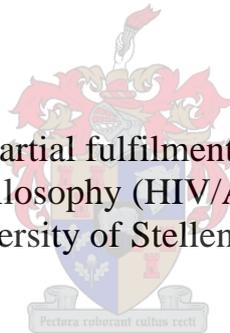


**A Technical Report on the development, implementation  
and evaluation of an HIV/AIDS workplace policy and  
program on a farm in Mpumalanga**

**A South African Case Study**

IDA DOYER

Assignment presented in partial fulfilment of the requirements for the  
Degree of Masters of Philosophy (HIV/AIDS Management) at the  
University of Stellenbosch



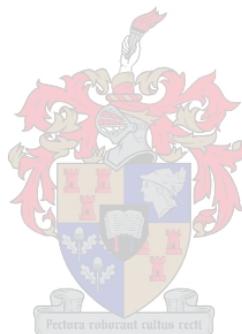
SUPERVISOR: DR H.D. VOS  
DECEMBER 2005

## Declaration

I, the undersigned, hereby declare that the work contained in this technical report is my own original work and that I have not previously in its entirety or in part submitted it at any university for a degree.

Signature:.....

Date:.....



## Summary

The population of rural agricultural South Africa is particularly vulnerable to HIV/AIDS due to the culmination of a variety of factors. Open discussions around sexuality, sex and sexually transmitted diseases are often limited in the more conservative rural areas resulting in limited knowledge on a disease such as HIV/AIDS. Lower levels of formal education impacts on understanding of physiological concepts such as “transmission”, “immune system”, “virus” etc. Income rate per annum is lower compared to urban dwellings resulting in limited financial resources as well as isolation from the tentacles of mass-media prevention and education messages on HIV/AIDS. Primary health care services in rural areas are often understaffed with limited resources, and unavailability of certain medication such as anti-retroviral drugs prevails. The combination of all the above-mentioned aspects leads to increased vulnerability to contracting HIV/AIDS.

Agricultural South Africa can and should contribute to economic growth and rural upliftment. The black landowners of South Africa is a valuable population regarding this idealism and should be empowered, educated and cared for. The HIV/AIDS disease poses a serious threat to the agricultural sector as well as the population of black landowners in rural South Africa. Action should be taken to accelerate HIV/AIDS interventions in rural areas, and private initiatives are desperately needed. If every farmer/landowner in rural South Africa were to enrol and finance an HIV/AIDS intervention program, the rural population of South Africa could be reached, educated and cared for sooner rather than later.

The objective of this research project was to record the process of development, implementation and evaluation of such an HIV/AIDS intervention on a farm. A homogenous population presented itself in the form of twelve full time employees and landowners on a farm in the Albert Luthuli district of Mpumalanga. An HIV/AIDS workplace policy and program were developed and implemented on the mentioned farm, and the effectiveness thereof was evaluated through post-intervention interviews. A control group consisting of eight farm workers employed on another farm in the district was identified and the same questions were directed at them in personal face-to-face interviews. The farm owner was interviewed to establish whether he perceived the implemented policy and program as valuable and profitable to the farm as a business. A qualitative case study design was thus utilised to obtain the results in this particular study.

The research results supported all four stated hypotheses and both the farm owner and employees perceived the implemented policy and program as positive, valuable and helpful. Valuable insight and knowledge were gained and recommendations to streamline an HIV/AIDS intervention on a farm are included in this technical report. Scientific research projects are crucial in the development of home-hitting and successful HIV/AIDS interventions, especially in rural South Africa.

If the results of a variety of interventions on farms were to be recorded and compared, valuable insight would be gained streamlining interventions on farms and minimising the detrimental effects of HIV/AIDS on rural areas of agricultural South Africa.

## Opsomming

As gevolg van die sameloop van 'n aantal spesifieke faktore is die plattelandse landboubevolking van Suid-Afrika besonder vatbaar vir die MIV/VIGS sindroom. Geslagtelikheid, seks en seksueel oordagbare siektes word nie openlik bespreek nie, met die gevolg dat kennis oor hierdie sake baie beperk is. Min skoolopleiding lei daartoe dat begrippe soos “oordraagbaarheid”, “immuunsisteem”, “virus” nie geredelik verstaan word nie. Lae gesinsinkomstes, min blootstelling aan die media wat boodskappe dra oor voorkoming en behandeling en die onbeskikbaarheid van anti-retrovirale middels is algemeen. Die gevolg is verhoogde vatbaarheid vir die MIV/VIGS sindroom.

Die landbousektor kan en moet sy deel doen aan ekonomiese groei en opheffing van Suid-Afrika. Swart grondeienaars is 'n kosbare bevolking en behoort opgelei, opgevoed en bemagtig te word. MIV/VIGS verteenwoordig 'n ernstige bedreiging vir die landboubevolking in plattelandse Suid-Afrika. Daadwerklike optrede is noodsaaklik en die inisiatief van die privaatsektor is onontbeerlik. As elke boer in Suid-Afrika betrokke sal raak en 'n program begin finansier, dan sal hierdie probleem hokgeslaan kan word.

Die doel van hierdie navorsingprojek was om die proses van die ontwikkeling, implementering en evaluering van 'n MIV/VIGS intervensie op 'n plaas te beskryf. 'n Plaas in die Albert Luthuli munisipaliteit in Mpumalanga is gekies. 'n Eenvormige bevolking van twaalf voltydse plaaswerkers en die plaaseienaar is gebruik. 'n Vigsbestuursprogram is ontwikkel en in plek gestel en by wyse van individuele onderhoude geëvalueer. 'n Kontrole groep van agt plaaswerkers op 'n naburige plaas is ook betrek en dieselfde vrae is aan hulle gevra. Ook die plaaseienaar het 'n evaluasie onderhoud gehad. Dit was dus 'n voorbeeld van 'n kwalitatiewe studie.

Die uitkoms van die studie dui daarop dat al vier die werkshipteses ondersteun is en dat sowel die plaaseienaar as die werknemers die beleid en die program positief en waardevol bevind het. Waardevolle insigte en kennis is opgedoen en aanbevelings oor die ontwerp en implementering van 'n MIV/VIGS bestuursprogram op 'n plaas word aangebied in hierdie verslag.

Wetenskaplike studie is belangrik vir die ontwikkeling van 'n sisteem om MIV/VIGS suksesvol te hanteer, veral in plattelandse Suid-Afrika. As soortgelyke programme kon ingestel en dan opgevolg word op 'n wetenskaplike basis, dan sou die gevolge van die MIV/VIGS sindroom in die platteland baie hanteerbaarder kon wees.

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# Chapter 1

## Introduction to the study

### 1.1 Introduction

Rural upliftment is considered as essential for economic growth in South Africa. All role players and especially black landowners in South Africa can and should, contribute to this idealism. This precious population should be empowered and preserved. The government is spending millions on the land reform program which aim is to have 30% of the commercial farmland owned and farmed by black landowners by the year 2015. It would be a tragedy if these landowners were not able to produce successfully due to poor health and mortality.

Rural areas in South Africa have however been neglected and came in second regarding HIV/AIDS interventions over the past few years. The rural population in South Africa consists of 58% of the total population as opposed to 42% in urban areas. The fact that HIV/AIDS primarily affects developing countries (mostly rural countries) implies that the actual number of infected individuals living with HIV/AIDS may be higher in rural areas of South Africa (Rural HIV/AIDS, 2005).

Lower levels of education in rural areas influence knowledge and insight in a disease such as HIV/AIDS. Concepts like “transmission”, “virus”, “symptoms”, “immune system” etc. are difficult to comprehend if basic knowledge on physiology and human anatomy lacks. Increased vulnerability to contracting the HI-virus is therefor a serious cause of concern due to lower levels of education that often exists in rural areas of South Africa.

Lower levels of education in rural areas also result in a lower income rate per annum, and poverty has been identified as one of the macro determinants of the HIV/AIDS disease (Sunter & Whiteside, 2001). Inaccessibility of electricity as well as luxuries to the likes of radios and television sets implicates that the tentacles of mass-media prevention messages about HIV/AIDS are unavailable and thus ineffective when it comes to the rural population of South Africa.

High dependency on agriculture in rural areas for food and income is another cause of concern relating to the HIV/AIDS disease. Lower levels of labor productivity as a result of morbidity, reduction of the labor force due to AIDS mortality, the withdrawal from the labor market to care for infected relatives, and a significant reduction in child labor availability because of infant mortality, are some of the negative effects the HIV/AIDS disease has, and will have in future, on rural agricultural South Africa (Rural HIV/AIDS, 2005).

Primary health care services are often also not on standard in rural areas. Inappropriate training, multiple roles to be performed by staff, heavy workload, infrequent and inadequate supervision, inequitable distribution of resources, poor facilities, infrastructure and transport are often some of the difficulties encountered in rural health care (“Voices” of Primary Health Care Facility Workers, 2005).

Communication about sexuality and sexually transmitted diseases is usually restricted in the more conservative rural areas. Cultural taboos and social stigma lead to a

culture of denial. This leads to lack of knowledge and insight and increases vulnerability to contracting a disease such as HIV/AIDS.

The need to initiate interventions on farms is paramount since the rollout of HIV/AIDS interventions through government into rural areas is a slow and tardy process. If every farmer in rural South Africa would initiate and fund an HIV/AIDS intervention program on his specific farm, the rural population of South Africa could be reached, educated and cared for almost simultaneously. It is time to give something back of what is due to the rural population and specifically the farm workers of rural South Africa.

The researcher was approached in January 2005 by a farm owner in the Albert Luthuli district of Mpumalanga to develop and implement an HIV/AIDS workplace policy and program for the farm. This opportunity was perceived as invaluable considering the importance of interventions in the rural agricultural sector of South Africa. A homogenous population presented itself in the form of all the workers on this specific farm. No previous HIV/AIDS intervention has ever been performed on this specific farm, or on any of the other neighboring farms in the district.

This specific farm in the Albert Luthuli district of Mpumalanga has been owned and farmed since 1880 by the same family. The fourth and fifth generation (father and son) are currently living on and farming the land. Most of the employees consist of families who have lived and worked on the farm since around 1910. The farm is thus one of rich tradition and heritage, with a special relationship existing among farm owner and employees.

## 1.2 Purpose of the project

The purpose of this technical report is to record the process of development and implementation of an HIV/AIDS workplace policy and program on a farm in South Africa, and more importantly to evaluate the effectiveness thereof.

The agricultural sector of South Africa can benefit greatly from research projects that would provide guidance regarding HIV/AIDS management on farms. This study aims at providing insights into the process of implementing and evaluating an HIV/AIDS intervention on a farm in Mpumalanga and would discuss the results obtained, difficulties encountered and pitfalls to be avoided.

## 1.3 Profile of employees

Twelve employees (mostly of the Ndebele and Swazi cultures) are currently being employed full time on the farm. Three part-time employees are utilized and remunerated on a day-to-day basis. All the full time employees are married and they all have children. The extended family structure exists, and the number of family members in a household differs depending on the school term/holidays.

All the permanent workers on the farm are landowners and part of the “Onbekend Farming Association” since 1998. They live on their own land in houses that they have built themselves, and in 40 percent of the houses electricity is provided by the Albert Luthuli municipality. The aim is to provide all the households with pay-as-you-go electricity. Running water is provided and readily available. All the landowners have small crops and gardens near their houses, where they mainly grow

maize, potatoes, tomatoes, spinach, carrots and cabbage. All the employees have livestock in the form of cattle, sheep, goats, pigs and/or chickens.

#### 1.4 Remuneration structure and benefits

The salary structure varies between R850 and R1443 per employee per month. No formal benefit structure exists. The employees are able to buy milk at the dairy as well as sheep from the farm owner at a drastically reduced price. Financial help is currently provided to three of the employees in order to aid them in the process of establishing their own crop farming business. The idea is to gradually provide financial help and assistance to all the landowners of the “Onbekend Farming Association”.

A formal policy regarding sick leave or absenteeism does not currently exist. The result thereof is that sick leave is paid in full, and remuneration is still received in spite of absenteeism. Compassionate leave (attendance of funerals) is granted each year, and this does not affect salaries.

A pension fund is at present being considered for employees as a benefit. Funeral coverage would be an important component of this fund.

Medical benefits are not provided although multivitamin and B complex tablets are provided monthly to every employee free of charge.

In order to achieve the idealistic goal of economic growth and rural upliftment in South Africa, the black landowners should be empowered, supported and preserved. HIV/AIDS poses a threat to this population due to lower levels of education and income that prevails in rural areas, limited communication around the disease because of cultural taboos and social stigma, and substandard primary health care services that often exist in these areas. There is a pressing need for HIV/AIDS interventions to be rolled out on farms in rural South Africa in order to educate and care for this disadvantaged population. Agricultural South Africa would benefit from scientific research in the field of HIV/AIDS management on farms in order to rise to the challenge of rural upliftment and economic growth in South Africa.

The next chapter contains an overview of the literature consulted preceding this research project. The definition of HIV/AIDS is provided, and current HIV/AIDS interventions in South Africa are discussed shortly. HIV/AIDS in traditional Africa as well as HIV/AIDS and the agricultural sector of South Africa are included in the literature review. Training interventions are also discussed since an HIV/AIDS intervention was developed, implemented and evaluated for the purpose of this research project.

## Chapter 2

### Literature study

Chapter two comprises of an overview of the literature consulted preceding this research project. The following aspects were identified as relevant to this study, and make up the literature review: the definition of HIV/AIDS, HIV/AIDS interventions in South Africa, HIV/AIDS in traditional Africa, HIV/AIDS and the agricultural sector of South Africa, and training interventions.

#### 2.1 The definition of HIV/AIDS

AIDS is the acronym for Acquired Immune Deficiency Syndrome. The disease is acquired and not inherited, and caused by a virus (the Human Immunodeficiency Virus or HIV) which enters the body from outside. The term *Immunity* refers to the body's natural ability to defend itself against disease and infections. *Deficiency* of a body's immune system refers to the fact that the immune system has been weakened/compromised in such a way that it can no longer defend itself against passing infections and disease. When a *syndrome* is used as a medical term, it refers to a set or collection of specific signs and symptoms that occur simultaneously and that are characteristic of a particular pathological condition (Van Dyk, 2001).

It is important to remember that although the term "disease" is used when we talk about AIDS, it is strictly speaking not a specific illness, but rather a collection of many different conditions (a syndrome). The HI-virus weakens the body's immune system in such a way that it can no longer fight any disease-causing agent. It would thus be more accurate to define AIDS as a *syndrome* of opportunistic diseases, infections and certain cancers – each or all of which has the ability to kill the infected individual in the final stages of the disease (Van Dyk, 2001).

#### 2.2 HIV/AIDS interventions in South Africa

In South Africa the focus of HIV/AIDS interventions are primary and secondary. The primary focus is on "biomedical" interventions, which aim to ensure that if a person has sexual contact with an infected individual, the risk of infection is reduced. Good sexual health and effective treatment of STD's (sexually transmitted diseases) are thus paramount (Sunter & Whiteside, 2001).

A second set of interventions (secondary interventions) focuses on altering sexual behaviour of people. These interventions usually include the knowledge, attitude and behaviour (KAB) messages. People need to have knowledge before they can change their attitudes, and finally their behaviour. In these education and prevention campaigns, people are encouraged to stick to one partner, delay their first sexual experience, and to use condoms. The familiar ABC message is portrayed:

- A = Abstain
- B = Be faithful
- C = Condomize (Sunter & Whiteside, 2001).

The above mentioned intervention strategy (ABC message) is an example of the "social marketing" approach that has been implemented since mid 1980's. The theory

behind this approach is that providing sufficient information regarding HIV/AIDS to the target population in a convincing manner would ultimately change sexual behaviour. This approach assumes that audiences are homogenous, absorb information presented to them and then react in a uniform way. Recipients of education messages are however diverse, and act in a variety of ways on information received (Foley, 1997).

### 2.3 HIV/AIDS in traditional Africa

It is important for any HIV/AIDS educator/trainer to understand and appreciate the traditional and unique African worldview in order to present successful education and prevention programs. This worldview has been ignored for far too long by the Western world. It is important to integrate the diverse culture and belief systems of Africa into current prevention messages, in order to provide home-hitting and successful interventions (Van Dyk, 2001).

Respect for, and knowledge of, people's traditions and ideas are very important, since people are generally slow to change their attitudes, traditions and behaviour. People are generally true to what they feel is right. Too often the human touch in the art of healing is lost when medical science moves in. If possible, combine what is best in modern medicine with what is best in traditional healing; the combination may be better than either one alone (Werner, 1995).

The African view on illness is an important concept to grasp, especially when perceptions around a disease such as HIV/AIDS need to be understood. If an individual gets ill in traditional Africa, he/she will not attribute such an event to fate or chance. Traditional Africans instead believe that a specific cause has directed every illness/disease, and it is therefore necessary to identify and eliminate this specific causal agent. In an attempt to understand the illness, traditional Africans will ask the questions "Why?" and "Who?" (Van Dyk, 2001). The following are believed to cause mental as well as physical illness:

- Disharmony with ancestors
- Witches
- A god
- A spirit
- Sorcerers
- A breakdown in human relationships
- Natural sources
- Heaven
- Contamination (Junod, 1927).

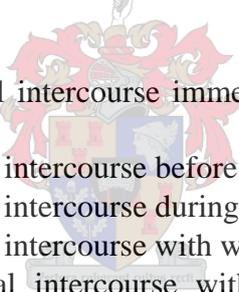
A greater understanding on perceptions of sexuality in traditional Africa is important, especially considering the rapid spread of the HIV/AIDS disease. In traditional Africa sex not only serves a biological function but also symbolises immortality. It is extremely important for traditional Africans to obtain personal immortality through their children. Children are perceived to be gifts from ancestors. (Kriel, 1992). If an individual does not have close relatives (like children) to be remembered by after death, he/she is perceived as insignificant and will simply vanish out of human existence after death. Procreation is perceived as a very important way to ensure

immortality. The ability to be able to bear children is therefore of the utmost importance to women in traditional Africa (Van Dyk, 2001).

Children are however not only a way to immortality, but also an important advantage for day-to-day functioning. Children, such as working in the fields, must perform many important duties. If the family were too small, these duties would be neglected. A man's wealth is thus determined largely by the amount of children he has fathered (Kriel, 1992).

If the concept of immortality and the value of children in traditional Africa are firmly grasped the concept of polygamy would be better understood. Reluctance to wear condoms and a woman's determination to have children (even if she is HIV positive) also become more understandable. Faithfulness between a husband and all his wives, would therefore be a more meaningful message to convey than that of monogamy (Van Dyk, 2001).

All traditional African beliefs and practices should not be stigmatised and condemned as harmful and ridiculous. Certain beliefs and practices can actually promote sexual wellness, and health care workers and trainers should focus on and encourage those practices. The PEN model is recommended in terms of which traditional cultural health beliefs and behaviour can be categorised as positive (P), exotic (E) or negative (N). Cultural behaviour and beliefs that fall into the category of positive include the following:

- 
- Discouragement of sexual intercourse immediately after a woman has given birth
  - Discouragement of sexual intercourse before marriage
  - Discouragement of sexual intercourse during menstruation
  - Discouragement of sexual intercourse with widows
  - Discouragement of sexual intercourse with women who have aborted or miscarried
  - Intercourse with a person with a STD is perceived as dangerous
  - "Thigh sex" and other forms of non-penetrative intercourse is encouraged for unmarried individuals (Van Dyk, 2001).

Behaviours and beliefs in traditional Africa that are unfamiliar and strange to the Western culture, but not necessarily harmful to health, are categorised as "exotic". These behaviours can include polygamous marriages, herbal remedies and cultural rituals (Van Dyk, 2001).

Negative cultural behaviours are those beliefs and practices that are harmful to an individual's health and should be changed, if possible. Examples include: multiple sexual partners, cleansing routines where a widow must have sex with a close relative, the custom of inheriting the wife of a deceased brother, the use of sex to express hospitality, the practice of "dry" sex, and female mutilation (Van Dyk, 2001).

HIV/AIDS in traditional Africa is a complex, interesting and very challenging phenomenon and it would be invaluable to not only condemn and criticise, but to aim at understanding and respecting traditional African beliefs and behaviours.

## 2.4 HIV/AIDS and the agricultural sector of South Africa

The World Health Organisation estimates that over seven million African farmers and farm workers have already died of AIDS since the year 1985. It is predicted that a shocking 16 million rural people will die of AIDS in Southern Africa by 2010. According to the World Health Organisation it is estimated that between 30 and 40 percent of Southern African farm workers are infected with the HI-virus. This would impact severely on the agricultural sectors as well as food security of these countries. Absenteeism and high staff turnover due to mortality have become a reality on many farms in rural South Africa. An important fact to acknowledge is that over 6.5 million people in South Africa directly or indirectly rely on primary agriculture as a means of livelihood (AgriAids, 2005).

AgriAids has identified a few important aspects regarding the impact of HIV/AIDS on the agricultural sector of South Africa:

- HIV/AIDS would impact on labour and production. Especially farms that are labour-intensive with a low level of mechanisation are at risk to develop labour shortages. Caring for infected family members will also reduce productivity among farm workers.
- The agricultural sector is at risk of losing knowledge and management skills among workers. Farmers would be forced to recruit new workers and the extra time spent on training would delay production. Experienced workers are lost and not available to younger generations.
- Rural decline is another risk the HIV/AIDS disease presents. More than two thirds of the population in the 25 most affected African countries live in rural areas. Health services are less available and information and education levels are generally low in these areas.
- Many farmers participate in small scale farming for subsistence purposes. HIV/AIDS would have a negative impact on crop yields, soil fertility, livestock production as well as a general reduction in land use. The fact that HIV-infected individuals need to focus on healthy living and the eating of fresh fruit and vegetables exacerbates that problem in rural South Africa.
- HIV/AIDS disproportionately affects women, and research indicates that 75% of newly infected people between the ages of 15 and 24 are female. This is due to physiological factors, but also reflects the unequal power relations between men and women, especially in the more conservative agricultural areas of South Africa.
- Cultural taboos and social stigma often lead to a culture of denial, especially in the conservative rural areas. Sexuality is rarely discussed, resulting in limited information regarding the disease (AgriAids, 2005).

AgriAids is an initiative formed last year (2004), aiming at raising awareness of HIV/AIDS in farming communities, and facilitating prevention and care campaigns. AgriAids is registered as a non-profit organisation and is run by volunteers. Funding is currently sought in order to establish this organisation as a permanent national initiative (AgriAids, 2005).

The Ndlovu Medical Centre is in partnership with AgriAids and has been developed over the last ten years by Dr HA Tempelman and his team in Mpumalanga. It is a private initiative that grew towards a community health care centre. General

Practitioners' services and community health services like a free TB-clinic, subsidised maternity services and a free anti-retroviral service for AIDS patients are provided. It is also an outreach service in the form of a Farm Pilot Project. The purpose was to develop a mobile HIV/AIDS Care Unit that can provide farm workers with critical ART-treatment, counselling and testing services. The project is being rolled out on five farms in two provinces (Gauteng and Mpumalanga). It will act as an intervention model that can assist in reducing the negative impact of HIV/AIDS on the agricultural sector (AgriAids, 2005).

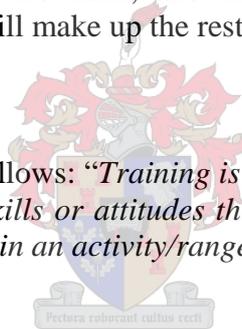
The Ndlovu project and AgriAids is in need of skill transfers and local existing HIV/AIDS strategies on farms that can be replicated. The researcher has contacted Dr Tempelman and a meeting was arranged in order to link the project on the farm in Mpumalanga to the mobile clinic service. Sustainability, continuity and forming of mutually beneficial and lasting partnerships are very important in order to achieve lasting results in the fight against HIV/AIDS in the agricultural sector of South Africa.

## 2.5 Training Interventions

The research project aims at clarifying the process of development, implementation and evaluation of an HIV/AIDS intervention on a farm in Mpumalanga. A training intervention was performed on the farm, and therefore a review of literature on intervention/training programs will make up the rest of this chapter.

### 2.5.1 Definition of training

The definition of training is as follows: *“Training is a planned and systematic effort to modify or develop knowledge, skills or attitudes through a learning experience; and to achieve effective performance in an activity/range of activities”* (Caple, 1992).



### 2.5.2 Adult education/training

Adult learning (andragogy) differs from pedagogy. The following are important factors to acknowledge when training adults:

- Adults are capable of designing and managing their own learning/training
- Adults can learn from one another
- The learning experience for adults should preferably be problem centred
- The learning design should promote the integration of information
- Exercises and cases should have fidelity
- Feedback and recognition should be provided and planned for (Ukens, 2001).

When training adults it is also important to remember that trainees are influenced by a number of factors, such as prior learning experiences, personal diversity, learner maturity, personal development goals as well as the workplace atmosphere (Charney & Conway, 2005).

### 2.5.3 Successful training

Trainers should be aware of the prerequisites for effective recollection of facts. People remember concepts they:

- Learned most recently
- Heard about more than once
- Were able to practice
- Could start implementing
- Understand are important
- Are encouraged or rewarded for using (Charney & Conway, 2005).

Successful training is a skill that requires dedication and enthusiasm. A number of criteria have been identified for training programs/interventions to be successful:

- All training goals should be linked to the goals of the organization
- Senior-level commitment and involvement is paramount
- Train a critical mass of people (or all of them!)
- Measure and evaluate the results
- Respect the principles of adult learning
- Use the best resources available
- Focus on real-world training
- Operate within the values of the organization (Charney & Conway, 2005).

#### 2.5.4 Successful HIV/AIDS adult education

A paper commissioned by the Australian Federation of AIDS Organization (AFAO) in June 1997 contains practical and valuable input with regard to best practice in HIV/AIDS adult education (Foley, 1997).

Six important aspects are discussed in the paper and highlighted as important to include in intervention programs. *Firstly*, peer education and peer educators should play an important role in any adult HIV/AIDS intervention program.

*Secondly*, the focus should be on learning how to live with HIV/AIDS, and on how to take charge and resume responsibility for your own health. The role of people living with AIDS (PWA's) would be invaluable in driving this message home.

A *third* important aspect in successful adult education is activism. People learn and gain insight by being activists for a common goal.

A *fourth* and important aspect that can not be overlooked in any adult HIV/AIDS intervention, is the provision of treatment (prophylactic as well as anti-retroviral medication).

The *fifth* component is that the organization should provide a feeling of communal striving towards a greater goal. Members of an organization learn from their collective experiences, and ultimately a learning culture develops within an organization.

The *sixth* and final component of value in adult HIV/AIDS education is to acknowledge the fact that individuals often learn through struggle. The struggle to obtain anti-retroviral treatment from the government in South Africa, played a vital role in raising awareness and teaching individuals about the HIV/AIDS pandemic (Foley, 1997).

### 2.5.5 Evaluation of training programs

Evaluation of the effectiveness of training programs is very important and should always follow any intervention performed. Three important reasons are identified for evaluating the effectiveness of a training program, and that is to be able to identify areas of improvement, to determine whether the course should be continued or discontinued, and to assess a program's role in an integrated training strategy (Charney & Conway, 2005).

Donald Kirkpatrick (1979) developed a model for evaluation of the effectiveness of training programs, and this model consists of four different levels:

- Reaction – monitor how well the participants liked the program. The subjective experience of the trainee with regard to the program should be collected at this stage of the evaluation process.
- Learning – monitor knowledge gained. Are the facts, principles and techniques discussed understood and remembered?
- Behavior – monitor whether transfer of learning took place and whether behavior has changed accordingly.
- Results – monitor the impact of the training program on the business/organization (Pfeiffer, 1994).

Training can also be evaluated by monitoring whether knowledge was gained, skills improved and attitudes changed or altered (Caple, 1992).

Training should always be a systematic process that follows a cyclical pattern of training design, conducting of training, monitoring of the effectiveness, and investigating of new training needs. The evaluation process plays a crucial role in the effective execution of the systematic training process (Caple, 1992).

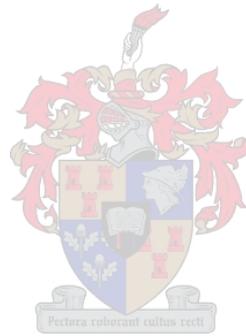
In this chapter an overview of the literature has been provided that was consulted preceding the execution of this research project. The definition of HIV/AIDS was discussed, and it was stressed that AIDS, although called a disease, is in fact a syndrome or collection of opportunistic infections and cancers. The Human Immunodeficiency Virus (HIV) causes this disease and weakens the body's immune system.

Current HIV/AIDS interventions in South Africa are primary (biomedical) or secondary (social marketing approach). The biomedical approach focuses on optimal sexual health and early treatment of sexually transmitted diseases, while the secondary approach provides information on HIV/AIDS and aims at altering sexual behaviour. It is important to acknowledge and respect the traditional African worldview on health when an HIV/AIDS intervention is executed in rural South Africa.

HIV/AIDS poses a threat to the agricultural sector of South Africa and AgriAids has been initiated in response to this problem. Training and intervention programs should be preceded by thorough literature review and planning, and should be relevant and effective. Foley published a paper (1997) on best practice in HIV/AIDS adult education containing six aspects highlighted as important to include in intervention

programs. Training programs and interventions should always be evaluated in order to monitor the success thereof.

The next chapter contains the research methodology implemented in this project including the research problem, objectives, research question, hypotheses, research design, research population, data gathering, method of analysis, ethical considerations and control of extraneous variables.



## Chapter 3

### Methodology

Chapter three entails the research methodology implemented in this project. The research problem is stated firstly, and then the subsequent objectives and research question follow. Four hypotheses are stated, and the research design implemented is a non-experimental qualitative case study. The research population presented itself in the form of a homogenous group of farm workers (and landowners) on the specific farm in Mpumalanga. Data gathering and method of analysis will be discussed in detail, as well as ethical considerations and the control of extraneous variables.

#### 3.1 Research problem

The high prevalence rate in Mpumalanga, as well as the lack of formal research projects concerning HIV/AIDS education in the agricultural sector of rural South Africa initiated the research problem. The process of development and implementation of the HIV/AIDS workplace policy and program on the farm was recorded in the form of a case study, and the effectiveness thereof was monitored. The research problem can be defined as follows:

HIV/AIDS education in agricultural South Africa is not adequately recorded. The process of development, implementation and evaluation of HIV/AIDS workplace policies and programs on farms is not properly quantified. Intervention strategies can not be streamlined and adjusted without formal research projects pointing out pitfalls and shortcomings.

#### 3.2 Research objectives and research question

The objective of this research project was to record the process of developing and implementing an HIV/AIDS workplace policy and program on a farm in the Albert Luthuli district of Mpumalanga South Africa. The effectiveness of the program needed to be evaluated and recorded, in order to provide insight into the pitfalls and problems to be avoided when undertaking such an intervention project in the agricultural sector of South Africa.

The objectives set for the study related to the following research questions:

- “Do the employees on the farm perceive the HIV/AIDS workplace policy and program implemented, as valuable and positive?”
- “Is there a significant relationship between the HIV/AIDS workplace policy and program implemented, and the heightened knowledge and changed behavior regarding HIV/AIDS among the employees on the farm?”
- “Is there a significant relationship between the HIV/AIDS workplace policy and program implemented, and the success of the farm as a business?”

Kirkpatrick (1979) developed a widely used tool to evaluate the effectiveness of training programs, and the following four identified areas (see literature study Chapter 2) were utilised as particular research objectives:

- Whether the employees experience the policy and program implemented as *valuable and positive*.
- The relationship between the program implemented, and the *knowledge/insight* gained regarding HIV/AIDS.
- The relationship between the program implemented, and *behavioral change* with regard to HIV/AIDS related issues (safer-sex practices, greater care taken when confronted with blood etc).
- The relationship between the program implemented, and *the impact on the farm as a business*.

### 3.3 Hypotheses

With reference to the above stated research problem, objectives and questions, the following hypotheses were set:

- H1: The farm workers perceive the HIV/AIDS workplace policy and program implemented as positive and valuable.
- H2: There is a significant relationship between the HIV/AIDS workplace policy and program implemented, and the heightened knowledge of the farm workers regarding HIV/AIDS.
- H3: There is a significant relationship between the HIV/AIDS workplace policy and program implemented, and the changed behavior of the farm workers regarding HIV/AIDS related issues (for example the use of safer-sex practices and greater caution when confronted with blood).
- H4: The HIV/AIDS workplace policy and program implemented has a significantly positive impact on the farm as a business.

### 3.4 Research design

A non-experimental qualitative research design was implemented in this particular study in order to provide a descriptive account of events. Non-experimental descriptive research focuses particularly on describing some phenomenon, event or situation (Christensen, 2001). In this regard, the objective was to describe the steps taken in the process of developing, implementing and evaluating an HIV/AIDS workplace policy and program on a farm in Mpumalanga. A thorough and accurate description of the following is included in this technical report:

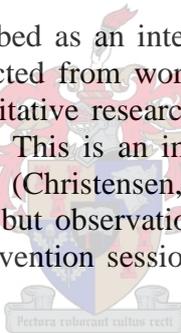
- The process of developing and implementing the HIV/AIDS workplace policy (the complete draft of the policy is included as appendix 1)
- The process of developing and implementing the HIV/AIDS program (all the intervention sessions are included as appendixes)
- The process of evaluation of the HIV/AIDS workplace policy and program
- The reaction of the farm workers to the program implemented

- The relationship between the program implemented and the knowledge gained regarding HIV/AIDS among the farm workers
- The relationship between the program implemented and changed behavior of the farm workers with regard to HIV/AIDS related issues
- The relationship between the program implemented and the success of the farm as a business.

A non-experimental qualitative research design was utilized in this study because non-numerical data was collected in order to answer the research questions. Non-numerical data usually consists of data such as statements made during an interview, written records, pictures, clothing, observed behavior etc. (Christensen, 2001).

The case study design was considered for this research project. A case study design is regarded as qualitative research in which the researcher explores a single entity or phenomenon (the “case”). In this particular study, the workplace policy and program implemented on the farm were studied. The research project is bounded by time and activity (a *program*, event, process, institution, or social group) and collects detailed information during a sustained period of time. Case studies are in-depth studies of the phenomenon of each case in its natural context and include the point of view of the participants (Leedy, 1997).

Qualitative research can be described as an interpretative method because meaning and interpretation has to be extracted from words, pictures and observations. The multimethod characteristic of qualitative research implies that a variety of methods are used in order to collect data. This is an important aspect, as it leads to more accurate and complete information (Christensen, 2001). In this particular study, in-depth interviews were conducted, but observation as well as verbal and non-verbal feedback received during the intervention sessions, supplemented the data collected during the interviews.



### 3.5 Research population and sampling of research participants

As mentioned earlier in this paper, the workers on a farm in the Albert Luthuli district of Mpumalanga became one of the first communities of landowners in October 1998 through the government’s land reform program. The “Onbekend Farming Association” was founded.

Black landowners in South Africa form a valuable population in our country, and they could contribute to the rural upliftment that is so desperately needed in South Africa. This conviction, the fact that the farm owner requested and supported the development and implementation of an HIV/AIDS workplace policy and program on the farm, and the serious need in the agricultural sector of South Africa for scientifically recorded interventions, led to the identification of this particular research population.

All the full time employees on the mentioned farm (twelve individuals) were included in this research project. Only ten of the employees were available on the day the interviews were conducted. Random sampling of participants was therefore not applicable in this particular study.

A group consisting of eight farm workers employed on another farm in the district of Albert Luthuli in Mpumalanga was identified as a control group. The same post-test evaluation was performed and the results obtained from the two different groups were analyzed and compared.

### 3.6 Data gathering

A survey was conducted (on ten of the research participants, the farm owner as well as the control group) in order to collect the data needed for this particular study. A survey is a field study in which an interview technique is used in order to gather data on a given state of affairs in a representative sample of the population (Christensen, 2001). According to Christensen (2001), a survey is a widely used technique in non-experimental research approaches. It represents a probe into a given state of affairs that exists at a given time. In this particular study, a probe into the current state of affairs (the development, implementation and success of the HIV/AIDS workplace policy and program) was executed.

Direct contact with all the research participants was made, and face-to-face interviews were conducted on the two farms. Several methods could be used to conduct a survey, such as the face-to-face method, the telephone method, the random-digit dialing method and the mail method (Christensen, 2001). A face-to-face personal interview was however singled out for this particular study, as it provided more detailed information. The interviewee's answers to the questions were perceived as primary data, and observation of the research participants was secondary data.

A set of questions was prepared in advance, and the questions were compiled in such a fashion that information relating to the four stated hypotheses was collected. Information was collected on the following issues:

- The reaction of the research participants to the program (whether they perceived the program as *valuable and positive*).
- *Knowledge gained* concerning HIV/AIDS.
- *Changed behavior* (if any) concerning HIV/AIDS related issues (safer-sex practices and greater care taken when confronted with blood).
- The impact of the program on the *farm as a business*.

The interviewer asked mainly open-ended questions that enabled the respondents to answer in any way they please. Answers to open-ended questions are valuable when the interviewer needs to know what people are thinking and feeling regarding certain issues. Interviews were conducted with the help of a translator (an HIV/AIDS worker from the Albert Luthuli municipality who also performed the last intervention session with two other peer educators) in order to translate questions into the mother tongue of the research participants.

Another important factor when conducting interviews is to structure the interview in such a way that makes the research participants feel comfortable and relaxed. A few initial questions were asked in order to establish an open and honest relationship (to a level that is realistic and achievable in a short period of time). The interview must not be too long, complicated, tedious and digressive. It should be well structured, well planned and most of all, well executed.

### 3.7 Method of analysis

The researcher carefully wrote down the answers to all the in-depth open-ended questions. Questionnaire sheets were developed where enough space was left underneath every question for the researcher to write responses down (in English) when interviewing the research participants, as well as the control group of farm workers from another farm in the district. The researcher interviewed the farm owner in Afrikaans (the farm owner's mother tongue). These answers were written down on the questionnaire sheet.

Four clusters of questions were developed, consisting of five questions each. Four sections therefor exist in order to test the four stated hypotheses. The first three clusters of questions were on the questionnaire sheets designed for the interviews with the farm workers. The second and third clusters of questions were utilized in the interviews with the control group. The fourth cluster of questions (designed to monitor the impact of the policy and program on the farm as a business) were directed at the farm owner.

For each question, two opposite meanings existed. The answers were interpreted and categorized into these two groups of meaning. For the purpose of this study, the two groups were headed as "positive impact" and "no significant impact" of the policy and program. The number of answers received as "positive impact" and as "no significant impact", were calculated. The average number of "positive" and "no impact" answers for cluster one; two and three were then calculated and compared to the answers received from the control group. Eventually, through the systematic categorization and calculation of answers received from the research participants and the control group, the first three hypotheses were either supported or rejected. The fourth hypothesis would be supported or rejected only through the interpretation of the answers provided by the farm owner.

### 3.8 Ethical considerations

The consideration of ethical issues is an integral part in the development of any research design. The treatment of research participants is one of the most fundamental issues confronted by scientists (Christensen, 2001). It is of the utmost importance to always treat research participants fairly and justly. Consent of the participants is very important, and a potential participant who has received an explanation of the procedure to be followed would have the right to provide or withhold informed consent. In this particular study, informed consent was obtained in advance and the objectives and importance of the study were thoroughly explained. The identities of the research participants and the members of the control group were kept confidential. No names were linked to the answers obtained on the questionnaires.

### 3.9 Control of extraneous variables

Control of any scientific experiment is very important. Control of extraneous variables would ensure internal validity of the experiment (Christensen, 2001). Extraneous variables can not always be fully eliminated, but should be acknowledged and minimized. In this particular study certain extraneous variables like past experience, intelligence and history could not be changed or controlled.

The following aspects were accepted as constant, in an attempt to provide as much control, and thus internal validity, as possible:

- All the research participants were of the same gender – men
- All the research participants live on Onbekend farm in the Albert Luthuli district of Mpumalanga
- All the research participants are landowners since October 1998, and part of the “Onbekend farming association”
- All the research participants are employees on the same farm in Mpumalanga
- All the research participants are from two African cultures: The Swazi and Ndebele cultures (both part of the Nguni culture)
- All the research participants grew up in rural areas of South Africa
- Most of the research participants only have primary education, and some never received any formal education (only two of them have matriculated)
- All the interviews were conducted on the farm
- All the interviews were conducted by the researcher with the help of an HIV/AIDS worker from the local municipality (for translating purposes)
- All the interviews were conducted over the period of two days, in order to minimize discussions among the participants
- The control group was a group of eight farm workers (all from the same farm) in the district of Albert Luthuli municipality.

Another important extraneous variable that might be present in this particular study, is the variable of positive self-presentation. Positive self-presentation is a participant’s motivation to respond in such a way as to present themselves in the most positive manner (Christensen, 2001). In this particular study the fact that the researcher is the daughter of the employer of the participants, might have lead to positive self-presentation. This extraneous variable needs to be acknowledged, and where possible, minimized. It is important to stress the fact that the results were anonymous and that the researcher was only interested in the truth, and not in the “performance” of the individual participants.

Any researcher should also be aware of the perceptions, attitudes and beliefs that he/she contributes to a research study. These extraneous variables are called experimenter attributes and experimenter expectancies, and should be acknowledged and controlled as far as possible (Christensen, 2001).

Chapter three explained in detail the research methodology implemented in this research project. The research problem, objectives and question were stated initially, and the subsequent hypotheses were derived from that starting point. The research design was selected and implemented and the process of data gathering and analysis followed. Ethical considerations are of paramount importance during the implementation of any research project, as well as the control of extraneous variables in order to ensure reliability and validity of the results obtained.

The next chapter contains the results obtained from the face-to-face interviews conducted with the research participants, control group and farm owner.

## Chapter 4

### Results

Chapter four comprises of the results obtained from the interviews conducted with the ten research participants, the control group consisting of eight farm workers, and the farm owner. All the questions asked as well as the answers provided are to follow.

#### 4.1 Stated Hypotheses

The following four stated hypotheses were tested:

- The farm workers perceive the HIV/AIDS workplace policy and program implemented as positive and valuable.
- There is a significant relationship between the HIV/AIDS workplace policy and program implemented, and the heightened knowledge of the farm workers regarding HIV/AIDS.
- There is a significant relationship between the HIV/AIDS workplace policy and program implemented, and the changed behaviour of the farm workers regarding HIV/AIDS related issues (for example the use of safer-sex practices and greater caution when confronted with blood).
- The HIV/AIDS workplace policy and program implemented has a significantly positive impact on the farm as a business.

#### 4.2 Results achieved

The results obtained from the face-to-face interviews are systematically discussed in the following segment and questions six to fifteen contain the answers provided by the research participants, as well as the answers obtained from the control group:

##### **Question 1 - Are you happy about the fact that an HIV/AIDS policy and program were implemented on this farm?**

All the research participants (100%) perceived the HIV/AIDS workplace policy and program as positive, valuable and enjoyable. They verbalised that HIV/AIDS was unfamiliar and scary to them at first, but that the program highlighted the “good news” relating to HIV/AIDS - the fact that death is not immediate and that healthy living can prolong the onset of full-blown AIDS.

##### **Question 2 – Do you think that HIV/AIDS education on farms is important and necessary?**

All the participants (100%) were of the opinion that HIV/AIDS education on farms is important and necessary. They felt that the education should be expanded to family members as well, and the need to protect their children against the disease was verbalised.

### **Question 3 – Did you enjoy the sessions?**

All the participants (100%) thoroughly enjoyed the intervention sessions. The researcher always introduced an activity during these sessions in order to facilitate participation, discussions and humour. The observed behaviour during the intervention sessions confirms that the participants enjoyed the sessions very much.

### **Question 4 – Did you learn new facts during these sessions?**

All the participants (100%) confirmed that they did indeed learn new facts during the intervention sessions. The following were identified as previously unknown to them:

- The correct way to use a condom
- The danger of STD's (sexually transmitted diseases) and the importance to receive medical treatment as soon as possible
- The danger of contaminated blood and the importance of glove-use when confronted with a bleeding individual
- The fact that new-borns (one in every three) can contract the HI-virus from breast milk if the mother is HIV positive
- The importance of condom use in order to protect themselves against contracting the HI-virus
- The importance of a healthy diet in order to build up your immune system and to prolong the onset of full blown AIDS
- The importance to talk to their children about the danger of HIV/AIDS. It was verbalised that it is easier to talk to their spouses about HIV/AIDS, than to address the issue with their children.

### **Question 5 – Do you think this program should be presented on other farms in the district as well?**

All the participants (100%) were of the opinion that it would be important to present HIV/AIDS education programs on other farms as well. They verbalised that the program should be reproduced on all the farms in the district in order to save lives and to ensure a future to other farm workers as well. Concern for the children was also expressed again.

### **Question 6 – What is contracted first, HIV or AIDS?**

70% of the *research participants* correctly answered that HIV is contracted first. One of the participants was unsure, and two participants were of the opinion that AIDS is contracted first.

75% of the *control group* was able to answer this question correctly.

### **Question 7 – Name a few modes of transmission?**

All the *research participants* (100%) were able to name modes of transmission correctly. They all verbalised that unprotected sex (sexual intercourse) as well as contact with contaminated blood could lead to HIV infection.

Only 37% of the *control group* were able to correctly name both unprotected sex as well as contact with contaminated blood as modes of transmission. One participant was of the opinion that sharing a toilet can lead to HIV infection. 75% of them were aware of the danger of unprotected sex, but unaware of the danger relating to contact with contaminated blood. 25% of the control group verbalised that they did not know how HIV was contracted.

**Question 8 – Is it safe to share toothbrushes, needles and razors?**

All the *research participants* (100%) were aware of the danger in sharing toothbrushes, needles and razors. They were all able to verbalise that the sharing of these objects with infected individuals could lead to HIV infection.

87.5% of the *control group* were able to answer this question correctly.

**Question 9 – Is it possible to see whether a person is HIV positive?**

All the *research participants* (100%) were able to answer this question correctly. They all knew that it is not possible to see if an individual is HIV positive and that a blood test would have to be performed in order to confirm an individual's HIV status.

Only 25% of the *control group* knew that it is impossible to see if an individual is HIV positive. 75% of the workers were of the opinion that HIV positive individuals were very thin. One of the workers verbalised that diarrhoea, vomiting and sores around the mouth area are indications of HIV infection.

**Question 10 – Where can you go to get tested for HIV, and why is it necessary to undergo a test?**

All the *research participants* (100%) were able to name at least two places in the Albert Luthuli district where HIV testing is performed. They were all (100%) of the opinion that undergoing an HIV test is important in order to know your HIV status. They identified peace of mind as an important motivator, as well as planning for the future. One participant acknowledged that knowing your HIV status would enable you to protect your spouse against the infection.

Only 25% of the *control group* were able to identify areas in Albert Luthuli where HIV testing is performed. 87.5% of them were of the opinion that undergoing an HIV test would be beneficial. Peace of mind was provided as the main motivator in this regard.

**Question 11 – Is it important to be sexually faithful to your wife/wives?**

All the *research participants* (100%) were of the opinion that it is very important to be faithful to your wife/wives. This would protect you from contracting the HIV disease. One participant verbalised that the spouses should also be faithful.

87.5% of the *control group* acknowledged the importance of faithfulness in a relationship. One participant laughed and verbalised that it is a challenge to be faithful. One participant did not think it important at all.

**Question 12 – Do you use a condom when you engage in sexual intercourse?**

50% of the *research participants* use condoms when engaging in sexual intercourse. One of them verbalised that the unfamiliarity of condom-use is scary to him. One participant said that he took some condoms from the dairy and has intentions to start using condoms from now on. A few participants acknowledged the importance of condom-use. One participant provided family planning as the main motivator for his condom-use.

25% of the *control group* use condoms when engaging in sexual intercourse. One of the participants verbalised that he uses condoms when having sex with his wife. Another group member admitted using condoms when engaging in sexual intercourse with other individuals, and not when having sex with his wife.

**Question 13 – What must you do when you are confronted with blood/a bleeding individual?**

All the *research participants* (100%) were aware of the danger of contaminated blood and that latex gloves should be used as protection when touching a bleeding individual.

25% of the *control group* were aware of the fact that gloves should be used when confronted with a bleeding individual. 75% of the control group verbalised that they would pour water onto the wound and bandage the wound (without mentioning glove-use).

**Question 14 – Do you know how to use a condom correctly and have you used a condom in the last month?**

All the *research participants* (100%) verbalised that the correct way to use a condom is clear to them. They admitted that condom-use was unfamiliar and foreign to them up and until the session with the peer educator (Themba) when correct use of a condom was demonstrated. 50% of the research participants have used a condom in the last month. One of them admitted to be motivated to start using condoms from now on.

37.5% of the *control group* is aware of the correct way to use a condom. 62.5% were unsure of correct condom-use. Only 12.5% admitted to using a condom in the last month.

**Question 15 – What do you usually eat and drink during a normal working day?**

All the *research participants* (100%) were aware of the importance of a healthy and balanced diet. They included either vegetables or fruit as a part of their daily food consumption. They acknowledged the importance of water-intake and verbalised that water cleanses the body.

Only 37.5% of the *control group* included vegetables and/or fruit in their daily diet. They verbalised that porridge, milk, bread and meat are the main food groups to be consumed on a daily basis. Only one participant acknowledged the importance of water.

**The following questions were directed at the farm owner.**

**Question 1 – Are you of the opinion that the HIV/AIDS workplace policy and program implemented was valuable and positive?**

The farm owner was of the opinion that the policy and program implemented were positive and valuable. In his opinion the workers have gained a lot in understanding and knowledge regarding the disease. The farm owner verbalised that he himself also gained valuable insight into the HIV/AIDS disease and how to manage it effectively on the farm. He also verbalised that the intervention sessions served as valuable examples on how to communicate effectively with the workers.

**Question 2 – Do you think that the implemented policy and program would have a positive impact on the farm as a business?**

The farm owner was of the opinion that the policy and program implemented would have a positive impact on the farm as a business. He verbalised that relationships and trust between management and workers have been solidified and that the program would have a positive impact on physical health and productivity of the employees.

**Question 3 – Have you stumbled across any evidence that the program has already had a positive impact on the farm?**

According to the farmer the whole management strategy on the farm has always been aimed at getting worker involvement and commitment. The program has contributed to strengthening this aim. During a period of absence by the farmer the planning and execution of different tasks on the farm were performed very efficiently.

**Question 4 – Do you think that interpersonal relations as well as worker morale were influenced?**

The farm owner was of the opinion that interpersonal relations and morale of the workers were influenced very positively indeed.

**Question 5 – Would you advise colleagues on other farms to implement an HIV/AIDS workplace policy and program? Why?**

The farm owner verbalised that he would most definitely urge other farmers to implement a similar policy and program on their farms as well. If an employee is healthy, he can work harder and produce better. Better productivity and motivation is the cornerstone of efficient farming. A closer commitment from management to the worker and his well being will lead the workers to reciprocate from their side.

The first five questions stated were directed at the research participants and aimed at either supporting or rejecting the first hypothesis. Questions six to fifteen were directed at both the research participants and the control group consisting of eight farm workers on a neighbouring farm. These questions were designed to test the second and third stated hypotheses. The last five questions were directed at the farm owner and were utilised to either support or reject the fourth and final hypothesis.

In chapter five the results obtained from the face-to-face interviews are discussed and interpreted.

## Chapter 5

### Discussion and Interpretation of Results

A systematic discussion and interpretation of the answers obtained from the face-to-face interviews with the research participants, the control group and the farm owner will make up this chapter. The researcher is aware of the expectations and perceptions relating to this study, and attempted to minimise this extraneous variable called “researcher attributes”.

#### **Question 1 – Are you happy about the fact that an HIV/AIDS workplace policy and program were implemented on this farm?**

All the participants were positive and happy about the implemented policy and program. The workers are indeed thankful and appreciative of the fact that the farm owner initiated the implementation of the policy and program on the farm. The workers “warmed” towards the researcher as they became more familiar and relaxed with the concept. It is also evident that HIV/AIDS was a threatening concept to them at first, but that the intervention sessions brought insight, hope and familiarity to them.

It is however important to acknowledge the fact that interpersonal relations between farm owner and workers has always been a priority and carefully nurtured on this specific farm. It was therefore not threatening to the workers to attend these sessions with the farm owner doing all the translating. They are all very comfortable and relaxed with the farm owner and an open, honest and mutually respectful relationship already exists. It is clear that trust and openness need to be established on other farms before participation and interaction can be achieved. The use of an HIV/AIDS worker or a peer educator might be more successful in circumstances where openness and trust do not prevail between farm owner and employees.

#### **Question 2 – Do you think that HIV/AIDS education on farms is important and necessary?**

All the research participants were of the opinion that HIV/AIDS education on farms is very important and necessary. They verbalised that other farm workers should also have a future and voiced their concern for their children and families. The program was unfortunately only implemented on the farm workers. The researcher did however organise one intervention session for the wives and children of the research participants. The peer educators from the Albert Luthuli municipality presented this intervention session (July 2005).

The farm workers in rural South Africa are the lost population regarding HIV/AIDS education and treatment. No anti-retroviral treatment is available at the Carolina Hospital. Bethal, Witbank and Middelburg are the closest centres in possession of anti-retroviral medication. The misconceptions relating to HIV/AIDS are distressing. The concern is that certain basic facts relating to HIV/AIDS have to be clear in order to protect one self from contracting the virus. Great concern is felt for the rural farm workers in South Africa. Low levels of education, poor health care services and

isolation from the tentacles of national intervention make these workers extremely vulnerable.

### **Question 3 – Did you enjoy these sessions?**

All the research participants were in agreement that the sessions were enjoyable and positive to them. The basic rules of group therapy were applied to every intervention session. An activity was part of every session in order to facilitate participation and discussions. Humour also played an important role in the facilitation of enjoyment during the execution of these sessions. Observed behaviour confirms the fact that the participants enjoyed the sessions. It is important to keep in mind that successful training (no matter how serious the subject) is based on the contact and the relationship established between trainer and trainees.

### **Question 4 – Did you learn new facts during the sessions?**

All the research participants verbalised that new information was provided and that knowledge was gained. The following were previously unfamiliar to them:

- Correct condom use
- The dangers of sexually transmitted diseases and the importance of receiving medical treatment as soon as possible
- The danger of contaminated blood and the importance of glove-use when confronted with a bleeding individual
- The fact that babies (one in every three) can contract the HI-virus from breast milk if the mother is HIV positive
- The importance of condom use in protecting oneself from contracting the HI-virus
- The importance of a healthy and balanced diet in order to build up the immune system and to prolong the onset of full blown AIDS
- The importance of communicating the dangers of the HIV/AIDS disease to their families and especially their children

The gaps in basic knowledge that existed among the research participants and that still exists among the members of the control group need to be emphasised. Certain basic facts regarding the HIV/AIDS disease has not yet reached the rural agricultural areas of South Africa. The above mentioned facts that the research group verbalised as previously unclear to them, confirms the fact that agricultural rural areas in South Africa is in desperate need of HIV/AIDS interventions.

### **Question 5 – Do you think that this program should be presented on other farms in the district as well?**

All the research participants were of the opinion that the program should be presented on other farms in the district and that other farm workers should also receive information and training on HIV/AIDS in order to ensure a future for them. It was obvious that the program installed a sense of responsibility and concern in the research participants especially for their families and children. The fact that the participants were of the opinion that the program should be duplicated on other farms confirms that they really did experience the intervention sessions as positive, valuable and important.

### **Question 6 – What is required first, HIV or AIDS?**

The fact that 70% of the research participants and 75% of the control group were able to answer this question correctly, lead to the conclusion that this fact regarding the HIV/AIDS disease has already reached most of the population in rural agricultural South Africa. It is however sad that this knowledge would not serve a protective role and that other live-saving facts relating to the disease are still unclear.

### **Question 7 – Name a few modes of transmission?**

The fact that all the research participants (100%) were able to correctly name both unprotected sexual intercourse as well as contact with contaminated blood as the main modes of HIV transmission, confirms that crucial knowledge regarding HIV/AIDS has indeed been gained as a result of the intervention sessions.

Only 37.5% of the control group were able to correctly identify both unprotected sexual intercourse and contact with contaminated blood as modes of transmission. This is a cause of concern as the most important fact regarding HIV/AIDS is the knowledge regarding transmission. Only if you are clear about the way a disease is contracted, can you begin to protect yourself from it effectively.

### **Question 8 – Is it safe to share toothbrushes, needles and razors?**

All the research participants (100%) were aware of the potential danger in sharing toothbrushes, needles and razors with an infected individual. 87.5% of the control group were able to answer this question correctly. The researcher is however aware of the fact that the question is leading and that the natural way to answer would be to say “NO”. The research participants were however able to provide the reason as to why it is potentially dangerous to share these objects, while the control group was not able to explain why.

### **Question 9 – Is it possible to see whether a person is HIV positive?**

All the research participants (100%) were able to correctly answer that it is not possible to see if a person is HIV positive and that a blood test is the only way to confirm an individual’s HIV status. This is such an important issue relating to HIV/AIDS and a very crucial fact to be aware of in order to protect oneself from contracting the disease. It is a cause of concern that only 25% of the control group were able to answer this question correctly. A shocking 75% of the control group were of the opinion that HIV positive individuals were very thin and that they could be identified.

### **Question 10 – Where can you go to get tested for HIV, and why is it necessary to undergo a test?**

All the research participants (100%) were able to identify at least two different places in the Albert Luthuli district of Carolina where HIV testing is performed. They are all aware of the importance of having an HIV test done and verbalised that piece of mind, planning for the future and protection of one’s spouse is important motivational factors to undergo a test. The farm owner said that he would go with the participants for an HIV test and that leading by example would be important in this regard. A test-day would be organised on the farm.

Only 25% of the control group were able to identify areas in the Albert Luthuli district of Carolina where HIV testing is performed. 87.5% of them were of the opinion that undergoing an HIV test is important. It is however unlikely that any of them would actually go for a test on their own initiative. They were not able to provide clear reasons as to why it is important to undergo an HIV test.

The success of any HIV/AIDS intervention would be calculable when action is undertaken and individuals are stirred to take charge. The fact that all the research participants were eager and willing to have a test day organised proves that the intervention sessions were indeed successful and that action is flowing from the information provided.

#### **Question 11 – Is it important to be sexually faithful to your wife/wives?**

All the research participants (100%) were of the opinion that it is very important to be sexually faithful to your wife. They were able to verbalise that faithfulness in a relationship would protect both partners from contracting the HIV/AIDS disease. 87.5% of the control group were of the opinion that faithfulness is important. The cognitive awareness of a fact does however not necessarily lead to corresponding behaviour.

#### **Question 12 – Do you use a condom when you engage in sexual intercourse?**

50% of the research participants verbalised that they use a condom when engaging in sexual intercourse. The extraneous variable of positive self-presentation must however be acknowledged when regarding these answers. 25% of the control group admitted to using condoms when engaging in sexual intercourse. It was appreciated that asking an individual a question about sexual behaviour and practices is always slightly uncomfortable.

Condoms were lavishly provided and made readily available to the research participants, and placed on a table in the dairy where they all eat lunch every day. Hopefully behaviour change will actually begin to occur and follow-up in the form of a “test-day” and visits from the Ndlovu Mobil Medical Clinic would reinforce the importance of condom use.

#### **Question 13 – What must you do when you are confronted with blood/ a bleeding individual?**

All the research participants (100%) were able to answer this question correctly and they were all aware of the danger of contaminated blood. They verbalised that they were not previously aware of the dangers of being in contact with blood and that this was an unfamiliar fact to them. They have however become aware of the fact that the HI-virus can be contracted not only through unprotected sexual intercourse, but also when they come in contact with contaminated blood and they have an open wound or laceration on their hands/bodies. This is an important fact regarding the HIV/AIDS disease and the knowledge gained on this specific issue would be valuable and serve an important protective role.

Only 25% of the control group were aware of the fact that latex gloves should be used when confronted with a bleeding individual because of the potential danger of contaminated blood. This is a cause of concern as one would expect that a basic fact

such as this regarding HIV/AIDS would already be familiar to people. Without the knowledge of certain basic information relating to the HIV/AIDS disease, protection against contracting the virus would be impossible. The answers to this specific question confirm that HIV/AIDS education on farms in rural South Africa is urgently needed in order to convey basic, life-saving knowledge about the disease.

**Question 14 – Do you know how to use a condom and have you used one in the last month?**

All the research participants (100%) are aware of correct condom use. They verbalised that it was previously unclear to them but that the session with the peer educator (Themba) was very enlightening regarding this issue. The peer educator demonstrated correct condom use to the research participants during the last intervention session.

50% of the research participants verbalised that they have used a condom in the last month. Positive self-presentation might have played a role in the responses to this specific question. Condoms were however provided and a table with latex gloves and condoms was placed in the dairy. All the research participants are aware of the importance of condom-use and one participant verbalised that he has intentions of starting with condom-use from now on.

Only 37.5% of the control group were aware of correct condom use, which is a great cause of concern. 12.5% verbalised that they have used a condom in the last month. If the extraneous variable of positive self-presentation is acknowledged, the fact that HIV/AIDS intervention is desperately needed on farms becomes very clear.

**Question 15 – What do you usually eat and drink during a normal working day?**

All the research participants (100%) are aware of the importance of a healthy and balanced diet to strengthen the immune system and to prolong the onset of full-blown AIDS. This is such an important fact to portray in any HIV/AIDS intervention. The “good news” regarding HIV/AIDS is that death is not immediate and that the disease can be managed on a personal level. The message of “positive living” is very valuable and important and that it can not be overemphasised enough. The research participants have also received multi-vitamin and B complex tablets from 1999 monthly free of charge. They are all very positive about taking these tablets and always remind the farm owner when the tablets are finished and refills are needed. They all have small gardens at home and the message regarding healthy eating habits has really hit home. Only 37.5% of the control group mentioned either vegetables or fruit as a part of their daily food consumption. It is obvious that the message regarding healthy living has not yet been delivered to them. Productivity and optimum health of farm workers is such an important aspect on any successful farm. Hopefully farm owners would acknowledge this and start investing in the health and wellbeing of their workers in the near future.

The following questions were directed at the farm owner:

**Question 1 - Are you of the opinion that the HIV/AIDS workplace policy and program implemented was valuable and positive?**

The farm owner is of the opinion that the implemented workplace policy and program was very valuable and positive. According to the farm owner the farm workers have gained a lot in understanding and knowledge about the HIV/AIDS disease, and he himself has gained insight into the disease and the management thereof. The intervention sessions also served as valuable examples on how to effectively communicate with the workers. The involvement of the farm owner in the process of development and implementation of the HIV/AIDS policy and program conveyed a message of concern and care to the workers. The farm owner translated every intervention session into the mother tongue of the participants, and his involvement and commitment to the process was apparent right from the start. This can only have a positive impact on the morale and motivation of the farm workers and lead to higher levels of commitment and productivity.

**Question 2 – Do you think that the implemented HIV/AIDS policy and program would have a positive impact on the farm as a business?**

The farm owner verbalised that the implemented policy and program would indeed have a positive impact on the farm as a business. Relationships and trust between employees and management have been solidified. The program would also have a positive impact on physical health and productivity of the workers, and the farm/business would benefit greatly from that.

The fact that multi-vitamin and B complex tablets have been distributed monthly to all the employees on the farm since 1999 has obviously impacted positively on the physical health and productivity of the workers. Healthy living and eating habits have also always been emphasised by the farm owner's wife. Certain positive and supporting actions and practices on the farm thus preceded the process of implementing and developing an HIV/AIDS workplace policy and program. Fertile soil has therefor been prepared in advanced and the positive outcome of the program greatly lobbies on that.

**Question 3 – Have you stumbled across any evidence that the program has already had a positive impact on the farm?**

According to the farm owner the whole management strategy on the farm has always been aimed at getting worker involvement and commitment. The implemented program has contributed to strengthening this aim.

It is predicted that the implemented policy and program will have a positive impact on the farm as a business, especially if indirect benefits such as worker morale and higher levels of motivation and productivity are considered. A direct positive impact (in rand and cent) would however not be calculable as of yet, since the program has only been implemented in February 2005. A calculable positive impact on the farm as a business might however be noticeable in the long term when the stronger immune systems of the farm workers might prolong the onset of full blown AIDS in the HIV

positive individuals. This would lead to lower levels of employee turnover on the farm.

**Question 4 – Do you think that interpersonal relations as well as worker morale were influenced?**

The farm owner is of the opinion that the implemented policy and program have indeed influenced worker morale and interpersonal relations between management and employees very positively; a crucial element in any successful business. If management portrays an attitude of caring and commitment to employees, the whole atmosphere and culture in an organisation is drastically influenced for the better. The most valuable asset in any organisation (and especially on a farm) is the work force. Investing in employees/people is never a waste of money or time.

**Question 5 – Would you advise colleagues on other farms to implement an HIV/AIDS workplace policy and program? Why?**

The farm owner verbalised that he would definitely urge his colleagues to implement an HIV/AIDS policy and program on their farms as well. If an employee is healthy, he can work harder and produce better. Better productivity and motivation is the cornerstone of efficient farming. Closer commitment from management to the worker and his wellbeing would lead the worker to reciprocate from his side.

This chapter contained a systematic discussion and interpretation of the answers obtained from the face-to-face interviews conducted with the research participants, the control group and the farm owner.

The first five questions were aimed at supporting or rejecting the first stated hypothesis. The answers provided by the participants confirm that they experienced the implemented workplace policy and program as valuable, positive and enjoyable. The first hypothesis was thus supported.

Questions six to fifteen were directed at the research participants as well as the control group in order to determine whether hypotheses two and three were supported or rejected. The answers provided confirm that valuable insight was indeed gained and behaviour change did occur due to the implemented policy and program. The control group was unclear regarding the following aspects: modes of transmission, identification of an HIV positive individual, the importance of HIV testing, glove-use, correct condom use, and the importance of a balanced diet.

The answers provided by the farm owner confirm that he definitely perceives the implemented workplace policy and program as valuable, positive and profitable to the farm. Investing in people always has a positive impact on any organisation, but also on interpersonal relations, motivation, morale and productivity. Giving something back in the form of a small-scale “social investment” is important, satisfying and a blessing to oneself.

The following chapter contains concluding remarks as well as recommendations to consider when undertaking an HIV/AIDS intervention on a farm.

## Chapter 6

### Conclusion and Recommendations

Chapter six contains concluding remarks as well as recommendations regarding HIV/AIDS interventions on farms. The four stated hypotheses will firstly be discussed, followed by 18 recommendations.

*The first hypothesis was definitely supported.* The employees all perceived the implemented HIV/AIDS workplace policy and program as positive, valuable and enjoyable. The first five questions were all answered with enthusiasm and accompanied by smiles and laughter from the research participants. Observed behaviour during the intervention sessions confirms that the sessions were enjoyed, appreciated and perceived as valuable and positive. Every intervention session was accompanied by visual demonstrations and/or an activity and this facilitated discussions, participation, involvement and enjoyment.

*The second hypothesis was also supported.* Valuable insight and knowledge was definitely gained. The answers received from the research participants and those received from the control group differed significantly regarding insight and knowledge on HIV/AIDS. The research participants became aware (through the intervention sessions) of the following important facts (among others):

- correct condom use
- the danger of contaminated blood and the importance of latex gloves
- the importance of a healthy, nutritious diet in strengthening of the immune system
- the potential danger in breast milk for the baby of an HIV positive woman
- the importance of communication with children about the HIV/AIDS disease
- the importance of condom use to protect oneself from contracting the HI-virus
- the danger of STD's and the importance of medical treatment

It was obvious that certain important facts about the HIV/AIDS disease have not yet reached the rural agricultural population of South Africa and that HIV/AIDS interventions are desperately needed.

*The third hypothesis was also supported in part.* 50% of the research participants admitted to using condoms where only 25% of the control group verbalised that they use condoms when engaging in sexual intercourse. Cognitive awareness of the importance of condom use has also been established in the research participants. Changed behaviour regarding contact with contaminated blood will also occur in the research group as they all have gained insight into the fact that contact with blood is potentially dangerous and that latex gloves should always be used. Condoms and gloves have been made accessible.

Behaviour can only be monitored through observation (which is not practically possible in this specific study) and interviewing. The interview method is not completely reliable but observing behaviour would not be possible in this regard. Follow-up and a test day where HIV status would be established would be invaluable in achieving results regarding behaviour change. It would be a long-term process and continuous support and involvement would better chances at success (ultimately achieving change in sexual behaviour).

*The fourth hypothesis has been supported as well.* The farm owner was definitely of the opinion that the implemented policy and program was valuable and profitable to the farm as a business. Value was added in the form of boosted morale, better interpersonal relations and trust, and higher levels of motivation and productivity. The calculable benefit of the intervention is not yet tangible in rand and cent, but in the long term better health and higher levels of commitment and productivity would have a significantly positive impact on the farm as a business. Healthy employees would lead to lower levels of employee turnover, which would preserve the expertise and organisational atmosphere on the farm.

The following recommendations have evolved from this research project:

1. Firstly, the intervention on the farm has been a very enriching experience. Working with people and making a difference in people's lives need to be a passion and a calling and the most satisfying and enriching exercise that one can ever busy oneself with.
2. The families of the employees (wives and children) should be involved in any intervention program. It was obvious that the sessions raised concern for the families (especially the children) and the need have been verbalised to also involve the families. Due to lack of time and in order to control the project (homogenous research group) only the full-time male employees on the farm were included in the project. The community in which an individual operates also needs to be involved in any HIV/AIDS intervention.
3. Follow-up is extremely important. A test day will be organised on the farm, and the Ndlovu Medical Mobile Clinic will visit the farm (hopefully once a month) and provide education, anti-retroviral treatment and medical care. An intervention can not be successful in isolation and community involvement and follow-up to reinforce and solidify information received, is of the utmost importance.
4. Peer educators have been found to be very helpful. Male peer educators should handle certain issues like demonstrations on correct condom use. The research participants enjoyed the session with the peer educators and open discussions were facilitated. The use of peer educators as facilitators is regarded as very important.
5. The use of PWA's (People Living with AIDS) was impossible as no one was available from the local municipality. It would have been very valuable and insightful to use a PWA. It personifies the disease and serves as motivation and encouragement to see that HIV positive people can still lead a happy and meaningful life.
6. Experience in group therapy and facilitation of groups is very valuable and helpful. Correct handling mechanisms are paramount for openness and establishment of relationship between participants and facilitator. The use of activities and demonstrations serve an important role in achieving participation, discussions and enjoyment. Activity promotes understanding and retention.
7. Honesty, openness, care, trust and an ability to meet the participants where they are (not in a condescending fashion) are extremely important. It is important to

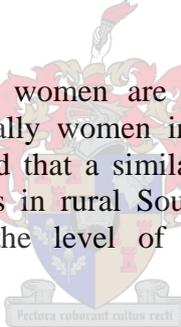
aim at creating a feeling of responsibility and unity by making HIV/AIDS “our problem/concern” and not “your problem”.

8. Openness and trust between farm owner and employees facilitated the success of the intervention sessions. Empowerment and employee involvement has always been part of the management strategy on the farm. HIV/AIDS education can not be treated as an isolated issue. Poverty, discrimination and lack of power and the feeling of empowerment are driving forces behind the disease. It is important to accept the challenges presented. Every employer can empower his/her employees.

The employees were comfortable with the farm owner translating every session because a mutually respectful and open relationship prevails between management and workers. It is important to acknowledge that the process would probably not have been as successful or easy on other farms where this specific management style is not implemented. The farm owner and his wife have always portrayed commitment and care towards the workers and their health.

9. Organisations mirror the styles of their chief executive officers (farms mirror the styles of the farm owner) and management should be composed, open, engaged, stimulating and thoughtful. Managers should invest time in creating and participating in rituals (like this HIV/AIDS intervention) that reinforces a culture of care in an organisation.

10. It is a well-known fact that women are disproportionately affected by the HIV/AIDS epidemic. Especially women in poor rural communities are very vulnerable. It is recommended that a similar study be executed on a group of women on two or three farms in rural South Africa. It would be valuable to investigate perceptions and the level of knowledge women has regarding HIV/AIDS.



11. The researcher experienced difficulty with the translator during the execution of the in-depth interviews. The translator used was not very experienced but consistency is important. It is recommended that a trusted, known and experienced translator be found before venturing on any intervention. The farm owner was utilised very successfully during the intervention sessions, as he is very experienced in translating. The ideal however would be to facilitate the intervention sessions in the mother tongue of the participants.

12. It is recommended that interventions are planned for and executed every month. This would increase involvement from the employees as routine and predictability would be established.

13. It is further recommended that any facilitator on a farm should not assume anything regarding basic knowledge on HIV/AIDS. The researcher was surprised at the gaps in basic knowledge that existed. A pre-test is recommended in this regard. A pre-test could not be performed in this particular study as the researcher only decided to utilise this project as a formal scientific technical report after the first intervention session had been performed. The fact that the research participants were unaware of correct condom use, the danger of contact with contaminated blood and the importance of a healthy diet to prolong the onset of full blown AIDS, confirms that intervention sessions should include all the basic information (with demonstrations) on HIV/AIDS.

14. Repetition of facts is very important in any intervention on a farm. The level of formal education is generally low and the biological/physiological information on HIV/AIDS is difficult to grasp in one session. The researcher started every session by recapping the most important facts discussed in the previous intervention. This proved to be very valuable.
15. An intervention on a farm is a long-term commitment and follow-up is extremely important. The perfect situation would be an intervention of at least 12-18 months, with monthly meetings. If anti-retroviral therapy were provided, monthly contact would be continued indefinitely when medicine is distributed (by the Ndlovu Mobile Medical Clinic).
16. It is important to highlight the “good news” about HIV/AIDS and to stress positive living and a healthy lifestyle. Intervention should include home-visits and distribution of seedlings and help with gardening. Distribution of multi-vitamin tablets is extremely important. Flu-shots before the start of winter should be included. A holistic approach is therefore recommended for any HIV/AIDS intervention. Education and knowledge cannot be provided in isolation.
17. The discussion and implementation of the HIV/AIDS workplace policy should be reintroduced after the completion of the program. It was obvious that the concept of a workplace policy was foreign at the initiation of the project, and more feedback would be received if the policy is rediscussed at the end of the intervention program.
18. A feeling of belonging and membership to an association/organisation are known to increase the acceptance of a shared ideology and value system. The fact that the research participants are all part of the “Onbekend Farming Association” and landowners may be invaluable in mobilising them to collectively take action against HIV/AIDS and to strive toward a common goal. Purpose and direction are paramount to achieve mobilisation. The fact that all the participants were concerned for the health and safety of their children, may present a common goal and objective to strive towards. This would facilitate mobilisation as well as a feeling of empowerment and consolidation in the fight against HIV/AIDS. Identification of local leadership and possibly the founding of an HIV/AIDS task team would be important steps to be taken in this process.

The rural population of agricultural South Africa is in many ways the disadvantaged group regarding HIV/AIDS intervention, education and care. A variety of factors increase vulnerability to contracting this disease. Limited financial resources, lower levels of education, restricted communication around sex and sexuality as well as understaffed and often inadequate primary health care services in rural areas are aggravating factors enhancing vulnerability to a disease such as HIV/AIDS.

The agricultural sector should contribute to the rural upliftment that is so desperately needed in South Africa. Economic growth in rural sectors is crucial in the realisation of this ideal. The population of black landowners in South Africa is an important role player in achieving this goal. Unfortunately HIV/AIDS poses a serious threat to black landowners, farm workers, and ultimately the entire agricultural sector of South Africa. Interventions on farms are desperately needed and crucially important in the fight against HIV/AIDS.

The objective of this research project was to record the process of development, implementation and evaluation of such an intervention on a farm in the Albert Luthuli district of Mpumalanga. Valuable insight and knowledge was gained on the current situation in agricultural South Africa, and it became evident that interventions are desperately needed.

The challenges encountered and pitfalls to be avoided when undertaking such a project also became clear, and were recorded as practical recommendations. Scientific research projects on farms are paramount to streamlining and improving existing interventions in rural South Africa, and this research project is a starting point in achieving that objective. The sessions presented as well as the workplace policy is included in this technical report and the aim was to facilitate the process of small-scale interventions on farms.

It is recommended that similar projects be undertaken, recorded and compared in order to develop home-hitting and successful interventions in rural agricultural South Africa. Time is a luxury that has unfortunately passed us by, and the tardy roll-out of the government's HIV/AIDS intervention strategy in rural agricultural South Africa should be accelerated. Partnering with farm owners in this regard to subsidise and initiate projects on farms on a manageable small-scale level could make a considerable difference to rural South Africa. South Africa is indebted to the farm workers in rural populations and the development and implementation of powerful, home-hitting HIV/AIDS strategies is one way of starting the payback that is already overdue.



# Appendix 1

## HIV/AIDS workplace policy – February 2005

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## 1. The preamble and objectives

*The farmer and farmworkers on Droogvallei, Onbekend and Appeldoorn farms, hereby acknowledge the seriousness of the HIV/AIDS epidemic. It is an epidemic that should be recognized, managed and controlled. The objective of this policy is threefold:*

- To prevent new HIV infections among the farmworkers
- To care for and support those already infected with the HIV disease
- To minimize the impact of the HIV disease on the farm

## 2. Principles of the policy

### 2.1 Non-discrimination and acceptance

The farmer shall ensure that no employee or prospective employee living with HIV/AIDS is unfairly discriminated against on the basis of his/her HIV status. HIV/AIDS is perceived as a manageable disease and accepted as a chronic disease no different from other chronic diseases such as cardiovascular diseases or diabetes. The farmer, as well as farmworkers, will not treat an HIV-positive employee/colleague any differently on the basis of his/her health status.

### 2.2 An open and caring work-environment

The farmer and farmworkers would openly discuss the HIV/AIDS disease during scheduled meetings, and will produce a joint effort in creating an open and caring work-environment on the farm. An environment where HIV/AIDS is accepted, acknowledged, and managed together as a team.

### 2.3 Safety in the workplace

The farmer commits himself to create a safe work environment (as far as is reasonably achievable) where the risk of contracting the HIV-disease is minimized. Education and training will be provided to all the farmworkers at a scheduled time regarding safety in the workplace and safety procedures that should be implemented during the occurrence of an accident at the workplace.

### 2.4 Prohibition on HIV testing

No employee or prospective employee shall be required to test for HIV. The farmer shall under no circumstances force any employee to undergo an HIV test.

### 2.5 Encouragement of voluntary counseling and testing

The farmer encourages all employees to undergo voluntary counseling and testing, in order to determine their personal HIV status. The knowledge of a positive HIV status, could encourage employees to manage the disease on a personal level (for example to eat healthy and balanced food, to take multi-vitamin supplements, to drink at least eight glasses of water a day, to go for regular medical check-ups at the clinic etc). A negative HIV status could encourage employees to change their behavior and to

implement safe-sex practices like condom-use every time they engage in sexual intercourse. The farmer thus encourages voluntary counseling and testing not for his own benefit, but solely for the benefit of his employees, in order to empower them to respond correctly to the HIV/AIDS disease.

No employee will be dismissed on his/her health status alone, and in the case of incapacity, the above-mentioned steps will be taken.

If an employee becomes disabled/incapacitated because of AIDS, and has been a worker on the farm for 5 years or more, the farmer will pay 80% of the employee's normal salary until the day of that particular employee's death.

## 2.6 Care and support

The farmer commits himself to provide support and care (as far as it is within his financial abilities) to all his employees who are HIV positive. Multi-vitamin supplements will be provided on a monthly basis to all employees (regardless of their HIV status) in order to ensure optimum health levels and thus better productivity. The mealie meal (maize) available at the local mill, is vitamin-enriched, and will thus provide some of the essential nutrients needed for a balanced diet. An education session will be scheduled in order to train employees to manage the disease on a personal level, and to stress the importance of healthy living in minimizing the effects of the disease, and in postponing the onset of full-blown AIDS.

The American pharmaceutical company, Aspin, has recently announced that they will provide generic anti-retroviral treatment to South Africa for the price of R100 per month. This is a huge reduction in the normal price of R1000-R3000 per month. The farmer commits himself to investigate this opportunity further and to provide 50% of the costs of anti-retroviral therapy (thus R50 per month) to an employee that has become chronically ill with AIDS.

## 2.7 Sick leave

According to the "Basic Conditions of Employment Act. No. 75 of 1997", an employee is entitled to six weeks paid sick leave, provided that a medical practitioner supplies the farmer with a sick-note stating that the particular employee would be unable to perform his/her duties due to ill-health. If extended sick leave should be required, the farmer and employee should negotiate an extension of the sick leave, but then at a reduced rate.

## 3. HIV/AIDS workplace program

Expanding on the HIV/AIDS workplace policy, an HIV/AIDS workplace program would be implemented, that would entail the following:

- Communication of the workplace policy would be the first step to be taken in the implementing of the HIV/AIDS program. Open discussions of the aspects included in the policy would be encouraged, and employees would receive a certain amount of time (for example 1-2 weeks) to contemplate the issues addressed in the policy and to raise concerns, ask questions and make recommendations.

- A second and final draft of the HIV/AIDS workplace policy would then be introduced and distributed among each and every employee.
- An education and training session would then be scheduled in order to raise the standard of awareness of the disease, and to convey the basic facts around the disease (what exactly is HIV/AIDS, the difference between HIV and AIDS, modes of transmission, symptoms etc).
- Another education and training session would then be scheduled in order to provide information regarding voluntary testing and counseling, the medical interventions available, the medical staff at the clinic and the services they provide, and other important aspects with regard to the medical intervention following a positive HIV test.
- A special session regarding safety in the workplace (and in any other situation) would be scheduled, in order to convey safety measures to be taken in the case of an accident or when employees are confronted with body fluids (like blood) of colleagues or friends.
- A session focused on the personal management of the disease would also be performed. This session would stress the importance of healthy living, the eating of nutritional food, the importance of regular exercising and of drinking plenty of water, as well as other important life skills that would ultimately postpone the onset of full blown AIDS.
- Community involvement would be encouraged, and the training sessions would include the employee's wives and children. Leave would also be provided on the 1<sup>st</sup> of December (world AIDS day) to encourage participation in the community projects on that specific day. Contact would be established with the local HIV/AIDS coordinator of the Albert Luthuli district, in order to keep abreast of all the HIV/AIDS initiatives launched in this area.
- The distribution of multi-vitamin supplements would continue regardless of an employee's HIV status.
- An open and caring environment would be established where employees would be encouraged to raise concerns or issues regarding the HIV/AIDS disease (or any other problem). This would ultimately create an environment where problems are solved together, and stress levels are managed through open and constructive communication.

#### 4. Monitoring and evaluation of the HIV/AIDS policy and program

It is important to acknowledge that the HIV/AIDS disease is a dynamic and ever-changing challenge, and it would therefore be valuable to revise and update the workplace policy and program periodically. A specific time frame should be identified to receive feedback from the employees regarding the policy, program and training sessions. The employees should be reassured that the policy and program run on this farm, is "for the people and by the people" and that without collaboration, the objectives would never be achieved.

*This policy is in compliance with the Employment Equity Act's Code of Good Practice on Key Aspects of HIV/AIDS and Employment, as well as the Basic Conditions of the Employment Equity Act No. 75 of 1997.*

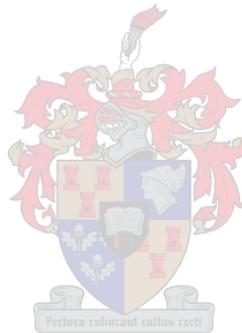
## Appendix 2

### **First intervention session (February 2005):**

*The objective of this session was to introduce the first draft of the HIV/AIDS workplace policy to the farm workers.*

The farm owner presented the first intervention session at one of the weekly discussion meetings on the farm. The farm owner had introduced the idea of implementing a formal HIV/AIDS workplace policy and program on the farm, at an earlier meeting with the farm workers. They had all agreed that HIV/AIDS is a pressing issue, and that action would need to be taken.

The first draft of the HIV/AIDS workplace policy was discussed and distributed among the employees (every employee received a copy of the first draft in English). The content of the policy was thoroughly explained in Swazi by the farm owner.



## Appendix 3

### Second intervention session (March 2005):

The objective of this intervention session was to share basic information regarding the HIV/AIDS disease with the farm workers.

The researcher presented the second intervention session on fourteen March 2005. The content of the first draft of the HIV/AIDS workplace policy was revised at the beginning of the session. The rest of the session was devoted to the sharing of basic information regarding HIV/AIDS. The researcher used verbal and visual techniques (as well as one activity) to carry the information across to the research participants. The following is a summary of the content of the session:

- The meaning of the acronyms HIV and AIDS were explained.
- The fact that HIV is the virus that is acquired first, which leads to AIDS (a combination of illnesses due to suppressed immunity of the body) was shared.
- The modes of transmission were shared, and the “safe” and “unsafe” body fluids were identified through the use of a simple interactive activity.
- A few activities that would not lead to HIV transmission were then discussed and shared.
- The course of the disease was then discussed, from the onset of infection to the ultimate end when AIDS claims the life of the infected individual.
- It was stressed that the process discussed above could vary between a few months, or be as long as a couple of years.
- The researcher then underlined the fact that the only way to know if an individual were HIV positive would be through having a blood test performed. No visual symptoms are present at first.
- The well-known ABC message was then shared, in order to provide a guide as to how to protect yourself against HIV infection.
- Precautions regarding contact with blood were also included and the researcher warned against the sharing of needles, toothbrushes and razor blades.

## Appendix 4

### Third intervention session (March 2005):

The object of this session was to discuss the importance and process of voluntary HIV testing.

The researcher presented the third intervention session on the seventeenth of March 2005. Firstly, the information shared at the second intervention session was revised shortly, in order to refresh the farm worker's memories. The rest of the session was devoted to the sharing of information regarding voluntary testing. The following facts were shared:

- The reasons why it is strongly recommended to undergo an HIV test.
- The fact that an HIV test is 100% voluntary and the farm owner may not under any circumstances force the employees to go for a test.
- The places in the Albert Luthuli district of Carolina where the farm workers would be able to go for an HIV test.
- The names of the nurses who would perform the HIV test at the above mentioned places were provided.
- The steps to be taken in the process of decision making regarding HIV testing.
- The actual process of testing and what would happen how and when.
- The recommended actions to be taken as an individual who has received an HIV negative test results, as well as the anticipated accompanied emotions.
- The recommended actions to be taken as an individual who has received an HIV positive test result, as well as the anticipated accompanied emotions.
- Actions to be taken to lengthen the time span from HIV infection to the onset of full-blown AIDS.
- The availability of anti-retroviral treatment, as well as prophylactic treatment and the use thereof, were included in this discussion session.

## Appendix 5

### Fourth intervention session (May 2005):

The objective of this session was to refresh the memories of the farm workers regarding certain facts around HIV/AIDS, and to test their knowledge at this stage of the intervention.

The researcher presented the fourth intervention session at the end of May 2005. The basic information regarding HIV/AIDS, were revised at the beginning of the session in order to improve recollection of facts and to stress the importance of certain issues.

An interactive activity was then performed in order to facilitate discussion and to test knowledge gained thus far in the process of implementation. *Musical box* was played and the workers had to pass on a bag containing different objects and pictures while music played. As soon the music stopped, the person in possession of the bag had to draw an object/picture from the bag and discuss the related subject shortly. The following objects/pictures were included in the bag:

- Surgical gloves
- Condoms
- A razor
- A toothbrush
- Vitamin pills
- An injection needle
- Tears
- Urine
- A toilet
- Blood
- Breast milk
- Nutritious food and water
- A person smoking a pipe



The farm workers were encouraged to discuss the meaning of the picture/object they have received. This activity was thoroughly enjoyed and interaction was facilitated. Practical revision of important facts regarding HIV/AIDS were presented and achieved in a fun, interactive way.

## Appendix 6

### **Fifth intervention session (May 2005):**

The objective of this session was to familiarise the farm workers with the process of HIV testing and to prepare them for the moment they would receive their test results.

The researcher performed the fifth intervention session at the end of May 2005. The focus of this session was voluntary counseling and testing, and to prepare the farm workers for the moment they had to undergo an HIV test in reality. The following facts regarding HIV testing were revised shortly:

- The places in the Albert Luthuli district of Carolina where an HIV test could be performed, as well as the places that would be free of charge.
- The name of the nurse at the hospital in Carolina who performs the counseling and testing.
- The process of testing (pre-test counseling, pricking of finger, waiting for expected results for about ten minutes, the giving of the results, and post-test counseling).

An activity was then introduced in order to role-play the actual process of testing, as well as the receiving of test results. The researcher explained to the farm workers that they would need to imagine themselves at the hospital in Carolina undergoing an HIV test from Sister Rose Fakude (“played” by the researcher). The imaginary results of the tests were then provided through the same musical box activity where every individual had the opportunity to draw a confidential “test result” from the bag. The bag contained equal amounts of little papers with “HIV positive” or “HIV negative” written on them.

The results were first silently contemplated, and then the researcher encouraged every farm worker who “tested” HIV negative, to share his good news with the group. The group who “tested” negative, was then encouraged to share the emotions experienced as well as practical action plans in order to stay healthy and negative. The researcher also explained that a second test would need to be performed in three months time (if unprotected sex occurred during the three months prior to testing).

The “HIV positive” group was then encouraged to share their results and emotions and action plans for the future with the group. The message of “positive living” was underlined and the researcher provided the farm workers with plans to lengthen the time span from HIV infection to the onset of full-blown AIDS. The following was encouraged:

- The eating of nutritious food (crops being grown in the gardens at home were discussed).
- Drinking plenty of water.
- Cutting back on alcohol consumption as well as smoking.
- Continued use of the multi-vitamin and b-complex tablets provided by the farm owner.
- Use of the vitamin enriched milk formula and porridge provided free of charge at the hospital following an HIV positive test result.
- The dedicated and persistent use of condoms for each and every sexual encounter.
- Frequent visits to the doctor.

## Appendix 7

### Sixth intervention session (June 2005):

The objective of this session was to facilitate discussions regarding behaviour change and the issues hindering individuals to change behaviour even after knowledge has been gained.

The researcher presented the sixth intervention session in June 2005. The aim of this session was to facilitate discussions regarding behaviour and the pitfalls hindering individuals to change their behaviour even when knowledge has been gained.

An interactive activity was presented where a parcel wrapped in layers and layers of wrapping-paper was passed from the one research participant to the next. Every participant had to remove one layer of paper. Certain layers of paper were white with a black question mark on it. The participant in possession of the parcel when the white paper with the question mark was revealed had to answer a question regarding certain issues related to HIV/AIDS. The mystery prize was to be awarded to the individual who took off the last layer of wrapping. The following subjects were discussed:

- Whether the negotiation of safe sex practices (like condom use) was difficult, and why.
- Whether the research participants perceived themselves as being at risk to contract HIV. The HIV prevalence rate in Mpumalanga was discussed.
- Whether the research participants were positive about undergoing an HIV test, and the concerns and fears around this subject.
- Whether the research participants would actually react correctly and safely when confronted with blood.
- Whether the research participants have been eating nutritious food and drinking plenty of water.
- Whether the participants understand that treatment of sexually transmitted diseases is important and crucial.
- Whether the participants believe that HIV/AIDS is a real concern/or not.
- Whether the participants know someone who died of AIDS.

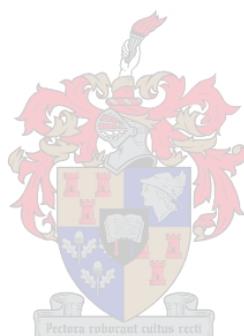
The idea was to facilitate discussions among the group regarding the behavior change that needs to follow knowledge gained, and the aspects that hinder this process.

## Appendix 8

### **Seventh intervention session (June 2005):**

The objective of this session was to facilitate peer education in the mother tongue of the participants, and to link the intervention on the farm, to the interventions in the district.

The seventh intervention session was presented by an HIV/AIDS worker in the municipality of Carolina in the mother tongue of the research participants. Peer education as well as linking this intervention program with the interventions in the community, were the goals of this session. The researcher also wanted the participants to receive HIV/AIDS education from a black man and woman of the Nguni culture that they could relate to and freely communicate with.



## Appendix 9

### Questionnaire 1

**Questions 1 – 15 would be asked in the interviews with the twelve research participants. Questions 6 – 15 would be utilized to interview the control group.**

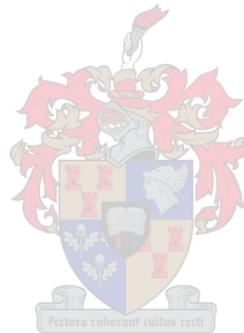
1. Are you happy about the fact that an HIV/AIDS policy and program were implemented on this farm?
2. Do you think that HIV/AIDS education on farms is important and necessary?
3. Did you enjoy the sessions?
4. Did you learn new facts during the sessions?
5. Do you think that this program should be presented on other farms in the district as well?
6. What is required first, HIV or AIDS?
7. Name a few modes of transmission?
8. Is it safe to share toothbrushes, needles and razors?
9. Is it possible to see whether a person is HIV positive?
10. Where can you go to get tested for HIV, and why is it necessary to undergo a test?
11. Is it necessary to be sexually faithful to your wife/wives?
12. Do you use a condom when you engage in sexual intercourse? Specify when and when not, or with whom, and with whom not.
13. What must you do when you are confronted with blood/a bleeding individual?
14. Do you know how to use a condom and have you used one in the last month?
15. What do you usually eat and drink during a normal working day?

## Appendix 10

### Questionnaire two

**Questions 1 – 5 would be asked to the farm owner during the face-to-face interview.**

1. Are you of the opinion that the HIV/AIDS workplace policy and program implemented was valuable and positive?
2. Do you think that the implemented policy and program would have a positive impact on the farm as a business?
3. Have you stumbled across any evidence that the program has already had a positive impact on the farm?
4. Do you think that interpersonal relations as well as worker moral were influenced?
5. Would you advise colleagues on other farms to implement an HIV/AIDS policy and program? Why?



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