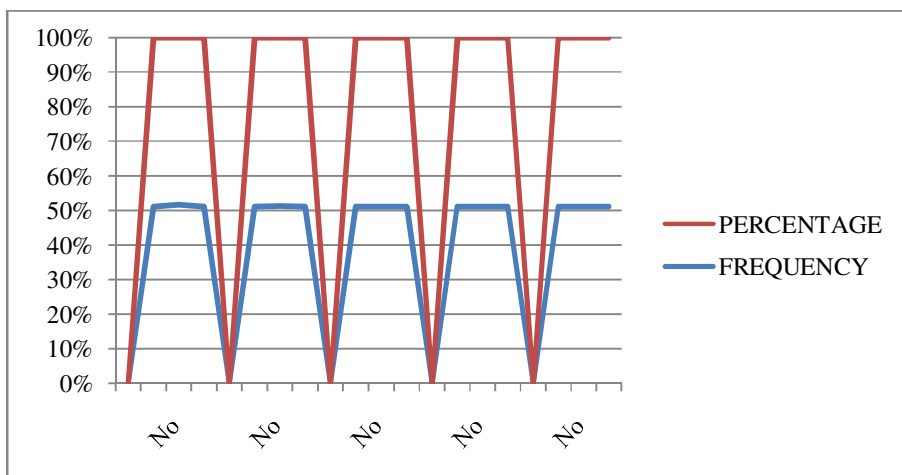


Chart 8. Awareness based on information infection

HIV/Aids Awareness

From table six, the people were asked if they have ever heard of HIV/AIDS. The response shows that 102 or 97% out of 105, of the respondents interviewed, have heard while 3 or 2.8% said they have not heard about HIV/AIDS. The number of those that are aware is greater than those that have not heard of HIV/AIDS.

The people were asked if they have ever been tested or gone for check up, the responses showed that 49 or 46.7 have done a test on HIV/AIDS while 56 or 53% have not done any HIV/AIDS Test. These group of people who have not done any HIV/AIDS test were afraid of stigmatization if they were discovered to have HIV/AIDS after the test. Such group may be living with HIV/AIDS unknowingly; they may be spreading the disease unknowingly.

The people were asked if they ever visited any HIV/AIDS patient. The response showed that 32 or 30.5% of the respondents have visited HIV/AIDS patient while 56 or 53% had not visited any HIV/AIDS patient in the past. Most of those who have not visited a HIV/AIDS patient tend to claimed that there is no close friend or relative of their that has it or has ever suffered from the disease.

People were asked, whether they know if someone has HIV/AIDS by mere looking at the person, the response showed that 29 or 29.6% say yes that if somebody is very slim and dark with red lips, and is coughing has the tendency of HIV/AIDS, while 76 or 72.4% say they don't understand, whether a person has HIV/AIDS or not because HIV/AIDS (no dey show for face) and that some HIV patient are healthier, than the non HIV positive patients because of anti-retroviral drugs.

People were asked if they know that HIV/AIDS is real. The response showed that 97 or 92.4% believed that HIV/AIDS is real, while 8 or 7.6% though otherwise, many have heard of HIV/AIDS some have seen a HIV/AIDS patients on television, and some around them.

People were also asked can someone contact HIV/AIDS through eating from the same plate with an infected person, the responses showed that 7 or 6.7% say yes, while 98 or 93% did not agree that eating with infected person can cause any form of transmission.

People were also asked can someone contact HIV/AIDS through sneezes or coughs, they believe that coughs or sneezes of an infected person, increase one's chances of getting infection because of the fair of the sickness while 98 or 93% disagreed that eating with HIV/AIDS infected person does not have any effect.

Table 1. Awareness on the methods of cure

<i>Characteristics</i>	<i>Frequency</i>	<i>Percentage</i>
Yes	61	58.1
No	44	41.9
Total	105	100

(Source: Researcher's field survey, 2013)

Prevention of HIV/Aids

- I. Prevention of HIV/AIDS, the people were asked if someone can prevent HIV/AIDS by using drugs. The response showed that out of the 105 respondents 61 or 58.1 believed that HIV/AIDS can be prevented by the use of drugs while 44 or 41.9 did not believe that HIV/AIDS can be prevented by the use of drug.

- II. The people were asked can someone prevent HIV/AIDS can be prevented by abstinence from sex the responses showed that 96 or 91% of the respondent are aware that abstinence is the best method of prevention while 9 or 8.6% of the respondents did not believe that abstinence is the only method of preventing HIV/AIDS.
- III. The people were asked can someone prevent HIV/AIDS through hugging an infected person, the response shows that 4 or 3.8% subscribed that by mere hugging of an infected person you will not be effected, while 101 of 96.2 of the respondents, did not agree that by mere hugging of an infected person you will contact HIV/AIDS, so the awareness of the preventions of HIV/AIDS is high.
- IV. The people were also asked that do you know that the use of condom reduce the chances of one getting HIV/AIDS, 93 or 88.6 of the respondents, are aware that the use of condom reduces the chance of one getting infected with HIV/AIDS because the chance of one getting infected is very slim while 12 or 11% said that they were not aware that the use of condom prevent HIV/AIDS transmission. They were so afraid thinking even with the condom one will still be affected with HIV/AIDS.

CONCLUSION

1. The study concludes that HIV/Aids infection spreads rapidly in urban areas than in the rural environment where cultural forces are weakened by modernity in the urban.
2. Males report for treatment than females due to stigmatization as well as restriction of women from outings
3. Middle class income earners are more affected by the diseases than both low and elites.
4. Unmarried youths are more affected than the coupled from both monogamous and polygamous families.

RECOMMENDATIONS

The following recommendations were brought forward after this research:

1. Awareness of HIV/AIDS among the illiterate population of the study area urban/rural be intensified to bridge the gap in the awareness between the elites and the illiterates.
2. In the course of creating of awareness in the area, more pictorial adverts be used instead of written commentaries.
3. Religious centers and places of worship should as well pick up the challenge of creating awareness on the dreaded disease.

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