THE INFLUENCE OF HIV/AIDS ON MINNA

BY

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PGD/ENVIRONMENTAL MANAGEMENT/GEO/2003/2004/266

A project submitted to the post graduate school, Federal University of Technology Minna in partial fulfilment of the requirements for the award of the post graduate Diploma in environmental management Department of Geography, School of Science and Science Education Federal University of Technology, Minna.

DECEMBER 2004

DECLARATION

I hereby declare that this project was carried out by me under the close supervision of DR. P. S. AKINYEYE and has not been submitted anywhere else for the award of the Postgraduate diploma. All published works of other authors have been fully acknowledged.

..... 29/11/04

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CERTIFICATION

I certify that this work "the influence of HIV/AIDs on Minna" was carried out by Mohammed Yanda under my supervision and that it meets the regulations governing the award of the Postgraduate Diploma in Environmental Management of Geography Department, Federal University of Technology, Minna and is approved for its contribution to knowledge and literary presentation.

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DEDICATION

I dedicate this project to Aishat Mohammed my mother, Hauwa Mohammed my wife and my children, Hassan, Hussaini and Abdullahi Mohammed.

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My unreserved gratitude goes to Almighty Allah, on whom I live and have my being. It is from Him all blessings come.

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ABSTRACT

The project examines the influence of HIV/AIDS on Minna. Data collection which includes questionnaire distribution, oral interviews from different medical centre and other parts of Minna revealed the following results.

Government's effort in educating the people with regard to relationship is on the positive side. People are now aware of the relationship with HIV infected person, HIV can not be contacted through handshake, hugging etc.

People don't see any reason to carry out any test of HIV as the result may be injurious to them if on the bad side.

There is a 100% effect on the socio-economic activities of the populace, since all the people agreed that it has influence on both economic and productivity wise.

That, no matter the stage of HIV/AIDs infection one would not know the HIV status of an individual until a laboratory test is conducted on the individual.

That poverty level and in adequate awareness also contribute to the spread of HIV/AIDS infection. Suggestions in form of recommendations were proffered to cope with some of the consequences of HIV/AIDS.

TABLE OF CONTENTS

CHAPTER TWO

CHAPTER THREE

CHAPTER FOUR

CHAPTER FIVE

CHAPTER ONE

1.1 INTRODUCTION: HIV means Human immuno deficiency virus. HIV virus are membraned-envelope retroviruses belonging to a group of retroviruses called lent viruses (from latin, lentos = slow) so name because of their slow, gradual action.

When it was first sequenced, the HIV genome was discovered to be a single molecule 9,700 nucleotides in length.

The HIV virus causes AIDS (Acquired immune deficiency syndrome) so called because this is the stage where the HIV virus has completely destroyed the leucocytes (T. lymphocyte) and have exposed the body to any external attack (opportunistic infection) the defense mechanism of the human body has been completely broken down.

The route of HIV infection are through heterosexual (opposite gender) or homosexual (same gender) sex with an infected partner, the use or contact with contaminated blood either accidentally acquired or through sharing of needles in drug taking or transmission from mother to baby in breast feeding. The HIV-infection has a primary stage and a latency period before it becomes overt AIDS.

1.2 **PRIMARY STAGE**

Without symptoms (a symptomatic) in many cases. With an influenza like illness lasting up to four weeks and includes headache, a sore throat and some glandular swelling. More marked symptoms may resemble those of glandular fever, with both appetite and weight loss. Along with these symptoms there may well be chronic or intermittent diarrhoea which will also reoccur in the later

stages of HIV infection, shingles, a herpes zooster skin rash found on the chest, abdomen and/or back, painful lesions and ulceration around the anal, genital and oesophageal areas of the body caused by the herpes simplex virus, unusual bleeding or bruising of the skin, and thrush, a white cheesy coating of the tongue, mouth and gums.

The early symptoms of the influenza type cause profusion of the virus in the peripheral blood areas and a marked decrease in the circulating CD_4 T. cells.

May have a window period when no reaction is detected. This window period may last up to six months.

Activation of CD_8 T. cells.

Antibody production (or seroconversion)

1.3 **A SYMPTOMATIC**

(or clinical latency period) when nothing serious seems to be happening but:-

CD_4 T cells continue to decline. In Africa, this takes place between four to six years after infection.

Opportunistic infections start to appear some HIV-infected persons withstand the presence of opportunistic infections either because they seroconvert or their immune response is maintained or Remain seronegative (for whatever reason) their body has resisted the HIV infection even though they may have had a high exposure to HIV or rarely they may have a genetic resistance to the infection.

During the latency period, the viral production continues with each HIV cell provoking its host cell to make around 250 HIV clones before destroying the

cell. When the viral load reaches critical amount the immune system is suppressed to such a degree that other infections, which under normal circumstances would not be too difficult to resist, gain entrance (Hence the designation opportunistic infections) and the individual is further weakened and will die of these diseases.

Since particular clusters or syndromes of clinical conditions are associated and observed in people with the increasing viral load, the person is said to have AIDS. The particular make up of the syndrome may vary from person to person and country to country and may be any combination of some twenty six or so particular infections.

Although the syndrome is different for each person initially, as the AIDS progresses particular infections and a general pattern of disease emerges. The signs and symptoms of infection that begin to emerge through the latency period of HIV-infection are referred to as the AIDS related complex (ARC) ARC is diagnosed in HIV infected people presenting with two or more of the following signs and symptoms which have not responded to symptomatic treatment over a few months.

An intermittent/continuous fever around or above 38°C. More than ten percent weight loss

Intermittent/continuous diarrhoea

Swollen lymph nodes

Night sweats

Fatigue/Lethargy

Laboratory test will indicate the degree to which the viral load has increased and the immune cells have been suppressed. The body now becomes more vulnerable to the opportunistic infections. The progression of ARC can be seen in a generalized case description written by D. Serwadda and his colleagues about the symptoms of AIDS in Ugandan as observed in the mid-80s when the condition first emerged:-

In the first six months the patient experiences general malaise and intermittent fevers for which he may treat himself or receive Aspirin, chloroquine or chloramphenicol. In due course he develops loss of appetite, in the next six months intermittent diarrhoea starts, there is a gradual weight loss and the patient is pale.

After one year, the patient develops a mucolopapular rash, which is very itchy all over the body the skin becomes ugly with hyper pigmented scars, there may be cough usually dry but sometimes productive. By this stage, sometimes earlier, the patient is so weak, if taken to hospital, not much can be done to help him and death follows.

In the light of recent advance in HIV/AIDS treatments the ARC development written about here sounds inevitable and hopeless. Fortunately advances in the knowledge and management of opportunistic infections now offer greater hope.

As the HIV kills off the T. lymphocytes cells, the individual becomes progressively immune-suppressed. Monitoring, and indeed trying to slow this

progression tracks the transition from being HIV-infected to developing overt AIDS.

The healthy immune system has from 600 – 1500 T – cells per microlitre of blood (μL).

In the acute influenza-like viral illness associated with the primary infection of HIV and subsequent seroconversion the T-cells count falls below 500 μL. The body rallies to the situation and respond by raising the cell level to around 700 μL. As the condition relating to the primary infection become more pronounced in the latent period of the infection, the cell count drops to between 200-500μL and opportunistic infections develop.

At this degree of immunosuppression the individual is diagnosed as having overt AIDS. In the development of AIDS, as the T-cell counts decreases there is a corresponding rise in the level of HIV in the body. The lymph system and the body tissues carry around 98 percent of the virus with the remaining two percent carried by the blood Viral RNA (Ribonucleic Acid) molecules are measured in particles per milliliter of blood and as with the T-cell count (Total cell count) the implications of having particular levels is critical, if the individual has 5,000 particles or lower of HIV the expected survival rate is five or more years.

When the viral load is between 5,000 and 10,000 particles the disease progression is at fairly low risk. When the viral load increases from 10,000 – 100,000 particles there is a medium risk of the HIV developing.

Anything over 100,000 particles places the individual at high risk of the HIV becoming overt AIDS.

1.4 YOU CANNOT GET HIV/AIDS FROM

Casual contact with infected person, this includes handshaking, hugging, caring for people with HIV/AIDS or visiting them in their homes or hospital. A study of 16,000 close family members and work colleagues in the USA showed no evidence of casual HIV transmission.

Food prepared or served by HIV positive people or by using their utensils.

Saliva or tears (that includes the intimate contact of kissing) if anything, the saliva weakens the presence of HIV.

People with HIV coughing or spitting.

Toilets or toilets seats and wash hand basins.

Swimming pools or public showers.

Visiting your doctor or dentist.

Donating blood.

Mosquitoes or other insect bites.

Using an infected person's telephone.

Contact with animals.

1.5 STATEMENTS OF PROBLEMS

It reduces the human population thereby reducing the workforce and this have an overall effect or reduction in productivity. In adequate awareness to the people on HIV/AIDS by the government. Peoples poor attitude towards the use

of condoms. Married couples are not always faithful to their partners (Wife/husband).

The poverty level led to the use of recycled or unsterilized instruments for injection, circumcision and the use of one clipper to barb more than 5 people at a time. The bad habit of some laboratory personnel to supply unscreened blood for transfusion.

1.6 AIMS AND OBJECTIVES

The aim of this study is to find out the influence HIV/AIDS has on the society using Minna as a case study. The objectives to be employed would include: (i) Enlightment of the people on the danger posed by the ailment.

(ii) To educate people to relate very well with those that are HIV positive already.

1.7 JUSTIFICATION OF STUDY

This is to create awareness to the people that HIV/AIDS exists and it do exists. Therefore precaution should be enforced through the use of ABC proposals.

A - Abstinence

B - Be faithful

C - Use condoms

1.8 SCOPE AND LIMITATION OF THE STUDY

The study covers only Minna town in Niger State and not beyond. Many

Some people will not be willing to fill the questionnaires having heard that it is about HIV/AIDS. This makes one to get in accurate data.

1.9 BACKGROUND OF THE STUDY AREA

The founder of Minna town are Gwari people, Minna itself is a Gwari language which means Mi-spray Nna-fire (spray fire).

The fact is that the time people came to settle in Minna is not really on record.

LOCATION:- Minna is the state capital of Niger State bounded in the east by Maitumbi, in the south by Sauka-Kahuta and in the north by Bosso, Minna being the capital of Niger State is one of the middle belt state of Nigeria.

The Niger State which Minna is the capital is surrounded by states which are Kaduna, Sokoto Kebbi, Federal Capital Territory. Minna is located on a plane land doted with small hills around.

CLIMATE:- Minna witness both dry and wet season, the wet season start by April/May and ends by October to November during which the temperature is moderate (that is favourable) they usually experiences intermittent non-break rainfall during September time.

In dry season, the temperature is usually high and last as from February to March while the harmattan season lasts from ending of November to January ending.

Minna town is drained by river Chanchaga, Bosso stream which transverse the town.

POPULATION:- The population of Minna is estimated to be about 1 million people by this year (2004) (National Population Commission).

1.10 HISTORICAL BACKGROUND OF HIV/AIDS

In truth, no body yet knows the origin of HIV infection although there are very many theories purporting to account for it. Some of these are simplistic and bizarre others, frankly, are deeply offensive to various people who are HIV infected. Still other theories have an air of plausibility about them which means that they resurface with a fair degree of regularity, particularly if another 'proof' can be added to the theory.

It suggests that viral material was carried in the tail gases of a comet passing close to the earth and that this material was deposited, subsequently infecting nearby people.

Although one or two famous astronomer's name have been linked to this theory in the popular press, these scientists deny the possibility of this extraterrestrial phenomena and any personal connection to the theory. God's wrath; As I wrote in the 1980s, certain segments of the population have openly stated their belief that AIDS is God's wrath since the scriptures condemn the homosexual practice in which AIDS was first observed in the western world. If one adds to this belief the mysterious origin of the virus, and the apparently hopeless prospects for a cure, it will readily be understood how many have come to believe in divine intervention, with AIDS being God's way of destroying sinners. If these were so, it would be difficult to see why God after watching over

thousands of years of vastly differing sins, should suddenly decides to settle His score with homosexual and drug addicts rather than any other sinners.

If God or witchcraft are not responsible for HIV, then secretive human agencies must be, so popular wisdom dictates. Who more likely than governments with heavy bureaucracies and hidden agendas?

Conspiracy theorists have blamed German biological warfare all the way back to the days of Nazi dominance in Germany for the escape of HIV infecting agents, then, depending on one's particular political affiliation, others have blamed either the American central intelligence Agency or the Russian secret service for deliberately using destructive viruses, including HIV to destabilize countries for their own political aims.

There is a lack of information to support these theories. It is that, very lack which fuels such theories since it can easily be claimed that confirming data is being withheld by the interested parties.

Early theories suggested that African swine-fever had infected Haitians, and homosexual men who holidayed in Haiti, who subsequently introduced the virus into the homosexual community of North America, others have suggested that HIV was a freak side effect of the hepatitis B vaccine used to treat the hepatitis prevalent in North American homosexuals in the early 1980s. Since the treatment was given as part of the therapy for what was already described as Gay-related immune deficiency (GRID), it suggests that contaminated hepatitis B vaccine arrived too late on the scene to be said to be the origin of HIV.

Other accidental emergences of HIV have been put down to the use of unsterile antibiotic needles being re-used, and to the destruction of the human nervous system as a result of nuclear tests and the subsequent radioactive fall-out worldwide.

By far, most interest in HIV origin has centered around contaminated vaccines used in other areas of preventive medicine, namely small pox and polio. In fact, when HIV erupted onto the Ugandan medical scene it was widely believed to be as a result of the World Health Organisation anti-small-pox campaign of the 1970s. It is the contaminated polio vaccine which is attracting the most attention at the present time.

Opponents of the simian-human transmission remain unimpressed by the evidence in support of the monkey theories and argue that viral sequencing of HIV strains indicates that HIV has been around probably for hundreds of years. Rather than acquiring HIV from SIV (simian immune viruses). It is thought that HIV mutated to become ever more infectious. Even Edward Hooper wrote that in 1988 it became apparent that the African green monkey SIV was actually only distantly related to HIV 1 and HIV 2, which meant that although SIV agm (a particular simian strain) might be an ancestor of the HIVs. It could not have been the immediate source (as many thought) Hooper also quotes researcher Preston Marx as saying 'Shown-by itself, natural transfer of SIV to human is not enough- it does not result in AIDS.

It is hard to establish from the 'evidence' of the various theories concerning the origin of HIV whether or not the infection started in Africa or has

become, through no fault of its own, an African infection. Contaminated blood products, before these were adequately screened, and sexual tourism have no doubt contributed to cross-infection, hence the different strains of HIV present in African countries.

1.11 DEFINITION OF BASIC CONCEPT

HIV means Human immunodeficiency virus. HIV virus are membrane enveloped retroviruses belonging to a group of retroviruses called lenti viruses (from latin Lentos = slow) so name because of their slow, gradual action. When it was first sequenced, the HIV genome was discovered to be a single molecule 9,700 nucleotides, in length.

AIDS – means Acquired Immune deficiency Syndrome so called because this is the stage where the HIV virus has completely destroyed the leucocytes (Total lymphocyte) and the body defense completely broken down and susceptible to any external attack.

LEUCOCYTES – These are the white blood cells in the human blood, which fight for infection, they are the soldiers of human body measuring about 4,000 – 11,000 cubic milliliter per blood.

LATENCY PERIOD: - This is when nothing seems to be happening, even when an individual is infected with HIV, at this stage, the individual is a symptomatic.

CD_4 – Is referred to the white blood cell count.

WINDOW PERIOD – Is defined as the period that exist between when an individual is infected with HIV virus and the period it will be detected in the blood, this usually last for 3 – 6 months.

ANTIBODY – Can be defined as a substance which appear in the body spontaneous as a result of introduction of an antigen.

CHAPTER TWO

2 LITERATURE REVIEW

AIDS researcher "William Check (2000) notes that there is a higher level of African heterosexual activity than in the U.S., and greater use made of commercial sex providers.

Not every person exposed to HIV risk becomes infected on exposure, and researchers are trying to find out the whys? And why nots? Royal free hospital AIDS specialist Dr. Margaret Johnson (1995) speaks for clinicians when she says, we need to find out why it is that some people can become infected with HIV after only very few contacts with the virus-during unprotected-sex for instance-whereas other people take a long time to (or don't) become infected, despite repeated exposure.

Regina McNamara (1997) reports that women are more frequently infected with sexually transmitted diseases from a single act of intercourse than men.

Virologist Dr. Clive Loveday (1995) of the Middlesex hospital London, states what is not clearly understood is the exact mechanism by which the virus crosses the membranes into the body.

Recent research has shown that part of the answer to the questions raised by HIV/AIDS researchers lie in the vulnerability of the tissues of the vagina, forestkin and anus.

We have already noted that skin is one of the component of innate immunity acting as a barrier to the entry of various micro-organism to the body.

The outermost layer of skin, the epidermis, has a water proof seal particularly rich in a substance called keratin, where the skin is thin or breeched, the skin becomes vulnerable to any pathogen present.

The skin around the vagina, foreskin and anus is by virtue of its sensitivity, easily damaged and, in any case, thinner than the protective skin in other parts of the body. Other factors which increase susceptibility to HIV and other sexually transmitted diseases are:-

2.1 VAGINA - Thinner tissue limning of the vagina in adolescent girls and the position of a zone of cells around the cervix which are more exposed in younger women and progressively less exposed during ageing process.

Less profuse mucus in the vagina.

The presence of vesico-vagina fistula (VVf) in which urine continuously leaks through an opening between the bladder and the vagina.

HIV also targets lymphocytes and macrophages which may be present in the vaginal as a result of any inflammation however caused.

2.2 FORESKIN - Has less keratin than the penis, so while intact, easily allows HIV to penetrate the skin and affect semen directly and indirectly. Is liable to tears and ulceration, but even without these being present, uncircumcised men are eight times more likely to get HIV from an infected woman. Circumcision can reduce HIV risk by around 60 percent (although there are cultural reasons why circumcision may not be considered a therapeutic option). According to professor Bertram Auvert, of the french National institute of health, circumcision of all

male Africans could lower the HIV rate to 10 – 15 percent of the population rather than the 32 percent or so that is the present reality (Ibid page 10).

2.3 ANUS - The extreme thinners of protective tissue lining the rectum makes it easily liable to damage. Unprotected anal intercourse carries the greatest HIV risk, with homosexual men having a higher prevalence than receptive women because of both passive and active roles.

The spread of HIV/AIDS can be either insidious or like wildfire. As journalist Johanna McGeary 2001 writes most people do not know how or when they caught the virus, many never know they have it, many who do know don't tell anyone as they lie dying. Africa can provide no treatment for those with AIDS. Most will die of tuberculosis pneumonia, meningitis, diarrhoea, whatever overcomes their ruined immune system first.

Science writer Micheal Day (1996) hype, hope and HIV New scientist, 3rd August page 29 state "the casual observer could be forgiven for thinking that AIDS researcher had proved that their new drugs extend the lives of people with HIV. But that although recent developments probably do hold out new hope, the truth is far more complex, he goes on to say, the data on survival simply are not available yet, not by a long chalk.

Hooper Edward (2000) the river, London, penguin page 12, says even if the new drugs could be proven to be highly effective in influencing quality of life and survival rates, it has been pointed out that 90 percent of the people around the world infected with HIV cannot afford them.

As Patricia Fultz, of the university Alabama, Birmingham U.S.A. says "With 40 million people infected in the world, there is a great need for a vaccine (1999) (Dying, so we might live new scientist).

Finding a risk free vaccine is proving very difficult for the following reasons:-

With HIV's ability to keep mutating and producing new strains a single vaccine may not be possible. This fact alone could stop the search or if continued gives rise to a number of questions. Would it be possible to combine various HIV strains for vaccination purposes? How many shots would be needed? How often would these be given? How much would all the above cost? If drug treatment is already unaffordable what hope for a series of vaccinations given over perhaps a life time?

The introduction of a live vaccine, however weak carries the risk of inducing HIV-infection. Ruth Ruprecht, researcher at the Dama –farber cancer institute Boston U.S.A. states weakening the virus's ability to replicate is not a safe vaccine strategy.....it can still cause AIDS (Kleiner Kurt 1997, live and dangerous, New scientist, 4th October, page 5).

Science writer Nell Boyce reports: people infected with a weakened form of HIV have finally started to develop signs of AIDS after more than a decade of good health, dashing hopes that a similar mutant virus could be used as a live vaccine (Boyce Nell 1999). End of the line? New Scientist, 30th January page 11).

Science writer Rachel Nowak says, in the light of these results, hopes for a vaccine that can completely prevent HIV infection are fading, however so attention is shifting towards vaccines that might slow the progression to AIDs (NAWACK OP. Cit. idem).

Former United State president Bill Clinton expressed the hope in 1997; if the 21st century is to be the century of Biology, let us make an AIDs vaccine its first great triumph (Rowland – Jones, Sarah 2001). Needle in a haystack, New Scientist, 7 April page 50). Professor Gary Hopekins and colleagues from Loma Linda University, California, in an analysis of a centre for disease control study, reports that there has been a dramatic increase in adolescent female engaging in premarital sexual intercourse over the decades studied from 1970. Well over a quarter of girls aged 15 – 19 admitted to premarital sexual activity with the highest increase in the 15 years old and of the age range.

Around 4.6 percent of the 15 years old girls engaged in sex in 1970, the figure leaping to 25.6 some two decades later. The same study showed that one in every six young women in high school had experienced sexual intercourse with at least four different partners. Similar results were obtained in other research into adolescent sexual behaviour (Hopkens, Gary L. Joyce W., Hopp, Helen P. Hopp. Christine Neish, Gayle Rhoads (1997). AIDs risk in adolescents.

Former health commissioner of Illinois, U.S.A. Dr. Herbert Ratner wrote:- Today abstinence and monogamy are no longer disdainfully dismissed as religions dictates. Rather they are seen as the pragmatic answer to a pressing problem..... abstinence before marriage and monogamy therefore are

sexual norms protective of homosapiens which serve the survival needs of the human animal (Ratner, Herbert, (n.d.) AIDs – The answer family life bulletin n.p).

Anton Checkhov (1904) said "When a lot of remedies are suggested for a disease, that means it cant be cured". If AIDs has been around then, he might have had it in mind. His statement is truer of AIDs than almost any other disease, and particularly so in Africa.

Dr. Saleem Farag points out that strategies which focus on technological interventions, to prevent the potential consequences of behaviour fail to recognise the fact that the problem associated more with the frequency of sexual involvement and not only the effectiveness of the barriers used (FARAG, Saleem A (1996) preventing HIV infection in Africa).

Mr Yoweri Museveni, president of Uganda as saying young people must be taught the virtues of abstinence and self control (Idem).

Hilary Dixon and Jane Springham comment:- The values and attitudes of those around us were in their turn shaped by the whole range of religious, moral legal; ethical and social norms of the society in which we live. (Dixon, Hilary, Jane Springham (1991).

President Museveni says:- In countries like ours where a mother has to walk 20 miles to get an aspirin for her sick child..... The practical question of getting a constant supply of condoms or using them properly may never be resolved. (FARAG, OP. Cit. Idem).

In one study in Nigeria involving doctors and nurses only 46.7 percent surveyed identified HIV as leading to AIDs. Sixteen percent thought that HIV was an unspecified virus or a complication of other sexually transmitted diseases. Mosquitoes bites still figured high on the list of causes in 30.5 percent of the surveyed along with handshaking and kissing. Over 60 percent of the medical personnel said they were not willing to manage people with HIV infection (SALIHU, Nasiru, Isaac Olaseha, Joshua D, Adeniyi, Ademola J, Ajuwon 1998, knowledge and attitude of physicians and Nurses about AIDs in Sokoto, Nigeria. Int. J. health education Vol. 36 No, 1 page. 26 – 28).

CHAPTER THREE

METHODOLOGY

3.0 The method used in collecting data is through questionnaire survey. The interpretation of the questionnaire are given below and the questionnaire sheet itself is attached at the back of the project.

3.1 Data collection:- Data for this study were collected through various means. Data were obtained from text books, journals, past work, newspapers and so on. Information were also obtained from library.

Questionnaire were also distributed to various groups. The questions asked were aimed at the achievement of the set objectives. Oral interviews were conducted and the result were analysed. A sample of the questionnaire can be seen in Appendix 1. Information were also obtained from hospitals, Health centres and Barracks clinic.

3.2 Data Analysis:- The collected data were analysed using various existing techniques. The data were subjected to various statistical analysis, Tables were used to illustrate detail discussion. The use of percentages (%) were also employed.

4.0 # CHAPTER FOUR

4.1 DISCUSSION OF RESULTS

TABLE 4.1 Relationship with HIV/AIDs infected person.

Relationship	No of respondent	%
Do not relate	4	10
Relate well	30	75
Relate with caution	6	15
TOTAL	40	100

Source: Compiled by the author.

The above table shows the relationship people will have towards an HIV infected person, the survey carried out shows that the percentage of people that will relate very well with an HIV infected person is 75% followed by 15% (relate with caution and lastly 4% do not relate).

In conclusion, the above table (4.1) has shown that with government, awareness and education, people are trying to show concern to HIV infected individuals.

TABLE 4.2

Testing for HIV/AIDs voluntarily.

4.2

Voluntary test	No of respondent	%
YES	15	37.5
NO	25	62.5
TOTAL	40	100

Source: Compiled by the author.

Table 4.3 shows how many people that have gone or have not gone for HIV test voluntarily before 62.5% of the people have not gone for the test voluntarily before while 37.5% have done the test before.

The table there shows unwillingness of the people to test themselves for the presence or absence of the virus in their body system, possibly because they are afraid to do so, as if it turns out to be positive, they will be down psychologically.

4.3 TABLE 4.3

Influence of HIV/AIDs on the society.

Influence	No of respondent	%
i Reduction in population	-	-
ii Reduction in productivity	-	-
All of the above.	40	100
TOTAL	40	100

Source: Compiled by the author.

Table 4.3 shows the influence of HIV/AIDs on the society economically/productive wise.

The combination of i and ii indicate a 100% effect on the socio-economic activities of the populace.

4.4 TABLE 4.4 Knowledge of some one infected with HIV by looking at his face.

Knowledge	No of respondent	%
YES	3	7.5
NO	37	92.5
TOTAL	40	100

Source: Compiled by the author.

The above table 4.4 represent the percentage of people that says either it could be possible for one to know some one infected with HIV/AIDs by looking at his/her face or not.

There are about 92.5% of the respondent that said it is not possible to know HIV infected individual by just looking at his/her face as it does not show on the face, but until after the person have gone for blood test in the laboratory. About 7.5% of the respondents said it is possible to know an HIV infected person by just looking at his/her face when the HIV/AIDs infection have reach an advanced stage.

4.5 TABLE 4.5

Poverty level and in adequate awareness as it contributes to the spread of HIV/AIDs.

Poverty	No of respondent	%
YES	30	75
NO	10	25
TOTAL	40	100

Source: Compiled by the author.

Table 4.5 represents how poverty level and inadequate awareness will contribute to the spread of HIV/AIDs 75% of the respondent agreed that poverty level and inadequate awareness can contribute to the spread of HIV/AIDs either, because of some people who engage in prostitution due to lack of money to satisfy their daily/basic needs or inadequate awareness makes them to have unprotected sexual intercourse or ignorance.

While 25% of the respondents agreed that poverty level and inadequate awareness has got nothing to do with the spread of HIV/AIDs either because the people engage in sex as a result of pleasure as some of these people are very rich or comes from a rich family. So also these class of people are well educated and are aware of the existence of HIV/AIDs and its consequences, but will still go ahead to have unprotected sex, because they felt it is more pleasurable and their "I don't care attitude" and way wardness.

In summary, the relationship with HIV/AIDS infected person is on the positive side since about 75% of the data collected agreed that they can relate very well with HIV/AID infected person, so also about 62.5% of the data collected said they wouldn't go for voluntary HIV testing as if found positive, the result would be fatal for them.

92.5% of the data collected agreed that it is never possible for one to know an Hiv infected person by just looking at his/her face; until a laboratory test is conducted; 75% of the data collected said poverty level and inadequate awareness also contributes to the spread of Hiv/Aids; finally 100% of the data collected agreed that it has effect on socio-economic activity and productivity of the country, since it reduces population, thereby reducing the workforce.

CHAPTER FIVE

5.1 SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.2 The influence of HIV/AIDS on Minna has the following problems:-

Reduction in population which will have an overall effect or reduction in productivity. Inadequate awareness to the people by the Government, peoples' poor attitude towards the use of condom, married couples are not always faithful to their partners.

The objectives that were employed includes:

(i) Enlightment of the people on the danger posed by the ailment.

(ii) To educate people to relate very well with those that are Hiv-positive already.

The methods used in data collection were questionnaire survey and oral interviews and the results obtained are as follows:-

Governments effort in educating the people with regard to relationship is on the positive side. People are now aware of the relationship with HIV infected person, HIV can not be contacted through handshake, hugging etc.

People don't see any reason to carry out any test of HIV as the result may be injurious to them if on the bad side.

There is a 100% effect on the socio-economic activities of the populace, since all the people agree that it has influence on both economic and productivity wise.

That, no matter the stage of HIV/AIDs infection one would not know the HIV status of an individual until a laboratory test is conducted on the individual.

That poverty level and inadequate awareness also contribute to the spread of HIV/AIDs infection.

5.2 PREVENTION

There is no vaccine available to prevent infection with HIV. Scientists are working to develop one but is not likely to be available for a long time. However, infection can be prevented by using the ABC approach to safer sex.

A:- Abstinence: Abstaining from sex prior to infection is a sure way of preventing sexually transmitted infection of HIV.

B:- Be faithful: faithfulness to one's uninfected partner will prevent HIV infection. In polygamous marriages, the husband and his wives should remain mutually faithful.

C:- Condom usage:- Regular and correct use of condoms provide a high level of protection against HIV infection.

In addition, everyone should avoid sharing needles or using skin – piercing instrument that has not been sterilized and everyone should ensure that blood is screened for HIV before having or giving a blood transfusion. Blood donors should also be properly screened for HIV.

In a situation where one or both (married or unmarried couple) is infected they should use condoms every time they have sex because:-

They may be infected with different types of the virus and cross infection may result if a condom is not used.

More virus can be transmitted which may accelerate the onset of AIDs.

The person who has an (STI) sexually transmitted infection such as herpes or syphilis which results in sores or ulcers is at a greater risk of transmitting or contracting HIV. Those at risk of acquiring sexually transmitted infections are

also at risks of acquiring HIV because of similar behavioural patterns and similar modes of transmission.

Persons who are living with HIV/AIDs requires information, counseling, care and support. In general, they should be advised to:

Protect themselves from further sexually transmitted infections.

Avoid passing the infection to others through unprotected sexual intercourse.

Share information about their HIV status with their spouses and those they trust.

Eat nourishing food and get plenty of rest.

Seek counseling about pregnancy, for the sake of the mother and child.

Avoid discrimination and stigmatization of people living with HIV/AIDs.

Respect the rights of people living with HIV/AIDs. Provide care and support to people living with HIV/AIDs. Ensure that they fully participate in decisions and activities that affect their lives.

They should not be discriminated against in the exercise of any of their fundamental human rights, or should there be any stigma because a person is infected with HIV or is suffering from AIDs.

They deserve to be treated exactly the same as any other person. Public health educators should help educate society about the facts and should be vocal advocates for the rights of people living with HIV/AIDs.

Moses and Plummer write: As long as there is widespread poverty, marginalization of risk groups, counter-productive labour practices and denial of women's rights, the fundamental transformation of individuals and societies which is required to ultimately control AIDs in Africa will not occur.

These varying factors have a bearing on the health of individuals. Those that have been termed multiple contingent Risk, and it includes:-

Exploitation.

Loneliness and Isolation

Low cost housing

Minimal access to HIV education or information poverty

Separation from one's spouse/family/community.

Underemployment and unemployment

Vulnerability

Condoms, which was the only method prescribed for casual sex, was not totally safe and a lot of its weaknesses were starting to surface as a result of its increase use.

"Some of the weaknesses which were not much talked about in the past included bursting, leaking and slipping off inside the women. Although leaking was not always noticed even after sex, cases of condoms slipping off had become frequent and they reached the attention of health officials because sometimes they had to be removed by the doctor.

The condoms are becoming less and less reliable than we had thought. They frequently slip off, leak and burst, exposing both the male and female partners to the AIDs virus. The only reliable method to avoid AIDs is to stop having casual sex, and for school children it is waiting until you have a faithful partner in marriage.

Where a condom is used and the stronger the latex the better – it is firmly urged that a spermicide also be used. In any case it is a mistake to think that other contraceptive methods such as birth control pills or the diaphragm can prevent HIV-infection.

In many societies sex is a taboo subject, so any counsel with regard to condom use may feel inhibited from promotion condoms in case it is thought they are also promoting the promiscuous behaviors often associated with their use. These are issues that must be resolved by all concerned in the fight to control HIV/AIDs. Only by bringing all the facts into the open will people be able to make intelligent decisions.

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APPENDIX I

Department of Geography
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Niger State.

INFLUENCE OF HIV/AIDs ON MINNA"

RESEARCH QUESTIONNAIRE

Dear Respondent,

You are please requested to complete this research questionnaire on the above title. Your response should be made independent and personal as possible and ensure honesty. All responses shall be treated with strict anonymity and confidentially. There are no right nor wrong answers. It is purely an academic exercise the responses will be used for the purpose of the research project.

Thanks for your anticipated Co-operation.

PGD/GEO/2003/2004/266
Mohammed Yanda
Department of Geography
Federal University of Technology,
Minna.

APPENDIX II

How will you relate with an HIV-infected person?

a) Relate very well (b) Relate with cautions (c) Not all

Have you ever gone for HIV test voluntarily before?

Yes or No.

Briefly state your own view on the influence of HIV on the society economically productive wise.

(a) Reduction in population (b) Reduction in productivity

(c) Others (please state).

Do you know someone infected with HIV by just looking at his face?

Yes or No.

If Yes or No How?

Do you agree that poverty level and inadequate awareness contribute to the spread of HIV/AIDs Yes/No.

If Yes or No Why?

What is your advice generally to people concerning HIV/AIDs?