QUESTIONNAIRE SURVEY TO DETERMINE THE PERCEIVED EFFECT OF IMMUNE BOOSTERS ON HIV/AIDS PATIENTS IN SOUTH AFRICA

A mini-dissertation submitted to the Faculty of Health Sciences, University of Johannesburg, in partial fulfillment of the requirements for the degree of Master of Technology: Homoeopathy

by

Tebogo Tsele
(Student number: 809909178)

Supervisor: ___________________________ _______

Dr M.R.A Moiloa Date

Co-supervisor: ___________________________ _______

Dr S. Koopedi Date

Johannesburg, 2006
DECLARATION

I declare that this dissertation is my own work. It is being submitted for the Degree in Masters in Technology: Homoeopathy at the University of Johannesburg. It has not been submitted before for any degree to this university or any technikon or university.

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Tebogo Tsele

_____ day of ________________ 2006
ABSTRACT

The joint United Nations programme on HIV/AIDS (UNAIDS) in collaboration with the World health Organization (WHO) published a report stating that, 42 million people are living with Human Immunodeficiency Virus (HIV) globally, where 20 million people had already died and where HIV, the virus that causes Acquired Immune Deficiency Syndrome continued to spread in all countries (Pratt, 2003). In South Africa it is estimated that a total number of 5.6 million individuals have acquired HIV infection by the end of 2003 (Department of Health, 2004).

Highly active antiretroviral treatment (HAART) is presently the treatment of choice for people with HIV/AIDS. These drug cocktails of protease inhibitors and nucleosides led to the first real medical progress in the treatment of the epidemic. Although most people with HIV/AIDS are encouraged by the results of using the cocktail of Antiretroviral drugs (ARV’s), a recent study published indicated that 27% of people who are HIV positive have an infection that is resistant to all three classes of HIV drugs presently available (Voelker, 2000). This evidence show that there is a need for Alternative and Complementary Therapies to treat a significant number of people living with HIV infection.

The aim of this study was to determine, by means of a questionnaire survey the perceived effect of Complementary Immune Boosters in HIV/AIDS patients in Johannesburg, Gauteng. This study also determined the knowledge people have of HIV/AIDS and how patients knew about the availability of Complementary Immune Boosters. Age, gender, marital status and employment status of patients were also determined.

This study involved acquiring questionnaire survey responses from 200 participants in Johannesburg, Gauteng. Participants were recruited from twenty health shops and pharmacies that purchase Complementary Immune Boosters. A motivating letter (Appendix A) was hand delivered to health shops and pharmacies by the researcher prior to the completion of the questionnaire (Appendix B) to notify the pharmacist or health
shop attendant about the research. Responses were recorded and correlated and analysed using qualitative and quantitative methods, including descriptive statistics.

The results of this study provide a database estimating how effective Complementary Immune Boosters are on HIV/AIDS patients and reasons why HIV/AIDS patients choose to utilize Complementary Immune Boosters to boost their immune system or to relieve some of their symptoms.

Of the 200 respondents only 40% said they are HIV positive, 22.4% said they are not and 37.6% said they do not know if they are HIV positive. The data showed that the percentages of respondents are almost equal with males (51.0%) and females 49.0%. In addition, the majority of respondents are blacks with 81.8%, the second group are whites 8.6%, and coloured 7.1% and Asians are only 2.5%. Cellfood (26.8%) was the most used product by respondents, followed by Hypoxis Hemenocalidea (African potato) 17.7%. The remaining 55.5% was shared by other Immune Boosters.

Most respondents said they consume Complementary Immune Boosters to boost their immune system. Data showed that only 1.5% of respondents were advised by their medical practitioners to use Complementary Immune Boosters. With the study done on attitudes of medical practitioners regarding Complementary medicine in South Africa, 70% of medical practitioners felt that Complementary and Alternative Medicine should play an active role in the health care system in South Africa (Selli, 2003).

The results of this study are expected to initiate further, much needed research in the area of HIV/AIDS and Complementary and Alternative Medicine.
ACKNOWLEDGEMENTS

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1. INTRODUCTION

1.1 Problem Statement

The use of Alternative medicine in the HIV/AIDS infected community is widespread, and yet the medical and scientific community knows little about the safety or efficacy of most of these treatments. A study by the Medical Research Council of South Africa in 2004 found that up to seven million South Africans could die of AIDS by 2010 unless efforts are stepped up to counter the epidemic (Makubalo, 2004).

People living with HIV/AIDS continue to die of AIDS due to a lack of appropriate treatment (Gray, 2005). The government of South Africa had a plan to put 53 000 patients suffering from HIV/AIDS on antiretroviral drugs by March 2004. By the end of January 2005 only 29 000 HIV/AIDS patients were receiving the treatment in the public facilities (Keeton, 2005).

1.2 Aim of the Study

The aim of this study was to determine, by means of a questionnaire survey, the effectiveness of Complementary Immune Boosters utilized by HIV/AIDS patients. The study also determined the extent of knowledge people have of HIV/AIDS, as well as the reasons why they take Complementary Immune Boosters and how they got to know about them.

1.3 Importance of the Problem

The HIV/AIDS epidemic has become a serious health and development problem worldwide (Stannard, 2002).
By establishing a database on the effectiveness of Complementary Immune Boosters, it will be possible to identify whether Complementary and Alternative Medicine (CAM) is playing a role in treating people living with HIV/AIDS.

The extent of knowledge, attitudes, use of Complementary Therapies and the effectiveness of Complementary Immune Boosters by people have not been extensively surveyed. No studies in South Africa have looked at the effectiveness of Complementary Immune Boosters used by HIV/AIDS patients.
2. LITERATURE REVIEW

2.1 HIV/AIDS

2.1.1 Introduction

The Human Immunodeficiency Virus (HIV) is a ribonucleic acid (RNA), a retrovirus that is able to introduce its genetic material into the DNA of the human body (Geddes and Gosset, 2000). The retrovirus undergoes an unusual biological process in which the genetic material, in the form of a single-stranded RNA, can be converted into a double-stranded DNA with the aid of an enzyme called reverse transcriptase (Clive, 1990).

Acquired immunodeficiency syndrome (AIDS), is caused by the Human Immunodeficiency Virus, a retro-virus which spreads by copying its genetic information and taking over DNA in healthy white blood cells or T-cells (Anastasi, 1999).

The HIV virus attaches to the surface of T-helper cells and CD4 molecules and forms the specific receptor by which it obtains access to the cell. It enters the cells via interaction between the HIV envelope glycoproteins and cellular receptors (Reeves and Betts, 1993).

HIV is diagnosed by a positive blood culture of HIV antigen and antibodies (Murray and Pizzorno, 1998). Diagnosis of AIDS depends on meeting certain criteria such as the presence of one of the twenty-three opportunistic infections (an infection that is caused by a normally non-infectious organism) and cancers linked to AIDS or a positive HIV test, plus a total helper lymphocytes count (CD4 count) of less than two hundred cells per microliter or a percent of helper cells to total lymphocytes (CD8 count) of less than 14% (Murray and Pizzorno, 1998).

2.1.2 The Immune System

The HIV virus enters and destroys important cells, which controls and supports the immune system. It attaches to the CD4 receptors mainly the T-helper cells, which are central to the normal function of immune system (Stallick, 1996).
During early stages of the disease the HIV virus infects about one out of thousand CD4 lymphocytes in the blood circulation. It causes a persistent infection that cannot be cleared by the host’s immune response (Haworth and Pratowski, 2002).

The occurrence of opportunistic infections stimulates the activity of the immune system, but each immune response triggers an additional cell response and these activated cells provide additional targets for HIV and replication. This is the reason for believing that the development of opportunistic infections accelerates the progression of HIV disease (Ward, 1999). Once infected with HIV the person is said to be HIV positive and carries the virus for the remainder of his or her life. At the point of infection, a battle begins between the virus and the body’s immune system (Jackson, 2002).

The body undergoes numerous stages once infected. The first stage is the primary stage, which lasts until the body’s immune response develops a small measure of control over the virus. The stage lasts for about 3 weeks, during which, up to 90% of people develop non-specific symptoms. There is a sero-conversion period that lasts from 6-12 weeks, during which the body develops antibodies against the virus. After 3 years of initial infection with the virus, roughly 30% of those people would have some symptoms. After 7-8 years, about 50% of the infected people develop full blown AIDS (Jackson, 2002).

The importance of strengthening the immune system is that the body will be able to fight the infection (Davis, 1998).

2.1.3 Transmission/ Spread of HIV

HIV virus is found in the body fluids of an infected person, and for a person to be infected the virus has to enter the body in sufficient quantities, i.e. if an infected person’s semen, vaginal secretions, blood or breast milk enters the blood stream. Saliva, sweat, tears and urine do not contain sufficient quantities of the virus to be infectious, and HIV is not transmitted through normal household contact including kissing (Van Wyk, 2003).
The virus spread most commonly by unprotected penetrative sexual contact with an infected partner. It is also transmitted through contact with infected blood. Drug users frequently spread the virus by sharing needles contaminated with the infected blood. Mothers who are HIV positive can also transmit the virus to their unborn babies during pregnancy, at birth and through breastfeeding, mother-to-child transmission, MTCT (Van Wyk, 2003).

2.1.4 Signs and Symptoms

Many people do not have the symptoms when they are first infected with HIV. However some people have a flu-like illness within a month or two after being exposed. The early symptoms include fever, persistent lymphadenopathy, chronic tiredness or lethargy, headache, feeling unwell for weeks or months and herpes zoster (shingles), particularly in adults less than 50 years of age (Jackson, 2002).

These symptoms usually disappear within a week to a month and are often mistaken for another viral infection. During this period, people are very infectious, and HIV is present in large quantities in the genital fluid (Associated press, 2004).

More persistent or severe symptoms may appear for ten years or more after HIV first entered the body, in adults or within two years in children born with HIV infection. This period of asymptomatic infection is highly individual. Some people may begin to have symptoms within a few months, while others may be symptom-free to more than ten years. More severe symptoms include lack of energy, weight loss of over 10% of total body weight or more than 50%, unexplained recurring fever, persistent or frequent yeast infection (vaginal or oral), skin rashes or flaky skin, pelvic inflammatory disease in women that does not respond to treatment, recurrent respiratory tract infection (Associated Press, 2004).
Later as a person develops full blown AIDS, further serious infections occur. This includes meningitis, Kaposi’s sarcoma, non- Hodgkin’s lymphoma, pneumonia, pulmonary tuberculosis and encephalitis (Geddes and Gosset, 2000).

2.1.5 Treatment of HIV

2.1.5.1 Conventional Medicine

At the beginning of the epidemic, little or no treatment was available for people with HIV/AIDS. Although as yet there is no cure, over the past decade researchers have identified a number of drugs that slow progression of the virus as well as therapies to treat the many opportunistic infections that attack people with HIV disease. The key to effective treatment is early detection and intervention (Anonymous, 1994).

A variety of drugs can suppress HIV either separately or, more commonly in combination with one another. The disease is chronic, meaning no available drug can cure it or eliminate it from the system (Associated Press, 2004).

2.1.5.1.1 Antiretroviral therapy (ART)

Over the past decade, antiretroviral drugs have been developed to combat both HIV infection and its associated diseases. The purpose of ARV therapy is to reduce the viral load as much as possible (Van Wyk, 2003).

In theory, HIV should offer a number of targets for the development of drugs, which could be selectively active against the virus while sparing the host cell. Therefore, drugs targeting on reverse transcriptase should have little or no toxicity to cells. However, in practice, the drugs which are frequently used in the treatment of AIDS, and which act on reverse transcriptase enzyme of HIV, all have significant toxicity (Schoub, 1995).

Treatment with highly active antiretroviral therapy, HAART usually results in decreased CD4 cell counts.
HAART is any retroviral regimen capable of suppressing HIV for many months and perhaps years in a significant number of individuals (Van Wyk, 2003). Although HAART can reduce the risk of certain complications of AIDS, strangely it does not restore the immune system’s ability to fight HIV (Hosein, 1999).

The antiretroviral drugs reduce the viral load, slow down there replication of the virus, suppress and prevent the recurrence of opportunistic infection (Haworth and Prawiski, 2000). Antiretroviral therapy leads to partial immune reconstruction. However, even if this is available, a substantial proportion of patients will present with immune suppression despite antiretroviral therapy (Anonymous, 1994).

There are currently three main categories of ARV’s drugs:

- **Nucleoside Reverse Transcriptase Inhibitors (NRTI’s)**

Zidovudine (AZT), the most popular of the AIDS medications, was originally developed for chemotherapy in cancer, but due to its toxicity it was never approved for human use. AZT is now licensed by the Food and Drug Administration, FDA, as a anti HIV medication (Giraldo, 2000).

AZT is used in combination with other anti-viral medicines in the treatment of the infection caused by the HIV virus. It is used to slow the progression of the disease in patients with advanced symptoms, early or no symptoms at all. AZT may cause some serious side effects, including bone marrow problems. AZT is highly toxic to human cells at the antiretroviral dosage recommended by the manufacturer (Giraldo, 2000).

Zidovudine slows the replication of the virus by blocking the reverse transcriptase enzyme. It does not cure HIV/AIDS but brings temporary relief for people with symptomatic HIV infection. The adverse reactions of AZT are anemia, nausea, fatigue, muscle pain, vomiting, insomnia and neutropenia. Bone marrow depression is the main side effect (Reeves and Betts, 1993).
A study has been done showing that a class of anti-HIV drugs called nucleoside analogue, which include AZT, can interfere with the ability of mitochondria to produce energy. Mitochondria are the power plant of cells that creates the energy that cells need to function normally (McKinney, 2002).

If patients taking nucleoside analogue develop mitochondrial toxicity, they may experience fatigue, shortness of breath, weight loss and a rapid heartbeat. A test was done measuring levels of mitochondrial DNA in the blood of HIV positive people and on nucleoside analogue medication. The results showed that people who had mitochondrial toxicity had significant depleted levels of mitochondrial DNA and once the patients stopped taking the anti-HIV drugs levels of mitochondria rebounded (McKinney, 2002).

- **Non-Nucleoside Reverse Transcriptase Inhibitors (NNRTI’s)**

Nevirapine is a drug used to reduce the viral load in people with HIV infection and to prevent pregnant women who have HIV from passing the virus to their babies during labour and at birth. It keeps the HIV virus from infecting cells by interfering with the virus reverse transcriptase. It binds directly to the enzyme and hence disturbs its functioning (Zeelie, 2002).

Nevirapine is used with other antiretroviral drugs to be effective, usually three or more. A person taking the drug can experience symptoms like rash, fever, hepatitis, arthralgia, myalgia, hepatotoxicity, gastrointestinal symptoms and dermatological reactions (Giraldo, 2000).

The South African Medicines Control Council (MCC) has changed its mind on the use of Nevirapine alone to reduce the risk of MTCT. It now recommends the medication being used as part of a combination of pharmaceuticals to prevent mothers infecting their children with HIV at birth. MCC believes that the risk benefit profile of Nevirapine monotherapy has changed and therefore no longer recommends its use for the prevention of MTCT (Makubalo, 2004).
The Food and Drug Administration (FDA) issued a public advisory on January 19, 2005, recommending against ongoing Nevirapine treatment in women with a CD4 count greater than 250, unless benefits clearly outweigh risks. Both men and women but especially women with an increased CD4 count are at greater risks of liver toxicity from Nevirapine than those with more advanced HIV disease (James, 2005).

- **Protease Inhibitors (PI's)**

Currently Protease inhibitors are being prescribed as antiretroviral drugs for the lifetime of the individuals who are HIV positive (Giraldo, 2000). Protease inhibitors inhibit the activity of the HIV protease, an enzyme essential for the replication in chronically infected cells. These are generally more powerful than nucleosides and have received major public attention (Levasseur, 2002).

The Protease inhibitors may be difficult to tolerate because of side effects like gastrointestinal symptoms. They also lead to heart diseases and diabetes in people who are already predisposed to these conditions (Levasseur, 2002).

2.1.5.2 Complementary and Alternative Medicine

Complementary and Alternative Medicine (CAM), is a broad domain of healing resource that encompasses all health systems, modalities, and practices and their accompanying theories and beliefs (Peters et al., 2002).

Complementary Medicine differs from Conventional medicine. Conventional Medicine traditionally aims to diagnose illness and treat or alleviate symptoms. Many of Complementary disciplines aim not only to relieve symptoms and restore wellness but also to help individuals in a process of self healing within a holistic view to health (Mason et al., 2002).

Complementary therapies, such as Chiropractic, Acupuncture, Herbal Medicine, Anthroposophical Medicine, Applied kinesiology, Homoeopathy, Ayurveda,
Reflexology, Massage and Naturopathy are in great demand. Some managed care organizations now offer these therapies as an “expanded benefit” (Eisenberg, 1997).

The CAM movement gained momentum over the last decade through the mobilization around the HIV/AIDS issue and in response to the needs of people living with HIV (Standish et al., 2002).

Few studies of use of CAM among people living with HIV/AIDS (PLWHA) have been conducted since combination ARV drugs became widespread. A study was conducted where 924 PLWHA (People living with HIV/AIDS) completed a self administered survey that included questions on use of CAM. Half of the respondents reported using CAM. Most PLWHA did not choose CAM as an alternative to ARV drugs, but use CAM to complement ARV drugs (de Visser and Grierson, 2002).

Vitamins, supplements and herbs have long been used by people with HIV in the hope of helping to manage side effects of other therapies and improve overall general health. Studies suggest that 70% of PLWHA and about 50% of general population use some form of CM (Pawluch et al., 2000).

2.1.5.2.1 Complementary Immune Boosters

Complementary Immune Boosters are natural immune system supplements made from a variety of herbs with no additives.

- **Hypoxis Hemenocallidea**

  Hypoxis Hemenocallidea (African potato) is a well known genus of the family hypoxidae. It has a long history of medicinal use in the African continent (Mills et al., 2005). Hypoxis has been around for centuries, it has been used by African traditional healers and regarded as a wonder plant and used for variety of ailments and as a convalescent and strengthening tonic (Mitton, 2002).
It is a plant high in sterols and sterolins, which are plant fats and glycosides. The University of Stellenbosch has shown the beneficial effect of sterols and sterolins on boosting the immune system against HIV/AIDS (Bouic, 2002).

Research on the benefits of sterols and sterolins is ongoing. To date sterols are known to boost the immune system, lower the cholesterol and works as an anti-inflammatory agent. Further research on the African Potato has shown that the new remedy appears to alert the immune system to produce more CD4 helper T-cells, lymphocytes that are then made available to destroy the viruses and bacteria which cause bodily harm (VanWyk et al., 1997). The South African health care community is currently using hypoxis as an immuno stimulant for patients living with HIV/AIDS (Mills, et al., 2005).

- **Echinacea**

Echinacea is a herb that has been used for a very long time to boost the immune system and to fight infections caused by viruses and bacteria. Echinacea contain echonacoside, a glycoside caffeic acid derivative bound in E. angustafolia. Polysaccharides posses the best immune stimulating properties, they are also antiviral. Echinacea, like all medicinal plants, also contain sterols and sterolins (Hoffman, 2002).

Echinacea enables the white blood cells to fight a whole range of foreign invaders from mild viral infections to more serious bacterial, fungal and parasitic infections. It improves the non-specific activity of the immune system. This means that it stimulates the general activity of the white blood cells to fight any foreign infective organism as well as cancer cells (Van der Merwe, 2001). Echinacea promotes helper T-cell activation and function. Helper T-cells are involved in cell-mediated immunity (Van der Merwe, 2001).
- **CellFood**

Oxygen is our most important element for life. We can live weeks without food, for days without water but we can only live for minutes without oxygen. This is because oxygen is essential for clearing the body of toxins and for creating energy. It is also our purifying agent, oxidizing toxins and waste in the body (Matulovich, 2002).

Cellfood is a supplement that supplies the body with oxygen at a cellular level only where it is needed. When the body receives a constant stream of the essential building blocks that is needed, it strengthens itself and then the vital force increases. This enables the body to liquefy accumulated waste toxins that have been lodged in the tissues, cells and organs of the body for many years and eliminate them as phlegm and mucus (Matulovich, 2002).

Apart from assisting with the cleansing of cells Cellfood raises the frequencies of organs, making them more resistant to lower frequencies of viruses, bacteria and parasites (Matulovich, 2002).

- **Sutherlandia fruscens**

(Sutherlandia fruscens (Cancer bush) is a perennial woody shrub, native in South Africa. It is a member of the fabacea family. It contains highly bioactive compounds including L-canavanine, pinitol, GABA, asparagines and a glycoside known as SUI (Gerick et al., 2001). Sutherlandia has been used to treat cancer, tuberculosis, diabetes, menopausal symptoms, and clinical depression by traditional healers for many years (Gerick et al., 2001).

It is an excellent adaptogenic tonic which improves the quality of life of patients with HIV/AIDS. It has an anti viral activity. It also improves appetite, weight, sleep, exercise tolerance, anxiety and overall sense of wellbeing. Researchers anticipated that there would be a delayed progression of HIV into AIDS in patients who use Sutherlandia (Bouic, 2002).
2.2 Worldwide use of Complementary and Alternative Medicine Therapies

Many people use Complementary Therapies for health problems, but the extent of this use is unknown. A national survey was conducted in the United States of America to determine the prevalence and pattern of use of Complementary Therapies such as Acupuncture and Homoeopathy. Telephone interviews with 1539 adults (response rate 67%) in a national sample of adults eighteen years of age and older were completed in 1990. Respondents were asked to report any serious medical conditions and details of their use of Conventional therapy then inquired about their use of Complementary therapy. Results showed that one out of three respondents (34%) reported using at least one Complementary therapy in the past year (Eisenberg, 1997).

2.2.1 Use of Complementary and Alternative Medicine in United States of America

Extrapolation to the United States population suggests that in 1990 Americans made an estimated 425 million visits to providers of Complementary Therapy. This number exceeded the number of visits to all United States primary care physicians (388 million) (Eisenberg, et al., 1993).

Two national telephone surveys of two randomly selected sets of adults were conducted, surveying levels of CAM in 1990 and 1997 respectively. Respondents were questioned on their use of sixteen Alternative therapies and defined accessing Alternative medicine as having used at least one of the sixteen therapies within the previous year. The results showed in table 2.1 (Eisenberg et al., 1998).

Table 2.1: Use of CAM in the USA

<table>
<thead>
<tr>
<th>CAM Therapy</th>
<th>1990 (%)</th>
<th>1997 (%)</th>
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<tbody>
<tr>
<td>Relaxation Techniques</td>
<td>13.1</td>
<td>16.3</td>
</tr>
<tr>
<td>Herbal Medicine</td>
<td>2.5</td>
<td>12.1</td>
</tr>
<tr>
<td>Massage</td>
<td>6.9</td>
<td>11.1</td>
</tr>
<tr>
<td>Chiropractic</td>
<td>10.1</td>
<td>11.0</td>
</tr>
<tr>
<td>Spiritual Healing</td>
<td>4.2</td>
<td>7.0</td>
</tr>
<tr>
<td>Homeopathy</td>
<td>0.7</td>
<td>3.4</td>
</tr>
<tr>
<td>Acupuncture</td>
<td>0.4</td>
<td>1.0</td>
</tr>
</tbody>
</table>
2.2.2 Use of Complementary Medicine and Alternative Medicine in England

Half of general practices in England now offer patients some access to Complementary and Alternative Medicines, CAM. New research shows that there has been a substantial increase in provision since 1995. Increased provision by the health care team, coupled with its use for priority patient groups, suggests that CAM is regarded by many GP’s (general practitioners) as having a role to play in patient management. A research was done where a postal questionnaire was sent to one in eight GP’s partnerships in England and eight hundred and seventy took part. Results showed that 49% of general practices in England were providing access to CAM in 2001 (Dobson, 2003).

Another survey of the use of CAM in England used a questionnaire sent out as a survey to 5010 randomly selected adults and received 2668 usable responses (a correct response rate of 53%). This survey asked respondent’s whether they had visited a practitioner of one of eight named therapies in the twelve months. The named therapies were Acupuncture, Chiropractic, Homoeopathy, Medical herbalism, Hypnotherapy, Osteopathy, Aromatherapy and Reflexology. The survey also asked for information on whether respondents had purchased any over-the-counter, Herbal or Homoeopathic remedies (Thomas et al., 2000).

Results showed that 13.6% of respondents had visited a practitioner of one of the eight named therapies in the 12 months, and overall 28.3% of respondents had either visited CAM therapist or had purchased an over-the-counter remedy.

The most commonly consulted CAM therapists are shown in table 2.2 (Thomas et al., 2000).
Table 2.2: Use of CAM in England

<table>
<thead>
<tr>
<th>CAM Therapy</th>
<th>Percentage of Respondents (%)</th>
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<tbody>
<tr>
<td>Osteopathy</td>
<td>4.3</td>
</tr>
<tr>
<td>Aromatherapy</td>
<td>3.5</td>
</tr>
<tr>
<td>Reflexology</td>
<td>2.4</td>
</tr>
<tr>
<td>Chiropractic</td>
<td>3.6</td>
</tr>
<tr>
<td>Acupuncture</td>
<td>1.6</td>
</tr>
</tbody>
</table>

2.2.3 Use of Complementary and Alternative Medicine in Germany

In Germany, a federal health report by the Robert-Koch- Institute in Berlin showed that three quarters of the population aged over sixteen have had some experience of natural or CAM. The report looked at attitudes towards CAM and its application (Tuffis, 2002).

2.3 Reasons for using CAM

Patients from three CM practices, Acupuncture, Homoeopathy and Osteopathy completed a questionnaire rating potential reasons for seeking Complementary treatment. The reasons that were most strongly endorsed were because they value the emphasis on treating the whole person, they believe Complementary therapy will be more effective for their problems than orthodox, because they believe CM will enable them to take a more active part in maintaining their health and because orthodox treatment was not effective for their particular problems (Vincent and Furnham, 1996).

In the United Kingdom a survey was also conducted on respondents who had used CAM. Respondents were asked what their main reason was for accessing CAM medicine or therapies (Ernst and White, 2000). Results are shown in table 2.3
Table 2.3: Reasons for Using CAM

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helps or relieves injury/condition</td>
<td>25</td>
</tr>
<tr>
<td>Just like it</td>
<td>21</td>
</tr>
<tr>
<td>Find it relaxing</td>
<td>19</td>
</tr>
<tr>
<td>Good health/wellbeing generally</td>
<td>14</td>
</tr>
<tr>
<td>Preventative measure</td>
<td>12</td>
</tr>
<tr>
<td>Do not believe conventional medicine works</td>
<td>11</td>
</tr>
<tr>
<td>Doctor’s recommendations/referral</td>
<td>11</td>
</tr>
<tr>
<td>To find out about other ways of life/new things</td>
<td>11</td>
</tr>
<tr>
<td>Way of life/part of lifestyle</td>
<td>8</td>
</tr>
<tr>
<td>Cannot get treatment from NHS/under conventional medicine</td>
<td>7</td>
</tr>
</tbody>
</table>

Additional evidence of the ever-growing interest in CM lies in the increased status and authority given by the U.S Congress to the National centre for CAM (formerly the office of Alternative Medicine) at the National Institutes of Health (NIH), which in 1998 awarded the agency a budget increase from $20 million to $50 million from 1997 to 1999, the centre has received a 400% increase in funding a clear reflection of interest in CM by Conventional researchers, academia, western-trained medical practitioners and consumers. In fact a recent issue of the Journal of the American Medical Association (JAMA) (Vol280.no18, 1998) was devoted entirely to CM (Anastasi. 1999).

2.4 Commonly used Complementary and Alternative Therapies for HIV/AIDS

2.4.1 Homoeopathy and HIV/AIDS
Homoeopathy is a system of medical practice that is based on the theory of treating likes with likes, using a substance to cure a disease that produces symptoms similar to those the person is experiencing (Robinson and Pratt, 2003). It had its origin in the thought and experimentation of Samuel Hannemann (1755-1843) (Sharma, 1992).

Homoeopathic remedies are extracted from a variety of substances including plants, minerals and animals by a process of dilution and succussion (Eizayaga, 1991).
Homoeopathy also uses the notion of the constitution, predispositions to certain kinds of behaviour or tendencies to certain types of symptoms, and illnesses are often treated by the administration of a remedy considered appropriate to the patient’s particular condition (Sharma, 1992).

Homoeopathy has a history of success in the treatment of infectious diseases, including many of the most serious and potentially fatal infectious diseases (Ullman, 2003).

Many HIV positive patients seek the care of Homoeopathy and licensed practitioners who use Homoeopathy (Standish et al., 2002). In India Homoeopathy is more widely used and is used to treat the growing HIV/AIDS epidemic. The Regional Research Institute of Homeopathy in Mumbai, India, under the Central Council for research in Homoeopathy conducted a placebo-controlled clinical trial using Homoeopathic remedies to treat people with HIV/AIDS and to consider different theoretical and methodological approaches to treat people with viral infections (Liebert, 2003).

This study was conducted on fifty asymptomatic HIV positive patients and fifty patients with generalized lymphadenopathy in whom a single Homoeopathic remedy was administered. The study showed that no significant improvement in CD4 T-cells but did found statistically significant pretest and post test results in patients with stage III AIDS, in CD4 (p0.008) and in CD8 (p .004) counts (Liebert, 2003).

Another study was conducted on 129 asymptomatic HIV positive patients in India. Patients were treated with Homoeopathic remedies (with potencies from 30C to 1M), based on each individual’s constitutional characteristics. Results showed that twelve patients became enzyme-linked immunosorbent assay (ELISA) negative after 3 to 16 months (Standish et al., 2002).

In South Africa research have been done on HIV/AIDS and Homoeopathic practitioners by the University of Johannesburg researchers. Results found that Homoeopathic simillimum or classical Homoeopathic medication was the most frequently utilized
treatment modality by Homoeopaths. The conclusion was that Homoeopathy has a role to play in the fight against HIV/AIDS (Buldeo, 2005).

A study was conducted on HIV positive children in the rural South Africa, Finetown validating a new therapy, Human growth factor (HoGFs) of treating the disease. It was conducted by a researcher at the University of Johannesburg. The study confirms Brewitt’s previous studies that have shown the effectiveness of (HoGFs) to strengthen the immune system and promote quality of life with HIV/AIDS (Da Silva, 2005).

2.4.2 Acupuncture and HIV/AIDS

Acupuncture originates from China. It is based on correcting the flow of ‘chi’ in the body. Chi being the vital life energy present in all living organisms. Chi circulates around the body via twelve major energy pathways called meridians (Wilkinson, 2000). Acupuncture consists of the insertion of sterile small needles into the body at points that lie along the meridians. The needles stimulate the flow of chi, rebalancing the flow of energy in the body, relieving pain and restoring health (Robinson and Pratt, 2003).

Acupuncture has been used for at least 5000 years as a method of balancing the body’s energy and encouraging the vital life force to circulate freely in the body through various channels (Robinson and Pratt, 2003). Acupuncture is used frequently by people with HIV/AIDS for its reputed ability to improve well-being, relieve symptoms, boost immunity and reduce stress levels (Wang, 1994).

One of the symptoms commonly reported by many people with HIV disease is pain as result of peripheral neuropathy and many people with this condition seek relief from acupuncture (Wang, 1994).
2.4.3 Reflexology and HIV/AIDS

Reflexology has its origin in Chinese medical thought and practices. It is a system of massage of the foot based on the belief that there are zones running vertically through the body and that each organ has a corresponding location in the foot (Sharma, 1992).

Treatment of reflexology is gentle and relaxing and is often accompanied by a sense of well being. Reflexologists work on zones associated with the lymphatic and endocrine system which strengthens the immune function which can be useful for HIV/AIDS patients (Robinson and Pratt, 2003).

2.4.4 Massage and HIV/AIDS

Massage involves manipulating the soft tissues and muscles of the body, using pressure and traction. Different massage techniques are used, including aromatherapy massage, shiatsu, holistic massage, Swedish massage, biodynamic massage and therapeutic massage (Peters et al., 2002).

In 1996 a study was conducted by Dr Gail Ironson and colleagues involving 20 HIV positive men and found out that daily massage for one month showed significant improvement in natural killer cells and CD8 counts as well as reported reduction in HIV related symptoms (Anastasi, 1999).

2.4.5 Relaxation therapy (stress management) and HIV/AIDS

Stress often associated with living with chronic illnesses such as HIV/IDS can impair immune function and further worsen the clinical course of the disease. Using a variety of techniques to manage stress effectively can be beneficial for most patients (Robinson and Pratt, 2003).
Stress is typically manifested by sympathetic nervous system responses, including sweating and tachycardia, and people affected frequently complain of headache, musculoskeletal pain, anxiety and inability to concentrate (Peters et al., 2002).

2.4.6 Diet and micronutrient supplements and HIV/AIDS

Dietary supplements are commonly used in an effort to boost the immune system of HIV positive people. Foods or substances derived from foods, for example garlic, turmeric, beetroot, olive leaf extracts and Chinese bitter melon are commonly used by HIV/AIDS patients (Robinson and Pratt, 2003).

Clinical trials have identified the vitamin and mineral needs of HIV positive patients and those with AIDS. These studies suggest the need for increasing the intake of micronutrients such as Vitamin C, Zinc, Vitamin A, Vitamin E, Selenium, N-acetyl cysteine, Copper, Manganese, Alpha-lipoic acid, Co-enzyme Q 10, Flavonoids AND Vitamin B complex (Huemer, 2000).

2.4.7 Herbal Medicine and HIV/AIDS

The World Health Organisation (WHO) reported that in wealthy countries, growing number of patients rely on Complementary and Alternative Medicine for preventive or palliative care. About 80% of people in Africa use Traditional Medicine (Samba, 2002).

The global market for Traditional Therapies is worth $ 60 million annually and is steadily growing, according to Dreyer (2004). Current estimates suggested that more than 60% of the world’s population relies on Traditional Medicine and in South Africa; this figure is over 80% (Dreyer, 2004).

People worldwide seem to have adopted herbal medicine in a major way. The benefit of Herbal medicine lies on their high acceptance by patients, efficacy, relative safety and low costs.
Survey data from the United Kingdom has shown that herbal medicine has been tried by about thirty percent of the population (Samba, 2002).

Very few clinical studies have been conducted in South Africa to assess the value and efficacy of Traditional Herbal Medicines that are commonly used by Traditional Healers for treating HIV/AIDS (Tshibangu et al., 2004).

A descriptive, perspective, follow up study of thirty three HIV positive patients was conducted over a year (November 2001 to October 2002) to assess the efficacy of South African Traditional Herbal Medicine in reducing the viral load and increasing CD4 counts. The outcome of the results showed the improvement in overall health condition, immune system, increased CD4 counts and decreased viral load count (Tshibangu et al., 2004).

South Africa has established a natural clinic where more than four hundred patients undergo treatment with natural remedies for HIV/AIDS (Giraldo, 2000).

The South African health minister, Manto Tshabalala-Msimang said in her speech (Feb 16 2004) that the use of African Traditional Medicine may eventually replace ARV drugs in the treatment of HIV/AIDS. She also stressed that traditional medicine should not be integrated into western medicine, as it is a science in its own right (Dryer, 2004).
3. METHODOLOGY

3.1 Sample Procedure

Two hundred participants were recruited from twenty health shops and pharmacies in Johannesburg, Gauteng. A motivating letter (Appendix A) was hand delivered to relevant health shops and pharmacies prior to the completion of the questionnaires (Appendix B) to notify the pharmacist or health shop attendant about the procedures of the research. The research was conducted in Johannesburg, Gauteng due to the fact that Johannesburg encompasses a variety of people from different provinces of South Africa.

The completion of the questionnaires was done in the health shops and pharmacies with the aid of the researcher, for the respondents to answer the questions accordingly. The respondents were encouraged to complete the questionnaire with honesty.

3.2 Data Analysis

The responses were recorded, correlated and analysed using qualitative and quantitative methods, including descriptive statistics. The results were analyzed and are discussed in chapter four.

Questionnaire

3.3 Analysis of response to questionnaire

The responses to the questionnaire were analyzed and information with regard to the following topics was explored.

1. The number of HIV/AIDS patients utilizing Complementary Immune Boosters
2. Different Complementary Immune Boosters utilized by HIV/AIDS patients
3. The effectiveness of Complementary Immune Boosters on reducing HIV/AIDS symptoms
4. Reasons why HIV/AIDS patients utilize Complementary Immune Boosters

The results suggest that HIV/AIDS patients are utilizing Complementary Immune Boosters to boost their immune system and reduce the severity of their symptoms.
4. QUESTIONS AND RESULTS

The questionnaire consisted of thirty one questions whereby two questions were optional to the respondents. Fifteen percent of respondents failed to complete the optional question where they were asked whether they know about their HIV/AIDS status. The questionnaire was designed to examine the perceived effectiveness of Complementary Immune Boosters; the knowledge respondents have of the transmission of HIV/AIDS and respondent’s reasons for utilizing Complementary Immune Boosters.

Question 1
Gender and age of respondents

The breakdown percentages of the respondents by gender and age showed that the highest percentage group is males over the age of 18 at 51.0% and females over the age of 18 at 49.0%. (Figure 4.1)
Question 2

Ethnicity of respondents

Data showed that 81.1% of respondents are black people and 8.6% are white. Coloured people are 7.1% and only five (2.5%) are Asian. The fact that black people account for a higher percentage can be explained by the fact that majority of people who willingly agree to complete the questionnaire were black people and are the majority group that visit health shops and pharmacies in Johannesburg Central (Figure 4.2).

![Ethnicity of respondents](image)

**Figure 4.2**

Question 3

The current marital status of respondents

Data showed that majority of respondents are single people at 66.9% followed by married people at 22.7%. Widow/er are at 6.6% and divorced people only at 3.9% (Figure 4.3).
Marital status of respondents

- Single: 66%
- Married: 23%
- Divorced: 4%
- Widow/er: 7%

Figure 4.3

Question 4
The current employment status of respondents

Employment status of respondents

- Employed full-time: 40%
- Employed part-time: 19.8%
- On contract: 13.7%
- Self-employed: 4.9%
- Retired: 2.7%
- Unemployed: 9.9%
- Student: 8.8%

Figure 4.4
Figure 4.4 shows that of the 200 respondents 40.1% of respondents are employed full time. Only 9.9% are employed part time and 8.8% are on contract. Respondents who are self employed are 2.7% and those who are retired are 4.9%. Data showed that 19.8% of respondents are unemployed and 13.7% are students.

**Question 5**

**Which Immune Boosters are you currently taking?**

Respondents were asked to mark the Immune Boosters they are currently taking. This survey indicates that Cellfood (26.8%) and Hypoxis (17.7%) are the most frequently utilized Immune Boosters. The option marked other (57.6%) is the most marked option, this indicates that HIV/AIDS patients utilize other Immune Boosters from different Complementary therapies including Homoeopathy, Vitamin supplementation and Nutrition.

The other Immune Boosters that are utilized are Echinaforce (11.6%), Golden seal (3.5%), Sutherlandia (12.6%) and Moducare (16.7%). The above Immune Boosters are described in 2.1.5.2 (Figure 4.5).
Question 6

Which symptoms did you experience prior to taking the Immune Boosters?

The respondents were given twenty symptoms to choose from which they have experienced prior to taking Immune Boosters. Most experienced symptoms are loss of weight (34.8%), decreased energy level (36.4%), loss of appetite (21.4%), and persistent cough (29.4%), skin rash (13.9%), herpes zoster (17.1%), tuberculosis (15.5%), shortness of breath (10.2%), oral thrush (9.1%), generalized itching (8.6%), fever (7.0%), diarrhea (6.4%), recurrent mouth ulcers and vaginal thrush (5.9%). The least experienced symptoms are loss of memory (1.6%), loss of hearing (0%), weak eyesight (3.7%), difficult swallowing (0.5%), pneumonia (2.7%) and recurrent sore throat (4.8%). Figure 4.6 shows the symptoms from the most experienced to the least.

Symptoms experienced prior to taking immune boosters

Figure 4.6

Question 7

Symptoms experienced by respondents while utilizing Immune Boosters

Figure 4.7 shows symptoms currently experienced by respondents while taking Immune Boosters. Data indicates that majority of symptoms experienced by respondents prior to taking the Immune Boosters have disappeared after utilizing Complementary Immune Boosters. Thirty five percent of respondent experienced loss weight prior to taking Immune Boosters and only 17.7% still experienced loss of weight. Respondents (36.4%)
experienced decreased energy level prior to utilizing Immune Boosters and (8.8%) of respondents still experience the same symptom after taking Immune Boosters. Data shows that respondents (6.4%) who experienced diarrhoea and recurrent sore throat (4.8%) prior to taking Immune Boosters have not experienced the symptoms after taking Immune Boosters.

![Figure 4.7: Symptoms Experienced by Respondents after Taking Immune Boosters Percentage](image)

**Question 8**

**For which reasons do you take Immune Boosters?**

The reasons that were most strongly endorsed were Complementary Immune Boosters boost their immune system (88.8%), Immune Boosters make their body strong (65.8%) and they utilize Immune Boosters to keep their body healthy (55.6%). Seven percent of respondents reported that they feel revitalized after utilizing Immune Boosters, five percent reported that immune boosters keep their minds alert, only (1.5%) reported that they utilize Immune Boosters because their general practitioners said they should utilize them and (0.5%) reported to utilize Immune Boosters because their friends are utilizing them. (Figure 4.8)
Reasons for utilizing Complementary immune boosters

**Figure 4.8**

**Question 9**
From whom did you find out about Complementary Immune Boosters?

Majority (52.3%) of respondents reported that they first heard about Complementary Immune Boosters from health shop attendants or pharmacists. Other respondents (27.2%) heard about Immune Boosters from relatives, from newspapers or magazine (14.9%), from friends (11.3%), from radio or TV (15.4%) and (13.8%) heard about Complementary Immune Boosters from doctors or other health professionals. (Figure 4.9)
Question 10
The database shows that (100%) of respondents has good knowledge about the transmission of HIV/AIDS and the cause of HIV/AIDS. This indicates that the Government’s basic HIV/AIDS campaigns and the beyond awareness campaign, ‘Lovelife’ and Soul City projects which were designed to reduce teenage pregnancy, the spread of HIV/AIDS and sexually transmitted infection among young South Africans are reaching some of the people of South Africa.

Question 11
Respondents were asked whether they are sexually active or not. Notably (49.2%) reported to be sexually active and (50.8%) said they are not. (Figure 4.10)

![Percentage of sexually active respondents](image)

**Figure 4.10**

Question 12
Respondents were asked how often they use a condom during sexual intercourse. Data shows that (36.5%) use condoms always and (53.2%) use condoms sometimes. Only (10.3%) of respondents reported that they never used condoms during sexual intercourse. (Figure 4.11)
Question 13
Respondents were asked to mark the main reason of using a condom. Most of the respondents (90%) reported that they use condoms to prevent HIV/AIDS, followed by (84.3%) of respondents who reported that they use condoms to prevent unwanted pregnancies. Forty one percent of respondents reported that they use condoms to prevent sexual transmitted diseases (STD’s). (Figure 4.12)
Question 14

Do you know your HIV status?

This question was optional to respondents. Only 170 respondents answered this question. Of 170 respondents (60.6%) of respondents know their HIV status and (39.4%) do not know their HIV status. (Figure 4.13)

![Pie chart showing HIV status knowledge](image)

Figure 4.13

Question 15

Are you HIV positive?

The data shows that thirty respondents did not respond to this question. It could be the same respondents who did not respond to the question that asked about whether they know about their HIV/AIDS status. It is important to note that this question was optional to respondents and maybe the reason of respondents not responding is the fact that there is still stigma attached to the disease. Forty percent of respondents reported to be HIV positive, (22.4%) reported they are not HIV positive and (37.6%) do not know whether they are HIV positive or not. (Figure 4.14)
Percentage of HIV/AIDS Respondents

- Yes: 40%
- No: 22%
- I don't know: 38%

Figure 4.14
5. DISCUSSION

This study highlights the utilization of Complementary Immune Boosters by a sample of HIV/AIDS patients in Johannesburg, Gauteng. Two hundred respondents recruited in health shops and pharmacies willingly completed the questionnaire survey.

It was found that 68 (40%) of respondents confirmed to be HIV positive. Due to stigma and the sensitivity around the HIV/AIDS, it was noted that some people still found it difficult to disclose their HIV status.

Several studies found that men and women do recognize their risks of HIV infection. However, sometimes people who are at risk of HIV infection may not perceive their risk and are therefore less motivated to protect themselves, or they may perceive themselves at risk but feel unable to influence their situation (Maharaj, 2004). Results showed that all respondents (100%) had knowledge about HIV/AIDS and the transmission of the virus. But 89 (49.2%) of respondents said they are sexually active and 53.2% said they use a condom sometimes.

It was noted that the majority of respondents were blacks (81.8%), followed by whites (8.6%) and coloured (7.1%). Asians makes a small percentage of 2.5%. This may be due to the fact that the majority of people found in Johannesburg central are black.

An increased number of studies conducted show that the level of HIV infection is greater among married than unmarried individuals. In fact some studies have shown that marriage is a risk factor for HIV because of infidelity (Maharaj, 2004). This study showed that majority of respondents are single people (66.9%) followed by married individuals (22.7%).

It is clear that HIV/AIDS is related to poverty, many of respondents do not have permanent employment, 36 (19.8%) are unemployed, 9.9% are employed part time, 8.8% are employed on contract.
Data confirmed that the Complementary Immune Boosters on the market is mostly utilized by HIV/AIDS patients. Respondents indicated that they utilize Immune Boosters to boost their immune system (88.8%) and Immune Boosters make their bodies strong (65.6%). As discussed in figure 4.9 most of respondents (52.3%) first heard about Complementary Immune Boosters from health shop attendants or pharmacists and only 13.8% heard from other health professionals. Only 15.4% heard from TV or radio and 14.9% from magazines.

The most utilized Complementary Immune Boosters are Cellfood (26.8%), African potato (17.7%) and others (57.6%) that were not included in the questionnaire.

The respondents indicated that they had a lot of relief from symptoms they experienced prior to taking Complementary Immune Boosters. Most of the symptoms respondents experienced prior to consuming Immune Boosters are loss of energy, loss of appetite, skin rash, persistent cough, herpes zoster, tuberculosis, oral thrush, diarrhoea and generalized itching. See figure 4.6

There are many products on the market that are being used by people. They range from vitamins and mineral supplements, Chinese medicine, herbal medicines and Homoeopathic complexes. This study showed that HIV/AIDS patients trust and believe in Complementary medicine and it highlighted that Complementary therapies play a role in the fight against HIV/AIDS.
6. CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

The research survey was successful in its attempt to establish the perceived effect of Complementary Immune Boosters on HIV/AIDS patients in Johannesburg, Gauteng.

Results of this survey lead to a conclusion that Complementary and Alternative Medicine does play a role in the fight against HIV/AIDS treatment. Patients with HIV/AIDS utilize and trust Complementary Immune Boosters to boost their immune system and reduce their symptoms.

Even though there is a lot of stigma and a problem with disclosure around HIV/AIDS, people agreed to be part of this survey.

This study showed that Complementary and Alternative Medicine has a role to play in the fight against HIV/AIDS. Africa is known as a place that harbours indigenous plants that have been used by Traditional Healers and the general population for ages, to cure ailments. This is a positive indicator that HIV/AIDS symptoms could be alleviated by these indigenous plants.

The lack of certainty regarding the efficacy and availability of antiretroviral medication is a very serious concern to people of South Africa and this gives Complementary therapies a huge role to play in the treatment of HIV/AIDS.

This survey carry only a small percentage of the data that needs to be collected and documented, in order to ensure that Complementary and Alternative Medicine makes a vital contribution to the treatment of HIV/AIDS in people living with the disease.
6.2 Recommendations

This study highlight the need for more information with regard to the Complementary Medicine Therapies and its treatment of HIV/AIDS in order to ensure that Complementary medicine makes a significant contribution in treatment of HIV/AIDS.

The following recommendations are made:

a) This study was limited to Johannesburg, Gauteng. It is recommended that the same study be conducted in other provinces. It would be of good interest to note how patients in other provinces respond to the utilization of Complementary Medicine Immune Boosters to boost their immune system.

b) Due to the fact that Johannesburg is huge it is recommended that the same study been conducted in other parts of Johannesburg.

c) People who are HIV positive claim that Complementary therapies aid to reduce their symptoms and side effects of ARV’s, it is recommended that results should be documented and published in order for people to know about various Complementary therapies and their treatment of HIV/AIDS.

d) Due to the lack of scientific evidence on Complementary Medicine it is recommended that more research be done on the efficacy of Complementary therapies on HIV/AIDS treatment.

e) As discussed in figure 4.9 most people heard about Complementary Medicine Immune Boosters from friends and others from general practitioners, and little is heard form magazines, TV’s and radio, it is recommended that there should be more advertising on Complementary therapies.
f) There were difficulties in obtaining confirmatory HIV status of the respondents; it is recommended that the researcher must not aid the respondents with the completion of the questionnaire. Confidentiality of an HIV status must be upheld and the sensitivity surrounding the issue must be acknowledged.

g) It is recommended that for future study, respondents should state whether they use ARV’s along with Complementary Immune Boosters.

h) Little is known about Complementary Immune Boosters that are on the market, it is recommended that research be done that investigate individual Immune Boosters

i) It is recommended that in the future study the questionnaire should not be too long; it should be more specific on what needs to be acquired to collect data.

j) It was found that 64 (37.6%) of respondents do not know their HIV/AIDS status, it is recommended that more programs should be implemented to teach people about the benefits of doing HIV/AIDS tests earlier.
7. REFERENCES


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Van der Merwe (2001). All about Herbs. pp 11-13,


Appendix A

SUPPORT HOMEOPATHY IN SOUTH AFRICA

A survey to determine the perceived effect of Complementary Immune Boosters

To whom it may concern

I am currently doing research at University of Johannesburg for partial fulfillment of the M. Tech degree (Homeopathy). The aim of the research is to determine the perceived effect of Complementary Immune Boosters in HIV/AIDS patients. Participants will be recruited from health shops and pharmacies.

Participants are HIV/AIDS patients who purchase Immune Boosters and use them to boost their immune system. The family members, who usually help with the purchase of such, are also welcome to participate in the survey. All respondents will remain completely anonymous.

I, Tebogo Tsele will be issuing questionnaires and help participants to complete them.

All information will be treated in the strictest confidence. Please note that this research will be used to develop and adapt strategies and programs to better equip Complementary Medicine in the treatment and control of HIV/AIDS.

The researcher will appreciate if you will allow her to use your facility to recruit respondents. Participants will not be forced to complete the questionnaire if they are not comfortable to do so.

Thank you in anticipation of your co-operation.

Tebogo Tsele
Cell no. 0833378857
Appendix B

Please answer the following questions by putting a cross (X) in a relevant block.

Section A

Background Information

1. Your Age (In complete years)  

2. Gender?
   - Male
   - Female

3. Ethnicity?
   - Black
   - White
   - Coloured
   - Asian

4. Your current marital status?
   - Single
   - Married
   - Divorced
   - Widow/er

5. In what type of area do you live most of the year?
   - Urban
   - Rural
   - Township
6. What is your current employment status?

<table>
<thead>
<tr>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed full-time</td>
</tr>
<tr>
<td>Employed part-time</td>
</tr>
<tr>
<td>On contract</td>
</tr>
<tr>
<td>Self-employed</td>
</tr>
<tr>
<td>Retired</td>
</tr>
<tr>
<td>Unemployed</td>
</tr>
<tr>
<td>Student</td>
</tr>
</tbody>
</table>

Section B

This section explores the extent to which you utilize Immune Boosters and your opinion regarding their efficacy.

7. Which of the following Immune Boosters do you currently take?

<table>
<thead>
<tr>
<th>Boosters</th>
</tr>
</thead>
<tbody>
<tr>
<td>African Potato</td>
</tr>
<tr>
<td>Cell food</td>
</tr>
<tr>
<td>Echinaforce</td>
</tr>
<tr>
<td>Golden seal</td>
</tr>
<tr>
<td>Moducare</td>
</tr>
<tr>
<td>Sutherlandia</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

8. How often do you take Immune Boosters?

<table>
<thead>
<tr>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least once a day</td>
</tr>
<tr>
<td>At least 3 times a day</td>
</tr>
<tr>
<td>At least less than once a week</td>
</tr>
<tr>
<td>At least once or twice a week</td>
</tr>
<tr>
<td>At least 3 or 4 times a week</td>
</tr>
<tr>
<td>At least 5 or 6 times a week</td>
</tr>
</tbody>
</table>
9. How long (in months) have you been taking Immune Boosters?  

10. Which of the following symptoms did you experience prior to starting to take the Immune Boosters? Please mark all the appropriate.

<table>
<thead>
<tr>
<th>Loss of weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased energy level</td>
</tr>
<tr>
<td>Loss of appetite</td>
</tr>
<tr>
<td>Skin rash</td>
</tr>
<tr>
<td>Recurrent mouth ulcers</td>
</tr>
<tr>
<td>Recurrent sore throat</td>
</tr>
<tr>
<td>Shingles (Herpes Zooster)</td>
</tr>
<tr>
<td>Tuberculosis</td>
</tr>
<tr>
<td>Pneumonia</td>
</tr>
<tr>
<td>Oral thrush</td>
</tr>
<tr>
<td>Vaginal thrush</td>
</tr>
<tr>
<td>Fever</td>
</tr>
<tr>
<td>Diarrhoea</td>
</tr>
<tr>
<td>Persistent cough</td>
</tr>
<tr>
<td>Generalized itching</td>
</tr>
<tr>
<td>Painful/ Difficult swallowing</td>
</tr>
<tr>
<td>Shortness of breath</td>
</tr>
<tr>
<td>Weak eyesight/ blindness</td>
</tr>
<tr>
<td>Loss of hearing</td>
</tr>
<tr>
<td>Loss of memory</td>
</tr>
</tbody>
</table>

11. Which of the following symptoms are you currently experiencing?

<table>
<thead>
<tr>
<th>Loss of weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased energy level</td>
</tr>
<tr>
<td>Loss of appetite</td>
</tr>
<tr>
<td>---------------------------</td>
</tr>
<tr>
<td>Skin rash</td>
</tr>
<tr>
<td>Recurrent mouth ulcers</td>
</tr>
<tr>
<td>Recurrent sore throat</td>
</tr>
<tr>
<td>Shingles (Herpes Zoster)</td>
</tr>
<tr>
<td>Tuberculosis</td>
</tr>
<tr>
<td>Pneumonia</td>
</tr>
<tr>
<td>Oral thrush</td>
</tr>
<tr>
<td>Vaginal thrush</td>
</tr>
<tr>
<td>Fever</td>
</tr>
<tr>
<td>Diarrhoea</td>
</tr>
<tr>
<td>Persistent cough</td>
</tr>
<tr>
<td>Generalized itching</td>
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<td>Painful/ Difficult swallowing</td>
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</tr>
<tr>
<td>Loss of hearing</td>
</tr>
<tr>
<td>Loss of memory</td>
</tr>
</tbody>
</table>

12. For which of the following reasons do you take Immune Boosters? Please tick all the applicable options.

<table>
<thead>
<tr>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>They keep my body healthy</td>
</tr>
<tr>
<td>They revitalize my body</td>
</tr>
<tr>
<td>They keep my mind alert</td>
</tr>
<tr>
<td>My doctor said I should take them</td>
</tr>
<tr>
<td>They make me feel strong</td>
</tr>
<tr>
<td>They boost my immune system</td>
</tr>
<tr>
<td>My friends take them</td>
</tr>
</tbody>
</table>
13. From whom did you find out about the Immune Boosters? Please tick all the applicable options.

<table>
<thead>
<tr>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friend</td>
</tr>
<tr>
<td>Relative</td>
</tr>
<tr>
<td>Doctor or other health profession</td>
</tr>
<tr>
<td>Pharmacist or health shop attendant</td>
</tr>
<tr>
<td>Newspapers or magazine</td>
</tr>
<tr>
<td>Radio or TV</td>
</tr>
</tbody>
</table>

**Section C**

Knowledge about HIV/AIDS

Please answer the following questions with a ‘Yes’ or ‘No’ by putting a cross (X) in the appropriate box.

14. Can a healthy young person get HIV/AIDS?
   - Yes □ No □

15. Can the contraceptive pill prevent HIV/AIDS?
   - Yes □ No □

16. Can HIV/AIDS be cured?
   - Yes □ No □

17. Can a man contract HIV/AIDS from a woman?
   - Yes □ No □

**Can HIV be transmitted through:**

18. Sexual Intercourse?
   - Yes □ No □

19. Kissing a HIV positive person?
   - Yes □ No □

20. Oral Sex?
   - Yes □ No □
21. Blood Transfusion?
   Yes [ ]  No [ ]

22. Being bitten by a blood-sucking insect such as a mosquito?
   Yes [ ]  No [ ]

23. Being touched by a person who is HIV positive?
   Yes [ ]  No [ ]

24. Sharing of syringes when taking drugs?
   Yes [ ]  No [ ]

25. Sitting on a toilet seat used by a HIV positive person?
   Yes [ ]  No [ ]

Section D

26. Are you sexually active?
   Yes [ ]  No [ ]

27. How often do you use a condom when having sexual intercourse?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Always</td>
<td></td>
</tr>
<tr>
<td>Sometimes</td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td></td>
</tr>
</tbody>
</table>

28. If you use a condom, (either always or sometimes) what is the main reason for using it?

<table>
<thead>
<tr>
<th>Reason</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>To prevent HIV/AIDS</td>
<td></td>
</tr>
<tr>
<td>I don’t trust my partner</td>
<td></td>
</tr>
<tr>
<td>To prevent unwanted pregnancy</td>
<td></td>
</tr>
<tr>
<td>To prevent STD’s</td>
<td></td>
</tr>
</tbody>
</table>

29. If you never use a condom, what is your main reason?

<table>
<thead>
<tr>
<th>Reason</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I trust my partner</td>
<td></td>
</tr>
<tr>
<td>I am allergic to a condom</td>
<td></td>
</tr>
</tbody>
</table>
30. Do you know your HIV status? (Optional)
   Yes ☐ No ☐

31. Are you HIV positive? (Optional)
   Yes ☐ No ☐ I do not know ☐