Title:

An evaluation of the Zululand University peer educator programme

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Degree:

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ABSTRACT

The reported study evaluated the effectiveness of the Zululand University HIV/AIDS peer educator programme. The evaluation was summative in nature. The research design was a pre-post-test control group design and both qualitative and quantitative methods were used for data collection and data analysis.

The outcome measures used for the evaluation were changes in participants' HIV/AIDS knowledge, attitude, and behavioural practices. Results indicated that changes had occurred in the experimental groups attitudes regarding HIV/AIDS, knowledge of HIV/AIDS, and the behavioural practices of the participants. A two-way analysis of variance (ANOVA) was conducted on attitude, knowledge, and behavioural practices between gender and groups. The analysis of variance (ANOVA) revealed that there were no significant differences in knowledge, attitude, or behavioural practices for both gender and groups.

However, a qualitative analysis revealed that the programme was significantly beneficial to participants with regards to their own relationships and empowerment. It has been suggested that further research should be conducted using a larger time frame and larger sample for evaluation.
CHAPTER ONE

INTRODUCTION

Outline of the study

Changing high-risk behaviour in order to prevent HIV/AIDS infection appears to be an approach that is utilized by most prevention campaigns and programmes. Harrison, Smit & Myer, (2000) also state that the main behaviour change strategies available to prevent HIV infection include raising awareness, reducing high-risk behaviours, promoting condoms, and educating people about the nature of the epidemic and ways to prevent infection.

The study reported in this dissertation is an evaluation of the effectiveness of Zululand University's peer educator programme in educating, and changing attitudes and behavioural practices regarding HIV/AIDS with the aim of HIV/AIDS prevention using a peer educator approach.

Methods of evaluation

The evaluation was summative in nature because the general impact of a programme that was already in operation was evaluated. The results of an evaluative study assist in reducing uncertainties, improving effectiveness, and decision-making with regard to what the programme is doing and affecting. Evaluation research is meant to track the efficacy of social programs in human and social terms and arises from the need for social accountability (Terre Blanche & Durrheim; 1997).

This effectiveness of the peer educator programme was assessed by
measuring the extent to which the programme met its objectives of HIV/AIDS prevention through - educating and informing on HIV/AIDS issues (knowledge), as well as encouraging behavioural change in safe sexual practices. The focus of the study was therefore on the activities and outcomes of a peer educator programme for HIV/AIDS.

This evaluation takes place from a psychological perspective. The attitude - to - behaviour process model and the theory of planned behaviour form the framework of the study. According to the theory of planned behaviour proposed by Ajzen & Fishbein (1980), attitudes guide behaviour suggesting that individuals consider the implications of their actions before deciding to perform various behaviours (Baron & Byrne; p131; 2000:).

It follows that, in order to change high-risk behaviour that contributes to HIV/AIDS infection; prevention programs should focus on altering attitudes that facilitate high-risk behaviour. Fazio (Fazio & Roskos-Ewoldsen; 1994) postulated a theory and an attitude- to - behaviour process model. The model explains how attitudes guide behaviour and secondly, emphasizes the influence of both attitudes and stored knowledge on an individual's definition of appropriate behaviour in a given situation. It is this definition then influences overt behaviour.

This is how the process works: some event activates an attitude which then influences our perceptions of the attitude object. At the same time, our knowledge about what is appropriate in a given situation is also activated. Together, the attitude and this previously stored information about what is appropriate or expected shape our definition of the event. This definition in turn influences our behaviour (Baron & Byrne; 2000).
One can conclude that knowledge and attitude regarding HIV/AIDS are significant factors relating to high-risk behaviours and the spread of HIV/AIDS. A change in knowledge and attitude may therefore possibly result in changed behaviour. The Zululand University peer educator programme aims to provide accurate HIV/AIDS knowledge, develop skills, promote positive and responsible attitudes, and provide motivational support to help individuals engage in safer sexual behaviour and reduce their risk of being infected with HIV. The extent to which it meets this aim/objective is evaluated by using change in knowledge, attitude, and behaviour practices as outcome measures of the programmes impact and effectiveness.

Both quantitative and qualitative methods of research and data analysis were used in order to increase the objectivity of the study.

**Rationale of the study**

South Africa is considered to be a country with one of the highest rated of HIV/AIDS infection by the World Health Organization (UNAIDS / WHO, 2000). According to statistics reported by the Department of Health, the province of KwaZulu Natal was the most affected by HIV/AIDS in the year 1999. The alarming statistics of HIV/AIDS infection of South Africa’s population demand prevention strategies and interventions because HIV/AIDS has grown beyond a public health problem to become a humanitarian and developmental crisis.

The Joint United Nations programme on HIV/AIDS estimated that AIDS had orphaned approximately 13 million children worldwide at the end of 1999, 95% of which live in Africa. According to UNAIDS (WHO; 2000), orphans are frequently without the means to survive and therefore may turn to prostitution or
other behaviors that heighten their risk of contracting HIV themselves. The Census Bureau estimates that by 2010, more infants in South Africa, Botswana, Zimbabwe, and Namibia will die from AIDS than from any other cause. For example, in South Africa, Census Bureau data showed that in 2000, forty five percent of all deaths among children under the age of 5 were AIDS-related (Christoff; 2001).

The Census Bureau further states that South Africa - in addition to Botswana and Zimbabwe - has experienced negative population growth due to the high prevalence of HIV, the low fertility rates, and high infant/child mortality rates. It further estimates that by 2010, the growth rate for these countries will be -1 percent. This will therefore impact on the social and economic development in the country. The persistence of infectious diseases, such as HIV/AIDS, is likely to aggravate and in some cases provoke economic decline, social fragmentation, and political destabilization. According to a review of the HIV/AIDS epidemic and governance in South Africa (2000), it was found that South Africa itself is characterized by large expenditure on HIV prevention programs.

In addition, the rest of the world have realized that the spread of HIV/AIDS in the country is staggering and therefore financial assistance and resources have been made available to South Africa by other countries to help address the problem of HIV infection. Since the 1980s, the U.S. Agency for International Development (USAID) has provided assistance to help fight AIDS in Africa. The US Agency allocated a 53-percent increase in funding, from $114 million to $174 million, for the year 2001 to expand its HIV/AIDS efforts in Africa. The agency's efforts have mainly been directed at specific target groups to reduce the spread of the disease through behavior change communication activities; promotion of increased condom use; and improved prevention, diagnosis, and
treatment of sexually transmitted infections. However, evaluation, surveillance, and epidemiological research, regular monitoring and evaluation of HIV prevention programs is necessary to prevent wasting resources on programs that do not meet designated objectives (Christoff; 2001).

The facts on HIV/AIDS infection in South Africa suggest an urgent need for change in the education, attitude and high-risk behaviour of South African individuals regarding HIV/AIDS infection. This need is further exacerbated by the social instability and economic decline that has resulted due to the effects of the disease.

A biomedical cure for HIV/AIDS is still elusive. In the absence of a biomedical solution, prevention does remain the cornerstone in response to the AIDS epidemic, especially in South Africa. This has resulted in a proliferation of AIDS prevention programs that differ in efficacy, approach and objectives.

The rationale for this evaluation study emanates from the fact that too often programs are widely disseminated without proof of their effectiveness (O’Donnell et al; 1990). Oakley, Fullerton & Holland (1995), found a low incidence in reporting on and evaluating the effects of AIDS programs that aim to change high-risk behaviours. Harrison et al (2000; p11) state, "There have been few evaluations of HIV/AIDS behavioural or educational interventions in Africa, the continent hardest hit by the HIV/AIDS epidemic".

According to MacPhail & Campbell (1999; pp149-165) even when evaluations are carried out, most evaluations focus on the individual level of analysis, and in doing so "not only do these evaluations fail to capture the social and community level processes that state-of-the-art HIV prevention interventions seek to promote, but they also squander a vital opportunity to improve our
understanding of factors that promote or hinder sexual behaviour change in concrete social settings. Better understanding of these processes could lead not only to the development of a more refined battery of indicators of programme success, but could also contribute to the development of more effective interventions and policies in the field of sexual health promotion. According to Goodman, Speers, McLeroy, Fawcett, Kegler, Parker, Smith, Sterling, & Wallerstein (1998), there is little research around concepts and models of prevention and there is even less understanding of what works, for whom and under what circumstances, especially in the case of smaller programmes.

AIDS programme evaluation can therefore be regarded as a powerful tool that can be utilized to answer valuable questions shared by many, especially those dedicated to the complex and overwhelming task of HIV/AIDS prevention. The information provided by an evaluation informs experience and judgment, with the primary aim of establishing the merit of a programme or intervention. Most importantly, programme evaluation also addresses the question of “what type of HIV/AIDS education or prevention programme could be effective for a high-risk population group?”

The envisaged value of the study lay in the fact that an evaluation of the programme could contribute to strengthening the program’s objectives and efforts by identifying which aspects of the intervention were working best and which might require modifying. This in turn could eventually contribute to maximizing the effect of the programme. Stakeholders and coordinators of the programme will be provided with information regarding: the impact of the peer educator programme, and the effectiveness of the programme in meeting objectives.
The results of the evaluation may also argue for the continuation and extension of the programme as well as inform the focus of future efforts. The evaluation will also serve to inform other programme developers regarding HIV/AIDS prevention by means of dissemination. This is in keeping with Clark's view (Clark; 1999) that the primary purpose of an evaluation is to assess the impact of a programme with a view to providing information to help stakeholders in the programme to make decisions about the future of the programme.

Objectives of the evaluation

According to the National Research Council's suggestions for evaluating AIDS prevention programs (Terre Blanche et al; 1996), an evaluation should hinge on three basic questions, namely:

- what interventions are actually delivered?
- do the interventions make a difference?
- what interventions make a difference?

In keeping with these guidelines, the main objective of the study was to assess the effectiveness of the Zululand University HIV/AIDS peer educator programme using significant changes in knowledge, attitudes and behavioural practices as outcome measures of this effectiveness.

The evaluation also answered questions such as:

- what are the objectives of the programme?
- is it meeting its objectives?
- is the programme targeting / reaching the right individuals?
- what is the opinion of the target population regarding the programme?
• which components of the programme are most effective?

• where should future efforts concentrate?

Area of the study

The study was conducted at the main campus of Zululand University, which is situated at KwaDlangezwa in Zululand.

The peer educator programme

DramAidE developed the Zululand University HIV/AIDS peer educator programme in response to the university's HIV/AIDS policy. DramAidE is an outreach programme of the University of Zululand and University of KwaZulu Natal. DramAidE (Drama AIDS Education), which was established in 1992, is a university-based, donor-funded agency that uses participatory drama and other interactive educational methodologies for HIV/AIDS, life-skills and sexuality education. These methodologies are participatory, non-judgmental, culturally sensitive and accessible to all ages, levels of education and cultural backgrounds. Since its inception DramAidE has worked in over 850 KwaZulu-Natal schools, in 19 tertiary institutions nationally, as well as in communities both urban and rural, training teachers, nurses, caregivers, members of non-government organizations, prisons and churches.

According to the stated mission DramAidE strives to facilitate critical awareness, provide information and develop the skills to build a social movement towards an education that acknowledges the right to health and well being for everyone. To this end, DramAidE recognizes that in the face of the HIV/AIDS pandemic, life skills have become survival skills, and the programmes mission is to develop an ethos that promotes health in all its aspects. There is a
need to shift beyond awareness of the epidemic to an approach that stimulates the entire community and their leaders to take action for sustained healthy living. A primary aim is to empower communities to take action and provide care and support for those infected and affected by HIV/AIDS. The programme includes networking and collaborating with other key players in the field in order to provide coherent and sustainable interventions. The objectives of the DramAidE policy are to identify and disseminate the available resources to be used in the fight against HIV/AIDS, and to create an environment where people living with HIV/AIDS are safe to reveal their status and seek appropriate support and counseling.

These objectives are extended to the peer educator programme, which aims to:

- provide correct and appropriate HIV/AIDS information,
- facilitate the exploration of existing attitudes and beliefs regarding HIV/AIDS in an open and non-judgmental environment
- encourage reflection on existing negative attitudes and behavioural practices/intentions regarding HIV/AIDS
- raise the level of understanding of HIV/AIDS throughout the University and thereby
- reduce the transmission of HIV through the provision of education and information
- encourage and facilitate voluntary counseling and testing
- actively promote good health and positive living on campus
- equip staff and students to be able to live and work in societies with increasing rates of HIV infection.

The programme is based on the peer education approach and the methodology used for all workshops consists of group work, role-playing, brainstorming and
freeze frames. It embraces a participatory and entertaining approach, which has proven to encourage student involvement. It consists of five workshops, which adopt a facilitation style to encourage self-efficacy.

These workshops are designed to give peer educators appropriate resources in HIV/AIDS information and skills within the context of living responsibly. They also serve to challenge and enhance the peer educator’s personal understanding of behaviour and social responsibility regarding HIV/AIDS prevention.

The first workshop is based on AIDS information, attitudes and beliefs and challenging misconceptions. Basic HIV/AIDS information, HIV/AIDS in relation to gender and culture, as well as myths and facts about HIV/AIDS is explored in this workshop. During this workshop session, the definition of the term peer educator is discussed, as well as the responsibilities and codes of conduct expected of a peer educator.

The second workshop focuses on relationships, life skills, love and sex. During this workshop gender roles and their impact on relationships are discussed. Providing life skills such as assertiveness training and self-concept and self-esteem building is explored in relation to HIV/AIDS. This workshop is held over a period of two days, as the content is extensive.

The third workshop focuses on teaching participatory techniques and facilitation skills to peer educators.

The fourth workshop explores living positively with HIV/AIDS, and encourages reflection on the benefits and challenges of knowing personal HIV status seeing as voluntary counseling and testing is seen as a crucial entry point into the
prevention and management of HIV/AIDS (WHO;2000). Furthermore, promoting awareness and knowledge on HIV/AIDS is a step in the direction of expanding voluntary counseling and testing services. This particular workshop assists students develop personal and social responsibility with a view to them assuming responsibility for their status by agreeing to voluntary counseling and testing.

Finally, the fifth workshop informs peer educators on their rights and responsibilities and encourages the development of behaviours that demonstrate care and support for people living with HIV/AIDS.

Terms of reference

Attitudes
According to Baron & Byrne (2000; p319), attitudes refer to our evaluation of any aspect / element of the social world - the extent to which we have favourable or unfavourable reactions to issues, ideas, people, social groups and objects.

Knowledge.
Knowledge can be defined as diverse sets of information that one knows or knowing (Baron & Byrne: 1990).

Behaviour
Behaviour is defined as the manner in which we act in different situations and which is interdependent on various social, biological, and environmental factors (Baron & Byrne; 2000).
Programme evaluation

According to Clarke (1990; p1) programme evaluation is: “the systematic collection of information about the activities, characteristics, and outcomes of programs for use by specific people to reduce uncertainties, improve effectiveness, and make decisions with regard to what the programs are doing and affecting”.

HIV (Human Immuno-deficiency Virus)

HIV can be described as a virus that destroys the immune system (Greenwood; 1994), most notably the helper T-cells that are responsible for the protection of the body against invading foreign bodies.

Experimental group

This term refers to the group that is subjected to the independent variable (Baron & Byrne; 2000), which is an intervention to determine effects.

Control group

It is a group that is used as a baseline against which one can measure the effect of an intervention (Baron & Byrne; 2000).
CHAPTER TWO

Literature Review

Programme evaluations that include a peer educator component have been limited, especially in South Africa, and Africa, the continent hardest hit by the HIV/AIDS epidemic (WHO; 2000). Furthermore, there have been few evaluations of HIV/AIDS behavioural or educational interventions in Africa, and although Peer education has been evaluated in several studies in other countries, limited studies exist of South African evaluations (Harrison et al; 2000).

Following is a review of literature and studies that have evaluated AIDS prevention programmes similar to the evaluation being reported. Also provided is a review of HIV/AIDS prevention programmes that have been implemented in South Africa in the last decade. Finally, the strengths and weaknesses of the peer educator approach are explored.

Similar to the reported research is an evaluation study by Anansuchatkul, Bupa, & Vanderbilt (1995). Here researchers evaluated the impact of three educational interventions for AIDS prevention on knowledge, attitudes, beliefs and behavioural intentions. This study is significantly similar to the study being reported, as a quasi-experimental, pre- and post-test, nonequivalent control group design was employed to evaluate the programme. Participants in the study included 252 Thai female workers between the ages of 15 to 29 years. Results of the study indicated that the peer led programme was significantly more successful in changing attitudes and behavioural intentions among the women than the other two educational interventions. A qualitative analysis was
performed and results suggested that participants' expressed greater satisfaction with peer led activities than those that were facilitated by strangers. African countries have the highest HIV/AIDS prevalence rates in the world. Botswana is a country where HIV/AIDS prevalence has reached crisis proportions and now has one of the highest rates of HIV/AIDS infection in the world (UNAIDS; 2000). Among initiatives implemented as a response to this crisis, is a peer education HIV/AIDS prevention programme (PEHAPP). Hope & Kempe (2003) evaluated the impact of the programme and peer education on HIV/AIDS prevention.

The assessment measured the impact and outcome of a peer education HIV/AIDS prevention programme in the workplace. The study was implemented in Botswana. Findings of the study indicate that the peer educator approach had a measurable positive impact in areas of improving knowledge, attitudes, and practices that are related to high-risk sexual behaviour. The research concluded that this in turn should reduce the incidence of HIV/AIDS transmission. However, a study by Middlestadt, Fishbein, Albarracin, Francis, Eustace, Helquist, & Schneider (1995) found that, although adults may acquire relevant knowledge, they might still resist changing what they do. The study indicated that a campaign designated to prevent the spread of HIV/AIDS was effective in changing attitudes and beliefs of those involved, but there was still little effect on behaviour. Slonim-Nevo, Ozawa, & Auslander (1991) add weight to this claim in an evaluation study. Findings suggested that interventions that were based on only dispensing information about HIV/AIDS were ineffective in reducing high-risk behaviour.

A review of similar literature (e.g. Rosenthal & Shepherd; 1993, Harrison et al; 2000, Peersman & Levy; 1998) increasingly suggests that knowledge - while a necessary precedent to behavioural change - is not sufficient to make this
happen as the underlying causes of the HIV/AIDS epidemic may be ignored and fundamental issues that confront people when making decisions about practicing safer sex are not addressed. Effective behavioural risk reduction programmes use skills-based education and training methods with a theoretical basis, which provides the only strong evidence to date for the efficacy of behavioural interventions.

A case in point is a study conducted by Visser & Schoeman (2004) that evaluated the outcome of an HIV/AIDS prevention programme in South African schools. The aims of the research were to monitor the process of implementation of the intervention at a school level and to then evaluate the impact in terms of knowledge, attitudes and reported behaviour patterns of the learners. The evaluation was conducted over a period of two years. Findings of the study indicated that limited change occurred. Even though learners had gained knowledge about HIV/AIDS, and their attitudes toward people with HIV were more positive, there was an increase in the reported high-risk behaviours of the learners. More learners were sexually experienced in the post-test than in the pre-test. In conclusion Visser & Schoeman (2004) state that knowledge may not necessarily be related to behaviour change and suggest that interventions should rather focus on addressing the underlying social norms that maintain high-risk behaviour patterns.

It is therefore likely that, the impact of most programmes emphasizing knowledge and prevention are limited, as they do not impart the skills that are required to achieve these ends. Harrison et al (2000) further state that behavioural interventions are most effective when targeted towards specific risk groups, taking into account the socio-cultural context of a community. Campbell & MacPhail (1999) support this claim and postulate that sexual behaviour is a complex and multi-determined phenomenon, determined by
intra-individual, inter-individual, community, social and economic factors. One would therefore require effective and relevant conceptual tools to adequately understand or measure the interacting effects of these factors, each operating at a different level on peoples' sexuality. It is furthered argued that HIV-prevention programmes will succeed or fail in changing peoples' sexual behaviour to the extent that they:

- provide the opportunity for target audience members to renegotiate their sexual and social identities at the collective level, and
- increase levels of perceived self-efficacy amongst target groupings. The greater control people have over the important aspects of their lives, the greater likelihood there is that they will adopt health-promoting behaviour. Successful interventions will develop the individual's belief in his/her potential to influence his or her life circumstances, including his or her health status.

Interventions that impart skills and seek to address the context of people's risk have been found to succeed in changing high-risk behaviours. Kelly (1995) developed and evaluated a programme that was partially based on the principles of peer education. Popular members of the gay community were trained to provide information and education pertaining to HIV/AIDS. Upon careful evaluation it was found that high-risk sexual practices were substantially reduced in four cities where the programme occurred. Of particular relevance is the intervention that was most successful in effecting change within this study. The programme was coordinated at a community level and developed an effective social support network. Participants were assisted in assessing their personal risk in order to change high-risk behaviour. The study concluded that it had succeeded by instilling within the participants a particular sense of self-efficacy and control over their own sexual practices.
In a study by Sionim-Nevo (2001) - which evaluated the effect of an HIV/AIDS prevention intervention on adolescent's behaviour, attitude and knowledge - it was found that the interventions had a significant effect on the treatment group's knowledge about HIV/AIDS, attitudes towards prevention, coping skills and behaviour. The study assessed the effect of a cognitive - behavioural program to prevent HIV/AIDS among adolescents in Israel. Research designs used were similar to the reported study as evaluation was carried out using an intervention and control pre-post follow-up. In a twelve-month follow up changes were still evident. The study concluded that interventions focusing on attitudinal changes, coping skills and assertiveness could be effective in changing HIV/AIDS related high-risk behaviours.

The above further supports the claim that, those programmes that impart skills are more likely to succeed in changing sexual behaviour than those that only impart knowledge. Furthermore, it is evidence that approaches to prevention should evolve from an emphasis on information-based HIV-awareness campaigns and the aggressive detection and treatment of sexually transmitted diseases, to more community based approaches involving peer education and using participatory techniques such as peer-led role-plays and group discussions (MacPhail & Campbell; 1999).

The HIV/AIDS peer educator programme conducted by the University of Zululand centre for the drama approach (DramAidE) claims to use a participatory approach and address the issue of social norms that maintain high-risk behaviours by involving the physical, emotional, and intellectual aspects of a person in the programme. The programme claims that it achieves these aims by exploring relationships, love, sex, discrimination and stigma, as well as coping and counteracting skills. A recent study by Niba & Green (2005) found
that participatory processes are required for successful intervention as it creates an environment conducive to mobilizing social change, thus assisting in the reduction of HIV/AIDS by changing attitudes regarding sexual behaviour.

An outcome assessment study by Reekie (1997) - based on the use of drama - evaluated the effects of an AIDS education program in Soweto High Schools. The study aimed to establish significant differences in knowledge and behavioural practices between adolescents who had watched an AIDS education play compared to those who had not. Age, gender and educational levels were used as covariates affecting the receptivity of pupils to the message of the play. A similarity of this study to the study under discussion is that an analysis of variance (ANOVA) was performed on data in order to measure changes in knowledge, attitudes, beliefs and intentions related to AIDS risk reduction. Findings of the study indicated that changes occurred in all outcome measures.

Kuhn, Steinberg & Mathews (1994) developed and evaluated a high school HIV/AIDS prevention programme, in response to findings that indicated high-risk sexual behaviour amongst adolescents within an underprivileged township in Cape Town. A test-retest control group design was used in evaluating the programme and results indicated that there were significant improvements in several AIDS related areas.

The prevalence of HIV/AIDS has impacted on numerous countries in the world. This has led to a proliferation of HIV/AIDS prevention programmes throughout the world. The Republic of Turkey is known to be at risk for high levels of HIV/AIDS infection due to an increase and rapid expansion of tourism in recent years. Ergene, Cok, Tumer, & Unal (2004) conducted a controlled study of the preventive effects of peer education and single session lectures on HIV/AIDS
knowledge, attitudes, and personal behaviour among university students in Turkey. The aim of the study was to assess the impact of peer education and educational lectures on outcome measures of attitude, knowledge, and personal behavior. Students were randomly selected to participate in peer education, single session lectures, and control groups. Statistical analyses revealed significant differences in all outcome measures. Furthermore, results indicated that the peer education strategy was more effective in eliciting change in students' knowledge and attitudes than the control condition.

The peer educator programme implemented by DramAidE at the University of Zululand does provide appropriate HIV/AIDS information and messages to students in order to encourage the development of a personal understanding of HIV/AIDS issues. The workshops of the programme also encourage reflection on personal behaviour, as well as provide coping and counteracting skills to promote social responsibility. Additionally, peer educators facilitate these activities. However the peer educator approach has received criticism and it's strengths and weaknesses are addressed below.

The peer educator approach

Peer education programmes in South Africa are increasing, for example, Planned Parenthood's adolescent reproductive health programme targeting out-of-school youth and the Mothusimpilo project on the gold mines seeking to evaluate peer education among commercial sex workers (Campbell; 1997).

Peer educators play an important role in the delivery of information on a variety of health topics including smoking, alcohol and substance use and reproductive health. Many authors (Milburn; 1995, Sloane & Zimmer; 1993, Turner & Shepherd; 1999) have suggested some benefits of peer education
interventions. These include; lower cost in terms of professional staff, a demonstrated advantage of reliance of youth on peers for a variety of supports which includes sexual information and the opportunity for volunteers to experience personal growth and possible career development. Furthermore, because a significant proportion of youth are enrolled in higher education, peer education is particularly appealing in this setting.

Results of the study by Ergene et al (2004) suggest that peer educators can be an effective alternative to traditional information giving exercises about HIV/AIDS. A reason reported for this may be that peer educators may promote more positive attitudinal changes effecting behaviour because of interactive discussions within the same social network.

Dube & Wilson (1996) state that sexual behaviour change is more likely to occur through the influence of peers than through conscious rational choices made by individuals in isolation. People are more likely to change their behaviour if they perceive that liked and trusted peers are changing theirs.

This thereby supports the peer educator approach to HIV prevention. According to Harrison et al (2000) the use of trained individuals from a particular target group to educate their peers is an increasingly popular method for bringing about behavioural change. Peer education programmes empower people as well as educating them by transferring the control of knowledge from the hands of experts to lay members of the community, thereby making the educational process more accessible and less intimidating.

Secondly, peer education allows group debate and negotiation of messages and behaviours, leading to the development of new collective norms of
behaviour rather than seeking to convince individuals to change their own behaviour based on a notion of rational decision-making.

Ideally, peer education combines awareness raising with behavioural risk reduction; what is taught is at least as important as how it is taught. The most successful peer education programmes have been those that draw on theoretical approaches (Janz et al; 1996).

For instance, the Postponing Sexual Involvement programme in California high schools used peer educators within a broader programme aimed at sexual risk reduction. Peer educators played an important part in imparting information, and in leading role-plays to rehearse sexual negotiation skills. However, they had support from authority figures and did not deliver the entire programme on their own. Similarly, an intervention with young women in the United States used peer education as one component of a multifaceted project and was able to demonstrate a significant influence on condom use and other behaviour (Baldo; 1998).

Using peer education and condom promotion, Laukamm-Josten, Mwizarubi, Mwajonga, Outwater, Valadez, Nyamwaya, Swai, Saidel, & Nyamuryekung'e (2000) aimed to decrease high-risk sexual behaviour among truck drivers within a pre-determined period from 1990 to 1993. When the programme outcomes were evaluated, it was found that peer education was an effective tool for increasing knowledge and encouraging appropriate behaviour change. Knowledge, attitude and practice surveys were conducted before, during, and after the intervention as evaluative tools. The project succeeded in overcoming barriers of discussing issues such as sex, death, STD's and condoms. Results further indicated an increase in condom carrying and use among men and women. This was seen as an indication of participants adapting safer sexual
behaviour. Positive attitudes also became more prevalent after the programme implementation. However, despite peer education projects being identified by the World Health Organization (WHO; 2000) as some of the most successful approaches in promoting and assisting behaviour change, reservations regarding its effectiveness in changing behaviour have been expressed. Some investigators have suggested that peers may not be the most preferred means of delivering health information especially regarding HIV/AIDS. Cline & Engel (1991) report that college students preferred to receive information about HIV/AIDS from health professionals rather than from peer educators. Helgerson & Peterson (1988) also found that adolescents did not trust the information they received from peer educators, preferring to seek additional information from health professionals. A study by Ramafedi (1994) raised concerns regarding the effectiveness of peer education programmes in eliciting behavioural change.

Another weakness of peer education - as reported by Broadhead, Heckathorn, & Weakliem (1998) - can be the tendency to make volunteer educators wholly responsible for programmes, with the danger that important elements such as building skills and increasing competence may be neglected if careful training and ongoing support are not provided.

Frankham (1998) states that the key elements in developing a peer education approach include the recognition that young adults exchange information and discuss issues such as AIDS, sexual health, and drug use and abuse amongst themselves. This leads one to believe that young people are already engaged in free and frank discussions about such issues, are experts in communication and that they will naturally apply empowering methods. However, Oakley et al (1995) report that conversations about sex between young men appear to be limited and they engage primarily in humourous or bawdy types of conversation.
about sex, thereby, little factual or reliable information about sexual experience
or safety practices is gathered in this way.

Widdicombe & Wooffitt (1995) lend further weight to these findings with
research into young people's conversations about sex. The study reports that
although youth say that they have learnt more about sex from their friends, they
find it difficult to recall facts they have learned in this way. There appear to be
limitations on the content of conversations especially among young women who
want to preserve their "reputations". Therefore, although young people are
more likely to turn to their friends for advice than their parents or professionals,
they are not necessarily seen as credible sources, because males have the-
need to be seen as "one of the lads". One would therefore have to question the
notion that peer communication is an established network through which young
people communicate about important issues such as HIV/AIDS and safe sexual
behaviour.

Survey of AIDS prevention programmes in South Africa

A complete review of all AIDS prevention programmes is not possible.
However, programmes that have been carried out over the past decade will be-
highlighted, in particular those that consist of action in areas such as peer
education, coping skills and behavioural risk reduction.

Harrison et al (2000) state that, information, education and communication
typically form the starting point for most HIV prevention activities, and in South
Africa these have been crucial in raising awareness about HIV/AIDS. While
South Africa has been criticized for its slowness in responding to the epidemic,
a high level of awareness exists among the general population. A number of
South African prevention efforts have been implemented by the national and
provincial governments, as well as by various non-governmental organizations (NGOs). The mass media have publicized HIV/AIDS through television programmes such as Soul City, which is a weekly drama series that covers a range of health issues, and thereby disseminating basic information about the epidemic and its consequences. Radio has also been an important medium for HIV/AIDS education, particularly through community radio stations such as Radio Zibonele in the Western Cape. The government - with private sector funding - set up the 'Partnership against AIDS', which various NGOs have supported through the 'Red Ribbon' campaign, in which government officials wear a red ribbon at public appearances in order to focus attention on the epidemic.

Other communication efforts focus on knowledge of HIV/AIDS and specific risks. An example of this is the Department of Health's Beyond Awareness campaign, which addresses HIV/AIDS and its prevention through popular media, widespread promotion of condoms, encouraging open dialogue on the disease, and sponsoring HIV/AIDS-related activities. In addition, important efforts in South Africa have included youth magazines, such as Laduma, which is produced in comic book form, and SexNews published in English and Zulu and using pre-tested language familiar to young people. Love Life, a national youth sexual health initiative, started a mass media campaign using billboards, newspaper advertisements, radio and other outlets to address sexual health issues, as well as underlying causes of HIV/AIDS, including gender issues and sexual coercion (Harrison et al, 2000).

Several intervention programmes - including Life Skills, DramAidE's Teaching Men to Care, Stepping Stones, and Love Life's youth-focused agenda - have been designed in an attempt to address issues such as empowerment and relationship negotiation skills. These programmes target young men and
encourage respect, care, self-esteem, and support for women and gender equality.

A very recent programme - CHAMP - which is aimed at HIV/AIDS prevention, focuses on strengthening communication and HIV/AIDS education between parents and youth. The programme has been implemented by the School of Psychology at the University of KwaZulu Natal, in collaboration with the Human Science Research Council and the National Institute of Mental Health in the United States. The programme promotes behaviour change through participatory education where participants in the programme discuss and debate on problems and issues related to HIV/AIDS, and then come up with their own solutions to these problems. It is a ten-week programme that invites families and community members to actively participate, using an open-ended cartoon based narrative that was developed especially for CHAMP (HSRC; 2003).
CHAPTER THREE

RESEARCH PROCEDURES

Method

This study is an outcome evaluation and therefore examines whether what has been done (the peer educator programme intervention) has made a difference within and to those participating in the programme. According to TerreBlanche et al (1996), the task of outcome evaluation is to show what changes have occurred over the time period from before an intervention is implemented to after implementation; i.e. pre-post differences.

A control group was used as a baseline against which the effect of the peer educator programme could be measured. According to Goodwin (1999; p182), threats to internal validity are especially dangerous when control groups are absent, especially in evaluation research.

To display these pre-post differences and in order to provide an objective and broad perspective of the programme effectiveness, both qualitative and quantitative approaches were used in data collection and analysis. A quasi-experimental design was used for the study. According to Rossi & Freeman (1998;p299), in most cases quasi-experiments are the most powerful alternatives to random experiments and are undertaken more frequently than true experiments.

Participants

The sample for the experimental group study was selected by nonprobability convenience sampling as the population depended on the subjects volunteering
for participation in the program as well as subject availability. The control group was selected after the experiment group volunteers were enlisted by matching procedures. Matching is accomplished by selecting groups as controls whose characteristics resemble the major relevant features of the experiment group or the group exposed to the programme / intervention (Rossi & Freeman; 1998).

The sample design was therefore a nonequivalent - groups design. According to Rosnow & Rosenthal (1999), nonequivalent-groups designs are between - subjects designs in which the subjects are assigned to experimental and control groups by means other than randomization and are tested before and after the experimental treatment. In the case of this study this was done by matching the two groups on demographic variables such as age, gender and year of study.

Sample characteristics

All participants that agreed to participate in the study were required to sign consent forms. According to Harrison et al (2000), the incidence of HIV infection is highest in women between 15 and 30 years of age in South Africa. Fortunately, volunteers for the experimental group consisted of 27 adults aged between 15-36 years, who were students of the Zululand University and who attended the six-week workshop. The control group consisted of 24 students also aged between 15 and 36 years and who did not attend the HIV/AIDS peer educator programme workshops.

It was found that all participants of the experimental group (27) were single and overall, 96% of the participants were aged between 20 to 25 years with a mean age of 22.4 years. All participants were students of the University of Zululand with a majority (76%) being fourth year students. The two groups were matched and were therefore similar in age, race, marital status and year of
study. Participants of the experimental and control groups did not meet and had no knowledge of the other group's existence. The reason for this was to prevent the possible contamination of results that may have occurred, had the experimental group participants communicated with the control group.

All the participants in both the treatment and the control groups were university students; therefore the two groups were also similar in this regard. However, the female sample in the control group was larger than that of the experimental group. Whilst the experimental group consisted of 11 females, the control group consisted of 14 females. The experimental group consisted of 16 males, whilst the control group consisted of 10 males. The experimental group was larger than the control group by 3. These were significant variables, as gender may have also impacted on any results obtained with regard to effects that might have occurred due to the HIV/AIDS peer educator programme.

A questionnaire - consisting of a demographic, knowledge, attitude and behavioural scale - was administered to the participants in a quasi-experimental pre-test post-test control group design. Thereafter, the experiment group was exposed to the HIV/AIDS peer educator programme whilst the control group was not.

The questionnaire on knowledge, attitude and behaviour was administered to both groups in pre- and post- sessions. This design allowed the researcher to establish any significant change in factual knowledge, attitude, and intentional behaviour regarding HIV/AIDS in the participants of the programme as compared to those who did not participate in the programme.

An objective and broad perspective on the effectiveness of the peer educator program could therefore be provided. Further information regarding the
possible influence of demographic factors on the impact of the HIV/AIDS peer educator program could also be obtained.

Procedure

The HIV/AIDS peer educator programme, which served as the intervention, was delivered over a period of 6 weeks during 2004. It consisted of 5 workshop sessions that provided information on HIV/AIDS, explored attitudes and beliefs on HIV/AIDS, and encouraged healthy and responsible relationships. The importance of supporting and being supported when affected or infected with HIV/AIDS was also explored.

The group leaders of the intervention and the data collectors for the pre- and post assessment phases consisted of DramAidE counselors and staff who worked with University of Zululand students on a regular basis. The leaders themselves were trained researchers in HIV/AIDS education and were therefore educated on data collection.

The experimental and control groups formed the independent variables as they would be manipulated to determine the effect of the intervention (the peer educator programme). The knowledge, attitude and behavioural practices scales formed the dependent variables as they are expected to change when the independent variables were manipulated.

The questionnaire was administered to both the experimental and the control groups, separately, yet, at the same time. This was done to avoid biasing the study as communication between the treatment and control groups could impact on the reliability of data obtained.
The pre- and post assessment data was collected immediately before the first session of the intervention and immediately after the last session of the intervention. Each participant completed his or her own questionnaire, which was anonymous and was not read by the leaders. These leaders were present to ensure that each participant responded independently. According to Slonim-Nevo (2001), this type of procedure, based on a combination of self-report and interview methodology was found to encourage honest responses.

In order to reduce or avoid social desirability bias, none of the participant groups were informed of the purpose of the study until after post-testing in a debriefing session. Although this does raise questions of an ethical nature, it was necessary in order to decrease bias and increase the internal validity of the research.

However, the autonomy of the participants was respected in that they were informed of their right to withdraw from the research at any time. They were informed that the potential benefits of the study would also outweigh the risks as the information and experiences of the programme would contribute to the participants’ learning experience regarding HIV/AIDS.

**Outcome measures**

According to O'Donnel et al (1990), outcome evaluations are conducted to measure knowledge, attitude, and behaviour or physical environment of the target population. The decision to use changes in knowledge, attitude / beliefs, and behavioural practices as measures of effectiveness of the peer educator programme was also based on the program's aims to increase knowledge as well as change attitude and high-risk behaviour for HIV/AIDS prevention. This
approach would then answer the guiding questions of this evaluation, one of
which was whether the programme met its objectives.

The data collection instruments used consisted of a self-report questionnaire
that was composed of four scales, namely, the demographic, knowledge,
attitude and behaviour scales (see Appendix A). This instrument was
previously used for a study on the knowledge, attitude and behaviour of
University of Zululand students and was therefore standardized on this
population at the time. However, as the instrument was not standardized on the
sample population of this study, it is possible that this might have impacted on
the internal consistency of the test and data obtained.

The demographic scale was composed of five items, which obtained data on
the research sample pertaining to: gender, age, marital status, race, and the
year of study at the university. This enabled the data obtained in the other
scales to be compared to factors such as gender and age as these are
significant factors with regards to HIV/AIDS statistics.

These factors were therefore recorded in order to observe their influence - if
any- on the experimental group’s performance as compared to that of the
control group. Scores on this scale ranged from 0 to 4 and a lower score
indicated a higher-risk group for HIV/AIDS.

The knowledge scale was composed of 13 items and assessed the degree to
which the respondent was aware of the basic facts about HIV/AIDS and how to
prevent infection. The items were rated as “Yes” or “No”. The scale ranged
from 0 to 1, and items were summed to yield a total possible knowledge score,
with higher scores indicating a greater and more accurate knowledge about
HIV/AIDS.
The attitude scale of the questionnaire was designed to assess the individual's self-reported attitudes on condom use; attitude towards HIV/AIDS infected people, treatment of HIV/AIDS, self-efficacy, and disclosure of HIV status. The scale consisted of eight items to which the individual responded with either a "yes" or a "no" or with "acceptance" or "rejection". The scale ranged from 0 to 2 with higher scores reflecting a more favourable and positive attitude toward HIV/AIDS prevention, support and disclosure.

The behaviour scale was designed to assess the individual's self-reported behaviour regarding personal sexual practices and HIV/AIDS prevention. The scale consisted of seven items rated as either a "yes," "no," or "always", "sometimes" or a "never". The scale ranged from 0 to 2 with higher scores reflecting safer sexual behaviour/practices and therefore greater HIV/AIDS prevention.

Information from the knowledge, attitude, and behaviour scales gathered information that is used to assess the impact of the HIV/AIDS programme on the sample population. This is further discussed in the analysis of results. The questionnaire therefore formed part of the evaluation of the peer educator program in that it indicated what changes – if any - occurred in the knowledge, attitude and behaviours of the participant treatment group, and if these changes were due to the peer educator program.

As mentioned, the task of outcome evaluation was to show what changes have occurred over the time period from implementation of the peer educator programme to after it's implementation, i.e. pre-post differences. In order to do this, baseline data was required. Therefore there needed to be an account of the extent of the problem before the intervention. In order to obtain baseline data a comparison/control group was used. Baseline data was also obtained in
the form of a pre-test analysis to display the extent of change in knowledge, type of attitude, and finally the behavioural practices of the participants. Change was measured by comparing each participant's pre-test and post-test scores on each scale. An analysis of variance was conducted to evaluate the differences in change that may have occurred within the experimental or the control groups.

The qualitative data collection instrument consisted of an unstructured questionnaire that formed part of a qualitative enquiry. It enquired about the experimental group participants' personal experiences and opinions of the HIV/AIDS peer educator programme as well as their suggestions for the future of the programme. Thematic content analysis was used to interpret qualitative data obtained:
CHAPTER FOUR
Data analysis and results

Quantitative analysis

To examine overall group differences in HIV/AIDS knowledge, attitudes, and behavioural practices, an analysis of variance (ANOVA) with repeated measures was utilized (Grimm; 1993). The statistic package SPSS computer programme was used.

An inspection of pre- and post-test means for both the experimental and control groups suggests that a change occurred in attitudes relating to HIV/AIDS, as well as knowledge about HIV/AIDS. Change was also found in behavioural practices of the participants after the intervention.

An inspection of means for gender comparison on all three scales of knowledge, attitude and behavioural practices also indicated a differential change in both male and female participants’ attitudes, knowledge and behavioural practices after the intervention.

A two-way analysis of variance (ANOVA) was conducted on knowledge, attitudes, and behavioural practices between gender and groups. The independent variables were group assignments, and gender of the participants.

The ANOVA revealed that there were no significant differences in knowledge scores between the control and experiment groups (F=2.3). This finding suggests that students exited the interventions with no significant increase in knowledge of HIV/AIDS.
No significant differences were found between control and experiment groups for attitude or behavioural practices scores either, although, interaction effects were found. Furthermore, no significant differences were found between the gender groups for knowledge, attitude, or behavioural practices scores, although, interaction effects were also noted here.

Knowledge

Data analysis indicated that even before the intervention began, more than 98% of all participants knew that sexual intercourse is a mode of HIV/AIDS transmission and that it is an incurable disease. Only 22% of all participants knew that women are at a greater risk of contacting HIV.

Attitudes

Although 94% of all participants indicated that they would express accepting attitudes towards a classmate/roommate living with HIV, 76% reported that they were unsure of the type of attitude they would express to the same classmate/roommate living with fully blown AIDS.

Behavioural practices

It is important to note that among all participants, 99% reported that they were sexually active. Of these, 56% reported that they had not been using condoms with their partners. Among female participants, 52% reported that both they and their partners decided upon condom-use, whilst 92% of male participants indicated that condom-use was decided upon by themselves only and not together with their partners.
Figure 4.1

COMPARISON OF PRE- AND POST-TEST MEANS OF ATTITUDE BETWEEN EXPERIMENT AND CONTROL GROUPS

Group means are graphed in figure 4.1. An analysis of variance with repeated measures indicated no significant differences between the experimental and control groups for attitude (F=3.4). However, trends are in the direction of more attitude improvement in the experimental group.
Figure 4.2

COMPARISON OF PRE- AND POST-TEST MEANS OF KNOWLEDGE BETWEEN EXPERIMENT AND CONTROL GROUPS

Knowledge Summary – Means table

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiment</td>
<td>10.62</td>
<td>11.62</td>
</tr>
<tr>
<td>Control</td>
<td>10.12</td>
<td>11.33</td>
</tr>
</tbody>
</table>

Group means are graphed in figure 4.2. An analysis of variance with repeated measures indicated no significant differences between the experimental and control groups for knowledge (F=2.3).
Figure 4.3

COMPARISON OF PRE- AND POST-TEST MEANS OF BEHAVIOURAL PRACTICES BETWEEN EXPERIMENT AND CONTROL GROUPS

![Comparison of pre- and post-test means of behavioural practices between experiment and control groups](image)

**Behavioural practices Summary – Means table**

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiment</td>
<td>6.40</td>
<td>7.55</td>
</tr>
<tr>
<td>Control</td>
<td>7.70</td>
<td>7.75</td>
</tr>
</tbody>
</table>

Group means are graphed in figure 4.3. An analysis of variance with repeated measures indicated no significant differences between the experimental and control groups for behavioural practices (F=1.86). However, trends are in the direction of greater improvement in the experimental group.
Figure 4.4

COMPARISON OF PRE- AND POST-TEST MEANS OF KNOWLEDGE BETWEEN GENDER GROUPS

Gender means are graphed in figure 4.4. An analysis of variance with repeated Measures indicated no significant differences between gender groups for knowledge (F=3.4).
Figure 4.5

COMPARISON OF PRE- AND POST-TEST MEANS OF ATTITUDE BETWEEN GENDER GROUPS

Gender means are graphed in figure 4.5. An analysis of variance with repeated measures indicated no significant differences between gender groups for attitude (F=2.3).
FIGURE 4.6

COMPARISON OF PRE- AND POST-TEST MEANS OF BEHAVIOURAL PRACTICES BETWEEN GENDER GROUPS

![Graph showing pre-test and post-test means for males and females.]

Gender means are graphed in figure 4.6. An analysis of variance with repeated Measures indicated no significant differences between gender groups for behavioural practices (F=3.2).
Qualitative analysis

An unstructured questionnaire was used to gather qualitative information from experimental group participants. Qualitative data was analyzed by means of thematic content analysis (Terre Blanche & Durrheim; 1999). Recurring themes of improved communication and coping skills, positive influences on relationships, empowerment, and a general satisfaction with the peer educator programme were found.

Female participants especially, reported that they felt a sense of relief and empowerment to know that they were not alone in experiencing difficulties within relationships. These difficulties related to the negotiation of condom use with their partners and voluntary counseling and testing. Being part of the programme gave them the confidence to negotiate with their partners and to cope better with pressures that arise out of relationships.

Participants expressed that they had learnt more about their own relationships during the programme because they were allowed to express their attitudes freely and challenge the attitudes or opinions of others. They felt that it had given them a unique perspective on the behaviour of the other gender and a better understanding of themselves and their own relationships with their partners. This was a significant finding because high-risk or safe sexual practices within relationships play a significant role in the spread of HIV/AIDS.

Both male and female participants also reported that they found it easier to communicate with their peers on the subject of HIV/AIDS and safe sexual behaviour. A majority of participants, both male and female, reported that they had gained a better understanding of what it felt like to be HIV positive and to have to deal with the stigma and isolation attached to AIDS. Most expressed that they would definitely not want to experience this type of rejection.
Participants reported that the peer educator programme had enabled them to cope better with the discomfort that arises when communicating with or supporting HIV/AIDS infected friends and family.

The aspects of the programme that were most liked by the participants were the plays that were attended as well as the role-playing exercises. The participants also found the candle-lighting ceremonies to be inspiring. Participants felt that they were part of a significant event and this gave them a sense of achievement. The aspect of the peer educator programme least liked by the participants was that some events took place over weekends or evenings and this imposed on personal time.

Discussion

While trends were generally in the expected direction, the fact that no significant differences were indicated between the experimental and control groups on all outcome measures may be attributed to several factors.

Firstly, the reported study relied on voluntary participation for the peer educator programme. According to Rossi & Freeman (1993;p219) the assessment of a program's real effectiveness is sometimes complicated by many factors besides the programme itself, such as biases in the selection of participants. This is especially true for those programmes in which participation is voluntary. This is because there is always the possibility that persons who choose to participate are the ones who would be most likely to improve anyway, whether or not they receive the services of a programme or intervention.

Furthermore, as indicated by pre-test data, most participants entered the programme with a significant amount of knowledge and positive attitudes regarding HIV/AIDS. Therefore, it is possible that biasing occurred in the
selection of participants and effects of the peer educator programme may have been difficult to track.

Secondly, the sample for the study was small. Rosnow & Rosenthal (1999; p182) state that a test of statistical significance - such as the $F$ - test used in the analysis - is affected by the sample size and therefore a real difference may not be detected if the sample size is small.

Thirdly, the matching procedure used in the reported study implies a biased dropping of subjects. This may then impact on the type and number of participants included in the study. Furthermore, the non-equivalent control-group design does not control for threats to internal validity (Rosnow & Rosenthal; 1999; p183).

Fourthly, the evaluation took place over a short period (six weeks) without a follow-up being done. This implies that significant changes that may have occurred in attitudes and behaviour could have been lost as these are complex aspects that require evaluation and monitoring over a substantial period of time.

Lastly, the data collection instrument (knowledge, attitude, and behavioural practice questionnaire) may have been ineffective in tracking significant benefits or processes of the programme. MacPhail & Campbell (1999; p149) argue that quantitative methodologies using "knowledge, attitude, beliefs and practices" questionnaires are inadequate for the task of tracking and measuring important determinants of programme success such as psychosocial changes. It is also stated that qualitative process evaluations, which take account of the above factor, could make a key contribution to the development of more successful HIV-prevention interventions.
Campbell (1997) and Campbell & Williams (1998) state that while quantitative measures are important in providing 'proof' that an intervention has had the desired impact, they furnish limited or no understanding of dynamics operating within the project.

However, Mercer, Washington, Holley, Malunga, & Linile, (1996; p143) found that the knowledge, attitudes, beliefs, and practices (KABP) survey approach was successful in providing significant data relating to the evaluation of HIV/AIDS prevention programmes.

In a critique of the evaluation strategies that currently dominate the field of HIV-prevention, MacPhail and Campbell (1999) report that greater attention needs to be paid to the task of supplementing existing quantitative measures of programme success or failure with qualitative contextual material.

The reported study has included qualitative methods for the programme evaluation and this provided significant information regarding the programmes effectiveness. According to UNAIDS (Christoff; 2001), high infection rates are caused and maintained by women fearing to ask male partners to use a condom because he may interpret her actions as implying that she knows of his infidelities or that she has been unfaithful. Women may also lack economic resources of their own and they may fear abandonment by or violence from their male partners. They therefore have little or no control over how and when they engage in sexual intercourse.

As indicated in the qualitative analysis of data, participants reported that the programme had positively influenced their own relationships and confidence levels, especially regarding condom-use negotiation. It was also reported that the programme had improved communication relating to HIV/AIDS. Therefore it
is assumed that a significant impact was made on variables such as relationship quality, communication, self-esteem, and self-reflection. It may further be assumed that the peer educator programme has been effective by positively influencing aspects and factors that maintain HIV/AIDS infection. It can also be said that the qualitative data was very significant in providing information on programme effectiveness even though quantitative data indicated little change.

It is recommended that further evaluation of the peer educator programme should be conducted with a larger time frame to monitor effectiveness. Furthermore, factors such as communication, relationship improvement, and self-esteem should be included as outcome measures as they are precedents to behaviour change. Behaviour change strategies aimed at preventing HIV infection should include activities that provide skills development so that young women, in particular, are able to successfully negotiate condom use and make other decisions regarding their involvement in sexual relationships.
CHAPTER FIVE

CONCLUSION

The results of this study suggest that the peer educator programme was not effective in inducing significant changes in the knowledge, attitudes and behavioural practices of participants. However, according to O'Donnel et al (1990; p10) a program's outcome can be measured in a variety of ways and indications are that the programme has succeeded in obtaining several of its stated objectives, which may eventually effect a significant attitude and behavior change.

The evaluation of the Zululand University HIV/AIDS peer educator programme was undertaken to answer questions such as:

- what are the objectives of the programme?
- is it meeting its objectives?
- is the programme targeting / reaching the right individuals?
- what is the opinion of the target population regarding the programme?
- which components of the programme are most effective?
- where should future efforts concentrate?

It has been mentioned that the peer educator programme aims to:

- provide correct and appropriate HIV/AIDS information,
- facilitate the exploration of existing attitudes and beliefs regarding HIV/AIDS in an open and non-judgmental environment
- encourage reflection on existing negative attitudes and behavioural
practices/intentions regarding HIV/AIDS (behavioural practices)

- raise the level of understanding of HIV/AIDS throughout the University and thereby
- reduce the transmission of HIV through the provision of education and information
- encourage and facilitate voluntary counseling and testing
- actively promote good health and positive living on campus
- equip staff and students to be able to live and work in societies with increasing rates of HIV infection.

The true extent to which the peer educator programme has succeeded in providing correct and appropriate HIV/AIDS information to the participants has not been fully established by the evaluation. However, pre-test results suggest that students of the university do possess a significant amount of factual information regarding HIV/AIDS.

Although no significant change was found in participants' attitudes, beliefs and practices regarding HIV/AIDS, it can be assumed that the programme has succeeded in facilitating the exploration of existing attitudes and beliefs regarding HIV/AIDS. Participants of the programme attest to this. They reported that being part of the programme gave them a unique perspective on the behaviour of the other gender and the role of cultural and social norms in their relationships. It was also reported that participants had gained a better understanding of themselves and their own relationships with their partners.

After the intervention, participants related that they found it easier to communicate with their partners on the subject of HIV/AIDS and safe sexual behaviour because their experiences within the programme have taught them that they are not alone in their difficulties with communication and relationships.
Furthermore, participants reported that by exploring stigma associated with HIV/AIDS, they had gained a better understanding of what HIV/AIDS infected individuals may experience. This can attest to the success of the peer educator programme in encouraging reflection on existing negative attitudes and behavioural practices/intentions regarding HIV/AIDS, as well as raising levels of awareness at the university.

USAID (Christoff; 2001) has identified several challenges that have hindered its ability to reduce HIV/AIDS, which are also common in South Africa. One of these challenges includes the low socioeconomic status of women in Africa. Social customs and cultural norms make it difficult for women to negotiate sexual behaviour within their marriages and to discuss issues such as HIV/AIDS. This facilitates the spread of HIV. Women in the study reported that they found it difficult to negotiate condom use with their partners, but being part of the programme had empowered them to negotiate within their relationships. According to Syme (1989) successful interventions will develop the individual's belief in his/her potential to influence his or her life circumstances, including his or her health status. It can be assumed then that the peer educator programme has succeeded in this regard.

In relation to the question of whether the programme is targeting or reaching the correct individuals the following has been considered. In a recent study by Partington-Nel (2002) it was found that a significant percentage of students of the University of Zululand had little knowledge of what HIV means biologically and how to deal with their peers who were infected. This suggests the need for educational HIV/AIDS programs students at the University.

This need is further supported by the statistics of the number of people infected in South Africa. A large survey conducted by the University of the
Witwatersrand suggests that the HIV/AIDS epidemic may be stabilizing in the youth age group. It was also found that the 20 – 24 year old age group had the highest prevalence rate of HIV/AIDS with 77% of this group being HIV positive (The Natal Mercury; April 15; 2004; p5). It has been found that there are persistent behavioural trends, such as multiple sexual partners that facilitate the spread of HIV/AIDS. It therefore follows that changing behavioural trends among the high-risk age groups should be an important aim of HIV/AIDS prevention and education programs. Since the sample of the evaluation consisted of student volunteers within the ages of 20 to 25 years it can be assumed that the peer educator programme succeeded in reaching and targeting those individuals at most risk for HIV/AIDS infection.

Based on information received from participants it can be assumed that, those interventions that focused on personal understandings of behaviour, coping and counteracting skills, as well as personal and social responsibility were the most effective within the peer educator programme. This was indicated by themes of empowerment and positive relationship influences.

Although the general opinion of the participants was that they had benefited from the programme, this study has not established whether the peer educator programme succeeded in reducing the transmission of HIV through the provision of education and information. The evaluation took place over a short period (6 weeks). Furthermore, the extent to which voluntary counseling and testing was facilitated has not been established. It is thereby recommended that future efforts of evaluation should concentrate on using changes in HIV/AIDS infection and changes in voluntary counseling and testing as outcome measures. An evaluation of this nature would have to be a longitudinal study, as a large time frame is required to detect significant changes in behaviour. This is due to the fact that HIV/AIDS infection is related to high-risk behaviour.
and behaviour is a complex and multi-determined phenomenon, influenced by intra-individual, inter-individual, community, social and economic factors (MacPhail; 1998).
REFERENCES


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APPENDIX A

Survey on HIV/AIDS

Thank you for your participation. Please be assured that your participation is voluntary and all data obtained is confidential. All forms are answered anonymously and you have the right to refuse answering this questionnaire at any time and there are no wrong or right answers.

Please answer questions by placing a cross (X) in the appropriate box.

Section 1

1.1 Gender

| MALE | FEMALE |

1.2 Age in years

| 15-25 | 26-35 | 35-45 | OVER 46 |

1.3 Marital status

| SINGLE | MARRIED | LIVING WITH PARTNER | DIVORCED |

1.4 Race

| BLACK | COLOURED | INDIAN | WHITE |

1.5 Year of study

| 1ST YEAR | 2ND YEAR | 3RD YEAR | 4TH YEAR |
Section 2

2.1 Is AIDS curable disease

YES  NO

2.2 People with multiple sexual partners are at greater risk of getting infected with HIV

YES  NO

2.3 Does HIV cause AIDS

YES  NO

2.4 Everybody is at risk of contacting HIV

YES  NO

2.5 Women are at a greater risk of contacting HIV

YES  NO

2.6 Unprotected sex with anybody place men at risk of becoming infected with HIV

YES  NO

2.7 HIV is the disease that mainly affects gay people

YES  NO

2.8 Prompt treatment of sexually transmitted diseases is one sure way of reducing HIV Transmission

YES  NO
2.9 You can get infected with HIV through kissing

| YES | NO |

2.10 It is safe to share the same cups, plates and utensils with HIV positive people

| YES | NO |

2.11 Have you ever been exposed to a condom use demonstration?

| YES | NO |

2.12 Do you know about retroviral treatment?

| YES | NO |

Section 3

3.1 If you were to have a room-mate/class-mate who is living with HIV, what would be your attitude towards him/her?

| ACCEPTANCE | REJECTION | NOT SURE |

3.2 If you were to have a room-mate/class-mate who has full blown AIDS, what would be your attitude towards him/her?

| ACCEPTANCE | REJECTION | NOT SURE |

3.3 Do you think people who are infected with HIV/AIDS need sympathy?

| YES | NO |

3.4 Do you think that people who are infected need your support?

| YES | NO |
3.5 Do you think people who are infected are entitled to treatment?

YES  NO

3.6 Do you think it is important for infected people to tell their sexual partners about their status?

YES  NO

3.7 Do you think it is important for infected people to tell their families about their status?

YES  NO

3.8 Does sex feel good when you use a condom?

YES  NO

Section 4

4.1 Are you sexually active?

YES  NO

4.2 Do you have penetrative sex (penis to vagina) with your partner?

YES  NO

4.3 Do you condomise?

ALWAYS  SOMESTIUES  NEVER

4.4 Do you carry your own supply of condoms?

ALWAYS  SOMESTIUES  NEVER
4.5 Who decides about condom use in the relationship?

<table>
<thead>
<tr>
<th></th>
<th>MY PARTNER</th>
<th>BOTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.6 Can you say "NO" to sex without a condom?

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

4.7 I intend to use a condom every time I have sex

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

Thank you for your co-operation.
APPENDIX B

1. What were the most interesting aspects of the peer educator programme that you participated in?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2. How did you benefit from the programme?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

3. What have you learnt from the programme?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

4. What did you not like about the programme?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
5. How can the programme be improved?

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

6. What does HIV/AIDS mean to you?

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Thank you for your cooperation