

**THE IMPACT OF HIV/AIDS ON POVERTY IN THE
EASTERN CAPE: A CASE STUDY OF LUSIKISIKI**

FOR A MASTERS MINITHESIS

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IN THE

DEPARTMENT OF STATISTICS



UNIVERSITY OF THE WESTERN CAPE

BY

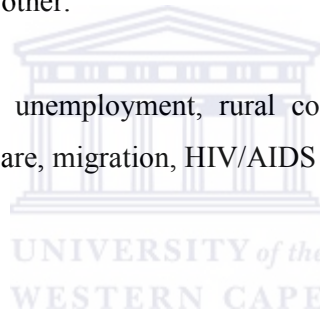
NONTEMBEKO DUDENI

SUPERVISOR: DR. THEUNS KOTZE
Co-supervisor: D Kotze

ABSTRACT

In recent publications and reports it has been outlined that HIV/AIDS is growing rapidly in the rural communities and the levels of poverty are on the increase. HIV/AIDS has been viewed to have a disastrous impact in almost every sphere of life, affecting the business sector, employment/unemployment, poverty, marginalizing a section of the population and tearing families apart. It is important to undertake a study of this nature in one of the provinces (Eastern Cape) that is characterized by high levels of HIV/AIDS in the midst of its poverty status. Using one of the province's districts, Lusikisiki (a case study area), which is vulnerable to these issues, would bring more awareness and help in informing the authorities, which could help them in decision-making as far as HIV/AIDS and poverty are concerned. The study is aimed at exploring more issues that evolve around HIV/AIDS and poverty and also to determine if HIV/AIDS can be closely linked to poverty, because it has been reported that these two strongly affect each other.

Key words: poverty, HIV/AIDS, unemployment, rural community, population dynamics, health, death rates, treatment and care, migration, HIV/AIDS projects.



DECLARATION

I declare that *The Impact of AIDS on Poverty in the Eastern Cape: A case study of Lusikisiki* is my own work, that it has not been submitted for any degree or examination in any other university, and that all the sources I have used or quoted have been indicated and acknowledge by complete references.

Nontembeko Dudeni

Date: 12 February 2007

Signed:



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CHAPTER 1

INTRODUCTION AND BACKGROUND INFORMATION

Eastern Cape, as one of the poorest provinces in South Africa, needs some profound research to enable it to face and to combat its challenges such as poverty, unemployment and growing numbers of people infected with HIV/AIDS. There is an underlying assumption that HIV/AIDS has a remarkable effect on increasing poverty levels. This research seeks to investigate further around the issue of poverty and HIV/AIDS and also attempts to prove that the underlying assumption also applies to the Eastern Cape, using Lusikisiki as a case study. Since it has been recognized that there is a strong correlation between HIV/AIDS and poverty (Christo Greyling, 2001:8), the expected results should indicate an association between these two issues. This is a community that is desperate for help in the fight against HIV/AIDS and poverty and an investigation such as this one will assist those in power on how to tackle these problems and give some recommendations and meaningful solutions, since similar researches have not been undertaken in these communities.

Lusikisiki, one of the small towns in the Eastern Cape that is economically depressed, has poor communication and transport infrastructure making delivery of services in health, education and welfare difficult. According to the epidemiological notes of the Eastern Cape Department of Health (2001:03) it has been discovered that the provincial poverty rate is the highest in the Eastern Cape. HIV/AIDS and the high migration-related HIV/AIDS prevalence strongly affects the communities of the district of Lusikisiki in the Eastern Cape. Most of its economically active population (including men and youth) migrate to other provinces such as Kwa-Zulu Natal, Gauteng, etc. in search of job opportunities. It is evident that some resort to commercial sex work due to unemployment and lack of skills that enable individuals to get decent employment. When these individuals return home, some are already infected with HIV/AIDS, which might be distributed among other members of the community. Lusikisiki is home to more than 150 000 people and is mostly rural. There is only one project in this area called Bambisanani that caters for two other districts of Bizana and Umzimkhulu and its aim is to assist those infected with and affected by HIV/AIDS. In the entire province, most of the projects are in the district of Buffalo city, the former East London, as well as the second

largest area in terms of these projects, the Lukhanji district. These two areas are very remote. This shows that there is an imbalance in the distribution of these projects in the Eastern Cape and it requires some consideration since HIV/AIDS and poverty affect more people in the rural areas. Therefore many more projects like these need to be established. (Epidemiological Notes of the Eastern Cape).

Research Hypothesis

It is assumed or hypothesized that HIV/AIDS increases the level of poverty in the most developing communities. In contrast, poverty is presumed to increase the spread of HIV/AIDS. In other words, these two are closely linked and each in turn increases the other. The research therefore seeks to investigate whether this hypothesis is significant or not.

The aim of the study

The main purpose of the proposed research is to inquire if the rising levels of poverty in the Eastern Cape are affected by the rapid spread of HIV/AIDS and vice versa, and also to further investigate the extent to which HIV/AIDS has affected the entire community in relation to employment, family structure, government delivery and poverty.

There is an urgent need to fight poverty and many factors are believed to cause its spread increasingly. These factors include high unemployment, HIV/AIDS, poverty, etc.

The research questions

- Are people in the Lusikisiki area actually living in poverty?
- If so, is it because of high unemployment and a low literacy rate or any other factor?
- Is the HIV infection rate high?
- What is the situation / living conditions like, for the people infected or households affected by HIV/AIDS?
- Looking at the current situation of these households, could the impact of HIV/AIDS worsen poverty over a long period of time and why?

CHAPTER 2

LITERATURE REVIEW

What are HIV and AIDS?

HIV (human immunodeficiency virus) is a virus that kills or harms cells of the body's immune system and gradually destroys the body's ability to fight infections and certain cancers.

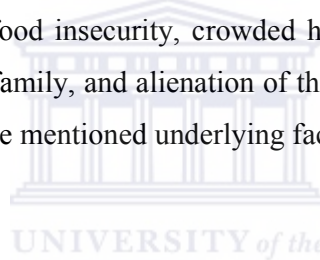
AIDS (acquired immune deficiency syndrome) is a disease that is caused by the human immunodeficiency virus. According to the Michelson Institute, Development Studies and Human Rights 2002, AIDS was first discovered in 1981 and has become a major worldwide epidemic. Individuals diagnosed with AIDS are likely to get life-threatening diseases called opportunistic infections, which are caused by bacteria, viruses and other microscopic organisms that are usually harmless in healthy people.

To explain further, AIDS is called 'acquired' to distinguish it from inherited or genetic forms of immunodeficiency. It is also called 'syndrome' since it is a set of symptoms, which occur together, rather than a clear-cut disease. According to the National Institute of Allergy and Infectious Diseases report of 2002, the term AIDS applies to the most advanced stages of HIV infection and includes all HIV-infected people who have fewer than 200 CD4+ T-cells, whereas healthy adults usually have counts of 1000 or more.

Symptoms of opportunistic infections common in people with AIDS include: coughing and shortness of breath, seizures and lack of co-ordination, difficult or painful swallowing, mental symptoms such as confusion and forgetfulness, severe and persistent diarrhoea, fever, vision loss, nausea, abdominal cramps and vomiting, weight loss and extreme fatigue, severe headaches and, finally, coma. In the case of African Countries, tuberculosis (TB) is the most fatal of the opportunistic diseases (UNDP: 2003).

What is poverty?

Poverty has many dimensions and these angles have to be viewed through a variety of indicators. When measuring poverty at country level, indicators such as level of income and consumption, social indicators and indicators of vulnerability to risks and of socio-political access are commonly used (World Bank: 2003). A person is considered poor if his or her consumption or income level falls below some minimum level necessary to meet basic needs. This minimum level is usually called the "poverty line", according to the World Bank Institute of Research on poverty. In simple terms poverty can be defined as hunger; lack of shelter; lack of access to clean water; lack of resources that disable a person from going to school, to make choices and to take advantage of opportunities; a state of being sick and being unable to see a doctor due to lack of income and lack of representation and freedom. Poverty is generally characterised by the inability of individuals, households or entire communities to have sufficient resources to satisfy a socially acceptable minimum standard of living (David Philip: 2000). Poverty includes: food insecurity, crowded homes, lack of adequate pay and secure jobs, fragmentation of the family, and alienation of the community. For the purpose of this study, poverty is defined on the mentioned underlying factors.



Is there any relationship between poverty and HIV/AIDS?

In South Africa, more than 61% of children in SA live in poverty due to the direct impact of HIV/AIDS (AIDS foundation, South Africa: 2003). From the research conducted by Christo Greyling in his book called: HIV/AIDS and Poverty - A challenge to the Church in the New Millennium (Christo Greyling: 2003), it is evident that poverty and HIV/AIDS are closely linked to each other because they seem to have an increasing effect on each other. That is, while HIV/AIDS seem to increase poverty, poverty also causes an increase in the spread of HIV leading to AIDS (Christo Greyling: 2003).

How does HIV/AIDS affect or increase poverty?

It is evident that when individuals progress from HIV to AIDS, they suffer many bouts of illnesses for which they seek treatment. In the process, they spend money on medical care, traditional healers, and so forth as well as on nutrition and supplements to help them remain

healthy for a longer time period. At the same time, the income is reduced as a result of the person having HIV/AIDS. In simple terms, health expenditure increases for the infected person while spending on food and other household essentials decreases. This impacts negatively on children and women, followed by the impact of death, which is more serious in poor households. Poorer households are likely to be relatively stronger affected by HIV/AIDS since they have a high dependency ratio and since AIDS victims are likely to be exactly the income-earning members of the household. They have fewer resources to enable them to cope with the problem. The major concern is that HIV/AIDS is affecting mostly the poor who are living in the rural areas, mostly in the African Countries (Christo Greyling: 2003).

How does poverty affect or increase HIV/AIDS?

Although poverty does not cause HIV/AIDS, it helps the transmission, makes adequate treatment unaffordable and accelerates deaths from AIDS-related illnesses. Poverty also makes people more vulnerable to HIV infection, for example poor people will have a less robust state of health, which can result in a weaker immune system. They also have less access to health care facilities and to health education on issues such as HIV prevention.

There seems to be a wide range of factors that lead to poverty having a negative impact on HIV/AIDS. Many employers, seeing the impact of HIV/AIDS on their workforce, are not employing staff with full benefits, but rather take them on as temporary staff with no benefits such as medical aid. This in turn means that pensions and other benefits will not be available to meet family needs. This is one factor that affects employment in the country taking into consideration that a large percentage of people are unemployed. It is also important to acknowledge that unemployment is a significant contributor to poverty as observed by the United Nations Development Program (2000).

Poverty also increases the probability of young women and men turning to commercial sex work, selling their bodies to ensure that they survive, to gain an income in order to support younger siblings, to secure their next meal, and to gain shelter or raise money for school fees. This, of course, increases the number of individuals who are at risk of getting infected with the HI-virus (Christo Greyling: 2003).

The measurement of poverty

It is generally accepted that there can be no single, universal, accurate and unambiguous measurement of poverty because of the diversity of variables. This means that if it is to be measured, appropriate parameters have to be selected that, in combination, effectively constitute a working definition in the context of the study at hand. There are some indicators that can be used to measure poverty. These can either be 'performance' or 'means' indicators. Performance measures point to the outcome of particular forces whether social, cultural, economical or political. Means indicators provide information about the factors that lead to, or bring about, particular outcomes. These measures are necessary if a study of poverty is to have any use as the basis for policy prescription. In order to understand poverty one has to understand factors and forces involved in ownership, control and utilization of resources. In essence poverty is about the relationship of people to commodities and of people to people, although this is not to deny the potential influence as a causal factor in its occurrence.

Key indicators of Poverty in South Africa

In South Africa, poverty is linked with high unemployment, hunger and malnutrition, inability to pay or lack of access to health care and basic services, disintegration of families, vulnerability, risk of homelessness and sometimes despair. Among other indicators of poverty in South Africa, social indicators which include health, education, clean water and fertility seem to play a major role in determining the levels of poverty of the households, communities and individuals (Statistics South Africa: 2000).

Poverty is concerned with the social as well as physical needs. Household income does not only determine access to amenities, lifestyles and choices, it also regulates access to power structures. Low income households often find it difficult to afford the transport and other costs for attending and therefore participating on local-authority council meetings, school meetings, pressure group meetings, and therefore lose the opportunity to challenge decisions and policies that affect them (Statistics South Africa: 2000).

Like health, poverty is a wider concept than the absence of physical symptoms. Income is a key resource for families with low income. It determines access to a host of other resources for health. Some families with low income are at least able to afford or have access to good housing conditions but have very little choice about the type of accommodation or where they

live. They are more likely to live in rented accommodation that is insecure, overcrowded and in poor structural condition than higher income families.

Families in poverty can only afford poor quality equipment and furnishings that are badly designed, worn out or break quickly. Cheap goods not only lack the quality, but also frequently fail to meet the same safety standards as those of expensive goods.

Poverty and unemployment are closely linked because most of the poor do not have jobs and those who do, work for low wages often far away from their families. This makes the poor very dependent on social grants.

Impact on women

Women are heavily affected by HIV/AIDS. They are at greater risk of infection due to physiological, anatomical and socio-economical reasons. They appear to be exposed to the disease at earlier ages than men. For example, there is a preponderance of females in the ages 15-24 while men are slightly more predominant in the age group above 30 years. Researchers elsewhere in Africa frequently reveal that older men in particular are looking toward schoolgirls for sexual exchange. As those men begin to realize the real and quite personal dangers of intercourse with their usual partners, they entice young girls into sexual relationships, hoping that they may be relatively free of infections (Ezekiel Kalipeni:2004).

Throughout the world, the ratio of female to male cases is rising, but women in the Sub-Saharan Africa are said to be at greatest risk and show highest prevalence. Reasons for this are not entirely understood, but arise from the convergence of inequitable systems of gender politics and resource allocation, domestic violence, lower rates of education, high risk of unemployment and underemployment, rape and disproportionate impact of structural adjustment programs (Ezekiel Kalipeni: 2004).

According to many findings, it is clear that women-headed households in South Africa tend to be poorer than those headed by men (Love Life: 2004). Unemployment is far higher among women than it is in men. Even among married women there is a high level of economic maltreatment.

Individual Poverty

Poverty has implications on increasing risk behaviour in relation to HIV/AIDS transmission. Poverty leads to migration from rural to urban areas. This is an effect of industrialisation, which many developing countries have to pass through. The people who migrate from rural to urban areas are often low-skilled, farm labourers who cannot find employment in industrial cities and many of these people resort to informal sector work that includes prostitution, dealing in and selling of drugs. These activities put these people at risk in terms of sexually transmitted infections including HIV/AIDS contraction; prostitution, due to the use of high-risk sexual practices such as unprotected sex and in drug abuse, sharing of needles. In lesser-developed and developing countries, these factors of trying to escape poverty through prostitution and drug use are high (International Aids Economics Network: 2002).

Rural poverty and migration

According to the Oxfam poverty report, in rural areas, the most crucial asset is the land. Gross inequality in land ownership is a major obstacle in many countries towards improved human security and agricultural progress. The concentration of the land in the hands of the few also reduces productivity and leads to an insufficient use of resources. When moderations of agriculture take place in this situation, it frequently results in the further marginalisation of the poor, who become landless labourers or small holders with insufficient land to meet family needs for food and income. Some rural people find it difficult to even make use of the small available land because of the lack of financing for cultivation, irrigation and buying insecticides. They often use the ancient ways of cultivating and ploughing the land and as a result the produce becomes less and not good enough to be sold for profit. Only those individuals who have access to modern ways of agriculture are capable of growing agricultural products for profit and these exclude the poor. The poor also lack education in as far as the use of land is concerned, they don't have information on issues like seasonal crop rotation, and they only concentrate on growing maize. The resulting poverty forces people to migrate to already overcrowded cities or work in environmentally damaging gold mines. There are other factors which impact negatively on rural farmers including the lack of water for irrigation purposes. Only those that are educated and have money to sustain their productivity, manage to overcome such obstacles.

While urban areas lead in rates of infection, the disease is spreading rapidly in the rural areas, propelled by rural urban linkages, lower levels of knowledge about HIV in rural areas and disrupted sexual economies caused by the conditions of villages creating both circular movements and a two-way flow of people that help facilitate the HIV/AIDS exchange. In Southern Africa, rural areas have from colonial times traditionally sent thousands of its young men to the mines of South Africa to work on contract arrangements. During the course of their contract they turn to commercial sex workers serving the mines. It is estimated that nearly half of the mineworkers who return to rural areas infect their wives and other women. The rapid diffusion of diseases in this region has been ascribed to high levels of 'sexual mobility' and such factors as male premarital and extramarital sexual activity (Ezekiel Kalipeni: 2004).

Investment in Education

Investment in education is also one of the determinants of human welfare, opportunity and economic growth. The low earnings of people are partly a consequence of their low levels of skill and literacy. Studies in agriculture and industry show that the better-educated people adapt to new technologies more easily and have higher rates of productivity (Kevin Watkins: 1996). This increases their earning capabilities and employment prospects. In an era of rapid technological change, the skill base of the work force is becoming increasingly important to national competitiveness. The level of education, particularly in the case of women, plays a critical role in relation to health.

Girls tend to receive less education than boys because they are regarded to be more important to household subsistence than their brothers. Girls are therefore often kept at home to perform domestic work or to take care of younger siblings and as a result they are likely to be drawn out of school if a family crisis arises. Such practices have kept women trapped in cycles of poverty and illiteracy, which are transmitted across generations. In the recent years, there have been high levels of teenage pregnancies and many girls were forced to leave school at early ages to take care of their babies and that has contributed negatively to their education (Kevin Watkins: 1996).

HIV/AIDS AND POVERTY

According to the United Nations, AIDS is the leading cause of death in Sub-Saharan Africa and the world's fourth biggest killer. It is estimated that by the year 2010, about 40 million children will have been orphaned by the pandemic. HIV/AIDS poses a great threat to development in poor countries, as the impact is the hardest among the poor. The poor have little access to prevention services, condoms or any form of treatment. Only about one in five people that are at risk of HIV infection have access to prevention information and services (United Nations Development Fund: 2002).

Multiple dimensions of poverty

Income is not the only measurement of poverty and economic growth alone will not end poverty. Escaping poverty depends on improving personal (individual) capacities, and increasing access to resources, institutions and support.

Illiteracy, poor health, social exclusion, gender and discrimination contribute to poverty. Poor health diminishes personal capacity, lowers productivity and reduces earnings. A high prevalence of diseases and poor health in a country harms economic performance while higher life expectancy, a key indicator of health status, stimulates economic growth.

Progress has been achieved easier and faster in countries that have provided reproductive health services including family planning, increased coverage and equality of education, advanced gender equality and developed responsible and accountable systems of governance and social participation (United Nations Population Unit: 2000).

CHAPTER 3

SAMPLING TECHNIQUES AND SAMPLE DESIGN

A total purposive sample size of 200 households was selected. Out of these 200 households, 150 were randomly selected from a list of all the names of the areas (rural areas, township and suburbs) under the jurisdiction of Lusikisiki municipality. One rural area and one township were randomly selected from the list. The other 25% (fifty) of the total sample size was selected using the purposive sampling method from the MSF clinic as to get a reasonable number of households with at least a person infected with HIV. The convenience sampling method was introduced later after collecting the data from 150 households because only a few households responded of having one or more individual(s) infected or having experienced AIDS death(s). For this study a reasonable sample of households with infected individuals and those without was required to make comparisons and measure the impact of HIV/AIDS on poverty and vice versa.

Instruments

A questionnaire was designed for the survey and a few open-ended questions that were of qualitative nature were incorporated into the questionnaire. The survey questionnaire contained questions about the households and personal information of the people within those particular households that were visited for data collection. Other information that the questionnaire included were housing characteristics of households, access to basic services, health and transport facilities, households' deaths in the past 10 years and causes thereof, respondents' comments on the relationship between HIV/AIDS and poverty and finally the health status of the households' members (that is, sourcing information on whether there was any person infected with HIV within households).

Data Collection

The data collection process took a period of nearly one month, from May 14 to June 9, 2004. A list of all the surrounding areas of Lusikisiki including all the rural areas, a township and suburbs was used for the random selection of data collection sites. Two areas were randomly selected from the list, which included one rural area called Kwa-Dick, and one township by the named of Joe Slovo that is in the municipal area (a low income housing scheme). Structured survey questionnaires were used as a data collection tool and every household with older persons capable of responding and taking part in the study, was visited. The households with no such person were not sampled. Fifty households were visited in the selected rural area of Kwa-Dick and the rest of 99 households were visited in Joe Slovo area, making a total of one hundred and forty-nine (149 households).

A more reasonable sample of households directly affected by HIV/AIDS or people living with HIV/AIDS was still required. The researcher had to ask for permission from the Head of the government hospital (St Elizabeth hospital) to interview some of the patients, but the permission was denied due to constitutional, confidentiality and protection issues that must be preserved by the institution towards people living with HIV/AIDS. A non-government organisation became an alternative, and the researcher negotiated with a French-based organisation called MSF (Medecins Sans Frontieres), which launched a HIV/AIDS care, treatment and support programme in Lusikisiki on July 29, 2003. Those in charge then granted permission, but subject to the consent of those individuals the interview was going to be conducted on (i.e. the support group members in the Lusikisiki Village Clinic).

At the village clinic, the counsellor in charge also gave permission and informed the support group members about the study whereafter members agreed to take part in the study. It was a Tuesday support group, which had about 58 members out of which 51 agreed to take part in the study. This can create a bias in the final sample. The questionnaires were filled in during two consecutive weeks because some of the respondents had to leave due to time. Those that understood how to fill in the questionnaire took it home until the next Tuesday when everything was finalised and a required sample of 200 questionnaires was reached.

It is well understood that in almost every research there are difficulties that a researcher has to face depending on the nature of the study and other factors that may arise. In this particular instance, the researcher received some threats and warnings from some households about the

rate of crime in that particular area and that strangers are easily attacked. With personal interviews, where a researcher has to go from one household to the other, it is even more unpredictable as to what could happen because one meets with different people of whom some are friendly to talk to whereas others are not. Despite the dangers that a researcher is subjected to when conducting interviews, respondents also find themselves in an uncomfortable situation. For an example, the subject on HIV/AIDS is still a sensitive issue and one may find it difficult to ask questions related to it depending on the previous experience in a particular household. Questioning someone who has recently found out about their HIV-positive status can be very hard for both the respondent and the interviewer, especially for the respondent. It was a great experience to be in contact with these people and the issues that affect their living conditions and it brought much hope for them to have someone who was willing to visit and talk with them about these issues.

Procedures used for data analysis

The frequency procedure, cross tabulations (pivot tables) and logarithm of the odds ratio (log odds ratio) were used as data analysis methods. A combination of quantitative and qualitative research methods was used for achieving the objectives of the study. These methods were used to evaluate how often certain characteristics occur in the sample, to measure the risk associated with HIV/AIDS and poverty and to compare different groups within the same sample size.

Limitations and gaps in the data

The possible limitations of the data have to do with the sample size, which is not completely random and therefore has some bias. The sample size is also perhaps too small to represent the entire province, although some or many characteristics of the whole population may be observed within this sample. The sampling procedure also does not allow for generalisation of the results to the entire population of Lusikisiki.

CHAPTER 4

RESULTS

This section presents information on the sample size and characteristics thereof. Main findings are also presented and discussed. The subsections include demographic information, housing characteristics and access to basic services such as water, electricity, sanitation, and transport facilities.

Theory and methods

The logarithm of a sample odds ratio, which is an important measure of the degree of association or relative risk, has been used to test the association between the variables used and the presence of HIV-positive person(s) in the sampled households. The aim of using the odds ratio in order to measure risk or association is to establish whether there is a relationship between poverty and HIV/AIDS. All the other variables seek to measure the poverty status of the households and also to predict the risk of greater poverty in the midst of HIV/AIDS. However, whether HIV/AIDS will accelerate poverty or whether poverty increases the rate of spread of HIV, is established in relationships that are measured using the log odds ratio. The higher the log odds ratio, the greater the risk associated with a measured variable. If the log odds ratio is zero, it means that there is no risk associated with the variables.

Demographic information

Table 1: The total number of household members

	N	%
1-5	116	58%
6-10	69	34%
11-20	14	7%
more than 20	1	1%
Total	200	100%

Descriptive statistics for the number of household members

N	Minimum	Maximum	Sum	Mean
200	1	22	1097	6

The majority (58%) of the households indicated that they had between one to five household members. Around 42% of the households had more than five individuals within these households. Among the households that were visited, one had 22 household members. The results also indicated that the average number of people per household was approximately 6 individuals.

Table 2: Distribution of household composition by sex

	N	%
Female	629	57%
Male	468	43%
Total	1097	100

Females constituted a larger proportion of about 57%.



Table 3: Household head

	N	%
Mother	108	54%
Father	83	42%
Other	9	5%
Total	200	100%

Over 50% of the households in the sample were female-headed as apposed to 42% male-headed households. The other 5% of households were headed by both female and male youth (less than age of 25) who were neither mothers nor fathers. This question was also aimed at sourcing whether there were child-headed households, but none were found in this sample.

Table 4: Age of persons within households

Age	N	%
0 to 4	132	12%
5 to 14	268	24%
15 to 34	474	43%
35 to 64	200	18%
65+	23	2%
Total	1097	100%

The above table shows that the majority of the people within the households in the sample fell between the ages of 15 to 34 years. Approximately 34 % of the people were children aged zero to 14 while the elderly constituted only 2% of 1096 people sampled.

Table 5: Marital Status

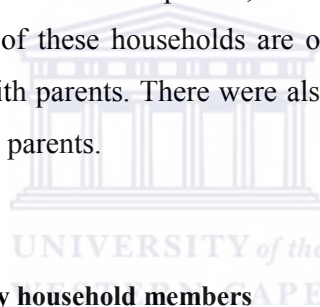
	N	%
Single	864	79%
Married	129	12%
Living together	42	4%
Widowed	38	3%
Divorced	24	2%
Total	1097	100%

Almost 79% of the households mentioned that they had household members who had never married before or were single. The other 21% is distributed among the married, partners living together, widowed and divorced or separated individuals.

Table 6: Relationship of household member to the household head

	N	%
Father/ mother	467	45%
Head/ acting head (to himor herself)	197	19%
Grand parent	162	16%
Spouse (i.e. Husband/wife/partner)	79	8%
Other relative (e.g. in laws)	59	6%
Sister/brother	50	5%
Non-related person	27	3%
Total	1041	100%

Approximately 45% of the individuals in the households visited indicated that the household head was either a father or a mother. Less than 10% of the people within these households indicated that the household heads were either spouses, other relatives such as in-laws, sisters or brothers, or non-related. Most of these households are of the extended family type even though most people are staying with parents. There were also a reasonable percentage (16%) of people that live with their grand parents.

**Table 7: Highest standard passed by household members**

	N	%
No schooling	42	5%
Sub A/ Sub B/ or Grade I/ Grade 2/ and Std 1	232	25%
Std 2/ Std 3	108	12%
Std 4	81	9%
Std 5	105	11%
Std 6	83	9%
Std 7	94	10%
Std 8	84	9%
Std 9	71	8%
Std 10/ Diploma / Certificate with Std 10	15	2%
National Diploma/ Degree	12	1%
Other (Honours Degree in Education)	1	0%
Total	928	100%

These results showed that there was an upward trend in the number of individuals in the sample that had less education or were still on lower grades whereas there were few individuals who had post-matric qualifications.

Table 8: Qualifications obtained and current studies within the visited households

	N	%
Education	16	64%
Economic & Management Science	3	12%
Accountancy	2	8%
Social Science	1	4%
Other	3	12%
Total	25	100%

Out of 25 individuals who had post-matric qualifications and were currently studying, 16 of them indicated that they either possessed qualifications in education or were studying in the same field. The remaining nine people were distributed among other fields of study as stated above.

Table 9: Did any member of the household receive any kind of training for skills used at work (e.g. welding, security guard, child caring, etc)?

	N	%
Yes	15	1%
No	1033	99%
Total	1048	100%

Only one percent of individuals within the 200 households indicated that they had received some training for welding or security guard.

Table 10: Employment status

	N	%
Unemployed	638	58%
Student	208	19%
Employed/ Working F/T	67	6%
Employed/ Working P/T	41	4%
Not yet economically active	42	4%
Not economically active	45	4%
Other (specify)	30	3%
Private Business/Self employed	26	2%
Total	1097	100%

The majority (58%) of the individuals within the sample of 200 households visited during the time of interviews declared that they were unemployed. Most of these individuals indicated that they were looking for employment though they were predominantly unskilled. The two percent self-employed or private business people included those that had their own ‘Spaza’ shops or were selling clothes or doing sewing.

Table 11: If employed, who is the employer?

	N	%
Government department	23	17%
Local Authority or Regional Authority (SAP, municipality)	4	3%
Public Corporation	16	12%
Private Sector Employer	41	31%
Self- Employment	9	7%
Household	20	15%
Other (specify)	21	16%
Total	134	100%

Most of the individuals in the sample (31%) showed that they were private sector employed, and this included furniture and retailer stores. Some (17%) indicated that they were employed by government Departments such as Education, Health and Social Development. Among different employers shown in the table above, 15% of the people in the sample showed that they were household employed to either keep children and or to do the daily domestic work.

Table 12: Employment sector

	N	%
Mining	9	16%
Manufacturing	6	11%
Electricity & Water	2	4%
Construction	6	11%
Wholesale & Retail	16	29%
Finance	2	4%
Educational Services	15	27%
Total	56	100%

The largest employment sectors in the sample were the wholesale and retail sector and the government sector (Department of Education). Only a few people indicated that they were employed in the financial sector (Banks and insurance companies) and electricity and water services.

Housing characteristics, sanitation, access to water and electricity

This section covers the basic needs such as shelter, water, sanitation and electricity, which are essential for household sufficiency. Poverty is said to exist when people or households do not have access to basic needs or lack the means to satisfy their basic and primary needs. Inaccessibility to basic services is also associated with poor health; hence impacting on HIV/AIDS. The section explores more than just the accessibility of these basic services, but the state of affairs thereof. For example, when one looks at access to water, one also wants to have an understanding of the water supply to assess the quality aspect of that water.

As part of the analysis, the log of the odds ratio which provides an estimate for the relationship between binary (“yes and “no”) variables was used.

The odds ratio is an important tool for testing and quantifying the association between two variables with dichotomous ratings. A log odds ratio that is greater than zero indicates higher risk of association, while that of zero or less shows no risk associated with the variables in question. The log odds ratio was transformed from the odds ratio (cross product of a 2X2 table), which was computed as follows:

For a 2x2 table displayed below,

	Variable1	
Variable 2	Yes	No
Yes	A	B
No	C	D

The odds ratio =AD/CB which is a simple cross product ratio. The natural logarithm of the odds ratio (log (AD/CB)) was then computed. It is more convenient to work with the log of the odds ratio than with odd ratio itself to interpret the findings due to the reason mentioned above.

Table 13: Housing characteristics

					Scaled		Unscaled	
		HIV+	HIV-	HIV+ %	Odds ratio	Log odds	Odds ratio	Log odds
Latrine	Yes	47	128	27%	0.8775	-0.13	0.3978	-0.9218
	No	12	13	48%	2.2060	0.79		
		59	141	30% Overall rate				

According to the results observed when measuring the association between the households that used latrines as sanitation facilities opposed to those households without sanitation facilities at all; the log odds ratio was found to be as high as 0.79 for the households without toilet facilities. The households without toilet facilities that had HIV-positive individual(s) constituted 48% while the households with toilet facilities and HIV-positive individual(s) comprised 27%, which is below the general (overall) percentage of 30%.

Table 14: Source of energy for Cooking

					Scaled		Unscaled	
		HIV+	HIV-	HIV+ %	Odds ratio	Log odds	Odds ratio	Log odds
Paraffin	Yes	15	89	15%	0.4028	-0.91	0.1992	-1.6135
	No	44	52	46%	2.0222	0.70		
Town gas	Yes	4	19	19%	0.5031	-0.69	0.4670	-0.7615
	No	55	122	31%	1.0774	0.07		
Wood	Yes	20	14	59%	3.4140	1.23	4.6520	1.5373
	No	39	127	24%	0.7339	-0.31		
Wood/paraffin	Yes	18	8	69%	5.3771	1.68	7.2988	1.9877
	No	41	133	24%	0.7367	-0.31		
Town gas/Electricity	Yes	1	5	21%	0.4780	-0.74	0.4690	-0.7572
	No	58	136	30%	1.0192	0.02		
Paraffin/Town gas	Yes	1	3	30%	0.7966	-0.23	0.7931	-0.2318
	No	58	138	30%	1.0044	0.00		
Electricity	Yes	0	1	25%	0.0000		0.0000	
	No	59	140	30%	1.0071	0.01		
Wood/Electricity	Yes	0	1	25%	0.0000		0.0000	
	No	59	140	30%	1.0071	0.01		
Wood/Paraffin/Gas	Yes	0	1	25%	0.0000		0.0000	
	No	59	140	30%	1.0071	0.01		
		59	141					

When households were asked about their cooking energy sources, 69% of them showed that they used both wood and paraffin and these households had HIV-positive person(s). The log odds ratio associated with these households was 1.68. Fifty-nine percent of the households indicated that they used wood and their log odds ratio was 1.23. Among the paraffin users (which made up a larger number of the sample), 15% of them had HIV-positive people and the log odds ratio is -0.91 opposed to town gas users with individual(s) diagnosed HIV-positive (approximately 17%) and risk as predicted by the log odds ratio was -0.23, taking into account that there were only a few of households using town gas.

Table 15: Source of energy for Lighting

					Scaled		Unscaled	
		HIV+	HIV-	HIV+ %	Odds ratio	Log odds	Odds ratio	Log odds
Electricity	Yes	36	137	21%	0.6280	-0.47	0.0457	-3.0857
	No	23	4	84%	13.7415	2.62		
Candle	Yes	9	4	68%	5.3771	1.68	6.1650	1.8189
	No	50	137	27%	0.8722	-0.14		
Paraffin	Yes	13	0	96%				
	No	46	141	25%	0.7797	-0.25		
Paraffin/ Electricity	Yes	1	0	75%				
	No	58	141	29%	0.9831	-0.02		
		59	141					

As far as energy sources for lighting were concerned, a large number of households indicated that they used electricity for lighting, of which 21% households in this category had individuals with HIV and the log odds ratio was -0.47. The proportion of households that use candles and also had HIV-positive person(s) was about 68%, showing a greater log odds ratio of 1.68.



Table 16: Water access

					Scaled		Unscaled	
		HIV+	HIV-	HIV+ %	Odds ratio	Log odds	Odds ratio	Log odds
Public tap	Yes	25	80	24%	0.7468	-0.29	0.5607	-0.5786
	No	34	61	36%	1.3320	0.29		
Protected well	Yes	3	37	9%	0.1938	-1.64	0.1506	-1.8933
	No	56	104	35%	1.2868	0.25		
Piped water (on yard)	Yes	0	22	2%	0.0000		0.0000	
	No	59	119	33%	1.1849	0.17		
River/Stream	Yes	30	0	98%				
	No	29	141	17%	0.4915	-0.71		
		59	141					

Water access as well as other basic services is also one of the most important indicators of the standard of living. The majority of the households (53%) in this particular sample showed that

they accessed water from public taps while 40 in 200 households used protected wells as water sources. Approximately 15% of the households indicated rivers and streams as the households' main water sources while 11% of the households showed that they had piped water in the yard and some had water tanks. The log odds ratio for the households that use public taps showed a lower risk association of -0.29. The log odds ratio was reduced to zero among the households that have piped water (in the yard) with a 0% proportion of individuals living with HIV in these households. Only a small proportion (8%) used protected wells as the main water source and these households also had at least an HIV infected person. The log odds ratio for this group was -1.64.

Table 17: Transport facilities to school / work

					Scaled		Unscaled	
		HIV+	HIV-	HIV+ %	Odds ratio	Log odds	Odds ratio	Log odds
Walk	Yes	43	98	31%	1.0486	0.05	1.1792	0.1648
	No	16	43	28%	0.8892	-0.12		
N/A	Yes	7	14	34%	1.1949	0.18	1.2212	0.1998
	No	52	127	29%	0.9785	-0.02		
Taxi	Yes	3	11	23%	0.6518	-0.43	0.6331	-0.4571
	No	56	130	30%	1.0295	0.03		
Own car	Yes	1	10	13%	0.2390	-1.43	0.2259	-1.4878
	No	58	131	31%	1.0581	0.06		
Bus / Taxi	Yes	0	4	10%	0.0000		0.0000	
	No	59	137	30%	1.0292	0.03		
Walk / Taxi	Yes	5	4	55%	2.9873	1.09	3.1713	1.1541
	No	54	137	28%	0.9420	-0.06		
		59	141					

When a question was asked about the kind of transport facilities used for both schooling and for going to work, the largest number among those who walked was affected by HIV/AIDS (i.e. households had one or more people living with HIV). This proportion rate was at 31%, and the log odds ratio associated with it was about 0.05. Among the households with individuals who were not using any transport facilities for going to work or for schooling, 34% was directly affected by HIV/AIDS and the log odds ratio was 0.18. For the taxi users, the percentage of the proportion of households who use taxis and have at least an individual living with HIV was 2% and the log odds ratio was -0.43. The proportion of the households

that had a member who used taxis while some members walked to school or work was 56%, the log odds ratio was the largest (1.09).

Table 18: Use of health facility in the last sickness

					Scaled		Unscaled	
		HIV+	HIV-	HIV+ %	Odds ratio	Log odds	Odds ratio	Log odds
Clinic/ Hospital	Yes	46	90	34%	1.2215	0.20	2.0051	0.6957
	No	13	51	21%	0.6092	-0.50		
Doctor	Yes	9	22	30%	0.9777	-0.02	0.9736	-0.0267
	No	50	119	30%	1.0041	0.00		
None	Yes	3	25	12%	0.2868	-1.25	0.2486	-1.3920
	No	56	116	33%	1.1537	0.14		
Pharmacy	Yes	1	3	30%	0.7966	-0.23	0.7931	-0.2318
	No	58	138	30%	1.0044	0.00		
Traditional healer	Yes	0	1	25%	0.0000		0.0000	
	No	59	140	30%	1.0071	0.01		
		59	141					

When respondents within the sampled households were asked about the kind of health facility used during the last sickness in the households, 34% of the households, which indicated that they had an HIV infected person(s) showed that they either visited a public clinic or a hospital. The log odds ratio associated with this category was 0.20. Those that visited the doctor during the last sickness and had reported a case of having individual(s) infected with HIV had a proportion of about 30%, and the log odds ratio was -0.02. The proportion of the households, which did not visit any health centre during the last sickness experienced and were affected by HIV/AIDS, was 11% and the log odds ratio was – 1.25.

Other housing characteristics

Table 19: Level of satisfaction with regard to households' living standards

					Scaled		Unscaled	
		HIV+	HIV-	HIV+ %	Odds ratio	Log odds	Odds ratio	Log odds
Dissatisfied	Yes	37	66	36%	1.3398	0.29	1.9112	0.6477
	No	22	75	23%	0.7010	-0.36		
Neither/nor	Yes	9	44	18%	0.4888	-0.72	0.3968	-0.9243
	No	50	97	34%	1.2319	0.21		
Satisfied	Yes	5	17	24%	0.7029	-0.35	0.6754	-0.3925
	No	54	124	30%	1.0407	0.04		
Very dissatisfied	Yes	8	14	37%	1.3656	0.31	1.4230	0.3527
	No	51	127	29%	0.9597	-0.04		
		59	141					

The responses about the level of satisfaction on the households' living standards revealed that a large proportion of households (37%) were very dissatisfied about their living conditions. Furthermore, these households had at least one person living with HIV/AIDS; the log odds ratio was estimated at 0.31. Thirty-six percent (36%) of households that reported dissatisfaction about their living conditions and at the same time had one person or more with HIV. The relative risk of association for these households was 0.29. The households that reported satisfaction while having individual(s) infected with HIV/AIDS were about 24%, their log odds ratio was as small as -0.35. Approximately 18% of the households, which also had at least an HIV-infected member(s), were neither satisfied nor dissatisfied about their living conditions. Their log odds ratio was -0.72.

Table 20: Does the household own a vehicle?

					Scaled		Unscaled	
		HIV+	HIV-	HIV+ %	Odds ratio	Log odds	Odds ratio	Log odds
Own a vehicle	Yes	1	14	9%	0.1707	-1.77	0.1564	-1.8553
	No	58	127	31%	1.0914	0.09		
		59	141					

Among the households that did not own any vehicle, 31% of those also had household member(s) living with the HI-virus and the log odds ratio is 0.09; whereas the proportion of those households that owned at least one vehicle and had an HIV-positive member was 7% and the log odds ratio for this group was as small as -1.77.

Table 21: Does the household own a television?

					Scaled		Unscaled	
		HIV+	HIV-	HIV+ %	Odds ratio	Log odds	Odds ratio	Log odds
Own a television	Yes	10	46	18%	0.5195	-0.65	0.4215	-0.8640
	No	49	95	34%	1.2326	0.21		
		59	141					

Among a large number of households that did not own television sets, 34% of them had HIV-infected member(s) and the log odds ratio for this category was quite high (0.21) compared to the -0.65 of the 18% of households that had television sets and had HIV-infected individual(s).

Table 22: Does the household own a refrigerator?

					Scaled		Unscaled	
		HIV+	HIV-	HIV+ %	Odds ratio	Log odds	Odds ratio	Log odds
Own a refrigerator	Yes	5	32	14%	0.3734	-0.99	0.3154	-1.1539
	No	54	109	33%	1.1840	0.17		
		59	141					

Out of a large number of households that did not own refrigerators, 33% of them also had HIV-infected members and the risk relative to this group was 0.17. The proportion of households with refrigerators and at least an HIV-infected individual was 14%, the log odds ratio was -0.99.

Table 23: Does the household own a telephone and cell phone?

					Scaled		Unscaled	
		HIV+	HIV-	HIV+ %	Odds ratio	Log odds	Odds ratio	Log odds
Telephone	Yes	31	96	25%	0.7717	-0.26	0.5190	-0.6559
	No	28	45	39%	1.4870	0.40		
		59	141					

The percentage of households that were without a telephone or a cellular phone and had at least one person infected with HIV was 39% and the log odds ratio was 0.40; whereas the proportion of the households that had either a telephone or cellular phone and someone with HIV was 25% with the log odds ratio of -0.26.

Table 24: Does the household have access to land for farming and growing crops?

					Scaled		Unscaled	
		HIV+	HIV-	HIV+ %	Odds ratio	Log odds	Odds ratio	Log odds
Access to land	Yes	51	50	51%	2.4376	0.89	11.6025	2.4512
	No	8	91	9%	0.2101	-1.56		
		59	141					

A small percentage (9%) of households that did not have access to land for farming also had members(s) affected by HIV/AIDS. The risk (log odds ratio) associated with this group was -1.56. The log odds ratio for the households that had at least one member living with HIV and had access to land for farming was huge (0.89), and the percentage of these households was 51%.

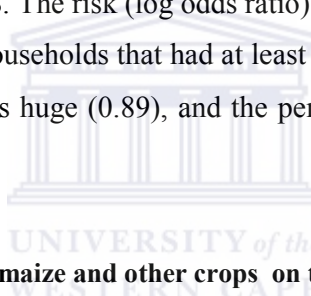


Table 25: Does the household grow maize and other crops on the available land?

					Scaled		Unscaled	
		HIV+	HIV-	HIV+ %	Odds ratio	Log odds	Odds ratio	Log odds
Grow maize & other crops	Yes	49	46	52%	2.5457	0.93	2.6630	0.9795
	No	2	5	31%	0.9559	-0.05		
	NA	8	90	9%	0.2124	-1.55		
		59	141					

When households that had one or more member(s) living with the HI-virus were asked if they produced maize and other crops on the land they had access to, 52 % of them responded that they did. The log odds ratio relative to this response was 0.93. Meanwhile, 31% of the households mentioned that they did not plant maize and other crops, the log odds ratio being -0.05. The remaining 9% represented the households that did not have any land for growing maize and other crops. The log odds ratio corresponding to this category was -1.55.

Table 26: Do the households grow vegetables?

					Scaled		Unscaled	
		HIV+	HIV-	HIV+ %	Odds ratio	Log odds	Odds ratio	Log odds
Grow vegetables	Yes	42	44	49%	2.2812	0.82	0.5303	-0.6343
	No	9	5	63%	4.3017	1.46		
	NA	8	92	8%	0.2078	-1.57		
		59	141					

Among the households that don't grow vegetables, 63% have at least an individual with HIV. Meanwhile, among the households that grow vegetables, 49% have at least an individual living with HIV. The log odds ratio for this group was 0.82. The households that did not have access to land for agricultural activities and had HIV-positive member(s) constituted 8% and their log odd was -1.57.

Table 27: Does anyone in the household receive any income from Old age pension fund?

					Scaled		Unscaled	
		HIV+	HIV-	HIV+ %	Odds ratio	Log odds	Odds ratio	Log odds
Old pension fund	Yes	16	16	50%	2.3898	0.87	2.9070	1.0671
	No	43	125	26%	0.8221	-0.20		
		59	141					

Fifty percent of the households that received an old age pension grant as one or other income source had at least one household member living with HIV and the risk as measured by the log odds ratio was 0.87. Among the households that did not receive an old age pension grant as a source of income, 26% represented the proportion of households that also had individual(s) infected with HIV and the risk was reduced to approximately -0.20.

Table 28: Does anyone in the household receive any income from disability grant?

					Scaled		Unscaled	
		HIV+	HIV-	HIV+ %	Odds ratio	Log odds	Odds ratio	Log odds
Disability grant	Yes	20	9	68%	5.3107	1.67	7.5214	2.0177
	No	39	132	23%	0.7061	-0.35		
		59	141					

Among the households which reported that they did not receive a disability grant as a source of income, 23% of them also had one or more member(s) infected with HIV and the risk derived from the log odds ratio was -0.35; while the proportion of the households which received the disability grant and had individuals infected with HIV was 68%, the risk for these households was 1.67.

Table 29: Does anyone in the household receive any income from child support grant?

					Scaled		Unscaled	
		HIV+	HIV-	HIV+ %	Odds ratio	Log odds	Odds ratio	Log odds
Child support grant	Yes	33	71	32%	1.1108	0.11	1.2514	0.2242
	No	26	70	27%	0.8877	-0.12		
		59	141					

An observed percentage of households which did not receive a child support grant as one or other source of income and had at least an HIV-positive person, was 27% and the corresponding log odds ratio was -0.12. Thirty-two percent of households indicated that they received child support grant as one or the other income source and those households had one or more members infected with HIV. The risk associated with these households was 0.11.



Table 30: Is there any person in the household who is self-employed?

					Scaled		Unscaled	
		HIV+	HIV-	HIV+ %	Odds ratio	Log odds	Odds ratio	Log odds
Self-employed	Yes	4	11	28%	0.8690	-0.14	0.8595	-0.1514
	No	55	130	30%	1.0111	0.01		
		59	141					

Among a group of households that received money from self-employment, 27% of those had at least a household member with HIV and the risk derived from the log odds ratio was reduced to -0.14. While the proportion of those households that did not receive income from self-employment was 30% and the corresponding log odds ratio was 0.01.

Table 31: Is there any other source (i.e. from employer, child maintenance, etc) except the sources mentioned above?

					Scaled		Unscaled	
		HIV+	HIV-	HIV+ %	Odds ratio	Log odds	Odds ratio	Log odds
Other income sources	Yes	25	96	21%	0.6224	-0.47	0.3447	-1.0652
	No	34	45	43%	1.8056	0.59		
		59	141					

The households that responded that they received income from other sources (employer or maintenance), constituted 21% and their log odds ratio was -0.47. The percentage of the households that did not have any member getting income from the above-mentioned sources and had one or more member(s) living with HIV was estimated at 43%. The risk for these households was as large as 0.59.

Table 32: Did the household experience any deaths in the past 10 years?

					Scaled		Unscaled	
		HIV+	HIV-	HIV+ %	Odds ratio	Log odds	Odds ratio	Log odds
Deaths in past 10 years	Yes	31	44	41%	1.6837	0.52	2.4407	0.8923
	No	28	97	23%	0.6898	-0.37		
		59	141					

When households were asked if any deaths have occurred in the past ten years, 41% of those households that responded that they did and these households had a member(s) infected with HIV. The log odds ratio for these households showed an increase in the risk of about 0.52. The proportion of households that did not experience deaths in the past ten years was 23%, these households also had at least a member infected HIV and the score as estimated by the log odds ratio decreased the risk to -0.37.

Table 33: Did the households experience any AIDS-related deaths in the past 10 yrs?

					Scaled		Unscaled	
		HIV+	HIV-	HIV+ %	Odds ratio	Log odds	Odds ratio	Log odds
AIDS-related deaths in past 10 yrs	Yes	11	9	55%	2.9209	1.07	3.5245	1.2598
	No	43	124	26%	0.8287	-0.19		
	Don't know	5	8	39%	1.4936	0.40		
		59	141					

The proportion of households that responded to have experienced AIDS-related death(s) and had a household member(s) infected with HIV was 55% with the corresponding log odds ratio as high as 1.07. The proportion of those households that had not experienced any AIDS deaths while having an individual(s) infected with HIV was 26% and the log odds ratio was -0.19. The proportion of households that were not sure if any AIDS death(s) had occurred was 39% with a positively skewed log odds ratio (high risk) of 0.40.

Table 34: In your own opinion: Do you think HIV/AIDS has an impact on poverty?

					Scaled		Unscaled	
		HIV+	HIV-	HIV+ %	Odds ratio	Log odds	Odds ratio	Log odds
Impact of HIV on poverty	Yes	56	122	28%	1.0970	0.09	2.2951	0.8308
	No	3	15	2%	0.4780	-0.74		
	Don't know	0	4	0%	0.0000			
		59	141					

When the respondents were asked if they thought HIV/AIDS had an impact in increasing poverty levels within the households affected by the pandemic, 32% of the respondents within the households with at least a person infected with HIV responded 'yes'. The log odds ratio was close to zero (0.09). Those that had an opposite opinion constituted about 18% of the sample and the corresponding log odds ratio was -0.74.

Table 35: What do you think about the impact of Poverty on HIV/AIDS; does poverty increase the rate of spread of HIV?

					Scaled		Unscaled	
		HIV+	HIV-	HIV+ %	Odds ratio	Log odds	Odds ratio	Log odds
Influence of poverty on spread of HIV	Yes	54	113	27%	1.1420	0.13	2.3894	0.8710
	No	5	25	3%	0.4780	-0.74		
	Don't know	0	3	0%	0.0000			
		59	141					

An overwhelming majority of respondents felt that poverty increases the rate of the spreading of HIV. Most of the respondents who felt this way mentioned commercial sex work as the leading factor in spreading the Human Immune Virus. Many of them referred to young girls being at risk as they are usually the ones who get involved in unprotected sex so as to get money in return to feed their families.

Diagram 1: Log odds scores of the households without any person living with HI virus

Stem	Leaves	Freq	% Freq
-15	77665 55555	10	7%
-10	44444 33333 33322 22222 22211 11111 11111 11100 00000 00000 0000	54	38%
-5	99999 99998 88888 88777 77666 66665	30	21%
-0	44433 33222 11111	15	11%
0	00	2	1%
0	11222 33333 44444 4	15	11%
5	55555 56677 7889	15	11%
Total		141	100%

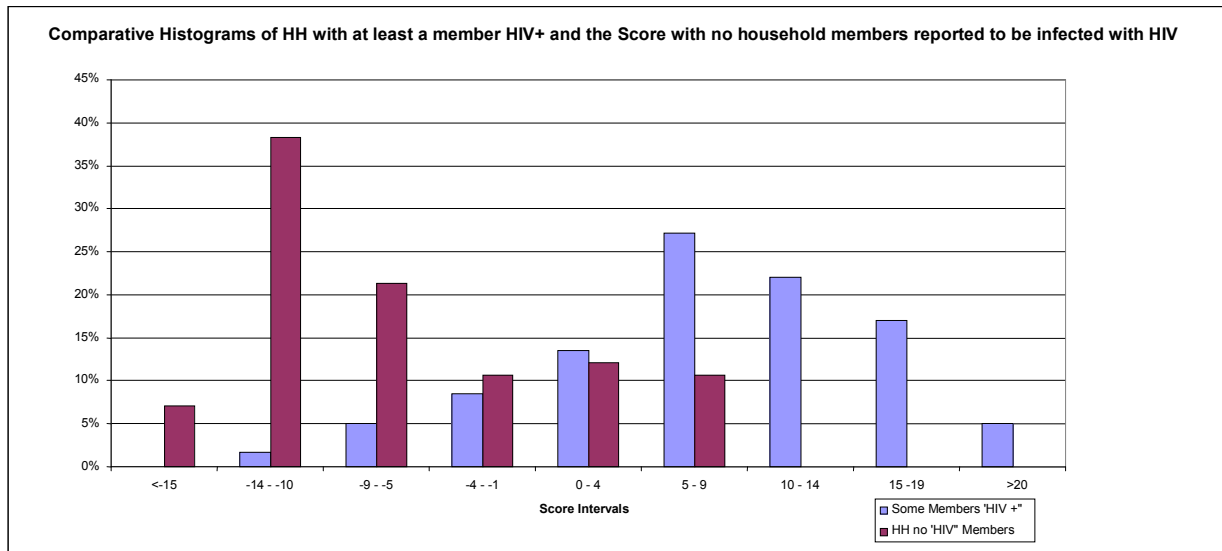
The above diagram represents the data observed when log odds ratio scores were formulated. The results on the above diagram showed that most of the data points (which add up to 77% households where no HIV case was reported) are skewed to the left, which indicates that the risk associated with these households is minimal. However, approximately 22% of the households where at least an HIV case was not known were associated with some risk due to high poverty levels.

Diagram 2: Log odds scores for the households with at least one person living with HIV

Stem	Leaves	Freq	% Freq
-15		0	0%
-10	2	1	2%
-5	866	3	5%
-0	22111	5	8%
0	00	2	3%
0	11222 4	6	10%
5	55567 77788 88889 9	16	27%
10	03333 33344 444	13	22%
15	55556 66677	10	17%
20	000	3	5%
		59	100%

Within households that were found to have at least one person infected with HIV, the log odds scores (data points) were skewed to the right. This in essence means that the risk associated with the variables that were used to measure poverty and standard of living in the sampled households and in relation to HIV infection, was relatively high. Only a few households had lower risks in association with HIV since only fewer data points scattered leftwards.

Graph 1: Histogram of the Households with one or more members with HIV and the score of the households with no one living with HIV.



The above graphical representation of the log odds scores shows the same findings for the two sets of households, i.e. those households affected by HIV and AIDS and those that did not report any cases of HIV-infection within their households. The same distribution as observed on the stem and leaf diagrams above is observed in this graph.

The results show that although HIV is known to infect any human being through blood transfusion, sexual intercourse, sharing of needles and poverty have an indirect impact on the spread of the virus, which could eventually lead to AIDS and death. The majority of households, which formed part of the sample, and could be considered poor, reported HIV cases. Not much could be said about the non-poor households. HIV and AIDS have a reputation of infecting and affecting the most poor people, households, communities, and countries throughout the world.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

This chapter gives an overall outline of the study and a discussion of the most important points. A relationship between HIV/AIDS and poverty will be stated based on the findings. Conclusions will be drawn from the findings and the reviewed literature while suggestions will also be made.

It can be concluded that Lusikisiki is one of the areas that have high poverty levels. To support this claim, it was established that there is a large number of individuals in the households aged 15 to 34 who are unemployed, unskilled, and dependent on social grants. These grants include children's support and parents' old age pension grants. Therefore, there is a high dependency ratio within this community. The literacy rate was also found to be relatively low. As a result of the lack of skills, the employed minority earn low wages. As it was earlier mentioned in the literature review, low skilled workers often earn low wages and work away from home. Without exception, Lusikisiki was proven not to be an exception as most household heads (fathers) were reported to be working far away from their families. The unemployment rate was far higher among women than it was in men as most women remain at home taking care of kids. Therefore, women-headed households tend to be poorer than those headed by men.

The majority of households reported that they did not have land for agricultural production to secure food and income. The small piece of land that some households owned was not used optimally due to the lack of equipment and technical knowledge. Escaping poverty depends on improving personal capacities and increasing access to resources, institutions and support but unfortunately for poor communities that is a challenge on its own.

During the time of the interviews, most of them that revealed that the household had someone infected with HIV or household members who died of AIDS had migrated for work at some point in their lives. Most of these people believed that these members got infected while away for work purposes. The literature stated that the people who often migrate from rural to urban areas are often low skilled and cannot easily find employment in industrial cities. As a result many of them resort to high-risk behaviours such as commercial sex work and unprotected sex, drug dealing, selling and abuse thereof and sharing of needles. Ezekiel Kalipeni mentions

in his book (HIV/AIDS in Africa beyond Epidemiology: 2004) that, while urban areas lead in rates of infection, the diseases are spreading rapidly in the rural areas. Rural- urban linkages, lower levels of knowledge of HIV (for instance) and disrupted sexual economies are the causes for the rapid spreading. Furthermore, the two-way flow of people facilitates the HIV/AIDS exchange.

As it was stated earlier, education is also one of the significant determinants of human welfare, economic growth and opportunity. As a result of low literacy and skills, people partly have low earnings. These results showed that there were many individuals who had informal education while only a few could be considered literate or had tertiary qualifications. However, it must be noted that the majority of the individuals in the sample were children and most of them were still in lower grades. Generally, the skills level of the majority of people that constituted the sample was low.

There was an overwhelming agreement among the respondents that HIV/AIDS and poverty were closely related. Most people stated that poverty in particular, forces young girls to engage in unprotected sex so as to support children and families and that put them at risk of HIV infection. This is what a girl aged 23 had to say about the impact of poverty on HIV/AIDS:

'Well, I think poverty has an impact on the spread of HIV because when you are poor you sometimes struggle even to have food and it is even worse if you have a kid. How do you take care of him? You must definitely do something and finding a job is impossible for a person like me who left school so early. The situation makes it easy for a person like me to meet a truck driver and get it going in exchange for money'.

The older people who shared the same sentiments about the impact of poverty on HIV/AIDS mentioned that younger girls tend to get involved with older men so as to get money and these older men tend to be in multiple relationships resulting in many girls getting infected. Nevertheless, there were fewer people who felt that poverty does not accelerate the spreading of HIV as they believed that the virus might possibly infect anyone irrespective of their well being. The only thing they seemed to uniformly agree on was that HIV/AIDS has a greater potential of causing poverty especially those who are already living in poverty. To support this view, several people stated that the disease attacks mothers and fathers leaving children orphans and vulnerable. Since there is also a high demand on children to be sent to school and receive better education, the situation of losing parents makes it difficult for children to receive such education. Therefore the cycle of poverty goes on for ages.

Currently, the situation of the households affected by HIV/AIDS is not satisfactory as many of these households are poverty stricken, and have no access to basic services like water, electricity and sanitation. Most of the economically active individuals are unemployed and the skills level is low. Among other things, these households do not own land and the pieces of land owned by a few are not used optimally and therefore do not generate income.

Generally, one can deduce that the rate of infection in Lusikisiki is high. This conclusion is based on the number of support groups at clinics and large numbers of people who attend these groups. In the current report published on October 31, 2005 by Kerry Cullinan, approximately 1 100 patients are on ARV treatment which has become the biggest rural treatment programme in the country. According to the Activity report compiled by MSF and Nelson Mandela Foundation, the rate of infection in pregnant women (testing during antenatal care) is approximately 33%. The antenatal HIV prevalence is among the highest in the rural areas of the country.

As it was mentioned earlier, NGOs such as MSF and Nelson Mandela Foundation are playing a major role in funding, support provision and education to the HIV-infected and affected households and the entire community. It is therefore recommended that such organisations should continue their hard work in overcoming the devastating impact that HIV/AIDS have in the community of Lusikisiki.

Programmes that would look at supporting orphans and children that have been made vulnerable by HIV and AIDS should be established by collaboration of different government departments such as Health, Social Development, Education and Housing among others.

The community needs to be capacitated and educated more on issues related to HIV/AIDS and sexual behaviours. Above all, the importance of investing in children's education needs to be emphasised to rural communities such as this one (Lusikisiki).

Finally, the Department of Local Government and Housing (Qaukeni Municipality) needs to ensure that basic services such as water (in particular), electricity and sanitation are provided to all the rural areas. Currently there are areas without water and people travel for more than 3 kilometres to access water from sources like dams; the water is sometimes not suitable for human consumption. There are still a large number of households without sanitation facilities and as a result an unhealthy environment is being created around such communities.

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