# Health Communication In Southern Africa: Engaging With Social And Cultural Diversity ~ Introduction

*Introduction*

A focus on Southern Africa as an area where more and better HIV/AIDS communication is needed cannot be better underlined than by recent figures on adults living with HIV (15-49 years): In Sub-Saharan Africa the figure stands at 11%, whereas the global percentage is 3.25% (UNAIDS, 2008). The rise in these figures over recent years can partly be accounted for by the introduction of antiretroviral therapy, which means that statistically people living with HIV have a higher life expectancy.

Still, 67% of the global HIV prevalence in 2007 was accounted for by Sub-Saharan Africa, as was 72% of the global AIDS deaths (UNAIDS, 2008). The HIV/AIDS epidemic in Southern Africa affects women more than men (60% of people living with HIV were female in Southern Africa in 2007; UNAIDS, 2008), especially regarding HIV prevalence among youth. It is within this context that this book wants to consider the role that health communication may play in combating the HIV/AIDS epidemic.

*Positive outcomes of health communication*

How can health communication benefit the fight against HIV/AIDS? This positive influence may apply at different levels. Communication is an important part of prevention campaigns like in the case of the ABC (Abstinence, Be faithful, use Condoms) motto, which could contribute to a decline in HIV infections. Since the HIV/AIDS epidemic in Southern Africa typically affects women more adversely than men, gender relations form an important contextual dimension of health communication. Prevention messages have to be reinforced by the empowerment of women, enabling them to change their vulnerable position in sexual relations and negotiations.

Prevention and treatment go hand in hand and both aspects should be addressed in health communication. Voluntary Counselling and Testing (VCT) is a desirable outcome for several reasons. If people are infected they can get treatment and guidance. The spreading of infections may be controlled by more knowledgeable and responsible behaviour by HIV-infected people. Being more open about VCT might also change the perceptions of people living with HIV. Health communication can take the form of campaigns for better drug regimens and adequate state support. People living with HIV/AIDS (PLWA) need to take antiretroviral medicine to avoid AIDS, and their Antiretroviral Therapy (ART) compliance might be improved by good instruction and motivation. New media technologies have created opportunities to develop support networks for social movements and non-governmental organisations working to ensure better access to anti-retroviral medicines for PLWA.

The best-known example of such a network in Southern Africa is the one built around the group Treatment Action Campaign (Berger, 2006; Wasserman, 2005). The portrayal of PLWA may be changed in a more positive direction. Mass media and government policies need to be analyzed critically to detect and change negative or undesirable social representations of HIV/AIDS, or of individuals or groups associated with the disease. Health communication may serve to counter stereotyping, vilification or marginalisation of PLWA in sections of society who are seen as undeserving of state support, e.g. prisoners, migrants, asylum seekers, or sex workers (Berger, 2006).

*Challenges in the Southern African context*
There are however, barriers and problems when trying to achieve these effects. The challenges for health communication are numerous, and occur at different levels. Campaigns such as ABC, often driven by foreign donors and NGOs, need to be embedded within local social relations and need to be complemented by attempts to address power structures and material conditions if they are to be successful. Stigmatisation and AIDS-denial create obstacles for people to engage in VCT and comply to ART, and help spreading the epidemic. Critical media coverage may highlight problems and challenges hampering the fight against HIV/AIDS.

Politicolegal discourses around HIV/AIDS range from government denialism (until recently the case in South Africa) to laws criminalizing sexual relations between men which may lead to imprisonment without access to condoms (e.g. in

Botswana; Berger, 2006), and the lack of state-supported programmes for access to anti-retrovirals.

In multilayered African societies, marked by linguistic, socio-economic, and cultural diversity, health communication messages have to take account of the possible different ways in which messages will be interpreted and understood within given contexts. 'One-size-fits-all' messages may not reach all of these groups adequately (Hoeken, Swanepoel, Saal, & Jansen, 2009).

Unlike in media-saturated Western societies, access to mass media and education remains unequal in Southern Africa. This creates an exposure problem, but also poses a cognition problem: if messages do come across, will these groups understand them the way they were intended? Despite the inequality and other socio-cultural limitations that may impede health communication, South Africa has pluralistic and diverse media, which may lead to mixed messages reaching audiences. Health information communicated on one media platform may be contradicted in another.

Material conditions impact on behavioural intentions. The difficult daily life circumstances may interfere with actual safe sex behaviour (for instance, poor women are more engaged in transactional sex; UNAIDS, 2008). Especially this latter barrier is difficult to overcome by means of health communication. Still, research and practice in health communication demonstrate some viable approaches to help fight the HV/AIDS epidemic.

*Health communication approaches*
Health communication research may assist in overcoming the practical challenges mentioned above. It is inevitable that a variety of approaches is needed at different levels. A recent overview of culturally adapted health communication message design is given in Swanepoel and Hoeken (2008).

Health communication approaches include research at the individual, community, and societal level. Individual psychological approaches, mass media campaigns, and group-based communal activities may go hand in hand and reinforce each other. We distinguish three active main approaches in current South African health communication research and practices: attitudinal and motivational antecedents to health behaviour; the effects of entertainment education and social representations of HIV/AIDS in mass media; and patient information in the

context of social and cultural diversity. Although these approaches represent mainstream Western health communication research, it is the locus of the research that strongly changes the outcomes and applications. This will be demonstrated in a brief sketch of these approaches as they are represented in the first three parts of this book. in the Southern African context.

*Individual and social network factors.*
Currently, the most inflUential theory explaining the antecedents of individual intentions to healthy or responsible behaviour (ABC, VCT, or ART) is the Theory of Planned Behaviour, later developed into the Integrative Model of Behavioural Prediction (Fishbein & Yzer, 2003). In this model beliefs about consequences, normative issues, and efficacy with respect to a particular behaviour determine the intention towards that behaviour. In the southern African context we are faced with challenges regarding all three antecedents. Knowledge about the consequences of unsafe sex is poor in many rural areas and communities with inadequate education (Boer & Mashamba, 2005).

Subjective norms are dependent on prevailing societal norms, and stigmatisation of people having HIV/AIDS hampers VCT or ART (Kalichman & Simbayi, 2003). Efficacy of behaviour is especially problematic in situations where women do not have the power to demand safe sex behaviour, due to their economic position or to cultural influences.

Whereas the antecedents of intended behaviour may indicate specific problems or solutions for individuals, other factors may prevent behavioural intentions from turning into actual behaviour. People live in social environments which may determine their behaviour irrespective of their individual intentions. Social norms in a network may also determine individual subjective norms. It is therefore pivotal that social networks are studied to make normative innovations possible (Kincaid, 2004). Potentially influential groups or individuals may be identified. If a social network is unraveled, communication strategies may be tailored for individual interventions, mass media campaigns, or combinations of activities.

*Social representations and entertainment education.*
Mass media communication in South Africa is complex for several reasons. One would have expected that the press freedom brought about by the demise of apartheid would have allowed for a greater diversity of perspectives in the mass media, but elite perspectives still seem to dominate the mainstream media. The

continued marginalisation of certain groups in the media may result in social representations of PLWA not achieving the desired social identification (Wasserman, 2006). If media users do not appreciate broadcasts as being about them, they will not be affected by a broadcast's content. Or worse, broadcasts failing to address the right target groups risk to reinforce stereotypes instead of fighting them.

Another Southern African problem is the limited access to print and broadcast media. Whereas Western media markets are saturated with mass media supply, many societal groups do not have access to mass media information. Instead, they are dependent on interpersonal communication, which may keep them from obtaining correct knowledge on health issues. However, radio broadcasts are quite commonly received and make it possible to overcome infrastructural barriers. Radio may be instrumental to provide information to many groups effectively (Kenny, 2002). It is important however, to develop interesting and trustworthy programmes to attract attention and provide proper information.

Emerging market nations like in Southern Africa are undergoing a 'leapfrog development' in Information and Communication Technologies, enabling social movements to create activist networks and support groups through the internet (Wasserman, 2005). An interesting application in health communication is the development of text messaging onjcell phones.

In contrast to these negative effects on social representations, mass communication can be effective in providing health information. Non-Governmental Organisations (NGOs) like Soul City use television, radio, and print media to deliver health information in attractive and convincing ways (Goldstein, Perlman, & Smith, 2008). Using the attraction of personalisation, drama, and narration, entertainment education (or edutainment) might help to make people aware of the consequences of unsafe behaviour and the importance of VCT, or might reduce stigmatisation (Kincaid, 2002).

*Patient information.*
Much of the HIV/AIDS communication is delivered at an individual level. Leaflets and interpersonal communication account for most of the delivered patient information. Leaflets are often not designed within the local communities. The information might therefore not be understood, or followed within the local communities where it needs to be effective (Swanepoel, Burger, Loohuis, &

Jansen, 2008).

Visual information is often considered superior to textual information in overcoming barriers of low education. However, visual literacy is needed to properly understand visual instructions (Avgerinou & Ericson, 1997). Low-literate individuals miss exposure to visual messages to the same extent as textual information. Providing explanatory context might help improve understanding (Phillips, 2000). In order to identify cultural and cognitive problems with understanding patient information, the information needs to be tested within the relevant target groups. Interpersonal communication in patient information might overcome these kinds of barriers.

*Overview of contributions*
The contributions in this book are divided into four parts. The first three parts represent research done in one of the approaches we distinguished in health communication: individual and social network factors, social representation and entertainment-education, and patient information. The fourth part consists of three campaign examples that have been effectively implemented along the lines of the three aforementioned approaches.

*Individual and social network factors.*
The Theory of Planned Behaviour is involved in research among larger groups of individuals, in order to determine antecedents of behavioural intentions. Mass communication campaign designers may learn from research outcomes to set their goals. It is important to verify whether there are differences between groups in different societies. Merel Groenenboom, Julia van Weert, and Bas van der Putte present a survey among Tanzanian and Zambian residents to identify differences in their antecedents to condom use intentions.

External to the Theory of Planned Behaviour is the social network approach. Determining the patterns of social linking between groups in local communities provides information on communication strategies that might overcome barriers posited by the social environment. Rachel Smith presents and analyzes social network data of ten rural Namibian communities, and formulates strategic consequences.

The power of social networks is that they may change social norms by means of communication between members of the network. However, topics like HIV/AIDS

or sexual behaviour are often taboo or stigmatised, making interpersonal communication between peers or primary group members difficult. Henk Boer and Tessa Custers analyze how communication on these topics is realised among young adolescents in a South African Township. Social capital determines in part interpersonal communication on sexual and health topics. Improving an individual's social capital might therefore lead to a change in social norms and attitudes on healthy behaviour.

*Social representations and entertainment education.*
In mass communication media, there is a mutual influence between target groups and the media they use. Cecilia Strand analyzes how local print media portray HIV/AIDS. Media might disturb media users' perceptions by constantly reporting on certain aspects of an issue. When news about the disease is focusing on its unavoidability and ubiquity, government policies or health communication may be less effective. John-Eudes Lengwe Kunda and Keyan Tomaselli analyze different discourses on HIV/AIDS, and reveal social representations of the disease. Health messages in South Africa and Zambia do not always adapt to audiences' myths and assumptions with respect to HIV/AIDS. By connecting messages to existing discourses health communication may be more successful in changing attitudes or perceptions. The South African Broadcasting Corporation has undergone different postapartheid transitions. Besides transforming into a more diverse broadcasting company, the SABC had to supplement support from the state with advertising income, which led to a more commercial management even as it was subjected to increasing allegations of political interference in its editorial content. Viola Milton studies the consequences of these transitions for the impact of the edutainment programmes SABC is programming.

In many Southern African countries, radio has the broadest reach of all mass media. This does not say anything about programme effectiveness. Radio listeners tend to ignore information they consider to be meant for others. Radio journalists do not always have the proper skills and means to enhance the effectiveness of health communication in their programmes. Mia Malan describes how journalists in a training programme discovered ways to make responsive and appealing radio broadcasts, by personalizing the health information.

*Patient information.*
Visual aids to provide health information to patients can be helpful to inform low-literate patients, but the design of pictograms needs to be designed for the

communities in which it is provided. Ros Dowse reports on her research into the effectiveness of pictograms with low-literate HIV/AIDS patients in South Africa.

Low education does not only hinder textual understanding, it creates problems for the comprehension of visual information as well. Hanneke Hoogwegt, Alfons Maes, and Carel van Wijk show the difficulties of interpreting visualised motion in health communication instructions.

An important condition for ART compliance is a proper understanding of the medicine's dosage instructions. Interpersonal communication is often difficult in a multilingual situation. In a pharmacy setting, Jennifer Watermeyer and Claire Penn analyze how patient information may be enhanced by using props in medicine dosage instructions.

In general, medicines are manufactured in the Western world. Pharmaceutical industry's patient information in South Africa is not well adjusted to specific South African contexts. As a result, patient information leaflets are not always fine-tuned to the situations of different patient groups living in South Africa. Daleen Krige and Johann De Wet investigate how these leaflets may be improved for South African society.

*Supporting people: Approaches to HIV/AIDS communication activities.*
Hugo Tempelman and Adri Vermeer are involved with a comprehensive and integrative health communication campaign in the South African Elandshoorn region. Following the Theory of Planned Behaviour, they establish the factors that determined who actually went for VCT, and who didn't.

The DramAidE Health Promotor project is a large and comprehensive campaign at many South African Universities. Based on entertainment education, and on principles of peer influence, HIV positive Health promoters are engaged in organising health communication activities, assisting peer educators, and advising students. Emma Durden gives an overview of the project evaluations over time on several locations.

Patient information has to overcome cultural and educational barriers, but the barriers of infrastructure are ubiquitous in South Africa. The diffusion of cell phones in the South African society, however, is rapidly growing. Tanja Bosch describes how patient information can be timely delivered to improve ART compliance.

*Conclusion*

The Southern African HIV/AIDS epidemic presents challenges for health communication at different levels: at the individual, social and cultural level. Recognition and understanding of these different levels is necessary to optimise the role that health communication can play in combating the epidemic. Contributions from different disciplines present innovative health communication research, while some chapters report on actual, comprehensive, and effective campaigns for prevention and support. We therefore hope that this book will be of use for both researchers and practitioners in health communication.

*References*

Avgerinou, M., & Ericson, J. (1997). A review of the concept of visual literacy. *British Journalof Educational Technology*, 28(4), 280-291.

Berger, J. (2006). *A is for arrogant, B is for brazen. Treatment action campaign website*. Retrieved 27 February, 2009 from http://www.tac.org.za/community/node/2219.

Boer, H., & Mashamba, M.T. (2005). Psychosocial correlates of HIV protection motivation among black adolescents in Venda, South Africa. *AIDS Education and Prevention*, 17(6), 590-602.

Fishbein, M., & Yzer, M.C. (2003). Using theory to design effective health behavior interventions. *Communication Theory*, 13, 164-183.

Goldstein, S., Perlman, H., & Smith, C.J. (2008). Health education in action in Southern Africa: Soul City. In P. Swanepoel, & H. Hoeken (Eds.), *Adapting health communication to cultural needs*. Amsterdam: John Benjamins.

Hoeken, H., Swanepoel, P., Saal, E., & Jansen, C. (2009). Using message form to stimulate conversations. The case of tropes. *Communication Theory*, 19(1), 49-65.

Kalichman, S.C., & Simbayi, L.C. (2003). HIV testing attitudes, AIDS stigma and voluntary HIV counselling and testing in a black township in Cape Town, South Africa. *Sexually Transmitted Infections*, 79, 442-447.

Kenny, C. (2002). Information and communication technologies for direct poverty alleviation: Costs and benefits. *Development Policy Review*, 20(2), 141-157.

Kincaid, D.L. (2002). Drama, emotion, and cultural convergence. *Communication Theory*, 12(2), 136-152.

Kincaid, D.L. (2004). From innovation to social norm: Bounded normative influence. *Journal of Health Communication*, 9(Supplement 1, June), 37-57.

Phillips, B.J. (2000). The impact of verbal anchoring on consumer response to image ads. *Journal of Advertising*, 29(1), 15-25.

Swanepoel, P., Burger, M., Loohuis, A., & Jansen, C. (2008). Promoting VCT among South African students: Are we missing the message? In P. Swanepoel, & H. Hoeken (Eds.),*Adapting health communication to cultural needs* (pp. 89-106). Amsterdam: John Benjamins.

Swanepoel, P., & Hoeken, H. (Eds.). (2008). *Adapting health communication to cultural needs*. Amsterdam: John Benjamins.

UNAIDS. (2008). *2008 Report on the global AIDS epidemic*. Geneva: Joint United Nations Program on HIV/AIDS.

Wasserman, H.J. (2005). Renaissance and resistance: Using ICTs for social change in Africa. *African Studies*, 64(2), 177-199.

Wasserman, H.J. (2006). Globalized values and postcolonial responses. South African perspectives on normative media ethics. *International Communication Gazette*, 68(1), 71-91.

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# Health Communication In Southern Africa: Condom Use in Tanzania and Zambia: A Study on the Predictive Power of the Theory

# of Planned Behaviour on Condom Use Intention

*Abstract*

The aim of this study is to examine determinants of condom use intention of Tanzanian and Zambian high-school students. Additionally, we aim to investigate whether determinants differ among different target (sub)groups. Data were gathered in a sample of high school students from Arusha area, Tanzania (n = 286), and Kabwe area, Zambia (n = 272). The TPB determinants attitude towards condom use and subjective norm explain, respectively, 15.5% and 16.5% of the variance in condom use intention in Tanzania and Zambia, while self-efficacy is not significantly related to this intention in both countries. In most target (sub)groups from Tanzania and Zambia, the same TPB determinants predict condom use intention. Besides the TPB determinants, other variables are significantly related to condom use intention, such as sexual experience and gender. These results vary over the (sub)groups.

The findings of this study prove the utility and global applicability of the TPB on condom use intention in Tanzania and Zambia. Because most subgroups in both countries show the same TPB determinants of condom use intention, cost-effective overall HIV/AIDS prevention programmes can be developed that can easily be adapted for different subgroups in different countries.

*Introduction*

AIDS (Acquired Immuno-Deficiency Syndrome), caused by HIV (Human Immunodeficiency Virus), is one of the most threatening diseases worldwide (UNAIDS, 2007). Sub-Saharan Africa, the area of Africa south of the Sahara desert, is the most affected region in the world, with AIDS being the leading cause of death in this area. Because relatively little is done on HIV/AIDS prevention and treatment, it is expected that the number of infected people and deaths will rise (UNAIDS, 2007).

HIV infection is often a consequence of a specific behaviour, one of which is unsafe sex (Fishbein, 2000). While condom availability has risen in Sub-Saharan

Africa, there are many factors that keep people from using them (AVERT, 2007). Therefore, most HIV/AIDS prevention programmes aim at increasing the use of condoms in order to decrease the risk of infection and restrict the AIDS-epidemic (Bennett & Bozionelos, 2000).

Theoretically, scientific knowledge can contribute to the effectiveness of HIV/AIDS prevention programmes. While some studies found that behaviour change interventions that were explicitly based on theory were not more effective than prevention programmes without a theoretical basis (see Hardeman et al., 2002, for a review), other research showed a higher effectiveness of prevention programmes based on scientific literature (Fishbein, 2000; Gredig, Nideroest & Parpan-Blaser, 2006; Jemmott et al., 2007; Munoz-Silva, Sanchez-Garciá, Nunes & Martins, 2007). A commonly used behavioural model in scientific studies is Ajzen's Theory of Planned Behaviour (TPB) (Ajzen, 1991). According to the TPB, behaviour is best predicted by asking people whether they have the intention to show this specific behaviour. In turn, behavioural intention is determined by attitude, subjective norm, and self-efficacy. The current study on condom use intention in Tanzania and Zambia used the TPB as a theoretical foundation. Until now, a couple of studies on condom use intention applying the TPB have been conducted in Sub-Saharan Africa. Most of these were carried out in South Africa (Boer & Mashamba, 2007; Bryan, Kagee & Broaddus, 2006; Giles, Liddell & Bydawell, 2005; Jemmott et al., 2007). No studies using the TPB were conducted in Zambia yet, and only one study is available on Tanzania (Lugoe & Rise, 1999). The current study was carried out in Zambia and Tanzania to examine whether the results of studies conducted in South Africa are also valid for other countries in Sub-Saharan Africa. The aim of the study is to examine determinants of condom use intention of Tanzanian and Zambian high-school students. Furthermore, the following subgroups will be compared to identify TPB determinants of intended condom use among specific target groups: males and females, students with and without a steady boy/girlfriend, and students with and without sexual experience. Subgroup analyzes to investigate whether the relation of attitude towards condom use, subjective norm, and selfefficacy to intention varies among specific target groups have hardly been reported in African studies. The research questions are:

* What are the differences between Tanzanian and Zambian high-school students in condom use intention, attitude towards condom use, subjective norm, and self-efficacy?

* What are the determinants of condom use intention of Tanzanian and Zambian high-school students?
* What are the determinants of condom use intention of males and females, students with and without a steady boy/girlfriend, and students with and without sexual experience?

The target group of this study is high-school students between 13 and 19 years old. Around this age most young people become sexually active and it is important to inform them timely and in the right way on safe sexual behaviour (UNAIDS, 2008a). Only a few prevention programmes in Africa focus on this group, even though the United Nations AIDS programme mentions studying young people as one of the most important goals of their prevention programme in Tanzania and Zambia (UNAIDS 2008a; UNAIDS 2008b). Respectively 11% and 13% of the Tanzanian males and females under study had sex before their 15th year. Of the Tanzanian young males and females (15-24 years old), respectively 81% and 36% had sex in the last 12 months, and 47% and 42% used a condom the last time they had sex (UNAIDS, 2008a). Only 44% of the Tanzanian young females correctly knows how to prevent an HIV infection, as does 49% of the Tanzanian young males.

Respectively 16% and 14% of the Zambian young males and females had sex before their 15th year. Respectively 86% and 30% of the Zambian young males and females had sex in the last 12 months, and 40% and 35% used a condom the last time they had sex. Of the Zambian young males, 37% correctly knows how to prevent an HIV infection, as does 34% of the Zambian young females (UNAIDS, 2008b; UNAIDS 2008c). The HIV prevalence rate in Tanzania is 8% compared to 22% in Zambia (Nyblade et al., 2003) and the percentage of HIV/AIDS-infected males and females is almost 50/50 in Tanzania, while three times more women thanman under 35 are HIV/AIDS-infected in Zambia (UNAIDS, 2006).

*Theory of Planned Behaviour*
The central behaviour in this study is condom use. How can the desired behaviour, condom use, be stimulated? To answer this question, insight into the factors that determine behaviour must be acquired (Lechner, Kremers, Meertens & De Vries, 2007). There are different theories and models; yet, many studies on condom use are based on the Theory of Planned Behaviour (Ajzen, 1991). Studies that compared behavioural models showed that the TPB was significantly more efficient in predicting condom use than other behavioural models such as the

health belief model, protection motivation theory, cognitive theory, and the information motivation-behavioural skills model (Bakker, Buunk & Siero, 1993; Chaisamrej, Zimmerman, Noar & Thomas, 2005). Moreover, the TPB is the most widely used model in studies on condom use intention (e.g., Armitage, Norman & Conner, 2002; Boer & Mashamba, 2007; Bryan et al., 2006; Bryan, Ruiz & O'Neil, 2003; Eun Seok, Kevin & Thema, 2007; Giles et al., 2005; Jemmott et al., 2007; Molla, Astrøm & Brehane, 2007; Munoz-Silva et al., 2007; Villarruel, Jemmott, Jemmott & Ronis, 2004; Wiggers, De Wit, Gras, Coutinho & Van den Hoek, 2003). Nevertheless, all these studies concluded that the TPB is not a perfect model and that possible expansions or improvements must be examined.

The TPB model can be explained by departing from the behaviour. Someone behaves in a certain way when that person has a strong intention to show that behaviour. Three behavioural determinants are underlying this behavioural intention: attitude towards the behaviour, subjective norm, and self-efficacy concerning the behaviour. Attitude is the general evaluation of the behaviour and is based on underlying beliefs that people have regarding pros and cons of the behaviour. Subjective norm refers to the perceived opinion of the social environment of a person regarding the desirability of his or her performance of the behaviour (Lechner et al., 2007). Self-efficacy is defined as the expectations that people have about their capability to perform a specific behaviour (Lechner et al., 2007). The behavioural intention to use a condom will be larger if a person has a positive attitude towards using a condom, if (s)he perceives that the social environment approves of using a condom and if (s)he expects to be capable of performing the behaviour. The relative influence of the three determinants can vary with the behaviour and population studied (Fishbein, 2000). A frequently voiced criticism on the TPB is that the model is not applicable to every culture because it is overly based on individualistic Western cultures. However, the TPB has been implemented successfully in more than fifty countries, developed as well as undeveloped ones (Fishbein, 2000). In every country, the three TPB determinants were the most important determinants of behavioural intention, although their values differed from country to country. The argument that the model is too individualistic therefore appears to be invalid, because even in a culture where group factors are known to be influential on someone's behaviour (South Africa), the model explained as much as 67% of the behavioural intention (Giles et al., 2005).

*Previous studies on condom use in sub-Saharan Africa*

Several studies have been carried out on the applicability of the TPB on HIV/AIDS prevention in Sub-Saharan Africa, although most of them have been conducted in South Africa. The results showed that the TPB seems to be well applicable (For studies in South Africa, see Boer & Mashamba, 2005, 2007; Bryan et al., 2006; Giles et al., 2005; and Jemmott et al., 2007; For studies in Ethiopia, see Fekadu & Kraft, 2001, 2002; and Molla et al., 2007; For a study in Tanzania, see Lugoe & Rise, 1999). The variance in condom use intention among Sub-Saharan Africans could be explained from 22% (Boer & Mashamba, 2007) to 48% (Molla et al., 2007), and one study even explained 67% (Giles et al., 2005). All three TPB determinants were generally significantly related to condom use intention. The conclusion regarding the relative importance of the TPB determinants of condom use intention varied over these studies. When comparing the results from ten datasets as described in the nine above-mentioned articles (considering the males and females datasets of Boer and Mashamba (2007) and Bryan et al. (2006) as separate ones and the study reported by Fekadu and Kraft (2001, 2002) in two articles as one), attitude towards condom use appeared to be the most important determinant in two studies (Boer & Mashamba, 2007 for females; Molla et al., 2007), subjective norm in five studies (Boer & Mashamba, 2005; Boer & Mashamba, 2007 for males; Bryan et al., 2006 for males and females; Fekadu & Kraft, 2001, 2002), and self-efficacy in three studies (Giles et al., 2005; Jemmott et al., 2007; Lugoe & Rise, 1999). Only a few studies showed non-significant results for attitude towards condom use (Boer & Mashamba, 2005; Giles et al., 2005), subjective norm (Boer & Mashamba, 2007 for females; Jemmott et al., 2007) and self-efficacy (Boer & Mashamba, 2005; Boer & Mashamba, 2007 for males; Molla et al., 2007). These results show that a lot of variation in the importance of the TPB determinants was found in the different studies.

Condom use intention is not predicted solely by the TPB determinants. Therefore, it is recommended to take additional variables into account in order to explore their indirect or direct role in the TPB model (Fishbein, 2000; Lechner et al., 2007). In the above studies, some additional variables were significantly related as well: language preference (local language versus English, Jemmott et al., 2007), gender (Boer & Mashamba, 2007; Bryan et al., 2006), HIV knowledge (Bryan et al., 2006), and positive future outlook (Bryan et al., 2006).

Some variables were also considered important in previous studies on the TPB

and condom use intention in Sub-Saharan Africa, but their relationship with condom use intention was not significant. We will further explore these variables in the current study. These are age (Bryan et al., 2006), HIV fear (Boer & Mashamba, 2007), sexual experience (Jemmott et al., 2007), and last condom use (Boer & Mashamba, 2007). In addition, following Boer and Mashamba (2007), religion was taken into account, because it was expected that Christians had a lower condom use intention. Several Christian denominations, in particular the Roman Catholic Church, do not approve of condom use (Bradshaw, 2003; Sarkar, 2008). Though never measured before, the residential area of respondents was also included because we had the impression that this might partly explain the differences in the results of earlier studies. For instance, urban areas showed a tendency towards rating self-efficacy as the most important determinant (e.g., Jemmott et al., 2007; Lugoe & Rise, 1999) whereas in rural areas attitude seemed to be more important than selfefficacy (e.g., Boer & Mashamba, 2007; Molla et al., 2007).

Finally, following the theorizing of Fishbein and Yzer (2003) three variables were added that might have a relationship with condom use intention, namely the attitudes towards specific goals. Attitudes towards specific goals are considered important because different goal attitudes might lead to different opinions about condom use. For example, people with an unfavourable attitude towards getting pregnant might hold a different opinion about condom use than people with a favourable attitude towards getting pregnant (Fishbein, 2000). In this study, three specific goals were distinguished that can be gained by performing, or not performing, the target behaviour of having sex with a condom: 1) getting pregnant; 2) experiencing pleasure; and 3) pleasing a partner.

*Method*
Data collection took place in April and May 2008. The participants were students from high schools in Arusha area, Tanzania, and Kabwe area, Zambia. Students and schools were found using a convenience sample. Non-Governmental Organizations (NGO's) in Tanzania (Foundation Friends of Tanzania) and Zambia (Student Partnership Worldwide) that work together with schools assisted in the data gathering process by approaching high schools in their area and asking for permission to hand out the questionnaire. Three schools in Tanzania and two schools in Zambia were approached and they all agreed to participate. The questionnaire was translated into the national language of the countries. In

Tanzania, this was Swahili and in Zambia this was English. After obtaining informed verbal consent, participants were given anonymous questionnaires. All students filled out the questionnaire within 45 minutes, and there was no non-response. The researcher and an interpreter were present in the classroom during the data collection. Confidentiality was assured in the questionnaire and the researcher repeated orally in class that all responses would remain anonymous.

*Subjects*

In Tanzania, 294 respondents completed the questionnaire whereas 273 respondents age of the respondents was 13 to 19 years old, respondents younger than 13 years old (i.e., eight in Tanzania and one in Zambia) were excluded, leaving 286 respondents in Tanzania and 272 in Zambia. The majority of the respondents were between 16 and 19 years old (85.7% in Tanzania and 79.8% in Zambia, respectively). Both in Tanzania and Zambia, the median age was 17 years. Of the Tanzanian respondents, 45.8% was female and of the Zambian respondents, 39.0% was female. In the Tanzanian sample, 22.7% reported that they had ever had sexual intercourse, of which 41.8% reported to have used a condom the last time they had sex. Of the Zambian respondents, 23.9% said they had ever had sexual intercourse, of which 39.7% used a condom the last time they had sex. Of the Tanzanian respondents, 81.0% reported to be Christian, 17.3% was Muslim, 1.0% was Hindu and 0.7% had another religion. Of the Zambian respondents, 98.9% reported to be Christian, 0.4% was Muslim, 0.4% was Hindu and 0.4% had another religion.

Differences between the Tanzanian and Zambian sample on the sociodemographic variables age, gender, and boy/girlfriend were examined using t-tests or chi-square tests. Results showed that the mean age of the Tanzanian respondents was slightly but significantly higher (16.95 versus 16.53 years) than that of the Zambian respondents, t = 2.385, p

*Questionnaire*

The four variables of the TPB were measured using scales that were used by Boer and Mashamba (2007). Because the Cronbach's ± of the subjective norm scale in this questionnaire was 0.61, which is too low for a valid scale, the subjective norm scale was replaced by the one used by Fisher, Fisher, Bryan, and Misovich (2002), that showed a Cronbach's ± of 0.79 in a South-African sample (Bryan et al., 2006). Condom use intention was measured with three items on a 5-point scale,

for example, "in the future I will always use a condom" (1 = completely disagree, 5 = completely agree, Cronbach's ± = *0.69*). Attitude towards condom use was measured with 13 items, each rated on a 5-point scale, ranging from 1 (completely disagree) to 5 (completely agree), Cronbach's α = 0.88. An example of an attitude item is "using condoms will make sex less enjoyable". Subjective norm was measured with eight items on a 5-point scale, for example, "friends that I respect think I should use condoms every time I have sex, during the next four months" (1 = very untrue, 5 = very true, Cronbach's α = 0.86). The self-efficacy scale contains twelve 5-point items (1 = completely disagree, 5 = completely agree, Cronbach's α = 0.69). An example is "I think condoms are difficult to use". A mean score was calculated for all variables measured with multiple items.

Variables that were not part of the TPB that were measured with existing questions were gender (0 = male, 1 = female), boy/girlfriend, sexual experience, language preference, religion, positive future outlook, HIV knowledge, and HIV fear. Boy/girlfriend was measured by asking "do you have a steady boyfriend/girlfriend" (0 = single, 1 = steady boyfriend/girlfriend) (Boer & Mashamba, 2007). Sexual experience was measured with the question "have you ever had sexual intercourse? (Male's penis in a female's vagina)" (Jemmott et al., 2007). Answering categories were: 0 = never had sexual intercourse, 1 = sexual intercourse at least once. In addition, last condom use was measured by the question "the last time I had sex, I used a condom" (1 = not applicable, 2 = yes, 3 = no) (Boer & Mashamba, 2007). Language preference was measured with one question based on Jemmott et al. (2007): "In general, what language do you read and speak?" (1 = only local, 5 = only English). This variable was recoded as follows: 0 = local language preference, 1 = both equal or English language preference. Positive future outlook was measured by 15 items (Cronbach's α = 0.67) in accordance with Bryan et al. (2006). An example of a positive future outlook item is: "In general I am satisfied with myself" (1 = disagree a lot, 4 = agree a lot). HIV knowledge was measured by four items (Bryan et al., 2006). An example of an HIV knowledge item is: "AIDS is caused by the HIV virus" (0 = no, 1 = yes). A total score was calculated by administering one point for each correct answer (range 0-4). HIV fear was measured with three items (Cronbach's α = 0.65) in accordance with Boer and Mashamba (2007). An example of an HIV fear item is: "I am afraid of contact with a person who is HIV positive" (1 = completely disagree, 5 = completely agree).

Religion was measured by asking people about their religion (Christian, Muslim, Jewish, Hindu, traditional African religion, none). No respondents adhered to a traditional African religion. Because large parts of the Christian Church oppose condom use, whereas Muslim, Jewish and Hindu churches do not oppose condom use to this extent (Sarkar, 2008), religion was recoded into: 0 = religion with a ban on condom use, 1= religion with no explicit ban on condom use or no religion.

The 'attitude towards goals'-items had not been used before in condom use studies and were therefore measured with self-designed questions. Attitudes towards three goals were discerned: attitude towards pregnancy ("I have sex because I want to get pregnant"), attitude towards having sex for own pleasure ("I have sex for pleasure"), and attitude towards having sex to please their partner ("I have sex to please my boyfriend/girlfriend"). These items were measured on a 5-point Likert scale (1 = completely disagree, 5 = completely agree). Finally, living area was examined by asking "in what area do you live?" (0 = rural, 1 = urban).

*Data analysis*
Descriptive statistics were obtained on the socio-demographic characteristics and the determinants of intended condom use. Differences between the Tanzanian and Zambian mean scores of TPB determinants were calculated using a Students t-test. Furthermore, t-tests were conducted to examine differences between the Tanzanian and Zambian respondents on additional determinants of condom use intention, that is, goals attitudes, HIV knowledge, and HIV fear. These analyses were also done for the separate target groups in each country: males, females, singles, students with steady boy/girlfriend, and students with and without sexual experience. Next, the determinants were included in a multiple regression model using forced entry in blocks with condom use intention as dependent variable. The three blocks were:

1. TPB determinants (attitude towards condom use, subjective norm, and selfefficacy);
2. determinants that might be influenced by means of HIV/AIDS prevention programmes (attitude towards pregnancy, attitude towards own pleasure, attitude towards pleasing partner, HIV knowledge, and HIV fear); and
3. other additional variables (gender, age, boy/girlfriend, sexual experience, residential area, language preference, religion, and positive future outlook). We conducted separate regression analyses for the Tanzanian and the Zambian

sample.

Religion was only entered in the Tanzanian analyses as 98.9% of the Zambian respondents was Christian. Finally, separate regression analyses were performed for the above mentioned subgroups in each country by adding the following variables in three blocks:

1. TPB determinants (attitude towards condom use, subjective norm, and self-efficacy);
2. Goal attitudes (attitude towards pregnancy, attitude towards own pleasure, and attitude towards pleasing partner);
3. gender, boy/girlfriend, and sexual experience. All statistical analyses were carried out using SPSS 16.0.

*Results*

*Differences between the Tanzanian and the Zambian sample*
T-tests were calculated to estimate differences between the Tanzanian sample and the Zambian sample with regard to condom use intention, TPB determinants, and condom use related variables that might be influenced by means of HIV/AIDS prevention programmes. Table 1 shows that the Tanzanian students scored significantly higher than the Zambians on condom use intention, self-efficacy, attitude towards pregnancy, attitude towards having sex for own pleasure, attitude towards having sex to please partner, and HIV fear.

Table 1. Comparison between the Tanzanian and Zambian samples on the TPB determinants, Attitudes towards goals, HIV knowledge, and HIV fear.

| | | Tanzania Total group (n = 286) | | Zambia Total group (n = 272) | |
|---|---|---|---|---|---|
| | | *M* | *SD* | *M* | *SD* |
| Intention | Intended condom use (1-5) | 3.47** | 1.22 | 3.13 | 1.10 |
| TPB determinants | Attitude condom use (1-5) | 3.76 | 0.94 | 3.77 | 0.75 |
| | Subjective norm (1-5) | 2.56 | 1.23 | 3.02* | 0.93 |
| | Self-efficacy (1-5) | 3.85** | 0.69 | 3.64 | 0.57 |
| Attitudes towards goals | Goal pregnancy (1-5) | 1.95* | 1.27 | 1.75 | 1.03 |
| | Goal own pleasure (1-5) | 2.75* | 1.59 | 2.50 | 1.31 |
| | Goal please partner (1-5) | 2.58* | 1.58 | 1.85 | 1.09 |
| HIV | HIV knowledge (0-6) | 3.39 | 0.79 | 3.39 | 0.77 |
| | HIV fear (1-5) | 3.82** | 1.15 | 3.41 | 1.18 |

*Note.* T-tests between Tanzania and Zambia; a score marked with * or ** indicates that the mean score is significantly higher than the comparison score.
* $p < 0.05$, ** $p < 0.01$.

Table 1. Comparison between the Tanzanian and Zambian samples on the TPB determinants, Attitudes towards goals, HIV knowledge, and HIV fear. Note. T-tests between Tanzania and Zambia; a score

marked with * or ** indicates that the mean score is significantly higher than the comparison score. * p < 0.05, ** p < 0.01.

On the other hand, Zambians scored significantly higher on subjective norm than Tanzanians. Due to the relatively large sample size, small differences between average scores can already be significant. When looking at relevant differences, considering a difference of > 0.40 (i.e., 10% of the range of the five-point scales) between the mean scores of Tanzanians and Zambians as clinically relevant, only subjective norm, attitude towards pleasing partner, and HIV fear showed relevant differences. The Zambian sample (M = 3.02) reported a higher average subjective norm than the Tanzanian sample (M = 2.56). The Tanzanian students scored higher on attitude towards having sex to please partner (M = 2.58) and HIV fear (M = 3.82) than the Zambian students (M = 1.85 and M = 3.41, respectively). The analyses were repeated for the target subgroups. The results of the subgroup analyses were comparable with those of the total Tanzanian and Zambian samples.

*Predictors of condom use intention in Tanzania and Zambia*
Regression analysis revealed that attitude towards condom use and subjective norm were predictive for condom use intention in both the Tanzanian and the Zambian sample (Table 2).



Table 2. Multiple regression of condom use intention in the Tanzanian (n = 286) and the Zambian (n = 272) main samples.

| Determinants | Tanzania | | | Zambia | | |
|---|---|---|---|---|---|---|
| | Step 1 | Step 2 | Step 3 | Step 1 | Step 2 | Step 3 |
| | β | β | β | β | β | β |
| Attitude towards condom use | .158* | .290*** | .230** | .292** | .290*** | .280** |
| Subjective norm | .337*** | .278** | .254** | .234** | .194*** | .207*** |
| Self-efficacy | .052 | .077 | .054 | .022 | .062 | .007 |
| Attitude towards pregnancy | | .172** | .155** | | .020 | .036 |
| Attitude towards sex for own pleasure | | .185** | .182** | | -.095 | -.106ᵖ |
| Attitude towards sex to please partner | | .085 | .086 | | .140* | .159** |
| HIV knowledge | | -.076 | -.057 | | .041 | .056 |
| HIV fear | | .025 | .035 | | -.063 | -.045 |
| Gender (1=female) | | | -.065 | | | .335* |
| Age | | | -.016 | | | .172** |
| Boyfriend / girlfriend (1=yes) | | | .165** | | | -.001 |
| Sexual experience (1=yes) | | | -.188** | | | -.018 |
| Living area (1=urban) | | | -.141** | | | .090 |
| Language preference (1=English) | | | .080 | | | .056 |
| Religion (1= no explicit ban on condom use) | | | .160** | | | _ᵃ |
| Positive future outlook | | | -.040 | | | .085 |
| R² change | .155*** | .092*** | .083*** | .165*** | .026 | .053* |
| R² | .155 | .246 | .329 | .165 | .191 | .244 |

Note. R² = explained variance, ᵖ p < .10, * p < 0.05 ** p < 0.01
ᵃ Religion not included as 98.9% of the Zambian sample was Christian.

Table 2. Multiple regression of condom use intention in the

Tanzanian (n = 286) and the Zambian (n =272) main samples.
Note. R2 = explained variance, # p < .10, * p < 0.05 ** p < 0.01 1) Religion not included as 98.9% of the Zambian sample was Christian.

Regression analyses were conducted for each target group. The main results of the subgroup analyses are comparable with those of the total Tanzanian and Zambian sample.

*Conclusion and discussion*
This study examined the predictive power of the TPB on condom use intention amongst 13 to 19 year old high-school students in Tanzania and Zambia. The TPB has potential utility in predicting behavioural intention as the TPB determinants attitude towards condom use and subjective norm explained respectively 15.5% and 16.5% of the variance in condom use intention of Tanzanian and Zambian adolescents. The results of this study also show that attitude towards condom use and subjective norm are important determinants of condom use intention for almost all target groups that were examined in this study: males and females, students with and without a boy/girlfriend, and students with and without sexual experience. In all subgroups, subjective norm was identified as a significant determinant of condom use intention. Attitude towards condom use was significantly related to condom use intention in all subgroups except for two (i.e., the Tanzanian female group and the Tanzanian adolescents with a steady boy/girlfriend).

Determinants of condom use intention seem to exceed national borders, as subgroups from different countries have the same TPB determinants of condom use intention, despite the general idea that differences between (sub)populations can be expected (Fishbein, 2000). These findings prove the utility and global applicability of the TPB for studies on condom use intention, and thus support the findings of Fishbein (2000) who identified the TPB determinants as the most important determinants of behavioural intention in more than fifty studies. The results also give reason for optimism about possibilities to use elements of the same HIV/AIDS prevention programmes for subgroups in different countries. Future research has to focus on the possibility to use one HIV/AIDS prevention

programme for, for instance, males in both Tanzania and Zambia. Only small local adaptations might be needed as several of the same behavioural determinants appear to be most important for target groups in both countries. This will reduce costs because the same programme can be implemented in more countries to a large extent.

*Further research*
into successful implementation of prevention programmes based on scientific studies is needed to reach successful and cost-effective pathways.

*Differences in the TPB variables between target groups*
Previous studies seldom compared the behavioural determinants of potential separate target groups, with the exception of comparisons between males and females (Boer & Mashamba, 2007; Bryan et al., 2006; Jemmott et al., 2007). With respect to Tanzanian and Zambian males, target subgroup analysis showed that attitude towards condom use and subjective norm were determinants of condom use intention among. This finding is consistent with the results of South African males in the study of Boer and Mashamba (2007), who used the same instruments to measure condom use intention, attitude, and self-efficacy. However, in our study attitude was more important than subjective norm, both in Tanzania and Zambia, whereas in the South African study of Boer and Mashamba (2007) subjective norm was more important. This difference might be explained by the instrument that was used to assess subjective norm. Boer and Mashamba (2007) measured subjective norm by means of the normative beliefs of six significant others, namely current sexual partner, new sexual partner, friends, parents, doctor, and public health campaigns (e.g., "my friends think that I should use condoms") as well as motivation to comply with these significant others (e.g., "I care about the opinion of my friends"). The instrument we used only assessed the normative beliefs of the respondents' boyfriend/girlfriend and friends. Taking the motivation to comply into account as well as various significant others might result in a higher predictive value of subjective norm. However, it must be noted that Bryan et al. (2006), using the same subjective norm instrument as we did, also found a higher predictive value for subjective norm than for attitude in their male sample. The results for females were slightly different. For them, subjective norm appeared to be the most important predictor of condom use intention in both our Tanzanian and Zambian sample. This is comparable with Bryan et al. (2006) and Fekadu and Kraft (2001, 2002), who found the same, but contrary to

Boer and Mashamba (2007) who reported no significant relationship of subjective norm with condom use intention for the female sample.

Besides differences in the relevance of the subjective norm between men and women, we also found a clinically relevant difference in the mean scores of the subjective norm between the Tanzanian and the Zambian adolescents. The Zambian sample reported a higher average subjective norm than the Tanzanian sample. This could perhaps be explained by the fact that the city of the Tanzanian respondents (Arusha) is more developed than the city of the Zambian respondents (Kabwe). This is affirmed by the difference in the rural/urban rate between the Tanzanian sample (46/54) and the Zambian sample (80/20) and is in line with the survey by Masatu, Kvåle, and Klepp (2003) among 1,247 seventh grade pupils in the Arusha district. In this study, respondents' friends did not feature as instrumental sources of reproductive health information, indicating that subjective norms of friends played a rather minor role in this area. Compared to their rural counterparts, urban dwellers may have different attitudes towards young people's sexuality, which in turn may influence the way they communicate about reproductive health matters (Masatu et al., 2003), possibly resulting in a lower perceived social pressure.

Self-efficacy was not related to condom use intention in the total Tanzanian or the total Zambian sample. However, we found a borderline significant effect for Tanzanian females. This partly confirms our impression from previous studies that self-efficacy is more relevant in more urban areas in comparison with more rural areas. Previous studies on condom use intention in Southern Africa found mixed results. Similar to our findings, Boer and Mashamba (2005) and Molla et al. (2007) found no effect of self-efficacy. Boer and Mashamba (2007) found no effect of selfefficacy for males but a significant effect for females. Large effects were found by Jemmott et al. (2007) and Lugoe and Rise (1999). This variation in results is in line with the large differences between studies that were reported by meta-analyses on applications of the theory of planned behaviour to condom use. For example, Sheeran and Taylor reported a correlation between self-efficacy and intention that varied between .08 and .62. Overall, and akin to our results, meta-analyses reported that of the three TPB determinants self-efficacy had the smallest effect on condom use intention, though it must be noted that the average effect was larger than found in our study (Albarracín, Johnson, Fishbein, & Muellerleile, 2001; Sheeran & Taylor, 1999). A point of attention is that the small

effect of self-efficacy in our study might be due to our operationalisation of self-efficacy. We used the same items that Boer and Mashamba employed (2005, 2007) and found largely identical results. Though we found no clear pattern in the different wordings of the selfefficacy items between the studies in Sub-Saharan Africa that might explain the variation in results, we cannot exclude that there might be some problem with the items we used. Alternatively, there might be a problem with the items that were used by the studies that found a large effect for self-efficacy. Therefore, future studies might further delve into the consequences of different operationalisations of selfefficacy.

It is noteworthy that in our study, self-efficacy had more effect on intention for Tanzanian women than for Tanzanian man. Similar findings were found in South Africa by Boer and Mashamba (2007). A potential explanation for this might be found in gender power imbalance, that is, self-efficacy is a determinant of condom use intention for females, and less for males, because of the gender power imbalance in sexual relations. Women do have to put more effort into negotiating condom use and this effort is to a large extent determined by self-efficacy (Albarracín, Kumkale, & Johnson, 2004; Boer & Mashamba, 2007). Despite the fact that gender power imbalance does exist in Zambia, women in Western Africa (this includes Zambia) have more control over sexual relationships than women in Southern Africa (Müller, 2005). Therefore, the reason that self-efficacy is not relevant for Zambian women might be that there is less gender power imbalance in Zambia. Future research has to examine to what extent gender power imbalance exists in different countries and how this influences the applicability of the TPB on males and females in sub-Saharan African countries.

To conclude, results for behavioural models are difficult to compare over studies due to variance in the studied populations (Lagarde et al., 2001). This is also shown by our comparison of all TPB studies on condom use intention in Sub-Saharan African countries, which showed that in each of the ten published datasets, different determinants were most important. Furthermore, comparisons are hampered by differences in the operationalisation of the variables. It is unclear whether different results can be explained by different populations or by the use of different items.

The current study is the first one to investigate determinants of condom use intention in two African countries with the same questionnaire. Overall, we found similar results in both countries and for most subgroups. As the use of the same

questionnaire seems to lead to more comparable results, it is recommended to develop a standardised questionnaire for future research on the predictive power of the TPB in Africa. Ajzen (2006) gives an outline of how to construct a standardised TPB questionnaire. Importantly, keeping the main sentence structure of the items identical, his recommendations allow for local variations in the exact wording. For instance, certain perceived behavioural consequences or self-efficacy control issues might be more relevant in some countries or for some target groups. This can be taken into account without threatening the comparability of the studies. If a more standardised questionnaire is used in more studies, more cumulative knowledge on the behavioural determinants of condom use intention in Sub-Saharan Africa might be gathered.

*Differences in the non-TPB variables between target groups*
In the Tanzanian sample, but not in the Zambian sample, having a boy/girlfriend was positively related to a higher condom use intention. The positive effect of a steady relationship might be explained by the fact that having sex with a steady boy/girlfriend is more of a habitual behaviour than having sex with a casual partner.

People are more prepared for habitual sexual intercourse by buying condoms, carrying condoms, and communicating about condom use, which leads to a higher condom use intention (Van Empelen & Kok, 2006). It is unclear why the same was not found in the Zambian sample, but possibly cultural differences might play a role too. In future research, the relationship between societal differences and determinants of condom use should be further explored.

Goal attitudes (i.e., attitude towards having sex for own pleasure, attitude towards having sex to please partner, and attitude towards pregnancy) were significantly related to condom use intention in several subgroups, which raises the question what the underlying mechanisms are. For example, does the positive relationship for females between attitude to have sex in order to get pregnant and condom use intention imply that these adolescents want to wait with having a baby until they are older, and in the meantime want to prevent themselves from getting infected with HIV? There are some studies available on how using a condom influences sexual pleasure (e.g. Catania et al., 1991), but attitude towards pregnancy, attitude towards having sex for own pleasure, and attitude towards having sex to please partner were never measured before in an African study that applied the TPB to condom use intention. It is recommended to

elaborate on the role of goal attitudes in future studies.

Tanzanians who adhere to a religion with a ban on condom use reported a lower condom use intention than respondents who have no religion or respondents who adhere to a religion with no explicit ban on condom use. This result can be explained by the Christian Church' stance, particularly that of the Roman Catholic Church, on condom use (Bradshaw, 2003; Sarkar, 2008). Previous studies showed that religious behaviour is a strong predictor of sexual behaviour (Sarkar, 2008), although is it also indicated that the positive and negative effects of affiliation to conservative religious groups may rule each other out, that is, affiliation with conservative religious groups is more likely to delay sexual initiation, but also lowers the likelihood of condom use during first sex (Agha, Hutchinson & Kusanthan, 2006).

Additional variables that were significantly related to condom use intention in other studies (gender, HIV knowledge, positive future outlook, and language preference) were not significantly related to condom use intention in the current study, except for gender. This is remarkable, because these variables were measured with exactly the same questions as used in previous studies (Bryan et al., 2006; Jemmott et al., 2007). However, as noted before, study results on determinants of condom use are difficult to compare. Therefore, it is recommended to explore different variables that could have a direct effect on condom use intention, in addition to the basic TPB model, for different countries and subgroups, as this might yield more in-depth insights.

*Limitations*
An important limitation of the current study is that the sample was not representative for all Tanzanian and Zambian adolescents between 13 and 19 years old. For example, the rural/urban rate, Christian/non-Christian rate, and high school attendance rate differ from the general rates of these countries. The rural/urban rate in Zambia is 60/40, whereas in our Zambian sample this rate is 80/20. The Tanzanian rural/urban rate is 64/36, whereas in our Tanzanian sample this rate is 46/54 (International Fund for Agricultural Development, 2008). Of the Tanzanian population, 30% is Christian (CIA, 2008), and 87% of the Zambian population (US Department of State, 2006), whereas in this study the percentage of Christians was respectively 81% and 99%. All respondents were high school students whereas only a selective group in both countries has the opportunity to go to high school (UNICEF, 2008a, 2008b).

We included religion in our study because several large Christian denominations oppose condom use, whereas most other religions are more liberal in this respect. However, in our survey we did not distinguish between Roman Catholics and Protestants. In Tanzania, about 60% of the Christians is Roman Catholic and in Zambia about 50% of the Christians is Roman Catholic (World Council of Churches, 2008). The Roman Catholic Church forbids the use of contraceptives, whatever the circumstances, but the Protestant churches (with a few exceptions) have developed a different interpretation, and generally emphasise birth control (Sarkar, 2008). Although both Catholics and Protestants promote the adoption of abstinence as an exclusive strategy for young people (Agha et al., 2006) and forbid premarital sex, these different interpretations might affect condom use intention. We found that condom use was lower among people who were members of one of the Christian churches. Most likely, had we been able to differ between the Catholic and Protestant churches, we would have found an even stronger difference between members of the Catholic Church and members of non-Christian churches. In future studies, it is therefore recommended to include subdivisions of Christianity in the questionnaire.

Sexual experience was operationalised conform an earlier study on HIV/AIDS prevention (Jemmott et al., 2007), as 'a male's penis in a female's vagina'. This definition was chosen because it is the most common way to have sexual intercourse and we wanted to avoid that non-risky behaviour (e.g., masturbation) would be associated with sexual intercourse. As this is not the only way to have risky sexual intercourse, this definition might have biased the results on risky sexual behaviour. The current and previous studies show that the TPB can be used successfully to predict behavioural intention, but that it is not a perfect model yet. Although several additional explanatory factors were found, we did not examine all possible influences on condom use. For example, the Integrated Model on Behaviour Prediction (IMPB), a model that is related to the TPB, includes environmental constraints and personal skills (Fishbein & Yzer, 2003). The usefulness of the IMPB should be explored in future studies.

Finally, we did not study actual condom use. Meta-analyses on condom use showed that behavioural intention is one of the best determinants of condom use behaviour (e.g., Albarracín et al., 2001; Sheeran & Orbell, 1998).

Although prospective studies that test the TPB with respect to the prediction of condom use behaviour in Sub-Saharan African countries are scarce, it is reasonable to assume that this also holds in these countries. In support, Bryan et al. (2006) found that intention was a significant predictor of behaviour among South African adolescents.

*Implications for interventions*
The findings of the current study have practical implications. HIV/AIDS prevention programmes in both Tanzania and Zambia should aim at the behavioural determinants that contribute significantly to condom use intention. Because most target subgroups have the same TPB determinants of condom use intention, development and implementation costs of prevention programmes can be reduced by using the same approach in both countries. For Tanzania and Zambia, this means that national HIV/AIDS prevention programmes should primarily target subjective norm and attitude towards condom use. These programmes should also take into account the additional non-TPB variables that are significantly related to condom use intention, which can differ for each target group in each country. Because they reported lower condom use intention, in Tanzania special attention should be paid to Tanzanians who are single, live in urban areas, are sexually active, and follow a religion that bans condom use. In Zambia, special attention should be paid to younger people and males. Nevertheless, during the research period in Tanzania and Zambia, it appeared that many NGOs, churches, schools, and politicians are still against condom use, and that they prohibit handing out condoms, for example at schools. As long as this policy does not change, fighting HIV/AIDS and increasing condom use will remain a challenge.

*References*
Agha, S., Hutchinson, P., & Kusanthan, T. (2006). The effects of religious affiliation on sexual initiation and condom use in Zambia. *Journal of Adolescent*

*Health,* 38, 550-555.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes,* 50, 179-211.

Ajzen, I. (2006). Constructing a TPB questionnaire: Conceptual and methodological considerations. Retrieved from http://people.umass.edu/aizen/pdf/tpb.measurement.pdf.

Albarracín, D., Johnson, B.T., Fishbein, M., & Muellerleile, P.A. (2001). Theories of reasoned action and planned behavior as models of condom use: A meta-analysis. *Psychological Bulletin,* 127, 142-161.

Albarracín, D., Kumkale, G.T., & Johnson, B.T. (2004). Influences of social power and normative support on condom use decisions: A research synthesis. *AIDS Care,* 16, 700-723.

Armitage, C.J., Norman, P., & Conner, M. (2002). Can the theory of planned behavior mediate the effects of age, gender and multidimensional health locus of control? *British Journal of Health Psychology*, 7, 299-316.

AVERT. (2007). HIV and AIDS in Africa. Retrieved April 16, 2008 from http://www.avert.org/aafrica.htm.

Bakker, A., Buunk, B., & Siero, F. (1993). Condoomgebruik door heteroseksuelen [Condom use among heterosexuals]. *Gedrag & Gezondheid*, 21, 238-254.

Bennett, P., & Bozionelos, G. (2000). The theory of planned behavior as predictor of condom use: A narrative review. *Psychology, Health & Medicine,* 5, 307-326.

Boer, H., & Mashamba, M.T. (2005). Psychosocial correlates of HIV protection motivation among black adolescents in Venda, South Africa. *AIDS Education and Prevention*, 17, 590-602.

Boer, H., & Mashamba, M.T. (2007). Gender power imbalance and differential psychosocial correlates of intended condom use among male and female adolescents from Venda, South Africa. *British Journal of Health Psychology,* 12, 51-63.

Bradshaw, S. (2003, October 9). Vatican: Condoms don't stop AIDS. *The Guardian.* Retrieved May 16, 2008 from http://www.guardian.co.uk/world/2003/oct/09/AIDS.

Bryan, A., Kagee, A., & Broaddus, M.R. (2006). Condom use among South African adolescents: Developing and testing theoretical models of intentions and behavior. *AIDS and Behavior,* 10, 387-397.

Bryan, A., Ruiz, M.S., & O'Neil, D. (2003). HIV-related behaviors among prison inmates: A theory of planned behavior analysis. *Journal of Applied Social Psychology*, 33, 2565–2586.

Catania, J., Coates, T., Stall, R., Bye, L., Kegeles, S., Capell, F., et al. (1991). *Changes in condom use among homosexual men in San Francisco.* San Francisco: Center for AIDS Prevention Studies.

Chaisamrej, R., Zimmerman, R.S., Noar, S.M., & Thomas, L. (2005, May). A comparison of five social psychological models of condom use: Implications for designing prevention messages. *Paper presented at the annual meeting of the International Communication Association*, New York. Retrieved April 27, 2008 from http://www.allacademic.com/meta/p14853_ index.html.

CIA. (2008). The world fact book. Retrieved April 7, 2008 from https://www.cia.gov/library/publications/the-world-factbook/fields/2122.html.

Eun-Seok, C., Kevin, K.H., & Patrick, T.E. (2008). Predictors of intention to practice safer sex among Korean students. *Archives of Sexual Behavior*, 38, 641-651.

Fekadu, Z., & Kraft, P. (2001). Predicting intended contraception in a sample of Ethiopian female adolescents: The validity of the theory of planned behavior. *Psychology & Health*, 16, 207-222.

Fekadu, Z., & Kraft, P. (2002). Expanding the theory of planned behaviour: The role of social norms and group identification. *Journal of Health Psychology,* 7(1), 33-43.

Fishbein, M. (2000). The role of theory in HIV prevention. *AIDS Care,* 12, 273-278.

Fishbein, M., & Yzer, M.C. (2003). Using theory to design effective health behavior interventions. *Communication Theory,* 13, 164-183.

Fisher, J.D., Fisher, W.A., Bryan, A.D., & Misovich, S.J. (2002). Information-motivation behavioural skills model-based HIV risk behavior change intervention for inner-city high school youth. *Health Psychology,* 21, 177-186.

Giles, M., Liddell, C., & Bydawell, M. (2005). Condom use in African adolescents: The role of individual and group factors. *AIDS Care*, 17, 729-739.

Gredig, D., Nideroest, S., & Parpan-Blaser, A. (2006). HIV-protection through condom use: Testing the theory of planned behavior in a community sample of heterosexual men in a high-income country. *Psychology and Health,* 21, 541-555.

Hardeman, W., Johnston, M., Johnston, D.W., Bonetti, D., Wareham, N.J., & Kinmonth, A.L. (2002). Application of the theory of planned behaviour in behaviour change interventions: A systematic review. *Psychology and Health*, 17, 123-158.

*International Fund for Agricultural Development.* (2008). World poverty map. Retrieved April 4, 2008 from

http://www.ruralpovertyportal.org/english/regions/index.htm.

Jemmott, J.B., Heeren, G.A., Ngwane, Z., Hewitt, N., Jemmott, L.S., Shell, R., et al. (2007). Theory of planned behavior predictors of intention to use condoms among Xhosa adolescents in South Africa. *AIDS Care*, 19, 677-684.

Lagarde, E., Caraël, M., Glynn, J.R., Kanhonou, L., Abega, S.C., Kahindo, M., et al. (2001). Educational level is associated with condom use within non-spousal partnerships in four cities of Sub-Saharan Africa. *AIDS*, 15, 1399-1408.

Lechner, L., Kremers, S., Meertens, R., & De Vries, H. (2007). Determinanten van gedrag [Determinants of behavior]. In J. Brug, P. Van Assema, & L. Lechner (Eds.), *Gezondheidsvoorlichting en Gedragsverandering* (pp. 75-106). Assen: Van Gorcum.

Lugoe, W., & Rise, J. (1999). Predicting intended condom use among Tanzanian students using the theory of planned behaviour. *Journal of Health Psychology,* 4, 497-506.

Masatu, M.C., Kvåle, G., & Klepp, K.I. (2003). Frequency and perceived credibility of reported sources of reproductive health information among primary school adolescents in Arusha, Tanzania. *Scandinavian Journal of Public Health,* 31, 216-223.

Molla, M., Astrøm, A.N., & Brehane, Y. (2007). Applicability of the theory of planned behavior to intended and self-reported condom use in a rural Ethiopian population. *AIDS Care*, 19, 425-431.

Müller, T. (2005). HIV/AIDS, Gender and rural livelihoods in Sub-Saharan Africa. Wageningen: Wageningen University.

Munoz-Silva, A., Sanchez-Garciá, M., Nunes, C., & Martins, A. (2007). Gender differences in condom use prediction with theory of reasoned action and planned behavior: The role of self-efficacy and control. *AIDS Care,* 19, 1177-1181.

Nyblade, L., Pande, R., Mathur, S., MacQuarrie, K., Kidd, R., Banteyerga, H., et al. (2003). *Disentangling HIV and AIDS stigma in Ethiopia, Tanzania and Zambia.* Washington, D.C.: International Center for Research on Women [ICRW].

Sarkar, N.N. (2008). Barriers to condom use. *The European Journal of Contraception & Reproductive Health Care,* 13, 114-122.

Sheeran, P., & Orbell, S. (1998). Do intentions predict condom use? Meta-analysis and examination of six moderator variables. *British Journal of Social Psychology,* 37, 231-250.

Sheeran, P., & Taylor, S. (1999). Predicting intentions to use condoms: A meta-analysis and comparison of the theories of reasoned action and planned behavior.

*Journal of Applied Social Psychology*, 29, 1624-1675.

UNAIDS. (2006). Report on the global AIDS epidemic. Retrieved April 10, 2008 from

http://www.unAIDS.org/en/KnowledgeCentre/HIVData/GlobalReport/Default.asp.

UNAIDS. (2007). AIDS epidemic update. Retrieved April 10, 2008 from

http://www.unAIDSrstesa.org/Documents/press_centre/Complete_report_2007

UNAIDS. (2008a). Country situation analysis Tanzania. Retrieved April 11, 2008 from http://www.unAIDS.org/en/CountryResponses/Countries/tanzania.asp.

UNAIDS. (2008b). Zambia country report. Retrieved April 10, 2008 from http://data.unAIDS.org/pub/Report/2008/zambia2008country_progress_report_en.

UNAIDS. (2008c). Country situation analysis Zambia. Retrieved April 10, 2008 from http://www.unAIDS.org/en/CountryResponses/Countries/zambia.asp.

UNICEF. (2008a). Tanzanian statistics. Retrieved April 11, 2008 from http://www.unicef.org/infobycountry/tanzaniastatistics.html#47.

UNICEF. (2008b). Zambian statistics. Retrieved April 11, 2008 from http://www.unicef.org/infobycountry/zambiastatistics.html#46.

US Department of State. (2006). Zambia. Retrieved April 10, 2008 from http://www.state.gov/g/drl/rls/irf/2006/71331.htm

Van Empelen, P., & Kok, G. (2006). Condom use in steady and casual sexual relationships: Planning, preparation and willingness to take risks among adolescents. *Psychology and Health*, 21, 165-181.

Villarruel, A.M., Jemmott, J.B., Jemmott, L.S., & Ronis, D.L. (2004). Predictors of sexual intercourse and condom use intention among Spanish-dominant Latino youth. *Nursing Research*, 53, 172-181.

Wiggers, L.C.B., De Wit, J.B.F., Gras, M.J., Coutinho, R.A., & Van den Hoek, A. (2003). Risk behavior and social cognitive determinants among ethnic minority communities in Amsterdam. *AIDS Education and Prevention,* 15, 430-437.

World Council of Churches. (2008). *Africa*. Retrieved January 5, 2009, from http://www.oikoumene.org/en/member-churches/regions/africa/.

# Health Communication In Southern Africa: Using Social Network Information to Design Effective Health Campaigns to Address HIV in Namibia

*Abstract*

When programmers only use representative responses from target audiences, they may design an intervention that does not fit a community's channel of communication. This study illustrates how to use social network analysis and community haracteristics to identify if communitywide health campaigns or mass media programmes best serve communities for communication interventions addressing HIV in Namibia. Interviews were conducted with Namibians from different households (N = 3763) in ten different communities over a year (October, 2003 to June, 2004). Based on community characteristics and social network analysis, group-based interventions rerecommended for seven of the ten communities, with varying suggestions for inclusion of critical groups and/or leaders within each area, and radio programmes to reach isolated groups. Additional suggestions for health interventions in each community are proposed from their community's characteristics.

*Introduction*

When health campaign designers only use the average scores from a random sample of their target audience, they may design an intervention that does not fit the community's channels of communication. When misfits occur, diffusion of information, norms, or behaviours may not occur or may generate unintended community activities, such as ostracism and stigmatisation. Information about the community's social system – its groups and their interconnections – could allow designers to adjust their interventions to these social influences. Community-level variables differ significantly from individual-level variables. They focus on group and social processes of leadership, equity, and social norms instead of

individuallevel behaviours, attitudes, and perceptions. This chapter shows community networks created through people's participation in social groups, and presents a decision-making model for interventions based on the community's network and characteristics.

These data come from Namibia. Namibia sits on the northwestern border of South Africa, and South Africa ruled it from 1946 until 1988. Although differences between the countries exist (e.g., population size: 2 million in Namibia versus 44 million in South Africa), their similar HIV prevalence rates for adults (19.6% for Namibia, 18.8% for South Africa, UNAIDS, 2006) make this exploration in Namibia a useful opportunity to further health communication development in Namibia and South Africa. The next section details more about networks and health campaigns followed by details about HIV in Namibia.

*Social networks and health communication*
Imagine that Sarah, who lives in a rural community in Africa, attends a church meeting where she listens to a dramatic production about HIV transmission, treatment, and care for those living with HIV (e.g., DramAidE, Mbuyazi, 2004). As she talks with other audience members after the show, they may share information about HIV, reinforce or change existing social norms about HIV, and disclose their intentions to help (or not) those living with HIV. After leaving the drama, Sarah may also talk to those who did not attend the drama about its content as well as how other audience members reacted to it.

Through this process, information and social norms diffuse within the community. A map of communication patterns – a social network – of this community ahead of time, might have revealed this church and Sarah as having powerful, central positions within the network. Their central positions could provide them with great potential to diffuse HIV information, norms, and innovations in this community. One way to think about networks is as a system of water pipes. The pipes are channels for communication – the communication is the water flowing through them. As more pipes exist within a community, communication may flow more quickly and easily through the community. People tapping into the water system at strategic places, such as where many pipes come together, may have better opportunities to access communication flowing in the system, stop communication from flowing further, or to put their own messages into the system.

Social networks, then, can be thought of as people tied to each other through one or more specific types of interdependency (e.g., familial, emotional, or economic). A social network is a map of the relationships between actors (e.g., people, groups, leaders, objects, or events); social network analysis investigates these relationships (Wasserman & Faust, 1994).

*Groups and social networks*
One reason this system perspective is so powerful is that social network analysis matches many theories used to design communication interventions. For example, in social cognitive theory, Bandura (1997) argues that people are motivated to learn about, and then to engage in, behaviours if they know about them and see others performing them. Both social cognitive theory and diffusion of innovations (Rogers, 2003) describe how media campaigns are mediated through social networks: People may learn of new behaviours through the media and then pass on this information to their interpersonal networks (Bandura, 2004; Rogers, 2003). While mass media provide information, communication in these interpersonal networks provides receivers with guidance and support to enact, maintain, or cease such actions (Bandura, 1997; 2004; Rogers, 2003).

Indeed, Fishbein (2000; Fishbein & Yzer, 2003) synthesised predominant theories of health behaviour research and suggested that one key determinant is "environmental constraints preventing behavioural performance" (Fishbein & Yzer, 2003, p. 166). Network analysis emphasises structural relationships as key explanatory concepts (Wasserman & Faust, 1994). It assumes that the structural properties of social formations are factors that shape the perceptions, beliefs, attitudes, and actions of individuals and groups. Thus, direct and indirect exchanges among social actors possessing differential resources (e.g., information, money, or power) may facilitate or constrain social influence and collective action. Individual community members, like Sarah, who take part in a social network would have greater social capital than people isolated from the community's social network. Her social capital may allow her greater access to knowledge, support, and resources (Fullilove, Green, & Fullilove 2000; Putnam, 2000).

A social network analysis map may be tailored to show which community members have inaccurate knowledge about a given health issue, and might show that these people cluster within an inter-connected set of social groups. Where significance testing from random sampling procedures may miss changes

in the knowledge, attitudes, or behaviour of a small cluster of people (Cohen 1994; Gondolf, 2004), a programmer armed with a network analysis could strategically focus a health intervention towards a disadvantaged cluster. On the other hand, if the network analysis shows that inaccurate knowledge is spread throughout a community, then the programmer may design a community-wide intervention or a mass media campaign with the knowledge that it will be diffused through these social groups.

*Group memberships*
There is good reason to test if a community is ripe for a community-based programme as many of these programmes are successful (e.g., Farquhar, 1978;
Keating et al., 1985; Nutbeam & Catford, 1987; Puska et al., 1983), such as community-based and clinic-based interventions for cancer screening (Pasick et al., 2004). Community-based programmes work for many reasons. Learning health information in groups from trusted sources replicates existing cultural patterns within many communities. Finally, as people feel stronger connections to their social groups, they attribute more credibility to group members as sources of information (e.g., Weenig & Midden 1991), with source credibility improving persuasion (e.g., Cialdini, 2008).

Such programmes, however, do not fit all communities. A meta-analysis of community-based interventions shows that many interventions work somewhere, but not one intervention works everywhere (Pasick et al., 2004). Successful interventions match features of the community, the target audience, and the objective, as well as intervention resources. One basic criterion for a group-based intervention is to ascertain how many people within a community participate in a social group. In addition to this basic criterion, important community characteristics to index include receptivity to change, perceptions of people living with HIV and AIDS (PLHA), leadership, group cohesion, active minorities, and communication patterns (Kincaid, 2004; Rogers, 2003). Many of these variables may exist at the citizen or group-level. For example, active minorities may be members within a group or groups within a community.

As for leadership, in some communities, particular social groups have more power than others within the community's social network. One way to understand how much power a particular social group holds within a community is to estimate its network centrality (Wasserman & Faust, 1994).

*Centrality: Groups and leaders*

If most people participate in one group, such as the Catholic Church, and take part in two or three additional groups, such as athletic clubs or performing groups, then the Catholic Church would be central in that community's network of memberships. If you presented information to members of the Catholic Church, then its members could disseminate the information to all their other social groups. Leaders may also be central within a social network because they lead a central group or because they lead multiple groups. Using local leadership well can improve an intervention's success. For example, one way to introduce information into a group is to train one member in health information. In comparing mass media and member-training interventions, Lam et al. (2003) found that both channels may improve people's health knowledge, but evoking actions, such as testing, only appeared in member-training interventions. Lam et al. (2003) argued that these trained group members "are effective because they use their cultural knowledge and social networks to generate change" (p. 516). In another example, participation in a mercury discussion network in Brazil was positively correlated with awareness of the critical information needed to change dietary habits (Mertens et al., 2008). The researchers noted that a community collaborator held a central position within this discussion network, and credited some of the programme's success to his placement within it. This system-level information, central groups and leaders, can be critical information to guide interventions aimed at the diffusion and adoption of complicated behaviours.

System-level information may not represent cultural or social expectations of leadership and decision-making. Respondents may see their own leader as the reasonable person to select and to guide group mobilisation activities in most communities. If leaders are not involved in this process, the programmes may not be effective. On the other hand, if all members of a group are expected to be involved in decisions and activities that affect the entire group, then leader-driven interventions may be inappropriate and ineffective.

*Intergroup and intragroup considerations*

One design concern for group-based interventions is whether to plan group activities that would involve multiple groups working together in a community effort, or to have separate group activities. Some people may feel confident that their groups could mobilise resources effectively without working with other groups. Forcing them to work together in a community effort may be problematic

because one must coordinate these different groups.

In addition, although many studies show positive outcomes of group-based interventions, some studies have shown the difficulties of engaging in a discussion about HIV/AIDS (e.g., Gruber & Caffrey, 2005). In such contexts, voluntary involvement and human resources dedicated to HIV/AIDS-focused activities may be constricted and contentious (Gruber & Caffrey, 2005).

People's confidence in their ability to confront others with sensitive information predicts if a confrontation takes place or whether a person decides to keep quiet (Makoul & Roloff, 1998). Reported confidence in helping those living with HIV in spite of opposition from the family or community predicts desires to keep a family member's HIV diagnosis a secret (Smith & Niedermyer, in press). In Namibia a stigma surrounding HIV/AIDS exists. For orphaned and vulnerable children in Namibia, children's ability to secure support has been tied directly to their parents' cause of death (e.g., Ruiz-Casares, 2006). Although non-profit organizations, such as Red Cross International, are concerned about the secrecy surrounding HIV, their efforts are focusing first on reducing the stigma and discrimination attached to HIV in Namibia (e.g., Tjaronda, 2004). With stigmatised issues, it may be critical to assess people's confidence that they would help people living with HIV even if someone, such as a family member or spouse, opposed them helping.

In fragmented communities, programmers may have to use mass media channels to reach into the different social networks. Whereas people naturally transmit new information to each other interpersonally (Granovetter, 1973), in a fragmented community mass media channels may be needed to ensure that everyone receives information. Without care, information and resources sent into fragmented communities can generate community-level inequalities in information and social support (i.e., social capital, Fullilove, Green & Fullilove, 2000; Putnam, 2000). Information about interpersonal and mass media channels can help programmers select the best channel to reach isolated community members.

*Namibia and HIV*
Despite years of HIV campaigns and health education presence in Namibia, HIV/AIDS prevalence is still climbing (UNAIDS, 2006). Due in part to AIDSrelated deaths, Namibian life expectancy dropped from 61 years (1991) to 53

years (2006, UNAIDS, 2006). In Namibia, 85,000 children have been orphaned due to the AIDS-related deaths of one or both of their parents (UNAIDS, 2006). These orphaned and vulnerable children (OVCs) are in need of adoption, and yet, extended families and communities are often reluctant to take them in (WHO, 2002). Health educators are trying to understand why family and community members are not taking in these children and how to persuade communities to adopt them (UNAIDS, 2004, 2006).

With the epidemic generalised and still on an upward trajectory, the Namibian government and its partners, including the United States Agency for International Development (USAID), have committed to providing a full range of prevention, care, support and treatment programmes, for higher-risk groups, people living with HIV/AIDS, their families and the orphans and vulnerable children affected by the epidemic. Nevertheless, Namibia is a vast, culturally diverse country, with a widely dispersed and largely poor population, which may require a tailored, communitybased approach with strong policy, financial and implementation oversight.

*Methods*

*Participants and procedures*
Namibian households (N = 3763) immediately adjacent to ten hospitals located throughout the country were interviewed (approximately 375 respondents in each location). The data took a year to collect (October, 2003: Oshikuku, Oniipa, Rehoboth; June, 2004: Andara, Nyangana and Rundu; and October, 2004: Katutura, Keetmanshoop, Oshakati, and Walvis Bay, see Smith, Witte & Keulder, 2004 for more information). In each region, researchers drew fresh maps that listed all formal and informal households within a 10-kilometre area surrounding the mission hospital. Interviewers stopped at each household, spiralling out from the hospital, and spoke with one eligible household member who was selected at random. They continued stopping at households until they completed their set number of interviews.

Interviewers had to be fluent in English and Afrikaans, as well as other local languages. Enumerators approached each selected household and asked to talk to the head of the household or the oldest person in the home. A family member (aged 15 years and older and residing in the household) was chosen at random to be interviewed in a private place either inside or outside of the

household. The enumerator read the informed consent information, which explained that participation was voluntary and their answers were confidential. At the end of the interview, the respondent was thanked with a household food item (e.g., small bag of rice or flour). The entire instrument contained questions assessing behaviours related to HIV prevention and care and support, psychosocial factors believed to influence these behaviours, perceptions of the community-level characteristics, and exposure to mass media and community-based messages related to HIV/AIDS, which appear elsewhere (Smith, Ferrara & Witte, 2007; Smith & Morrison, 2006; Smith & Nguyen, 2008).

*Instrumentation*
*Group membership.* Respondents were asked to name all the groups of which they held memberships. Respondents could name as many groups as they liked. These groups ranged from sporting clubs (e.g., Young Tswana football club), professional organizations (nurses' union), and religious groups (e.g., St. John's church choir). The respondents and their groups were entered into UCINET 6.0 for Windows spreadsheet (Borgatti, Everett & Freeman, 2002).

*Most important group.* After naming all of their social memberships, respondents were asked to name the group they regarded as most important to them. Respondents could only name one group for this category.

*Leadership.* Respondents were asked to name the leader of their most important group. Respondents could name as many people as they liked. The nominated leaders, participants, and the groups were entered into UCINET 6.0 for Windows spreadsheet (Borgatti, Everett & Freeman, 2002); this programme was used to calculate centrality and density scores.

*Responsible for group decisions.* Respondents were asked a single question of who should be responsible for making decisions that affected the entire group. Participants could select from the following choices: leader, elected representatives, entire group, or do not know.

*Information seeking about HIV/AIDS.* Respondents were asked if they had ever discussed whether HIV can be passed from a mother to her child during a group meeting (1 = yes, 0 = no).

*Group sources for HIV/AIDS information.* Respondents were asked to name groups that they would turn to for advice or information about HIV/AIDS.

Respondents could name up to five different groups. If respondents freely answered that they would go to no other group for information, then this answer was recorded.

*Non-group sources for HIV/AIDS information*. Respondents were asked six questions about where they get most of their information on HIV/AIDS (1 = yes, 0 = no). Respondents could mark more than one source. These sources included teachers, church, government, newspaper, radio, and television.

*Group activities*. Respondents were asked two questions about the activities of their most important social group. Respondents were asked if their most important group mobilised resources to help people affected by HIV/AIDS (1 = strongly disagree; 4 = strongly agree). They were then asked if their group had done anything to help people in the community affected by HIV/AIDS (1 = yes, 0 = no).

*Efficacy to resist opposition*. Participants were asked three questions to index how confident they felt about their ability to help someone living with HIV if (a) their spouse opposed, (b) members of their most important social group opposed, and (c) if no one else was helping (1 = not at all confident; 4 = very confident). The items were averaged into a single score, α = .78.

*Results*

*Group membership*
Before designing group-based interventions for communities, one must first learn if people participate in social groups, and if so, in how many. Interviewers asked respondents in each location to name the social groups in which they participated. Most people (modal response) participated in a single group, except in Oniipa and Rundu where most people belonged to three different groups (see Table 1). In Oniipa and Rundu, many residents may be able to transmit information they learn in one group to another group.

Table 1. Respondents' level of participation in groups

| | Sample size | Area of the country | Percent members | Modal memberships |
|---|---|---|---|---|
| Katutura | 520 | Central | 98% | 1 |
| Rehoboth | 400 | Central | 97% | 1 |
| Onipa | 400 | North | 98% | 3 |
| Oshakati | 338 | North | 100% | 1 |
| Oshikuku | 400 | North | 100% | 1 |
| Andara | 400 | NorthEast | 99% | 1 |
| Nyangana | 400 | NorthEast | 98% | 1 |
| Rundu | 400 | NorthEast | 100% | 3 |
| Keetmanshoop | 560 | South | 100% | 1 |
| Walvis Bay | 345 | West | 99% | 1 |

*Note.* Percent members = percent of respondents who reported membership in at least one local, social group. Modal memberships = modal number of social groups in which respondents reported membership.

Table 1. Respondents' level of participation in groups Note. Percent members = percent of respondents who reported membership in at least one local, social group. Modal memberships = modal number of social groups in which respondents reported membership.

In the other eight locations, residents may receive information in their group meetings, but information moves less easily from group to group. Programmers would need to either (a) bring information to each group, or (b) see if the same people lead these social groups. If the same people lead multiple groups, then these leaders may transmit information from group to group, thereby diffusing information through the community.

*Considering social groups*

When many groups exist in a given community, it may become impractical to implement group-based intervention programmes (see Table 2). This situation appeared in Katutura and Keetmanshoop where respondents named more social groups (232 and 213 groups, respectively) than at any other location (on average residents in other communities named 90 different social groups, SD = 31). Not surprisingly, fewer respondents in these two communities reported participation in any given group, in other words, any given group intervention would have direct contact with fewer people. Although group-based  interventions may still be effective in communities with lots of social groups, it may be too costly to implement them.

Table 2. Group characteristics by catchments

|  | Number of different groups | Group size | Most popular | Percent belonging to most popular group | Percent reporting MTCT discussion | Percent who said they went to no other group for advice or information on HIV/AIDS |
|---|---|---|---|---|---|---|
| Katutura | 232 | 2 | RCC | 9% | 79% | 53% |
| Rehoboth | 42 | 10 | ELCIN | 17% | 40% | 48% |
| Onipa | 99 | 4 | ELCIN | 77% | 71% | 34% |
| Oshakati | 134 | 3 | CAA | 14% | 68% | 42% |
| Oshikuku | 69 | 9 | RCC | 71% | 82% | 34% |
| Andara | 101 | 6 | RCC | 43% | 89% | 37% |
| Nyangana | 57 | 11 | RCC | 69% | 59% | 17% |
| Rundu | 100 | 9 | RCC | 40% | 72% | 28% |
| Keetmanshoop | 216 | 2 | RCC | 9% | 90% | 39% |
| Walvis Bay | 117 | 3 | ELCIN | 15% | 49% | 31% |

*Note.* ELCIN = Evangelical Lutheran Church in Namibia. RCC = Roman Catholic Church. CAA = Catholic AIDS Action. MTCT = Mother to child transmission of HIV.

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Respondents also named their most important group, the group that influenced them the most. In most cases, popularity and influence co-existed, that is, the most popular groups were named most frequently as the most influential groups. This pattern appeared in each community except in Katutura. In Katutura, more residents said they were members of the Catholic Church than any other group, yet more residents said that the Evangelical Lutheran Church influenced them more than any other group. When the most popular groups are also seen as the most influential groups, then designers may strongly benefit from including these groups in grouptraining programmes from an early stage. On the other hand, when discrepancies between popularity and influence appear, designers may need to include both groups to tap into both communication and influence channels.

*Centrality in membership network*
One way to understand how much power a particular social group holds within a community is to estimate its network centrality (Wasserman & Faust 1994, see Table 3). The estimate of degree centrality for these locations varies from 95% in Nyangana to 5% in Oshakati (M = 44%). The high centrality score indicates that most respondents participate in one group, making it central.

Table 3. Indicators of groups' centrality in membership network for each catchment

| | Centrality | Percent shared membership | Most central groups |
|---|---|---|---|
| Katutura | 11% | 32% | Youth club |
| | | | Roman Catholic Church |
| Rehoboth | 13% | 51% | Ebeno Church, ELCIN |
| Ongtu | 83% | 29% | ELCIN |
| Oshakati | 7% | 32% | Catholic AIDS Action |
| | | | Livonga Ekwato Group |
| Oshikuku | 10% | 47% | Roman Catholic Church, ELCIN |
| Andara | 70% | 49% | Roman Catholic Church |
| | | | Football Club |
| Nyangana | 35% | 47% | Roman Catholic Church |
| | | | Catholic AIDS Action |
| Rundu | 58% | 40% | Roman Catholic Church |
| | | | Catholic AIDS Action |
| Keetmanshoop | 13% | 33% | Catholic AIDS Action |
| | | | Youth club |
| Walvis Bay | 8% | 43% | Youth club |
| | | | Catholic AIDS Action |

Note. Percent shared membership = the percent of groups in a community that share members. ELCIN = Evangelical Lutheran Church in Namibia. For the purposes of this chapter, the specific names of youth clubs were not mentioned. These clubs included football teams, social clubs, and interventions such as New Start.

For example, in Nyangana (see Figure 1), most respondents participate in the Roman Catholic Church (the large square on the left) and then participate in a variety of additional groups.



Figure 1. The figure shows the connections among social groups in Nyangana, Namibia. The links connecting groups (shown as circles) represent residents who reported memberships in both groups. The size of the group (square) is based on size of the group's membership. Bigger figures represent larger groups.

*Table 3*. Indicators of groups' centrality in membership network for each catchment Note. Percent shared membership = the percent of groups in a community that share members. ELCIN = Evangelical Lutheran Church in Namibia. For the purposes of this chapter, the specific names of youth clubs were not mentioned. These clubs included football teams, social clubs, and interventions such as New Start. *Figure 1*. The figure shows the connections among social groups in Nyangana, Namibia. The links connecting groups (shown as

circles) represent residents who reported memberships in both groups. The size of the group (square) is based on size of the group's membership: bigger figures represent larger groups.

For example, in Nyangana (see Figure 1), most respondents participate in the Roman Catholic Church (the large square on the left) and then participate in a variety of additional groups.

Within Nyangana's social network map of memberships the Roman Catholic Church is in a focal position, which suggests that it should be included in the campaign's design. Oniipa, Oshikuku, and Nyangana have high centrality scores within their communities. This finding indicates that one group or a few groups hold privileged positions within these communities' network.

*Centrality in leadership network*
Another way that information may move between social groups is through common leadership. One person may lead two or more social groups in a community and may distribute information and guidance among these groups. In general, the degree centrality scores for the leadership networks are low (from 8% to 22%, M = 12%) (see Table 4). This estimate indicates that very few leaders are central.

Table 4. Indicators of groups' centrality in leadership network for each catchment

| | Leader Centrality | % of total groups share leadership | Comments |
|---|---|---|---|
| Katutura | 8% | 6% | Central leader groups link central member groups. |
| Rehoboth | 22% | 46% | Central leader groups link (indirectly) central member groups. |
| Oniipa | 16% | 28% | Link other groups |
| Oshakati | 1% | 2% | Link other groups |
| Oshikuku | 10% | 43% | Central leader groups link (indirectly) central member groups. |
| Andara | 4% | 34% | Central leader groups link central member groups. |
| Nyangana | 23% | 32% | Central leader groups link central member groups. |
| Rundu | 20% | 28% | Central leader groups link central member groups. |
| Keetmanshoop | 3% | 25% | Central leader groups link central member groups. |
| Walvis Bay | 8% | 9% | Link other groups |

Table 4. Indicators of groups' centrality in leadership network for each catchment

In addition, the three groups that are central in the network of leaders are also central in the network of members. Rehoboth shows the most connected network through leaders: 46% of the groups share leadership. Rehoboth's leaders have more potential power over the communication flowing through the community and a greater reach to more groups. Within Nyangana's network, two popular groups, the Roman Catholic Church and the Catholic AIDS Action, are connected through multiple leaders. Because they link two popular groups, these trained leaders could efficiently disseminate information to many sectors of the community. That said, only eleven groups are networked through shared leadership; which represents about 25% of all the social groups described in Nyangana. Interventions that rely exclusively on central leaders for dissemination may miss segments of the community.

Respondents were also asked to name the leader of their most important social group. The majority of respondents (M = 55%, SD = 16) showed consensus by
naming the same person as the leader of their group. The least amount of consensus appeared in Rehoboth and Oshikuku, where more than half of the respondents (85% and 57% respectively) either named different people as the leader of their group or could not name anyone as the group's leader. Interestingly, these two areas also showed the most connected networks through shared leaders. Together, these two findings may indicate that although a few people lead many groups in Rehoboth and Oshikuku, these leaders do not hold dominant power within any group. These two communities may be good candidates for collaborative, multiple-group activities, leading to community-wide action.

*Group decisions*
Another consideration for programmes delivered within group meetings is whom people believe should make decisions for the group. With the exception of Oniipa, the majority of respondents (M = 75%, SD = 13) across the rest of the locations said that the leader, owner, or elected representative should make decisions that affect the whole group. In Oniipa, over half of the respondents (54%) felt that the whole group should be involved in such decisions.

*Information seeking about HIV or AIDS*
Before designing group-based interventions, it is helpful to know if people in these areas currently discuss HIV/AIDS within their groups or if such discussions

would be new (see Table 2). Most respondents (70%, SD = 17) said that they talked about mother-to-child transmission of HIV (MTCT) in their group meeting. Across the locations about half of the respondents or fewer (53% to 17%) went to other groups for information. The most common source they listed, besides their own group, was the Catholic AIDS Action.

*Top source for HIV/AIDS information*
Some social groups are isolated from the membership and leadership networks in every location. Mass media programmes or community-wide programmes may be needed to reach these isolated groups. Across locations, respondents (M = 79%, SD = 11) said radio was the top source for information about HIV/AIDS, followed by other mass media sources, friends, and church. Most people (89%) own a radio, making radio programmes an excellent place to provide HIV/AIDS programming. This information could be compared with data gathered through the traditional, representative sampling before a final decision is reached.

*Group activities and efficacy to resist opposition*
Over half of the respondents (M = 64%, SD = 10) felt their groups could work independently and could mobilise resources for those affected by HIV/AIDS. Interestingly, when asked, many of the respondents (50%) could not recall an action taken by their group to help those living with HIV.

Social pressure can mobilise or inhibit support for those living with HIV. Across communities, only 36% of respondents (SD = 13) were very confident that they would help someone living with HIV if they hit social opposition (if their spouse, social groups, or community opposed them helping those living with HIV).

*Discussion*
Programmers have choices for designing interventions. One option is to produce campaigns designed for delivery within or diffusion through existing social groups. Social groups provide people with a chance to discuss the presentations, to encourage each other to adopt new information, attitudes, or behaviour, and to allow information to diffuse to those who do not have access to the mass media campaigns (Bandura, 1997, 2004; Rogers, 2003). Group-based programmes have the best chance for quick diffusion if (a) the people participate in social groups, and (b) these groups are networked through shared members or shared leaders. The findings for the catchments in Namibia showed that group-based interventions fit seven of the ten communities well. Some community

groups and leaders had powerful positions within the social network, making them important groups to consider when tailoring a campaign to a particular community.

*Central groups*
Central groups may critically shape their community's dialogue and activities. For example, a central group could decide that certain topics are taboo, and then effectively shut down the information flow throughout the rest of the community. On the other hand, if groups share members, but no one group is central (low centrality scores), then information may flow through the community even if one group attempts to stop its dissemination.

Although it is important to discover groups' centrality within the community's network, it is just as important to discover which groups may exist outside of the network. Within every catchment, some groups were isolated from the community network. Programmers may need to target these groups separately, because information may not flow easily to them. In some communities, the respondents only participate in one group, so groups often do not share members. This leaves the community dialogue fragmented into many (often small), social groups.

Programmers would need to bring representatives from these many groups to a community information meeting in order for information to diffuse within the community – unless the groups share leaders who could diffuse the information from group to group.

The findings showed that in every location, except for Oshakati, the most popular group was a church; in Oshakati the group listed most frequently by respondents was the Catholic AIDS Action. Religious organizations play an important social role and their participation should be addressed in the interventions' design. Special considerations may be necessary when disseminating messages in religious settings, because contextual information often guides how people determine the meaning of ambiguous words (Rodd, Gaskell & Marslen-Wilson, 2000). For example, a small study of youth, aged 15-25 in greater Windhoek Namibia showed that the youth confused the meaning of faithfulness as religious devotion instead of monogamy (Keulder & Witte, 2003).

*Local leadership*

When designing health interventions for distribution in social groups, the group's leadership may be asked to pass on the information to its members. If respondents feel confidence in their leadership, then the leadership may be a useful source for distributing HIV information. In contrast, residents may feel more confidence in health care workers as sources for health information. In previous reports, respondents in different communities have shown different levels of confidence in their local leadership and their health care workers.

Although central leaders in a network analysis may have appeal because of their potential to distribute information quickly, these issues of trust and confidence should be included in decisions about who should start sharing HIV information in the community. In addition, the use of leadership should be considered in the context of who makes decisions within the community. In these findings, community leaders could guide in most of the catchments, but in Oniipa, the group members needed more direct involvement in promotion activities.

*Understanding social resistance*
The findings showed that the amount of residents who felt capable of resisting social opposition to working on HIV/AIDS-related issues varied between communities. Campaigns may first need to make social support for those living with HIV a norm before expecting residents to start providing support (UNAIDS, 2002). As stated by UNAIDS, Community mobilisation is the core strategy on which success against HIV has been built. Fostering such mobilisation requires eliminating stigma, developing partnerships between social and government actors, and systematically involving communities and individuals infected and affected by HIV/AIDS (2002, p. 16).

Gruber and Caffrey (2005) note that resource-poor countries, groups, and citizens may not be able to take on additional, challenging activities. "What is remarkable and inspiring is that so many communities have done just that" (p. 1217). The authors warn that although communities have shown remarkable collaboration, this response should not be presumed or taken for granted. Further, designers need to consider how interventions may exacerbate community inequities or may marginalise community members.

Two other considerations should be noted. HIV/AIDS prevention, treatment, and care are very different objectives for which very different approaches might be needed. Although previous studies document community-based

interventions showing success with these three types of objectives (e.g., Rogers, 2003), the relationship between the objective and the norms, values, and goals of the local organizations is paramount. If the intervention's objective and the organization's mission do not align, the intervention can produce community conflict (e.g., Gruber & Caffrey, 2005).

*Practical implications*
If a community seems open to group programmes, one can evaluate if a couple of groups or a couple of leaders are more central within the area. Programmers should know to whom people attribute authority to take group decisions. This information can help ensure that certain groups or people are included within the programme development and implementation. This implication also means that community-level information may not generalise from community to community. Where principles of centrality, diffusion, and social resistance often generalise across communities, the person or organization in the central position, the information to diffuse, and the reason for resistance may and often does vary.

Typically, without a group-based intervention that forces the introduction of new information, most new information comes from outside sources (Granovetter 1973) such as mass media sources. If the baseline findings do not suggest that group-based interventions would be effective and programmers elect to produce mass media programmes, social network analysis may serve as a useful method to monitor mass media effects. Social marketing and entertainment-education strategies focus on mass media as a diffusion agent (Morris, 2003). Theories of two-step flow (Lazarfeld et al., 1944), social cognitive theory (Bandura 1997, 2004) and diffusion of innovations (Rogers, 2003) formalise the links between media programming and interpersonal communication. Media programmes spur interpersonal conversations, which then lead to the adoption of ideas, attitudes, or behaviours. In fact, one review suggests that peer networks play a critical role in the adoption of new ideas (Reardon & Rogers, 1988). A growing number of studies (e.g., Morris, 2003) gather information on these networks to design interventions and to monitor the efficacy of their media campaigns. Radios were ubiquitous in these catchments, and thus, radiobased entertainment-education may best reach the community, especially isolated members.

Network effects often work in tandem with entertainment-education. For example, researchers note that Twende na Wakati, the soap-opera campaign focusing on family planning in Tanzania, had strong effects because it stimulated

conversations within social networks (Mohammed, 2001). Peer discussions about the programme showed statistically significant effects for increased family planning knowledge and contraceptive use, even after controlling for direct exposure to the programme. Interpersonal communication in social networks and mass media campaigns can yield unique and complementary positive effects.

*Conclusion*

This chapter has addressed how attention to community-level characteristics and social network analysis may be a useful tool for designing and evaluating HIV/AIDS interventions. Decision-making models using such information may promote prosocial community mobilisation and proactively avoid inequity, marginalisation, or discrimination. By identifying the social processes at the community level, we gained an understanding of how communities as a whole react and respond to HIV/AIDS, in order to better develop community-based health campaigns.

*References*

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York: Freeman.

Bandura, A. (2004). Health promotion by social cognitive means. *Health Education & Behavior*, 31, 143-164.

Borgatti, S.P., Everett, M.G., & Freeman, L.C. (2002). *UCInet for Windows: Software for social network analysis.* Harvard, MA: Analytic Technologies.

Cialdini, R.B. (2008). *Influence: Science and practice* (5th ed.). Boston, MA: Allyn & Bacon.

Cohen, J. (1994). The earth is round (p < .05). *American Psychologist*, 49, 997-1003.

Farquhar, J.W. (1978). The community-based model of life style intervention trials. *American Journal of Epidemiology,* 108, 103-111.

Figueroa, M.E., Kincaid, D.L., Rani, M., & Lewis, G. (2002). Communication for social change: An integrated model for measuring the process and its outcomes. *Communication for Social Change Working Paper Series:* No 1. New York, NY: Rockefeller Foundation.

Fishbein, M. (2000). The role of theory in HIV prevention. *AIDS Care,* 12, 273-278.

Fishbein, M., & Yzer, M.C. (2003). Using theory to design effective health behavior interventions. *Communication Theory,* 13, 164-183.

Fullilove, R.E., Green, L., & Fullilove, M.T. (2000). The Family to Family program: A structural intervention with implications for the prevention of HIV/AIDS and other community epidemics. *AIDS*, 14, S63-S67.

Gondolf, E.W. (2004). Evaluating batterer counseling programmes: A difficult task showing some effects and implications. *Aggression and Violent Behavior,* 9, 605-631.

Granovetter, M.S. (1973). The strength of weak ties. *American Journal of Sociology*, 78, 1360-1380.

Gruber, J., & Caffrey, M. (2005). HIV/AIDS and community conflict in Nigeria: Implications and challenges. *Social Science & Medicine,* 60, 1209-1218.

Keating, K., Love, R., Oliver, T., Peach, H., & Flynn, C. (1985). The Hood River Project: Take a walk on the applied side. *The Rural Sociologist,* 5, 112-118.

Kincaid, D.L. (2004). From innovation to social norm: Bounded normative influence. *Journal of Health Communication*, 9, 37-57.

Keulder, E., & Witte, K. (2003). *In-depth interviews: The effect of culture and environment on the behaviour of Namibian youth.* Baltimore, MD: Johns Hopkins University Center for Communication Programmes.

Lam, T.K., McPhee, S. J., Mock, J., Wong, C., Doan, H.T., Nguyen, T., Lai, K.Q., Ha-Ianconis, T., & Luong, T. (2003). Encouraging Vietnamese-American women to obtain pap tests through lay health worker outreach and media education. *Journal of General Internal Medicine*, 18, 516-524.

Lazarsfeld, P.F., Berelson, B., & Gaudet, H. (1944). *The people's choice*. New York: Columbia University Press.

Makoul, G., & Roloff, M. (1998). The role of efficacy and outcome expectations in the decision to withhold relational complaints. *Communication Research*, 25, 5-29.

Mertens, F., Saint-Charles, J., Lucotte, M., & Mergler, D. (2008). Emergence and robustness of a community discussion network on Mercury contamination and health in the Brazilian Amazon. *Health Education Behavior,* 35, 509-521.

Mohammed, S. (2001). Personal communication networks and the effects of an entertainmenteducation radio soap opera in Tanzania. *Journal of Health Communication,* 6, 137-154.

Morris, N. (2003). A comparative analysis of the diffusion and participatory models in development communication. *Communication Theory,* 13, 225-248.

Mbuyazi, S.M. (2004). DramAidE: Participatory drama in South Africa. *Democracy and Education,* 23, 35-38.

Namibian Broadcasting Corporation. (2004). Namibian Broadcasting Corporation – Radio. Retrieved June 20, 2008 from http://www.nbc.com.na/radio/home.php.

Nutbeam, D., & Catford, J. (1987). The Welsh Heart Programme evaluation strategy: Progress, plans and possibilities. *Health Promotion,* 2, 5-18.

Pasick, R.J., Hiatt, R.A., & Paskett, E.D. (2004). Lessons learned from community-based cancer screening intervention research. *Cancer*, 101, 1146-1164.

Puska, P., Salonen, J.T., Tuomilehto, J., Nissinen, A., & Kottke, T.E. (1983). Evaluating community-based preventive cardiovascular programmes: Problems and experiences from the North Karelia Project. *Journal of Community Health*, 9, 49-64.

Putnam, R.D. (2000). *Bowling alone: The collapse and revival of American community.* New York: Touchstone.

Rodd, J., Gaskell, G., & Marslen-Wilson, W. (2000). The advantages and disadvantages of semantic ambiguity. *Paper presented at the annual meeting of the Cognitive Science Society,* Philadelphia, PA.

Rogers, E.M. (2003). *Diffusion of innovations* (5th ed.). New York: Free Press.

Ruiz-Casares, M. (2006). Strengthening the capacity of child-headed households in Namibia to meet their own needs: A social networks approach. Unpublished dissertation, Cornell University.

Smith, R.A., Ferrara, M., & Witte, K. (2007). Social sides of health risks: Stigma and collective efficacy in adopting AIDS orphans. *Health Communication,* 21, 1-10.

Smith, R.A., & Morrison, D. (2006). The impact of stigma, experience, and group referent on HIV risk assessments and HIV testing intentions in Namibia. *Social Science & Medicine,* 63, 2649-2660.

Smith, R.A., & Nguyen, L. (2008). Searching for a 'generalized social agent' to predict Namibians' intentions to prevent sexual transmission of HIV. *AIDS Care*, 20, 242-250.

Smith, R.A., & Neidermyer, A. (in press). Keepers of the secret: Desires to conceal a family member's HIV+ status in Namibia. *Health Communication*.

Smith, R.A., Witte, K., & Keulder, E. (2004). HIV/AIDS Strategic Information Report: Communities, group norms, and social change – A baseline social network analysis of residents from Andara, Nyangana, and Rundu (Wave 2, Round 1). Baltimore, MD: Johns Hopkins Bloomberg School of Public Health/Center for Communication Programmes.

Tjaronda, W. (May, 10, 2004). Red Cross day focuses on stigma. New Era. Retrieved September 4, 2007, from: http://www.newera.com.na/archives.php?id=1624&date=2004-05-10.

UNAIDS. (2002). Report on the global HIV/AIDS epidemic. Geneva: Joint United Nations Programme on HIV/AIDS (UNAIDS).

UNAIDS. (2004). Report on the global AIDS epidemic. Geneva, Switzerland: Author.

UNAIDS. (2006). Report on the global AIDS epidemic. Geneva, Switzerland: Author.

U.S. Census Bureau. (2004). International Population Reports WP/02-2, The AIDS Pandemic in the 21st Century. Washington, DC: U.S. Government Printing Office.

Wasserman, S., & Faust. K. (1994). *Social Network Analysis: Methods & applications.* Cambridge, UK: Cambridge University Press.

Weenig, M.W.H., & Midden, C.J.H. (1991). Communication network influences on information diffusion and persuasion. *Journal of Personality and Social Psychology,* 61, 734-742.

# Health communication in southern Africa: The Portrayal of HIV/AIDS in Lesotho Print Media: Fragmented Narratives and Untold

# Stories

*Abstract*

In late 2005, the Government of Lesotho launched the world's first comprehensive plan to offer its entire adult population voluntary HIV testing and counselling. Using manifest and latent content analysis this study explores how articles in the two largest weekly newspapers in Lesotho portrayed HIV/AIDS and the campaign during seven month. While HIV/AIDS is frequently covered and recognised as a public health threat, the 227 articles rarely discuss the underlying causes, and do thereby not offer the reader information on the key driving forces behind collective and individual vulnerability to the virus. Moreover, the portrayal of HIV/AIDS as an insurmountable and overwhelming phenomenon could be counterproductive to efforts to get an entire population to test for HIV.

*The HIV/AIDS epidemic in Lesotho*

Lesotho is a small least-developed country completely encircled by South Africa with a population of 1.8 million. Among the adult population one in four is infected with HIV, making Lesotho one of the hardest hit nations in the world (Ministry of Health and Social Welfare, MoHSW, 2004; United Nations joint programme on HIV/AIDS, UNAIDS, 2006a; Word Health Organisation, WHO, 2005).

Immediate causes contributing to the dramatic increase in infection rates over the past two decades include unsafe heterosexual intercourse and mother to child transmission (World Bank, 2000). Underlying structural causes include widespread poverty and social dislocation because of migratory labor practices

and gender inequality (World Bank, 2000; WHO, 2005) A recent positive result is that almost 94 percent of the population is reported to have 'correct' knowledge of HIV/AIDS. However, parts of the population still harbor a number of misconceptions about the HIV virus and only 24 percent of the women and 19 percent of the men are said to have comprehensive knowledge of both HIV transmission and prevention methods. Moreover, only 12 percent of men and 9 percent of women have gone for voluntary counselling and testing and know their HIV status (MoHSW, 2004). Today the epidemic in Lesotho has a mature pattern, similar to many countries in southern Africa, where the apparent stability in prevalence masks high rates of new HIV infections and even higher rates of AIDS-related deaths. In Lesotho, life expectancy has plummeted from 60 years in 1990-1995 to the most recent estimate of 42,6 years (United Nations Development Programme, UNDP, 2007) and 97,000 children are living as orphans due to parents dying of AIDS (United Nations Childrens Fund, UNICEF, 2006). High levels of morbidity and mortality increase demands on an already overstretched healthcare system and tend to impose a 'shock' to the household economy as it is often the economically active individual that falls ill and dies (World Bank, 2000a).

In 2003 the Government of Lesotho openly acknowledged the dire situation when the Prime Minister Pakalitha Mosisili warned: "we have to act NOW if we are to avert the potential annihilation of our nation" (emphasis in original document, Government of Lesotho/United Nations, 2003, p. xxiv) and in December 2005 the *Know Your Status* (KYS) Campaign was launched. *The Know Your Status Campaign* is the first attempt by any country in the world to provide universal HIV testing. The rationale behind the campaign is that voluntary counselling and testing is considered a key entry point into the components and activities of a comprehensive societal response. A comprehensive approach is generally expected to cover: prevention, treatment, care and support for those infected and affected by the virus, and impact mitigation (Barnett & Whiteside, 2006; Hewer, Motaung, Mathope & Meyer, 2005; McKee, Becker- Benton & Bertrand, 2004; UNAIDS, 2000, 2006a, 2006b; Weiser et al., 2006). The objectives of voluntary counselling and testing are to:

(i) detect infection early,

(ii) assist infected individuals to remain as healthy as possible,for as long as possible, by having access to available care and treatment services,

(iii) educate infected individuals to avoid infecting others

(iv) help individuals not infected to remain so through the maintenance of safe behaviour,

(v) assist individuals in life planning issues, and

(vi) assist individuals and couples in decisions about having more children, decreasing the chances of infecting infants (McKee et al., 2004:194).

A comprehensive response dominated by health interventions alone is insufficient to address the epidemic. Instead, a multi-sectoral approach that involves a broader range of stakeholders has since the mid 1990s gained ground as well as international recognition (Gavian, Galaty, & Kombe, 2006; United Nations, 2001, World Bank 1999b, 2003). Political leadership at the highest level is an absolute prerequisite for mobilizing a society's response (Piot, 2000). Moreover, without actively addressing stigma and discrimination, many HIV/AIDS-related health services could remain unused. Hence, aside from the human rights aspect, fighting stigma and discrimination is pivotal in making the available services a real option for those who need them (UNAIDS, 2005). In the case of Lesotho, aiming for universal testing, as opposed to singling out population segments, could potentially have a destigmatizing effect as everyone is treated equally.

The official goal of the campaign is to have offered all those living in Lesotho who are over 12 years of age the opportunity to be HIV tested by end of 2007. The ambitious plan is to offer 1.3 million individuals the opportunity to learn their status. Post-test services will be offered according to HIV status (MoHSW, 2005). A key element of post-test services is the provision of anti-retroviral therapy for those who test positive for HIV and who are in need of medical treatment. The plan to provide anti-retroviral therapy to all who need it is particularly bold when taking into account the scale of the epidemic and the fact that, as of December 2005, only 8,400 individuals out of an estimated 58,000 in need of treatment actually received antiretroviral therapy (WHO, 2005). The strategy also regards the availability of treatment as a key-motivating factor for individuals accepting the offer of an HIV test. Thus, an initial and central objective of the communication component of the campaign will be to raise awareness around anti-retroviral treatment and its availability through messages via electronic and print media, as well as other advocacy material (MoHSW, 2006).

The Know Your Status Campaign communication strategy identifies national mass media as a crucial partner and as a way of building national and local ownership of the campaign (MoHSW, 2006). Despite the radio's

overwhelming reach in Lesotho, television and newspapers are part of the Know Your Status Campaign communication channels as they are believed to be particularly effective in reaching opinion leaders such as cultural leaders, community elders and heads of official and traditional institutions at various levels. "Opinion leaders are important for 'selling' the programme to community members" (MoHSW, 2006, p.8). Without being mentioned a diffusion of innovation model is implied in the communication strategy.

Mass media are to be persuaded to participate and report on key events through consultative meetings and through capacity building workshops for interested journalists (MoHSW, 2006). In terms of readiness and perhaps even willingness to take part in a national effort, the Lesotho mass media already have shown its relative readiness to take on the issue. According to a recent study from Media Institute of Southern Africa (MISA, 2006), Lesotho has the highest overall proportion of HIV/ AIDS coverage in Southern Africa. Lesotho print and electronic mass media mentioned HIV in 19 percent of the all the surveyed stories, compared to a regional average of just 3 percent. HIV/AIDS is also better mainstreamed into the general news coverage. In addition, 37 percent of the stories on the epidemic have HIV and AIDS as the focus, while it was a sub-theme in the rest. Lesotho mass media also carried a significantly higher proportion of locally originated stories than the rest of the region, which can have an impact on the readers' perception of the issues relative relevance (MISA, 2006).

*Not your typical communication challenge*
More than 20 years into the HIV pandemic and despite countless information campaigns on prevention, anti-discrimination, treatment and care, a continuous rise in HIV prevalence, especially in southern Africa, has produced a number of studies questioning the straight forward relationship between information and changes in primarily long term sexual behaviour (James et al., 2005; Panos, 2003; Rogers & Singhal, 2003; UNAIDS, 1999a, b). One general conclusion from this work is that: Communication is necessary, but alone not sufficient for preventing HIV/AIDS, or augmenting care and support programmes. It should be noted that early communication efforts were successful in raising awareness of the existence of HIV/AIDS as well as knowledge on transmission modes (Bertrand, O'Reilly, Denison, Anhang & Sweat, 2006). Today, there is a growing acknowledgement that, in addition to spreading basic information, campaigns need to address the barriers that prevent the adoption of safer sexual

behaviour more directly (McKee et al.,2004; UNAIDS, 1999a; 1999b).

There are several reasons why HIV/AIDS should not be treated as a typical communication challenge. A major factor is that, as a sexually transmitted disease, it is surrounded by numerous societal restrictions, taboos and moral codes, and often HIV infection is associated with promiscuity or immoral sexual behaviour (Aggleton, 2000; Delius & Glaser, 2005; Kelly, 2004). In southern Africa there is also a dimension of traditional rules guiding 'pure' and correct sexual behaviour, which implies that the disease cannot be regarded simply as "as a result of sexual promiscuity. It is also understood to be the outcome of breaches of critical sexual taboos. The afflicted are therefore seen as partly responsible for their own predicament" (Delius & Glaser, 2005, p. 33). Moreover, HIV has linked death to sexuality: "the two most powerful sources of ritual impurity and contagion" in many traditional African belief systems (Delius & Glaser, 2005, p. 33). Accordingly, all the ingredients for fear of the infected and subsequent strong stigma are present, and offer an explanation of the depth of stigma in southern Africa. Stigma is a social process characterised by exclusion, blame, or devaluation of a despised and/or minority group, and/or a blemished character or faults of the moral statue of an individual (Goffman, 1963). The function of stigma is to identify individuals perceived as threat to the rest of the community and exclusion is a manifestation of that fear (Douglas, 1966; Goffman 1963).

"Stigma is one of the major barriers to effective communication about AIDS" (Rogers & Singhal, 2003, p. 285). Others argue that it is the greatest challenge (Aggleton & Parker, 2002). HIV-related stigma and subsequent denial is a major barrier for recognizing HIV as a personal risk, and seeking voluntary counselling and testing (Countinho, 2004; Kalichman & Simbayi, 2003; Maclean, 2004; UNAIDS 2005). A study from South Africa showed that individuals who did not seek voluntary counselling and testing demonstrated greater AIDS-related stigmas and ascribed greater levels of shame and guilt, as well as social disapproval of people living with HIV (Kalichman & Simbayi, 2003). In Botswana, stigma was identified as a major factor in delaying testing (Wolfe et al., 2006). Even after the introduction of free anti-retroviral therapy in 2002 through the Masa project, HIVrelated stigma is a factor influencing the decision of accepting the offer of a routine HIV test, as well as planning to test among people not previously tested (Weiser et al., 2006). Findings from Botswana suggest that "success of large-scale national anti-retroviral therapy programmes will require

initiatives targeting stigma" (Wolfe et al., 2006, p. 931), if they are to be successful. In this context it is important to note that there is nothing ontological about stigma. Social attitudes and fears connected with certain behaviours, groups, diseases, and so forth have always been under contestation, and can and do change.

Another factor making HIV/AIDS communication particularly challenging is its interconnectedness with embedded power structures. Three aspects influence sexual practices on both the individual and societal level: knowledge, rationality, and power relations (Ek, 1996). Accordingly, power relations determine what knowledge is to be socially sanctioned and acted upon, sometimes making it impossible for prevention messages to be realised into safer sexual practices. In terms of sexuality, "power determines whose pleasure is given priority as well as when, how, and with whom sex takes place" (Gupta, 2000, p. 2) Gender inequality is a key driving factor in the epidemic (Baylies & Bujra, 2000; Gupta, 2000). As such, "AIDS is not only an information problem, but a manifestation of an unequal power distribution between the sexes" (Ek, 1996, p. 146).

Poverty exacerbates the already unequal power distribution and skews the rationality concept. "Extreme poverty deprives people of almost all means of managing risk themselves" (World Bank, 2000b p. 1). Poverty forces individuals to make long term 'irrational' choices, as it makes them less likely to adopt safer behaviours if long term rewards collide with short-term access to immediate resources (Barnett & Whiteside, 2006; Kalipeni, Craddock & Gosh, 2003; Rogers & Singhal, 2003).

An epidemic is par excellence a collective event. While individuals do have responsibility for their actions, that responsibility has always to be considered in a context of what individuals can do given the structures of inequality and the histories within which they live their lives (Barnett & Whiteside, 2006, p. 79).

Thus, interventions need to broaden their focus from merely targeting the individual to persuading him/her to adopt new safer behaviours, to include addressing relevant structural constraints or altering those in conflict with the safer new behaviour (Barnett & Whiteside, 2006). In short, a "fundamental step is to realise that the HIV/AIDS epidemic is not just a biomedical and health problem. It represents a political problem, a cultural problem, and a socio- economic

problem" (Rogers & Singhal, 2003, p. 389), and, as such, it can never be successfully addressed by public health campaigns alone.

Having acknowledged the barriers for effective communication in terms of soliciting behavioural change does not imply that public health campaigns cannot promote health messages. A recent 10-year research review of health mass media campaigns concludes

*... that targeted, well-executed health mass media campaigns can have small to moderate effects not only on health knowledge, beliefs, and attitudes, but on behaviours as well, which can translate into major public health impact given the wide reach of mass media* (Noar, 2006, p. 21).

Mass media in western countries are a major source for both correct and distorted information on HIV/AIDS (Lupton, 1994; Rogers & Singhal, 2003). A recent review of mass communication programmes to change HIV/AIDS related behaviours in developing countries, showed a small to moderate effect on knowledge levels and a range of behaviours (Bertrand et al., 2006). The study concludes that mass media did have a positive impact when it came to increasing knowledge of HIV transmission and reduction of high-risk sexual behaviour (Bertrand et al., 2006). Mass media campaigns in the developing world have also proven to be able to both promote favourable attitudes on voluntary counselling and testing and provide information on where to access the services (McKee et al., 2004). Research from Zimbabwean HIV testing centers showed that 64 percent of the clients learned about the voluntary counselling and testing services through mass media (McKee et al., 2004). In Botswana, 69 percent of voluntary counselling and testing attendants reported that a television or radio message had facilitated their decision to accept the offer of a routine HIV test (Weiser et al., 2006). In addition, it has been argued that mass media can offer space for and be a part of creating an enabling and supportive societal climate for discussing HIV, stigma and discrimination, as well as, encouraging leaders to take action and keep policymakers and service providers accountable (UNAIDS, 2004). A study of 15 African countries identifies the higher a person's level of formal education and the more often he/she read newspapers, the more likely they are to cite HIV/AIDS as an important public problem (Afrobarometer, 2004). Subsequently, it could be argued that newspapers potentially could facilitate an educated elite readers' understanding of HIV/AIDS as a public priority.

Mass media can, through its portrayal and selective use of language, "trivialise an event or render it important; marginalise some groups, empower others; define an issue as an urgent problem or reduce it to a routine" (Nelkin, 1991 cited in Lupton, 1994 p. 22). This study examines print media content, by using a method that combines elements of systematic content analysis and more interpretive examinations of the properties of the portrayal of HIV/AIDS in general and the Know Your Status Campaign in particular in two weekly newspapers in Lesotho.

*Method*
The method is 'quasi quantative' as it relies on a number of quantifications and statements of frequency of the manifest features of the texts (Berleson, 1952). Still, the study relies more on a qualitative ethnographic approach to capture the more complex discursive formations in the texts.

Print media were selected as the Know Your Status Campaign communication strategy identifies this channel as a key channel to reaching key opinion leaders who are thought to be crucial for campaign success. While Lesotho has an adult literacy of 81.8 percent (Government of Lesotho/DLSSD, 2002), newspapers are primarily available in the urban areas and are regarded as a vehicle to reach elite audiences. Unfortunately, there are no reliable circulation data. Moreover, we anticipated a difference in coverage of the government initiated Know Your Status Campaign within a government channel as opposed to a privately owned and run channel. The radio scene is dominated by Radio Lesotho, and lacks a privately owned equivalence in terms of content to the state channel. Using print media had the additional advantage that, unlike the electronic media, there are comprehensive archives.

*Sampling procedure*
There are no daily newspapers in Lesotho, but a number of weeklies. The government-owned and operated newspaper, Lesotho Today, which has the widest geographical distribution, and the largest overall circulating paper, the privately owned, Public Eye were selected. Both papers devote half of their space to articles in English and the other half carries the same articles in the indigenous language, Sesotho. Both languages are official languages in Lesotho. The period under study runs from the Know Your Status Campaign launch date on December 1st 2005 and for 7 months until the end of June 2006. This time frame was selected to include the reporting of the campaign launch on World AIDS Day, but

extended to provide a large enough sample with 'regular' HIV/AIDS coverage during the first year of the campaign. Only the month of December could be said to be an a-typical month as the events around the Know Your Status Campaign launch and world AIDS Day both occurred during that month. During the sample period, only April featured any significant Know Your Status Campaign outreach event as the campaign secretariat spent most of the early months of 2006 by conducting baseline studies, formulating a communication strategy, preparing information materials.

The content analysis was carried out only on the English section. All articles in the English sections including the words 'HIV' or 'AIDS' were included in the sample and the total number of articles included in the analysis amounted to 227 of various lengths. Paid space, such as public service announcements, HIV/AIDS banners from local or international NGOs or government was not included.

*Manifest and latent content analysis*
By analyzing press representations of HIV/AIDS insights into a society's broader socio- cultural constructions around, not only HIV/AIDS, but disease, illness and health can be gained (Lupton, 1994). The content analysis and subsequent coding aimed at identifying reoccurring public discourses on HIV and AIDS. A discourse was identified as ways of organizing meaning, that are often, though not exclusively, realised through language.

The study looks at both manifest (obvious and explicit content and characteristics of the text) and latent (unintended or sub-textual content). A coding scheme was developed inductively after numerous readings and re-readings. The scheme included a part that registered the frequencies of manifest elements of the articles, and a second part that initially focused on latent features of the texts, such as the dominant and obvious narratives interwoven into the manifests elements of the text. This section was expanded to also include the absent discourse – causes of the epidemic. The method for the more interpretive and in-depth examination of the texts was inspired by an ethnographic content analysis (Altheide, 1996). The manifest analysis focused on registering:

a) if HIV/AIDS was the primary or secondary focus on the article,
b) if the content was local or international in its focus,
c) in what thematic surface context HIV/AIDS was dealt with (see Table 2 for

surface themes and distribution), and

d) what kind of article HIV/AIDS appeared in, that is: news article/feature story/opinion piece/column, reader's letter, review and whether the article made it to the front page.

An article was coded as a feature story if the content had one or more of the following characteristics: a human interest story, well researched investigative exposé, conversation piece, personal experiences, personality profile, or a piece of timeless nature. All articles with a clear viewpoint or with a clear intention to persuade the reader were coded into one of the following categories: opinion piece/column, editorial, reader's letter or review.

In addition, all articles were checked for e) statistics describing facts about the epidemic, for example prevalence rate, death rates, number of orphans and so forth. Quantification in health news stories is of particular importance. By providing statistics, the statements made in the article are substantiated, as well as give the reader with an impression of objectivity. Statistics showing to what scale something has happened also enhance the value of the news story and add drama. (Lupton, 1994). However, no attempt was made to evaluate the accuracy of the factual information in the articles. Finally all articles were scanned for f) if the article carried information on the Know Your Status Campaign, and, if so, whether the information was comprehensive.

The latent content analysis scanned for reoccurring narratives around the epidemic, and features of those very same narratives. The focus on narratives led to the inclusion of an examination of absence of certain features in those very same narratives.

*Results*

*Content analysis*
The manifest and latent text analysis provided two complementary sets of results. Through the manifest content analysis it could be concluded that HIV/AIDS is well featured both as a stand-alone topic and as a mainstreamed secondary focus throughout the material. HIV/AIDS is, however, rarely front-page material. Only 6 out of the 227 articles made it to the front page. For the privately owned Public Eye, HIV/AIDS was well integrated into the entire newspaper: news articles, feature articles, opinion pieces /columns, editorials, reader's letters, and

reviews (Table 1). Lesotho Today covered HIV/AIDS only in news, feature articles and editorials.

Table 1. Number and percentage of article types by primary versus secondary focus on HIV/AIDS in two newspapers.

| | Public Eye | | | | | | Lesotho Today | | | | | | All articles | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Primary focus | | Secondary focus | | Total | | Primary focus | | Secondary focus | | Total | | Primary focus | | Secondary focus | | Total | |
| | N | % | N | % | N | % | N | % | N | % | N | % | N | % | N | % | N | % |
| News | 33 | 25 | 35 | 26 | 68 | 51 | 27 | 29 | 42 | 45 | 69 | 73 | 60 | 26 | 77 | 34 | 137 | 60 |
| Feature | 16 | 12 | 17 | 13 | 33 | 25 | 8 | 9 | 11 | 12 | 19 | 20 | 24 | 11 | 28 | 12 | 52 | 23 |
| Editorial | 2 | 2 | 3 | 2 | 5 | 4 | 4 | 4 | 2 | 2 | 6 | 6 | 6 | 3 | 5 | 2 | 11 | 5 |
| Readers' letters | 3 | 2 | 7 | 5 | 10 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 7 | 3 | 10 | 4 |
| Opinion/ columns | 6 | 5 | 8 | 6 | 14 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 3 | 8 | 4 | 14 | 6 |
| Reviews | 1 | 1 | 1 | 8 | 2 | 2 | n/a | | n/a | | n/a | | 1 | 0 | 1 | 0 | 2 | 1 |
| Other | 0 | 0 | 1 | 8 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 |
| Total | 61 | 46 | 72 | 54 | 133 | | 39 | 42 | 55 | 59 | 94 | | 100 | 44 | 127 | 60 | 227 | |

Table 1. Number and percentage of article types by primary versus secondary focus on HIV/AIDS in two newspapers.

News articles appear to be the main type of article to carry HIV/AIDS content for both papers. Feature articles did not carry more comprehensive narratives on HIV/AIDS, that is, descriptions of the epidemic's immediate and root causes or inclusion of people living with HIV/AIDS, than did news articles. As for the government newspaper, Lesotho Today, feature articles were less frequent in general and HIV/AIDS content never appeared in readers' letters, opinion and columns. Lesotho Today did not carry reviews. In almost half (45 percent for Public Eye and 42 percent for Lesotho Today) of all the articles, HIV/AIDS was featured as the main theme, which is consistent with the findings of the aforementioned 2006 Media Institute of Southern Africa's study. Of the total 227 articles, 79 percent had a local Lesotho focus, that is, the focus of the article was featuring local conditions or interviewees was either Mosotho or both. Another interesting feature is the frequency of editorials, 11 in total. The high percentage of articles featuring local conditions instead of bought regional or international material in combination with the frequency of almost an editorial a month could indicate that newspapers do perceive HIV/AIDS as an important issue to cover.

Table 3. Mean frequency of supportive communication on condom use (0-2) and on abstinence (0-2) between the social network and boys (n = 24) and girls (n = 24) in Kayamandi.

| | Supportive communication on condoms | | | | Supportive communication on abstinence | | | |
|---|---|---|---|---|---|---|---|---|
| | Boys | | Girls | | Boys | | Girls | |
| | $M$ | $SD$ | $M$ | $SD$ | $M$ | $SD$ | $M$ | $SD$ |
| Mother | 1.2 | 1.5 | 0.8 | .89 | 0.8 | .83 | 1.7 | 1.2 |
| Father | 0.9 | 1.6 | 0.3 | .91 | 0.6 | 1.1 | 1.1 | 1.3 |
| Male relatives | 0.9 | 1.2 | 1.0 | 1.2 | 0.7 | 1.1 | 1.0 | 1.0 |
| Female relatives | 1.2 | 1.1 | 1.4 | 1.5 | 1.3 | 1.2 | 1.6 | 1.2 |
| Male friends | 1.0 | 1.2 | 1.6 | 1.6 | 0.8 | .89 | 1.3 | 1.1 |
| Female friends | 1.0 | 1.0 | 1.4 | 1.3 | 0.9 | 1.0 | 1.6 | 1.2 |
| Individual level | 1.0 | .67 | 1.0 | .67 | 0.9 | .71 | 1.4 | .68* |

* $p < .05$

Table 2. Main contexts in which HIV/AIDS is covered in the two newspapers.

In terms of the context in which HIV/AIDS is covered either as main focus or as a complimentary focus, all articles were sorted into exclusive categories of surface themes. Table 2 presents the ten most frequent surface themes in which HIV/AIDS occur in the sample. The ten categories include 86 percent of the sample. The remaining articles were distributed over a number of smaller categories. In terms of what contexts HIV/AIDS occur, International Development Cooperation, that is, technical and financial assistance provided by external donors to development programmes in Lesotho, is the most frequent context for HIV/AIDS.

This category is closely followed by Government and Governance that includes coverage of the Lesotho government, ministers and government officials' communication and initiatives. There is however a clear difference between the two papers and their coverage of the Government of Lesotho. The state run and owned newspaper Lesotho Today covers HIV/AIDS in this context far more often (27 percent of the 94 articles) than Public Eye (eight percent). The third most frequent surface theme in which HIV/AIDS appear is Lesotho Health Care System. The potential implications of placing and constructing narratives around HIV/AIDS in these contexts are elaborated upon in the discussion. Another interesting feature of the surface themes is the similarities in the respective papers' topical prioritisation. The use of quantification and provision of statistics as a journalistic tool to add weight to a news piece is used eight percent in the government paper Lesotho Today. In the Public Eye sixteen percent of the articles contained a quantification of the epidemic. In terms of the frequency of the Know Your Status Campaign, fourteen percent of the articles included coverage of the Campaign. However, only six articles provided comprehensive information on what the campaign actually entails. There was no discernable difference between the two papers in terms of covering the national Know Your Status Campaign.

*Dominant narratives on HIV/AIDS*

While HIV/AIDS is found to be frequently featured in both papers, an equally important question relates to how the epidemic is covered. That is, how the print media construct the epidemic in a recognizable universe for its Basotho readers. The quantitative analysis gave a basic structure, but provides little insight into the 'maps of meaning' that are provided by the media texts (Hall, Critcher, Jefferson, Clarke & Roberts, 1978). The following section presents only the dominant narratives that emerged through the more interpretative qualitative analysis. The reader should therefore bear in mind that the material also contains other narratives. Somewhat simplified it could be argued that there is only one dominant narrative, that of the devastating consequences of the epidemic that runs through the articles. This meta narrative is ever present and serve as a backdrop for coverage of international cooperation, crime, children and youth, the Lesotho Health Care System's struggle to deliver services to an ailing population, Government response and so forth. This dominant narrative in turn carries a number of sub-themes, where the epidemic's consequences on children, individuals, communities, and the Basotho society are elaborated on. Of equal importance is often what is not covered in the articles and the latent text analysis came to focus especially on uncovering the untold narratives on HIV/AIDS.

*Consequences of HIV/AIDS*

The consequences of the HIV epidemic on individual lives, community and society at large were a dominant narrative through the entire period. Three themes are particularly well covered:

a) the impact on children and the growing numbers of orphans and vulnerable children,
b) HIV and AIDS as a cause of death and disintegration of communities, and finally,
c) the negative impact on the country's overall socio-economic development. These narratives are intertwined with news articles whose main focus is to cover for example a new international cooperation programme or local, regional activism and voluntary work.

The impact on children and the growing number of orphans and vulnerable children (OVC in the news articles below) is one of the most dominant themes. The plight of children in the midst of the epidemic is both a surface theme in its own right, but also a narrative that is closely connected to other coverage.

HIV/AIDS is not only identified as the underlying factor for the increase of orphans in Lesotho, but the articles also elaborate on the consequences for affected children. The real impact of the disease on Lesotho's children is recognised and form a central part of the print media's discourse:

Humanity is grappling with the invisible killer on the rampage, devouring millions and leaving stranded orphans behind (Public Eye 17-22 /3 2006). The HIV/AIDS pandemic continues to cripple economies and to rob children of their childhood (Lesotho Today 8-14/12 2005).

Our government's endeavours to fight the spread of this scourge that continues to kill young men and women at their prime age, whom in most instances are breadwinners leaving thousands of children as orphans (Lesotho Today 1-7/12 2005).

The consequence of HIV/AIDS is the increasing number of OVCs and that OVCs live in a viscous cycle of food insecurity, disease and lack of care and education resulting in malnutrition and high mortality (Lesotho Today 26/1-1/2 2006). HIV/AIDS has redefined childhood. Children are left to grow alone without their primary line of protection- parents and they are left vulnerable to abuse, exploitation and violence (Public Eye 2-8/12 2005).

Another sub-narrative is HIV/AIDS as a cause of death and disintegration of communities, along with the devastating effects on macro-demographics:

People are buried every weekend due to deaths caused by HIV/AIDS or other related illnesses (Lesotho Today 13-26/4 2006).

At this rate of dying this village will soon be wiped out … we are burying a child or adult victim of AIDS almost every day" (Public Eye 3-8/2 2006).

In Lesotho, many families have been devastated by the deadly disease of HIV, and the situation seems to be worsening from day to day (Lesotho Today 25-31/5 2006).

HIV/AIDS has affected not only the size of population but also the age and sex composition and structure of the population (Lesotho Today 2-8/3 2006).

Between 2003 and 2005, HIV/AIDS and its associated disease conditions continued to make an unprecedented impact on Lesotho's population structure

(Public Eye 21-27/4 2006).

The material also includes a number of accounts of the epidemic's negative impact on the overall development of the country as the productive segments of the population fall sick and die. The texts also highlight the fact that the epidemic is an added burden on the government's budget. This theme was primarily covered by the government owned newspaper:

HIV/AIDS pandemic is a barrier to development as people with skills often die of this disease (Lesotho Today 22/12- 4/1 2006).

The most productive people who can bring the difference or development in the country are the most affected by the pandemic (Lesotho Today 13-26/4 2006).

If HIV/AIDS is still cleaning up the nation, most of the development will come to halt (Lesotho Today 27/4-3/5).

The future looks bleak for Lesotho (Lesotho Today 27/4-3/5).

This year's budget will see some of the governments projects being put aside more funds into fighting the disease (Lesotho Today 16-22/2 2006).

Know your status campaign, voluntary counselling and testing and treatment literacy The Know Your Status Campaign is awarded positive coverage. The initiative is often presented as the government's greatest response to date. The articles often report of the praise given to the campaign by the international community. The fact that Lesotho is the first country in the world to attempt to offer all its citizens voluntary counselling and testing, seems to be highlighted with a sense of national pride.

Basotho know that they are fighting for survival. Words like extinction and annihilation are commonplace. The Know Your Status Campaign is meant unflinchingly to confront the unthinkable (Public Eye 17-22 /3 2006). In a ground breaking move, the government has planned to introduce door-to-door HIV/AIDS testing and counselling as a measure (Public Eye 23-29 /12 2005). The first time in history for a door to door ... campaign (Lesotho Today 22/12 2005). In a landmark move, Lesotho would become the first country in the world to offer door-to-door HIV/AIDS voluntary counselling and testing (Public Eye 30/12 2005 – 5/1 2006). Lesotho's Know Your Status campaign, the first of its kind worldwide

(Public Eye 5-11/5 2006).

The positive effects of anti-retroviral therapy are described, but the information is far from comprehensive in the sense that correct information on when treatment can be started, that treatment is a lifelong commitment and that full adherence is very important but seldom achieved. Potentially coverage of the positive effects of anti-retroviral therapy can be a motivating factor for accepting the offer of Voluntary Counselling and Testing:

Let's all know our status because it is only then that those infected can receive appropriate treatment (Public Eye 6-12/1 2006).

Testing HIV positive was like a death sentence, and for many people this signaled the end of their lives. However, the situation has significantly changed thanks to life-prolonging anti-retroviral treatment. (Public Eye 3-9/3 2006).

I started treatment … I feel very healthy now and can easily go around my daily chores … working in the fields (Public Eye 30/12 2005 -5/1 2006).

He could now work the fields (Public Eye 3-9/3 2006).

The reference point of being able to continue farming thanks to anti-retroviral therapy is reoccurring in the material and, for a rural society, an easily recognised benchmark for being healthy. Despite the clear link between testing and access to anti-retroviral therapy, it cannot be said that the articles provide essential medical information on the complexities of treatment. It is, therefore, debatable whether or not it can be claimed that print media are raising the level of treatment literacy in any substantial way.

*The absent discourses on causes*
The elaborate descriptions of the devastating impact of the epidemic create an impression that the Lesotho print media are fulfilling one of the basic missions of journalism: cover events of relevance to the readers. However, the results of the latent text analysis show that both immediate causes, transmission through mother to child, and through unsafe blood, as well as root causes: poverty, gender inequality and social disruption due to labour migration, are more or less absent in the material. Transmission through sex is featured, but burdened by moral judgments. This fragmented narrative on HIV/AIDS and the exclusion of the epidemic's immediate and root causes cannot be derived from the lack of country-

specific data, as the facts on the causes are almost as conclusive as that of the consequences.

HIV/AIDS is predominantly a heterosexually transmitted disease in Lesotho and aside from a few exceptions, most notably some neutral statements done by the Prime Minister of Lesotho, sex and HIV infection are intimately linked to bad morals. The discourse on moral and blame ranges from open statements of condemnation, to being silently implied by the type of sexual behaviour described, such as sodomy, prostitution and rape, all of which are regarded as social ills in traditional Basotho society.

The illicit wanderings of men and women for heterosexual indulgence are disastrous … HIV/AIDS is predominantly spread through secretion of the sexual organs which normally occurs in cases of illicit sexual practices out of wedlock (Public Eye 16-22 /12 2005).

Introduction of the [teaching of] use of condoms in school, apart from being sinful, is indeed justification and opening the door for immoral lifestyles (Lesotho Today 19/1-25/1 2006).

They [Government of Lesotho] supply the community with condoms, and gloves, adding that in prisons they do not promote sodomy as it is a crime, but they supply them with prevention of HIV/AIDS (Lesotho Today 23-29/3).

Changes have been employed in prisons to fight HIV/AIDS which is reported to be rife due to sodomy and other factors that make prisoners prone to adulterous activities (Lesotho Today 13-26/4).

We are under the state of emergency and cannot afford to give priority to people rights to privacy over the need to stop the massacre of our people. Prostitution, as one of the sources of spreading the disease, must also be put under control (Public Eye 6-12/1 2006).

Be faithful to one partner. Which many of us interpret as 'be as faithful as practicality, convenience, peer pressure and other factors permit. In Lesotho, the biggest problems are massive urbanisation and erosion of good cultural and religious values, the endemic alcoholism, the influence of media such as television, and the fact that most employed people do migrant work (Public Eye 9-15/12 2005).

Sexual intercourse as a mode of transmission and cause of HIV infection is not absent from the texts like transmission between mother and child, the other main mode of HIV infection in Lesotho, nor is it nearly absent as in the case of transmission through unscreened blood. The main structural causes of Lesotho's HIV pandemic: widespread poverty, gender inequality and social dislocation due to a system of migrant workers are with a few exceptions all absent in the material. The potential implications of this fragmented portrayal disconnected from the realities of the epidemic in Lesotho, combined with the last discourse of hopelessness and defeat, will be discussed momentarily.

*A sense of hopelessness and defeat*
Instead of providing the reader with a whole narrative HIV/AIDS, some texts feature the HIV epidemic as a phenomenon threatening to destroy the nation. More worrisome, this discourse also portrays struggle against this unavoidable fate as being futile and hopeless.

HIV/AIDS pandemic continues to wreak havoc to our nation … We learn in some African countries like Uganda and Zimbabwe scourge of this disease is declining, but with us here the situation is gloomy" (Lesotho Today 16-22/2 2006).

The entire Basotho nation will be doomed if Basotho continue to ignore the disease in a manner that they are doing presently (Lesotho Today 8-12/12 2005).

Any discussion about the future must take full cognisance of the frightening scourge of HIV/AIDS pandemic which threatens to wipe off the entire African continent, including Lesotho, from the face of the earth (Lesotho Today 25-31/5 2006).

HIV/AIDS as a tragic event that the human mind cannot dissect. It shows how humanity is grappling with the invisible killer on the rampage, devouring millions and leaving stranded orphans behind (Public Eye 17-22 /3 2006).

Besides describing the worst possible scenario – the annihilation of the nation – the material presents a picture where past interventions aimed at escaping such a fate have rendered little result.

Despite massive HIV/AIDS campaigns very little behaviour change has been observed (Public Eye 5-11/ 5 2006).

The government, church organizations, non-governmental organisations (NGOs), small groups and the business sector exerted conceited efforts to arrest the escalation of the scourge, but it seemed all these efforts were no avail. The scourge is increasingly annihilating the nation and has made it prone to extinction (Public Eye 13-18/1 2006).

HIV/AIDS remains a huge mountain for nations to climb as amidst programmes and policies that government have, the number of new infections keep on increasing daily and alarmingly (Lesotho Today 8-14/12 2005).

The pandemic which continues to deprive Basotho of their valuable lives as the numbers of those infected and affected are continuing to increase. This despite all efforts applied to contain the disease (Public Eye 6-12/1 2006).

The state of affairs is forcing the country's social structure to gradually collapse, leaving little room for hope in people's mind (Public Eye 16-22/12 2005).

The two words extinction and annihilation have become common place for Lesotho and Swaziland, Africa's only functional kingdoms as far as the fight against HIV/AIDS is concerned (Public Eye 17-22 /3 2006).

*Discussion*
Mass media through its selections, omissions and interpretations visible through its contextual frames and narratives, provide its audiences with social constructions of numerous topics. An issue can be trivialised or awarded great importance and call for the audience attention. This paper set out to attempt to identify some of the components available to the Lesotho readers in a time when their country is making a bold move to address the HIV epidemic through increased voluntary counselling and testing. Naturally, mass media are one out of many channels to provide the Basotho people with information that contributes to their understanding of the HIV epidemic.

In a regional comparison, according to the Media Institute of Southern Africa (2006) the Lesotho mass media in general prioritise HIV/AIDS coverage both in terms of frequency and framing the epidemic in a local and culturally relevant context. In this study of two weekly Lesotho newspapers both the privately owned Public Eye and the government owned Lesotho Today provides space to cover the HIV/AIDS epidemic from a number of perspectives. On average these weekly newspapers each carry 16 articles that include HIV/AIDS every

month. Moreover, both papers award editorial space to the issue and thereby signal that they regard HIV/AIDS as an important issue for commentary. The salience given the epidemic is positive, but hardly surprising. In a high prevalence country such as Lesotho, the impact of the epidemic is so tangible for all citizens that failure to acknowledge or consistently misrepresent the everyday realities would be incompatible with the print media's most basic news delivery function. Without coverage of the epidemic, the newspapers would most likely appear more or less fictional even to the most uncritical reader.

*Counterproductive social messages*
In a time when the government of Lesotho is making an attempt to offer their entire adult population a voluntary counselling and testing, the inclusion of HIV/AIDS in the newspapers' editorial and ordinary news agenda is positive. However, of perhaps even greater importance is how the epidemic is constructed and framed for the reader. From a Know Your Status Campaign perspective it could be of interest to try to understand various mass media constructions of how the epidemic is to be understood and acted upon, and if needs be fine-tune future Voluntary Counselling and Testing messages accordingly. Returning to this study, it could be interesting to further investigate what the implications are of placing HIV/AIDS to a large extent in the context of international development cooperation, government, and the Lesotho health care system. By framing HIV/AIDS discursively as an issue closely connected to national and international institutions far away from the individual there is a potential risk the epidemic is perceived as an issue which is the responsibility of these very same institutions.

Moreover, strong narratives on the devastating consequences of the epidemic, such as high death rates due to HIV/AIDS, disruption of communities, changing demographics, an escalating orphan crisis, adverse impact on the economy and the overall development of the country, might even further construct HIV/AIDS as an overwhelming force beyond the control of the individual. In addition, fragmented narratives on the epidemic's causes that denies the reader any real understanding of why Lesotho is so severely affected, in combination with a defeatist discourse might fuel a reading of the articles that the HIV epidemic is too large and incomprehensible to act against. This interpretation of the epidemic is not conducive to create a momentum for mass HIV testing. In short, fragmented narratives on the causes of HIV/AIDS, combined with a defeatist portrayal of the epidemic, does not encourage social mobilisation

or social action of key opinion leaders needed to make the campaign successful. If the struggle against HIV/AIDS individually and collectively is portrayed as futile, inaction is an unfortunate but rational behavioural response.

Despite that the two surveyed newspapers provide space and positive coverage for the national Know Your Status Campaign during the first seven months of the campaign period, a moralistic discourse on sex could also be counterproductive.

Framing HIV/AIDS and sexuality in a way that further deepens stigma and discrimination, could contribute to denial of personal risk and adversely affect the perceived need for an HIV test. The strong social stigma associated with HIV/AIDS and the human response of denial has proven to be a strong adversary when it comes to getting individuals to go for voluntary counselling and testing, even when it is the only way to access life-saving treatment.

HIV/AIDS as a facilitator of change Ek (1996) discusses how an epidemic is an extraordinary event and thereby often inconsistent with previous experiences. A situation where previous experiences and ways of organizing human relations no longer can guide future interaction, has a great potential to open up for social change. An epidemic can therefore create space for actors who wish to challenge existing beliefs, norms, attitudes and practices (Ek, 1996). A situation where a virus is spread slowly and by known channels, like the HIV virus, should provide excellent preconditions for deliberation and subsequent adjustment of the social practices making individuals and communities vulnerable.

In countries where putting an ever increasing number of people on expensive life prolonging anti-retroviral therapy is not an option, changed sexual practices is the only sustainable strategy for both the individual and the society at large to gain control over the epidemic. According to LaFont and Hubbard (2007), the HIV epidemic has assisted countries in Southern Africa to expose the social structures and open up space to discuss previous social taboos, such as patriarchal power structures, gender inequality, sex and sexuality and so forth. The sheer impact of the epidemic has forced these previously off-limit topics into the limelight, and enabled social actors to openly challenge them.

In the case of the Public Eye and Lesotho Today, the discourse on sex and sexuality, as well as the absent coverage of power relations that guide sexual

relations and practices, are conspicuous, even if not surprising. Sexuality and entrenched gender inequality are socially sensitive and highly provocative topics, and here the two media outlets choose to play it safe, and omit them from their narratives around the epidemic. By merely reproducing the status quo in terms of gender inequality, sexual practices, and so forth, the articles fail to draw much needed attention to the complexity of the disease as well as the need for changing individual behaviours. Through omission of gender inequality and sexual practices, the opportunity to provide the reader with a more comprehensive understanding of both the epidemic and their own vulnerability is lost. A clear and neutral acknowledgment of current sexual behaviour and practices as the main cause for the epidemic would highlight each individual's responsibility to take action.

HIV/AIDS has been part of the public agenda for some 20 years and will in the absence of a vaccine continue to have a significant impact on life in Lesotho. Awarding this ever-present epidemic with timely, accurate, non-discriminatory, and informative coverage is no doubt going to be a challenge. More comprehensive narratives that do not shy away from the socially controversial aspects of the epidemic could solve this problem for some to come.

While the Know Your Status Campaign ended in December 2007, efforts to decentralise voluntary counselling and testing is planned to continue even after 2007. According to a World Health Organization press release in April 2008, 240 000 people in Lesotho knew their status at the end of 2007, and that 30 of the tests had been conducted in community-based settings. The author has been unable to find reliable statistics on how many individuals were tested as a result of the campaign.

*References*
Afrobarometer. (2004). Public opinion and hiv/aids: Facing up to the future? (Afrobarometer Briefing paper No 14). Retrieved February 1, 2008 from www.afrobarometer.org/papers/AfrobriefNo14.pdf.
Aggleton, P. (2000). *HIV and AIDS-related stigmatization, discrimination and denial: Forms, context and determinants*. Geneva: UNAIDS.
Aggleton, P., & Parker, R. (2002). *World AIDS campaign 2002-2003. A conceptual framework and basis for action: HIV/AIDS stigma and discrimination.* Geneva: UNAIDS.
Altheide, D.L. (1996). *Qualitative media analysis.* Thousand Oaks, California:

Sage.

Barnett, T., & Whiteside, A. (2006). *AIDS in the twenty-first century: Disease and globalization.* Second Edition, New York: Palgrave Macmillan.

Baylies, C., & Bujra, J.M. (2000). *AIDS, sexuality and gender in Africa: Collective strategies and struggles in Tanzania and Zambia*. London: Routledge.

Bertrand, J., O'Reilly, K., Denison, J., Anhang, R., & Sweat, M. (2006). Systematic review of the effectiveness of mass communication programmes to change hiv/aids-related behaviours in developing countries. *Health Education Research, Theory and Practice,* 21(4), 567-597.

Countinho, A. (2004). Challenging links involved in research policy-implementations – moving from national policy to free provision of ARVs in Uganda. In Sida (ed.) *Forging the links against AIDS* (pp. 49-56). Stockholm: Sida.

Delius, P., & Glaser, C. (2005). Sex, disease and stigma in south africa: Historical perspectives. *African Journal of AIDS Research*, 4, 29-36.

Douglas, M. (1966). *Purity and danger: An analysis of the concepts of pollution and taboo,* London and New York: Routledge.

Edgar, T., Fitzpatrick, M.A., & Freimuth, V.S. (1992). *AIDS: A communication perspective.* Hillsdale, N.J.: L. Erlbaum Associates.

EK, A-C. (1996). *Kenyanska AIDSdiskurser: En studie av AIDSinformation i Kenya och dess betydelse för kvinnors och mäns sexuella relationer i Luosamhället.* Umeå: UmU Tryckeri.

Gavian, S., Galaty, D., & Kombe, G. (2006). Multisectoral HIV/AIDS approaches in Africa: How are they evolving. In S. Gillespie (ed.), *AIDS, poverty, and hunger. Challenges and responses.* Washington: IFPR Publications Goffman, E. (1963). *Stigma, notes on the management of spoiled identity.* New York.

Simon and Schuster Government of Lesotho & United Nations/UN (2003). *Turning crises into an opportunity strategies for scaling up the national response to the HIV/AIDS pandemic in Lesotho.* New York: Third Press Publishers.

Government of Lesotho/DLSSD (2002). *Lesotho Core Welfare Indicators Questionnaire*, CWIQ Survey. Unpublished report.

Gupta, G.R. (2000). Gender, sexuality, and HIV/AIDS: The what, the why, and the how. *Paper presented at XIIIth International AIDS Conference.* Durban, South Africa 2002.

Hall, S., Critcher, C., Jefferson, T., Clarke, J., & Roberts, B. (1978). *Policing the crises: Mugging, the state, and law and order.* London: MacMillan Press.

Hewer, R., Motaung, E., Mathope, A. & Meyer, D. (2005). Social marketing as a means of raising community awareness of HIV voluntary counselling and testing

site in Soweto, *South Africa. African Journal of AIDS Research*, 4, 51-56.

James, S., Reddy, P., Ruiter, R.A.C., Taylor, M., Jinabhai, C.C., Van Empelen, P., & Van Den Borne, B. (2005). The effects of a systematically developed photo-novella on knowledge, attitudes, communication and behavioural intentions with respect to sexually transmitted infections among secondary school learners in South Africa. *Health Promotion International*, 20, 157-165.

Kalichman, S., & Simbayi, L. (2003). HIV testing attitudes, AIDS stigma, and voluntary HIV counselling and testing in a black township in Cape Town, South Africa. *Sexually Transmitted Infections,* 79, 442–447.

Kalipeni, E., Craddock, S., & Gosh, J. (2003). *HIV and AIDS in Africa: Beyond epidemiology.* Oxford: Blackwell Publishing.

Kelly, M. (2004). Ethical considerations of HIV/AIDS research in Africa. In Sida (Ed.), *Forging the links against AIDS* (pp.9-18). Stockholm: Sida.

LaFont, S., & Hubbard, D. (2007). *Unraveling taboos – gender and sexuality in Namibia.* Windhoek: Legal Assistance Centre.

Lupton, D. (1994). *Moral Threats and Dangerous Desires. AIDS in the News Media.* London: Taylor& Francis.

Maclean, R. (2004). Stigma Against People Infected With HIV Poses a Major Barrier to Testing. *International Family Planning Perspectives,* 30, 103.

McKee, N., Becker- Benton, A. & Bertrand, J. (2004). *Strategic Communication in HIV/AIDS Epidemic*. New Delhi: Sage.

Meyer-Weitz, A. (2005). Understanding fatalism in HIV/AIDS protection: The individual in dialogue with contextual factors. *African Journal of AIDS Research,* 4, 75-82.

Media Institute of Southern Africa [MISA]. (2006). HIV and AIDS and gender baseline study. *Media Institute of Southern Africa*. Retrieved August 2007 from www.misa.org.

Ministry of Health and Social Welfare [MoHSW] (2004). *Lesotho demographic and health survey 2004. Maseru*: Government of Lesotho.

Ministry of Health and Social Welfare. (2005). Know Your Status Campaign operational plan 2006-7- gateway to comprehensive HIV prevention, treatment, care and support. Universal access to HIV testing and counselling. Government of Lesotho. Unpublished document.

Ministry of Health and Social Welfare. (2006). 'KYS communication strategy', Government of Lesotho. Unpublished report.

Noar, S. (2006). A 10-year retrospective of research in health mass media campaigns: Where do we go from here? *Journal of Health Communication*, 11,

21-42.

Panos. (1999). AIDS reports: Investigating an epidemic. *Report from Panos Institute South Asia.* Panos-UNESCO publication. London:Panos

Panos. (2003). *Missing the message? 20 years of learning from HIV/AIDS.* London: Panos Institute UK.

Piot, P. (2000). Global AIDS epidemic: Time to turn the tide. *Science*, 288, 2176-2178.

Rogers, E.M. & Singhal, A. (2003). *Combating AIDS: Communication strategies in action.* New Delhi: Sage.

UNAIDS. (1999a). *Sexual behaviour change for HIV: Where has theory taken us? UNAIDS Best Practice Collection*. Geneva: UNAIDS.

UNAIDS. (1999b) *Communications framework for HIV/AIDS – A new direction.* A UNAIDS/ Penn State Project. Geneva: UNAIDS.

UNAIDS. (2000). *Tools for evaluating HIV voluntary counselling and testing*. Best Practice Collection. Geneva: UNAIDS.

UNAIDS. (2004). *The media and HIV/AIDS: Making a difference*. Geneva: UNAIDS.

UNAIDS. (2005). *HIV-related stigma, discrimination and human rights violations.* UNAIDS Best Practice Collection. Geneva: UNAIDS.

UNAIDS. (2006a). *Report on the global AIDS epidemic: Executive summary of the report on the global AIDS epidemic,* 2006. UNGASS & Toronto report. Geneva: UNAIDS.

UNAIDS. (2006b). *UNAIDS action plan on intensifying HIV prevention 2006-2007.* Geneva: UNAIDS.

UNDP. (2007). *Fighting climate change: Human solidarity in a divided world. Human Development Report.* New York: Palgrave Macmillan.

United Nations. (2001). *United Nations General Assembly special session on HIV/AIDS declaration of commitment.* Goals set to be achieved by 2003-2005. New York: UN.

United Nations Childrens Fund. (2006). *Women and children – the double dividend of gender equality. The state of the world's children 2007.* New York: UNICEF.

Weiser, S., Heisler, M., Leiter, K., Percy-De Korte, F., Tlou, S., Demonner, S., Phaladze, N., Bangsberg, D., & Iacopino, V. (2006). *Routine HIV testing in Botswana: A population based study on attitudes, practices, and human rights concerns*. PLoS Medicine, 3(7), e261.

WHO. (2005). Summary country profile for HIV/AIDS treatment scale up.

Retrieved January 20 2008 from www.who.int/countries/lso/en/.

Wolfe, W.R., Weiser, S.D., Bangsberg, D.R., Thior, I.J., Makhema, M., Dickinson, B., Mompati, K.F. & Marlink, M.R. (2006). Effects of HIV-Related Stigma among an early sample of patients receiving antiretroviral therapy in Botswana. *AIDS Care*, Vol. 18: 931-933.

World Bank. (1999). I*ntensifying action against HIV/AIDS in Africa – responding to a development crises*. Retrieved from http://go.worldbank.org/QRWUPT6440.

World Bank. (2000a). *Lesotho – the development impact of HIV/AIDS – selected issues and options*. World Bank Macroeconomic Technical Group. Unpublished report.

World Bank. (2000b). *World Development Report.* Retrieved January 20 2008 from http://go.worldbank.org/Z2LU71DB90.

World Bank. (2003). *Multisectoral HIV/AIDS projects in Africa: A social analysis perspective*. Retrieved January 20 2008 from http://go.worldbank.org/Y2BJAG21L0.

# Health Communication In Southern Africa: Social Representations Of HIV/AIDS In South Africa And Zambia: Lessons For Health Communication

*Abstract*

For people infected and affected by HIV/AIDS various linguistic representations have arisen, which create discourses as coping mechanisms and as systems of significations in order to make sense of HIV/AIDS. The AIDS epidemic has invited scientific efforts to revisit language and its role in the construction, positioning and repositioning of identities within cultural systems. This chapter highlights the relationships between language, culture and human experience. In studying the linguistic constructions of meaning vis-à-vis HIV/AIDS, this chapter heightens our understanding of the role of language and meanings in the creation of stigma. The chapter shows that language use with regard to HIV/AIDS is not neutral but has an ideological function. It plays on existing ideological conceptions as well as brings novel discourses into the sphere of interpersonal interaction. The acknowledgement of the power of language is critical for health communication, especially in multi-lingual ethnic groupings, who share similar linguistic forms. People engage with HIV/AIDS in their daily experiences by using familiar symbols, images, words and proverbs. It is argued in this chapter that this discourse of representation hinders the progress of public health interventions, especially with regard to HIV prevention and treatment with antiretroviral drugs. Public health communication and health promotion cannot merely rely on 'normative' linguistic labels to persuade, inform or negotiate health ideals, using the taken-for-granted myths/assumptions about the nature of HIV/AIDS and its effects. Listening to, and adapting the audience's appropriation of language, especially in contemporary times of HIV/AIDS, is important for audience-tailored messaging in order to achieve effective and meaningful negotiation with individuals and communities, so that collective efficacy is strengthened.

*Introduction*

The HIV/AIDS pandemic has covered the world in a cloud of despair. The Panos Institute expresses it thus: "so much energy for so little hope" (Scalway, 2002). By the year 2001, 36 million people were living with HIV worldwide (Piot, Bartos, Ghys, Walker & Schwartlander, 2001), while sub-Saharan Africa shared the largest burden of the disease (DFID, 2003; Piot et al., 2001; The Henry J. Kaiser Family Foundation, 2004). By 2004, sub-Saharan Africa was home to 66 (25 million) of people living with HIV/AIDS (The Henry J. Kaiser Family

Foundation, 2004). In 1999, this figure was representative of the entire population of Africa, 23.5 million out of an adult population of 268.9 million (Kelly, 2002). Contrary to the optimism of the Kelly-led report, the battle is far from being won (Kelly, 2002). Latest updates from UNAIDS give little hope of abating the epidemic, though stability is being recorded in some areas:

*The global epidemic continues to grow and there is concerning evidence that some countries are seeing a resurgence in new HIV infection rates which were previously stable or declining. However, declines in infection rates are also being observed in some countries, as well as positive trends in young people's sexual behaviours* (UNAIDS, 2006).

What is particularly worrying is that in places where success was initially recorded, improvement is either slow or infection rates are increasing (UNAIDS, 2006; WHO, 2007). In most affected areas of sub-Saharan Africa, most of the infections occur through heterosexual intercourse. This is an important ingredient in understanding stigma, since sexuality is still shrouded in mystery and shame. The latest picture of the epidemic still shows a gloomy picture:

*According to the latest figures published today in the UNAIDS/WHO 2006 AIDS Epidemic Update, an estimated 39.5 million people are living with HIV. There were 4.3 million new infections in 2006 with 2.8 million [65] of these occurring in sub-Saharan Africa and important increases in Eastern Europe and Central Asia, where there are some indications that infection rates have risen by more than 50 since 2004. In 2006, 2.9 million people died of AIDS-related illnesses* (WHO, 2007).

The epidemiology of the disease in Africa locates the sub-Saharan region as the most affected.

*Sub-Saharan Africa and the SADC region in particular carry the heaviest burden of HIV/AIDS in the world. It is estimated that by the end of 2005, the average adult prevalence of the SADC region was about 11 percent as opposed to the global figure of 1 percent. The SADC region with 4 percent of the global population is home to about 40 percent of people living with HIV/AIDS in the world. The SADC region continues to have a large share of new HIV infections, in 2005, 1.5 million new cases were estimated, representing about 37 percent of global infections* (SADC, 2006, p. 2).

In South Africa alone, by 2005 the estimate for people living with HIV was 5.5 million (HSRC, 2005). By the end of 2003, 5.3 million people were HIV positive in South Africa (UNAIDS, 2005). The epidemic in South Africa is at a stage where there are more people dying of the disease. In Zambia, HIV prevalence stands at 16, making it one of the highest in the region despite recording some stability (WHO, 2006).

*The role of language and metaphor in HIV/AIDS*
Social construction of HIV/AIDS in public consciousness is dependent on already existing 'socially constructed reality' of the understanding of HIV/AIDS. These already existing constructions are frames within which knowledge, attitudes, and practices are experienced.

Sontag (1989) was amongst the first researchers to assess and record the role of metaphor in framing HIV/AIDS discourses. In particular, Sontag noted the use of military metaphors, like 'invasion', 'combat', 'villain' and 'victim' (Sontag, 1989) and she noted how this could enhance a particular view of the disease. At the heart of this metaphorical representation is the depiction of HIV/AIDS as an invasion that must be fought against. Those carrying the disease carry within them the enemy.

This was seen to have implications on the way people living with HIV/AIDS were treated in communities. The result was stigma and discrimination. The gist of the argument is in the use of language. And how language use is reflective of an attitude towards an issue, idea, or people, in this case individuals living with HIV/AIDS.

Moto (2004) carried out research in Malawi, in which he examines the type of language and linguistic expressions used in describing sex and sexual behaviour in a predominantly conservative and male dominated society. He worked from the premise that language is reflective of a people's culture and the inherent perceptions of social relations. In addition to linguistic investigation, he also assessed the language used to discuss HIV/AIDS (Moto, 2004). The study is undertaken with a view to present sexual issues in 'straight talk' form. For instance, calling a penis *chida*, i.e. weapon, may not be an explicit enough message (Moto, 2004). Having studied the lexicon of the language used, Moto concludes:

*... that through the language studied, one gets the impression that despite the obvious awareness of the prevalence and the devastating socio-economic consequences of the pandemic, there is a sense of denial as well as acceptance of fate and determinism in some sections of the community* (Moto, 2004, p. 344).

Moto noted that language use was indirect, euphemistic, and gendered and reflected a predominantly male society. For instance, the description of a man as beast (*chir ombo*, represents power, authority and dominance (Moto, 2004). HIV/AIDS is also called *magawagawa*, meaning to share. The connotation is that the disease is passed on from one to another, which literally symbolises a giving of the virus to someone.

When describing sex, words like *kugonama* (sleeping on each other) and *owongolera msana* (curing the waist) are used. The conclusion is that, it is important to be aware of what people say, if we are to understand their cultural frames of understanding the reality (Moto, 2004).

*Metaphors and the nature of HIV/AIDS*
Metaphors have also been used as representations of peoples' attitudes, perceptions and knowledge about disease. In the area of HIV/AIDS, analyses of talk has employed images that reflect people's collective understanding of a given phenomena. For instance, research carried out in Zimbabwe found that stigma is constituted and reproduced in language (Mawadza, 2004). Mawadza unveiled various linguistic constructions of HIV/AIDS discourses in Zimbabwe. For example HIV/AIDS is depicted as makizi ya ku mochari (keys to the mortuary) (Mawadza, 2004). This implies the inescapability of death and treats people living with HIV/AIDS as inevitably on the queue to the mortuary. In some cases it is called Jemeza (sad times awaiting) (Mawadza, 2004), which depicts people living with HIV/AIDS as a sign of the advent of sorrowful times. Similar studies undertaken in Zambia, Tanzania and Ethiopia indicate related discursive construction of HIV/AIDS (Nyblade et al., 2003). In these studies, discourse analysis was used to unveil linguistic constructions of stigma.

Effective health communication interventions depend on understanding, the knowledge, attitudes, and practices of people from given cultural vistas. Hence the necessity of studying the use of metaphors in communities so that interventions fit into local frames of reference. People's experiences of stigma are constructed on the basis of connotations between AIDS and perceived promiscuity

and sex. A sense of sexual shame usually accompanies AIDS in communities and acts as a barrier to accessing care and prevention services (UNAIDS, 2001). These connotations are then represented in metaphors to serve a social function by coding the subject in terms that may elude individuals or groups, who may not be intended recipients of the stigmatising messages (Campbell, Foulis, Maimane & Sibiya, 2005). Some of these metaphors may be based on incomplete or total lack of knowledge about HIV/AIDS transmission and prevention. Analysis of the language used to describe an individual's status may indicate a mal-adaptive form of behaviour arising out of fear of causal transmission through communal sharing of common utensil or mere social interaction. The language used may also indicate the perceived nonproductive nature of HIV positive individuals, who are seen as destined to the grave (Mbwambo, 2003). Through the analysis of language used in stigma, some researchers have concluded that there is widespread pessimism in HIV/AIDS discourse, in which the gloomy image of death and dying is invoked (Duffy, 2005; Jones, 1997). The conclusion is that the study of metaphor and the language people use gives insight into the internal states of the individuals within a culture and their shared worldviews.

*Naming, perception and social discourse*
The naming or labelling of a problem allows not only the identification of the problem, but also an inherent desire for a solution (Cameron, 2003). The naming of sex and HIV/AIDS also reveals people's hopes, fears, meanings, understanding, and attitudes towards this experiential fact. Due to lack of scientific names for HIV/AIDS in African languages, the disease is given names that reflect people's feelings and fears (Mawadza, 2004). More often than not, people with HIV/AIDS are named after their appearance (permed hair, way of walking or body size). This comes handy as visual diagnosis is used to isolate individuals, who may be seen as infected. Other metaphors, which further stigmatise people living with HIV/AIDS, relate to death, the lethal nature of the disease, the advent of death, and a modern disease (Mawadza, 2004).

Some metaphors relate to HIV/AIDS as a self-inflicted disease. Studies indicate that stigma is more often attached to a disease whose source is perceived to be the bearers' responsibility. To the extent that an illness is perceived as having been contracted through voluntary and avoidable behaviours, especially if such behaviours evoke social disapproval, it is likely to be stigmatised and to evoke anger and moralism rather than pity or empathy (Herek, 1999). People living with

HIV/AIDS are considered as having voluntarily and immorally engaged in practices, whose consequences are manifested in their state of sickness and are as such stigmatised (Herek, 1999). It is noteworthy that HIV/AIDS stigma does not arise out of the blue, nor is it something dreamed up in the minds of individuals. Instead, like responses to disease such as leprosy, cholera and polio in the past, it plays to deep-rooted social fears and anxieties. Understanding more about these issues, and the social norms they reinforce, is essential to adequately responding to HIV/AIDS related stigma and discrimination.

Language is an important vehicle used to constitute and construct meaning and attitudes in public discourse. Further research has indicated the role of language in constructing reality. Horne (2004) carried out research on some aspects of AIDS-related discourse in post-apartheid South African culture, in which she concluded that language does not just describe a condition, but constructs it (Horne, 2004). Language can never be separated from thoughts and feelings or from the context of its use. This is shown in how language has been used in South Africa to talk about and concomitantly shape attitudes towards HIV/AIDS. According to the findings, different metaphorical representations have revealed varying conceptions and attitudes towards the disease (Horne, 2004). It has been called the 'three words' (Leclerc-Mdlala, 2000), and the 'modern disease' (Posel, 2004). The indirectness employed in describing the cause of death in HIV/AIDS cases is reminiscent of fear associated with the disease (Horne, 2004). The mystery surrounding the disease is partly due to lack of medical explanation for its existence and cure (Posel, 2004). Some of the words used are *ilotto* and *iace*, referring to the risky nature of the sexual activity with regard to the disease, but also it reveals that people are not always in control of whether they contract the virus or not (Horne, 2004). This metaphorical representation shows how deeply imbedded the use of metaphor, in the appropriation of meaning, is within the fabric of human interaction. The use of metaphors to describe sexuality and AIDS (Ross, 1988; Sontag, 1989; Watney, 1989) has demonstrated how human beings can tag disease in a particular way in order to negotiate meaning. Posel's metaphorical assertion carries weight: 'AIDS carries a heavy metaphoric burden' (Posel, 2004).

In South Africa, a study on stigma illustrates how language use is appropriated to represent illness and suffering within social contexts (Campbell et al., 2005). In Zambia, a study was conducted to assess the social representation of illness

amongst young people (Joffe & Bettega, 2003). It was found that in representing new illnesses, individuals and communities tend to appropriate already existing images or taken-for-granted assumptions with new forms of representations. These are negotiated as an attempt to grasp the phenomena at hand (Joffe, 2002; Joffe & Bettega). As our study elaborates below, the representation of HIV/AIDS takes on contemporary images, like top-up drawn from a commercial discourse, appropriating airtime for cellular phones to ARV therapy. Religious discourse is also drawn from by, for instance, representing the onslaught of death as the eschatological second coming of Jesus, invoking a discourse of the inevitability of death. These forms of representations are not unique to Zambia, as the studies cited in the literature above indicate (Nyblade, 2003).

Recognising the role of language in the construction of reality, the United Nations Development Programme has developed a HIV/AIDS-related language policy, in an attempt to normalise the disease, and to reduce stigma and discrimination (Horne, 2004). It is recommended that a language of peace be used in describing HIV/AIDS over and against war metaphors. These war metaphors have depicted HIV/AIDS in militaristic language (Sherry, 1993), dividing the world into groups of the invader and the invaded. This is the reason as to why Sontag advocated for the retirement of the use of military metaphor due to its dramatic character and the resulting stigmatisation of illness (Sontag, 1989, p. 94). Several works show how contemporary forms of social representations reveal deep-seated attitudes and practices to HIV/AIDS as well as to individuals perceived to live with the disease (Campbell et al., 2005; Castro & Farmer, 2005; Joffe, 2002; Joffe & Bettega, 2003; Link & Phelan, 2006; MacPhail, Pettifor, Coates & Rees, 2008; Simbayi et al., 2006; Washer & Joffe, 2006).

*Method*
Participants in the study were selected from support groups of PLWHA in rural district of Durban, whilst others with whom in-depth interviews were held came from Zambia. Discussions and in-depth interviews were tape recorded. The recordings were then transcribed and translated from isiZulu/Bemba/Chichewa into English. Some key phrases and terms are, however, retained in vernacular languages in order to retain forcefulness of meaning. Data were manually analyzed according to the interview questions set out in the study. This paper does not reveal any names of participants. Ethics approval was given by the Ethics committee of the University of KwaZulu Natal in South Africa.

Some of the interviews were transcribed verbatim by the authors. The author's analysis was informed by the principles of Grounded Theory and in particular, the use of constant comparison of themes within the collected data (Charmaz, 2006; Mays & Pope, 2000; Strauss, 1987). Initially, we used open coding to explore the data throughout the process of data collection. This process generated many themes and we explored the varying dimensions of these themes. For instance, the use of labels such as 'walking-walking' (*kuyendayenda*) in reference to promiscuity, and how they were related to each other. Although we began with codes used by the participants ("AIDS" a sign of immorality), the final labels used in the text represent our own summary of respondent accounts (for example, *kanayaka*/light is on, as representing AIDS). Further analysis suggested groups of inter-related themes. Once these key themes had emerged, further development and refinement was informed by the literature on stigma, AIDS, social representation of diseases. A focus of the analysis was on 'deviant cases', where the accounts did not appear to fit with the emerging typology, i.e. what are the ways in which talk about HIV and AIDS deviates from 'normal' discourse. Close analysis of these negative cases assisted in further refining the conceptual categories as outlined in the conceptual frame, 'firstness', 'secondness' and 'thirdness'. We were aware that the observation setting, our role and interest as perceived by respondents and our individual disciplinary perspectives might bias both data collection and analysis. Despite this, the researchers found that the emphasis of respondent accounts was actually towards interpersonal aspects of representing HIV/AIDS in similar terms and images that served the purpose of socialising disease perceptions within the community. During analysis, we were careful not to merely allow a clinical bias or a philosophical abstraction on stigma to influence the coding structure. Once the typology was established, we consulted with a reviewer who sought to identify the dominant version of the three levelled categories of 'AIDS representation in talk' in each observations, interviews and discussions. The researchers then read a sample of four transcriptions and independently identified the similar dominant versions for each. In addition to this validity check, we sought the opinion of anthropologist colleagues on the coherence and plausibility of the typologies.

*Results*

*AIDS and moral culpabilities*
When people talk about HIV, AIDS and sometimes sex, they are quick to

position others, especially those living with HIV and AIDS in categories that label them as morally culpable for their 'diseased conditions'.

Jane: *Hey, you … me … I wouldn't allow someone who was jumping-jumping to come and live in this village…*

The choice of language of 'jumping-jumping' in association with HIV and AIDS is a label of moral blame. This is further expanded in saying fyakuiletelela (they brought it upon themselves). The implication of this is that whoever has HIV has brought it upon themselves and as such do not qualify for sympathy.In response to what some respondents thought of being tested, the following were the responses:

Interviewer: *What about you, have you been tested?*
Mercy: *No, I wouldn't dare, what if I find that I am sick, especially that I am married…*
Andrew: *What do you mean? What would my wife think of me?*

Firstly, there is fear of knowing one's status and secondly, this fear is justified by summoning marital status. And by implication marriage is then defined as the risk factor. Despite stigmatising individuals, who have come out in the open by disclosing their status, some individuals do acknowledge the possibility of risk, which is then immediately linked to marriage in order to mitigate the moral gravity of a possible HIV+ status. This is a common linguistic construction in which the othering of disease by displacing the respondent as an actor within the discourse tends to be common (Leap, 1991). There is tension between self-knowledge and knowledge of and about the other. It is easier to deal with the disease in others than to confront it in oneself. Hence, stigma is the process of externalising our fears and labelling them on 'othered' individuals. It is a form of self-ostracisation, but in the other (Leap, 1991). Marriage becomes then, a way to abdicate personal urgency which does not emerge in the narratives on whether one would take an HIV test or not. The immediate reference in the narrative is to the 'other' partner, who may not approve or may become suspicious of a partner's sexual behaviour. This is in line with assumptions that HIV testing may in itself signify infidelity or lack of trust.

Mutale: *Let me ask, isn't it possible that when doctors find someone has tested positive can't they immediately give them a lethal injection?*

Fear of confronting HIV and AIDS is further manifested in extreme forms in which individuals wish for the extermination of individuals living with HIV. The suggestion of applying a lethal injection is a strong aversion to expel HIV and AIDS discourse from social interaction. The reason given for this suggestion is the perception that the absence of HIV positive individuals would eliminate the problem within the community:

Mutale: *It is better they are killed just there and then, so that they do not bring the disease to the community.*

There is fear that the disease may affect many people in the community, if people who are HIV positive are allowed back to live in the community. It is, however, ironical that one would rather not test but choose to live in ignorance. The problem seems to be that knowledge of HIV becomes synonymous with the existence of the disease. An unknown status becomes equivalent to non-existence of the disease. The need to eliminate an HIV threat from the community is revealed in this discourse of elimination, which is at the same time linked to individuals who are living with HIV. Individuals living with HIV/AIDS are seen as embodiments of the threat to the community. This notion of disease as a foreign invasion is not new (Nyblade et al., 2003).

*Christians, moralities and AIDS*

Christina: *No, for us we are Christians, we can't be sick of AIDS; we don't even talk about these condoms because our church doesn't allow!*

'For us we are Christians, we can't be sick of AIDS' describes the respondent primarily as a moral subject, more so of a Christian order. Whereas it is known that HIV also affects Christians, this denial is still rampant as some people still fear to be labelled, 'unchristian' or 'immoral'. In some places, it would be another form of exclusion from the community of Christians, hence the choice for ignorance which is embraced as bliss. If one's status is not known, then there are no labels, no stigma. This comes into play only when visual clinical signs associated with HIV emerge.

While advocates of VCT may argue that VCT may lead to higher knowledge levels, and encouragement to lead a normal and healthy life, the reality is different when the meaning of life is itself intimately bounded up with how one fits within a social collectivity. The above discussion is embedded within a

dominantly religious-Christian ideology which is drawn upon in representing HIV/AIDS.

Within the discourses of representation, a number of images arose that depict people living with HIV and AIDS. Most of these are associated with morality and sexual behaviour. In some cases, being HIV positive is described in terms which stand for moral recklessness. The following section dwells on representations of sexuality and HIV/AIDS.

*Ubulalelale (sleeping sleeping)*
This is an image that is used to signal 'casual sex'. When asked as to the cause of AIDS, *ubulalelale*, which is a synonym for promiscuity, equates the status of an HIV positive individual to 'immorality'. It is sometimes called *ubulwele bwa bucende* which means literally, 'disease of promiscuity'. The moral undertones are reinforced by a religious discourse in which promiscuity is defined per se as having casual sex outside the context of marriage. There is no room for committed relationships. Sex can only be lawfully had in a legally binding matrimonial bed. The choice of language equates HIV positive status to *ubulalelale* taking the symbolism of sex as a sleeping position and represented connotatively as a signifier of immorality. The symbol then takes on a common-sense (ideological position), which relates positive status to immorality.

*Jesus is coming*
Sometimes eschatological images are used. Yesu Abwela as in Jesus is coming. This symbolism is an invocation of the eschatological promise of the coming of the messiah. HIV and AIDS are, in popular religious discourse, related to eminent eschatological symbols, preceding the cataclysmic end of the world. These eschatological signs include earthquakes, and incurable diseases, among others: HIV is incurable; therefore it is an eschatological sign. The agents of this end are the evil forces, which have not repented and have cooperated with the devil. Being HIV positive gives one a mark of the end times. He or she becomes the incarnation of the signs associated with the incurable diseases, which signify the 'end of the world'.

Whilst on a higher religious ideological level HIV and AIDS are talked about in terms of 'end of the world signs', individuals are seen as 'leaving us' (meaning *batisiya*). Others would simply describe people living with HIV and AIDS as being *paulendo* (on a journey) or *chakumanda* (to the grave). *Chakumanda* is a

legitimate name in Eastern Province of Zambia, which is given to a child, who has survived after a series of infant deaths in a family. The name simply means someone has survived death. But, this symbolic name is taken up and appropriated to represent a person living with HIV/AIDS. The connotation is the necessary link between a positive HIV status and death. One is on his way to grave.

With these images circulating in communities, it is small wonder that individuals are too scared to take up HIV testing, which in the perception of the community makes one either a member of the *chakumanda* group or not. The risk is too much for perceived gain of longevity.

But the thrust of the choice of metaphors, in this case, is not a coming for salvation, but the 'end of someone's life', a time when they have to account for their promiscuity. Being HIV positive is immediately linked to end of life. Whoever tests positive, therefore, has his or her end in sight. What was done in the dark is now revealed in the light of day. This disclosure is either by personal verbal disclosure or by ones physical clinical manifestations. Disclosure by physical clinical manifestations happens more often, because individuals often present themselves for treatment at very late stages of the disease, when, in some cases, very little can be done to help them. The result is a prevalent belief that HIV status equals death.

*Pumping pills or top-up*
Antiretroviral drugs are in some settings called pumping pills or top-up. The idea is that antiretroviral drugs make one to become artificially fat. One woman told us, "when they start taking *ifi miti* (medicines), they become fat and others even look brownish (stereotype for beauty). Then suddenly they collapse and die". This process is likened the tube of a bicycle tyre, once pumped it goes flat again since it cannot be perfectly mended: *Mwelafye weka* (it is mere air being pumped for a short period of time to delay the inevitable). At a time, when antiretroviral drugs are noted for their treatment value, one would expect that they would be applauded as an advance in care and compassion within communities. But this happens not to be the case in some communities in Zambia and South Africa, where antiretroviral drugs are instead seen as artificially sustaining life before a sudden slump into death. In Zambia, the notion of topping up is the same as pumping pills, though top-up borrows from mobile phones, which means that in order for one to be able to make a call one must have enough 'air-time' (credit on

the phone). But, when the account becomes low, then one is forced to top-up for continued use. Antiretroviral drugs are thus symbolised as top-up. This means that a person, who is on antiretroviral drugs is topping up his account to keep living. This symbol shows the truth of the value of antiretroviral drugs, but turns the symbol into mockery, which only serves to undermine individuals who are on treatment. The resulting connotation is one of stigma by interpreting the life of individuals on antiretroviral drugs as on artificial sustenance and dependant on artificial forms of credit for survival.

*Kalaiti kanayaka (the light is on)*
For fear of calling people, who are living with HIV by their status, community members tend to employ images that indirectly depict them as sick and moving
towards the grave. In social interaction, someone may simply say *kanayaka* and members of the community know by implication the meaning of the phrase. The images are drawn from normal social discourse. The above image of *kanayaka*, which is a short form of the warning light on the motor vehicle fuel gauge indicating the diminishing fuel. On the first level of meaning, this image relates to the actual meter reading, but is relationally connected to people living with HIV and AIDS by locating them within a general symbol in which they are like cars running out of fuel. The underlying cultural assumption is that death is eminent, since the light is on. Being HIV positive is a danger sign signifying an inevitable grounding of a vehicle due to lack of fuel.

Antiretroviral drugs making HIV positive people invisible Health promoters hold on to the assumption that hope will reignite for people on antiretroviral drugs and that they will have a better life. Hence the promotion of the need to extensively rollout antiretroviral drugs. But little attention is paid to antiretroviral drugs being blamed as a danger to communities. This danger is immediately linked to the protection of the common good, i.e. the common health of the social web. HIV positive people or those suffering from AIDS must be made visible (i.e. actually seen) in order to act as a deterrent to reckless behaviour. Antiretroviral drugs tend to make symptoms disappear and as such make HIV infected individuals become invisible. In popular discourse this translates into a risky status, as individuals may not be able to make decisions to avoid 'these HIV+dangerous individuals'.

Linda: *These medicines are dangerous because HIV positive people are not*

*visible. We can't know them, so how can we protect ourselves?*

For some people in communities, the fact that antiretroviral drugs diminish symptoms in people living with HIV and AIDS implies that they cannot physically be isolated and hence pose a risk to the community:

Bwalya: *Please do not give them ARVs, these people should just die. You see them sickand about to die and then suddenly, you find them walking up and about looking fat, and our young men, who find it very difficult to hold on, are on them; the next thing we are also sick.*

Individuals living with HIV and AIDS are generally secluded as "other" from the group through a process of visual diagnosis. Appearance becomes the characteristic trait that is used to single out individuals, as either likely HIV positive or negative. In instances, where symptoms usually associated with an HIV positive sero-status are invisible, it becomes almost impossible to know who might be a 'dangerous sexual partner'. "Our young men, who find it very difficult to hold on, are on them" represents the biological drive metaphor, in which men are seen as driven by this 'other' force: An uncontrollable sexual drive, which must be released. As such the blame is on invisibility: Our young men cannot diagnose HIV status, when ARVs are available. This then becomes the justification for their resistance to antiretroviral drugs in the community. One leader of the community suggested These medicines have made our people even more promiscuous. The state in being seen to be sick serves a 'positive' social function of deterrence in this community. The implication is that when people living with HIV and AIDS are left to be seen to be sick, there are higher chances of them becoming a deterrent to casual sex, hence avoid transmission of the disease to those who are not infected.

*Infwa yenda (death walking)*
Others have chosen to use the term *infwa yenda*, which means 'death walking' to refer to people living with HIV and AIDS. It is equally a death metaphor, but depicts people as walking tombs. The tomb metaphor is a visual icon of the prevalence and inevitability of death resulting from AIDS related illnesses. This links HIV to death, not only as inevitable, but as well as deliberately caused. Such labels lead individuals further into denial, because of the fear of being categorised as 'death walking'. In general ethos, the grave is an isolated place, and no one communes with the tombs. That is a place of *abantu babene* (other people's

people, who are not of this world). It is also called *kumalalo* (where they sleep). The graveyard is therefore a cold place where the 'dead sleep'. Linking this metaphor to daily life means that whoever embodies the 'tombness' cannot live with the 'living'. He or she belongs to the 'liminal space' embodying the transition between this world of the living and the world of 'living dead'.

*Kalionde-onde (slimming)*
*Kaliondeonde* is a term used to mean 'slimming'. It is an equivalent of the 'slim disease' as referred to in some African countries. This plays on the initial clinical manifestations of indications of a positive sero-status (Godrey-Faussett et al., 1994; Lucas et al., 1994).

*Akashishi (infected with insects/germs)*
The association of HIV with the visual image of *akashishi* or *kadoyo*, i.e. an insect or ant, gives the impression of an animal like creature, which has crept into someone's body. This may reinforce witchcraft notions of a living being, which selects its victims. The *akashishi* or *kadoyo* metaphor does not physically equal to an actual category of insects or germs. The closest association of the foreign entity in one's body is by visualising insects and how they infect fruits, for instance, and transposing this hegemonic image into understanding the process of HIV infection.

Sometimes proverbs, such as *chikome-kome cha mukuyu mukhati muli nyelele* (the beauty of external outlook, whilst the inside is rotten or full of insects) show how the *akashishi* or *kadoyo* metaphors entrench a discourse representing individuals living with HIV and AIDS as carriers of rottenness. Hence they must be avoided.

*Labelling HIV by association*
In seeking to isolate individuals who may be testing to know their status, a discourse of association is employed by community members to identify various individuals, who may be HIV positive. Hence, sometimes individuals prefer to walk distances away from their villages in order to go and test for HIV in another village where they might not be known. This is done with a view not be identified by familiar members of the community. In turn, it serves the purpose of evading labels that socially group these individuals into 'stigma classes'. In some villages, a clinic may have a counselling facility for people who have HIV and AIDS related concerns, but may be afraid to present themselves lest they gain the label of the

'room' or building. He/she is 'room 1' relates the room associated with HIV to individuals, who might have visited such a place. This association does not segregate the various reasons that may lead individuals to seek health services. Some of these people may actually be HIV negative. One lady, on rationalizing, why she did not go for HIV testing said:

Makhosazana: *... fear of HIV and the stigma. Fear of knowing and how the community will treat you once they know your status or they have seen you come to the clinic ... especially room 1.*

Room 1 refers to a room reversed for voluntary counselling and testing. What is interesting to note is that she is able to name the problem: fear of HIV and stigma. She groups HIV and stigma as if they are synonymous, thus clearly highlighting the problem that HIV is intimately conceptualised in 'other' categories with value-laden moral judgements. The other feature that strengthens the negative impact of stigma is the fact that in these communities in rural Zambia and South Africa, communities live in a strong communitarian web of relationships. The identity of an individual is intimately connected to others in the community. One exists because others are.

Unlike the Cartesian *cogito ergo sum* or *je pense, donc je suis* ("I think, therefore I am"), these communities subject the individual to the 'We'. As such ones' existence is seen in terms of "I am because we are and because we are, therefore I am" (Mbiti, 1969, pp. 108-109). The fear of being known as HIV positive is not linked to individual good, but is located within a community ethic in which either an individual fits in or does not fit in. This process of inclusion and exclusion is prevalent in many facets of life experiences in these rural communities. Whoever deviates from the norm, for example, by becoming too rich, or by growing into old age, when many people die young, (for instance in Zambia with a life-expectancy of about 37 years), or by having successful children) is more likely to be associated with witchcraft. Deviance in these communities is defined, and consequently excluded by, identifying characteristics that are deemed threatening to the social order. Sexual immorality was another form of behaviour that in some communities called for moral sanctions and disapproval. In the era of HIV and AIDS, people can no longer hide their promiscuity. You get to know them through their sickness.

Sickness is therefore a signifier of immorality and is as such a visible

social representation of a 'prostitute'. The word prostitute is used to translate *maule* or *amaule*, sometimes referred to as *amaswau*. These words express a moral judgment on sex workers, who are judged as sexually promiscuous. This term is then taken on in ordinary discourse to refer to people, who are deemed incapable of 'taming' their sexual appetites. The concomitant connotations are that maule are not only sexually permissive, but lack moral character which is judged from a lack of either marital stability or failure to get married. The unfortunate part of this labelling is that a woman, who does not marry earlier than her peers, is more likely to be labelled as such.

*Labelling HIV by TB: a better label than HIV*
TB is used as an option for labelling HIV. It seems a preferable condition to HIV as people seem to understand it and know that it is treatable. In other cases, TB has become a symbol used to mark individuals with HIV. *Balilwala TB ishipwa* (he or she is suffering from TB that does not finish) may mean two things. Firstly, the person may be suffering actually from actual tuberculosis and secondly, the person maybe HIV positive with the initial clinical manifestation of tuberculosis. Hence the preference of the TB label, which is deemed moderate in social stigmatising consequences compared to HIV and AIDS.

*Labelling HIV by negative cultural symbols*
Negative cultural symbols are also used to label HIV/AIDS. The negative cultural symbols associated with HIV and AIDS, as a means to the negotiation of meaning, vary from context to context. In Zambia, symbols used to label HIV/AIDS were taken from a moralistic cleansing discourse, especially in rural areas. Whereas in South Africa, sometimes traditional imagery is used in relation to HIV/AIDS, like ipod, but cultural symbols and images to label HIV/AIDS were predominantly drawn from cosmopolitan images, like Channel O and BMW's Z3.

Cleansing discourses are used by people in rural areas to describe the separation of the good from the bad, the infected from the uninfected, the moral from the immoral. In seeking to main hegemonic order in its 'pure' form, metaphors call upon images, like OMO, a brand name for washing powder that is common in the area. OMO (washing away) is used to show the removal of unwanted stains or dirt (infection) from clothes. 'Sieving' or 'winnowing', used in traditional preparation of food, is used to describe removal of chaff from grain or any other 'separatables' from essentials. This discourse positions individuals in the community into binary oppositions of the essential and the non-essential, the

clean and the dirty. Thus the community is fragmented into either/or. The choice to be in one group or the other is a dilemma for members of such communities. Whoever tests positive is therefore placed in the 'other' category with all its negative associations. And since the sick are the chaff that is being disposed of from the community, or the dirt and infected that is being washed away by OMO, one has to choose to belong either to chaff or to the essentials. Going for an HIV test in itself places one on the borderline between the 'we' and 'them'; a choice that demands great courage to make. In contexts where one's existence is built by and within this community, the decision becomes a matter of being alive or dead. This uncompassionate community outlook may be surprising as it is cruel, but in linking HIV/AIDS metaphorically to OMO, which cleans the dirt and the infected from the community, it performs a `positive' social function, and this is a critical factor that demands a conversion of ethos, not just the provision of knowledge.

Further to the ostracism of lepers from social communion is the use of *ipot* in South Africa. *Ipot* is formed by adding the Nguni prefix, *'i'*, to pot, which is a three legged, traditional Zulu cooking vessel used over an outdoor fire. The pot is used in collective cooking activities, and metaphorically connotes the discourse of commonness of the disease. It is unlikely that many speakers of Zulu for instance will fail to recognise *ipot*. It additionally indicates that something is 'boiling' or 'cooking' in someone's body, which will soon be eaten away. But this eating away is a taking away from the community. This discourse announces the inevitable dawn of death for the person living with AIDS. When the metaphorical food/sickness is brought to the boil, then the individual is ready for death. This metaphor reminds the infected that they should prepare for death rather than preparing for positive living. Once you are diagnosed with HIV you are seating on fire with a three (HIV)-legged pot, ready for the inevitable conclusion.

In South Africa, cultural symbols and images to label HIV/AIDS were predominantly drawn from cosmopolitan images. The use of contemporary images, like 'Channel O', to represent HIV is testimony to the invocation of current prevalent images in order to appropriate meaning of a unique experience. But the choice for symbols is a choice for a form of silence that refuses to name but ends up paradoxically becoming louder than its initially sought to avoid. When an individual has malaria, people simply say he or she has malaria. But as for HIV, individuals in these communities simply spoke in symbols without directly naming the problem.

The use of channel is one such example. 'Channel O' is a risqué pop music station broadcast by the South African satellite television platform DStv. It is invoked as a visual metaphor to attach connotations of promiscuity to those known to be infected. Individuals, who are living with HIV/AIDS, are categorised as promiscuous, akin to the loose living depicted on pop music TV. Pop stars are depicted on Channel O as sexually appealing and charged sometimes with semi-exposed bodies (Channel O was banned in Zambia, as it was accused of promoting anti-Christian values by propelling semi-pornographic material into the airwaves). People going for voluntary testing and counselling are named as Channel Os. Semiotically, this naming identifies and others infected individuals in terms of the discourse of stigma.

Blame by association is the fourth discourse, which signified by an apparent excessive and conspicuous consumption, acquisition of material consumer goods and *embourgeoisification*. The sign, which connotes this fast living culture, is the BMW Z3 sports car model. This aspirational capitalist symbol mobilises the sign of promiscuity and links it to urban cosmopolitanism with its 'inevitable consequence of infection'. HIV infection is seen by rural people as a modern disease of the town. Those infected then return to the rural areas to die. The BMW Z3 thus connotes both positive upward class mobility and its negative opposite of the highlife aspired to being unsustainable and resulting in death. Hence, in Zambia the metaphors employed would include *kalaye ba noko*, "go and bid farewell to your mother (in the village)".

*Conclusion*
Language as a system for classifying meaning plays a central role in communicating health. It is the bedrock of any communication enterprise. Despite this understanding, health communication has not aggressively taken on the need to engage with language in itself i.e. deliberately targeting language that entrenches stigma and discrimination. This is important because people in any community conceptualise their problems within a particular signifying practice. This practice may offer insight into the way people conceptualise a problem confronting their daily lives. HIV/AIDS remains a stigmatising disease with dominantly 'othering attitudes', in which the disease is seen as affecting the other and not the person who is a subject of discussion or interviews. It is also understood within the prevailing religious ideologies which seem to offer categories for hopelessness, and a judgemental attitude that sees the other as

deservingly oriented towards inevitable death. Stigma on HIV/AIDS seems to change in its expressions depending on the context and categories used for its descriptions.

This renders support to the enduring nature of stigma as a major obstacle to prevention and treatment (Whitehead, Mason, Carlisle & Watkins, 2001). As elusive and dynamic as the nature of stigma is, semiotic analyses may come to the aid of conventional social learning theories in capturing the prevailing cultural forms of representations. This is what we learn from the analysis of the role of language in fuelling stigma and discrimination. We learn that language is ever evolving; taking on new symbols and images. As such, the task for researchers and consequently public health experts is the appreciation of the discourses operating in communities in order to better engage them. This can only be done in empathic communication, which takes on local lenses so that preferential options for secluded individuals are advanced. In this time and age, we cannot afford not to intervene for people with 'leper bells' which are linguistically constructed variously. It is time for compassionate health communication that seeks for a complete metanoia (conversion of mind and attitude) of community attitudes to people living with HIV and AIDS, especially in language discourses.

References
Campbell, C., Foulis, C.A., Maimane, S., & Sibiya, Z. (2005). 'I have an evil child at my house': Stigma and HIV/AIDS management in a South African community. *American Journal of Public Health*, 95(5), 808-815.

Castro, A., & Farmer, P. (2005). Understanding and addressing AIDS-related stigma: from anthropological theory to clinical practice in Haiti. *American Journal of Public Health*, 95(1), 53-59.

Charmaz, C. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. London: Sage.

Department for International Development. (2003). *UK's Call on Action on HIV/AIDS*. London: Department for International Development.

Duffy, L. (2005). Suffering, shame, and silence: the stigma of HIV/AIDS. *Journal of the Association of Nurses in AIDS Care*, 16(1), 13-20.

Godrey-Faussett, P., Mwinga, A., Hosp, M., Baggaley, R., Porter, J., & Msiska, R. (1994). Tuberculosis and slim disease in Africa. *British Medical Journal*, 309(6963), 1230b-1231.

Horne, F. (2004). Some aspects of AIDS-related discourse in post-apartheid South Africa. *Alternation,* 11(2), 401-419.

Human Science Research Council. (2005). *South African national HIV prevalence, HIV incidence, behaviour and communication survey,* 2005. Cape Town: Human Science Research Council.

Joffe, H. (2002). Representations of health risks: What social psychology can offer health promotion. *Health Education Journal,* 61(2), 153-165.

Joffe, H.L.N., & Bettega, N. (2003). Social Representation of AIDS among Zambian Adolescents. *Journal of Health Psychology,* 8(5), 616-631.

Jones, R. (1997). Marketing the damaged self: The construction of identity in advertisements directed towards people with HIV/AIDS. *Journal of Sociolinguistics*, 1(3), 393-418.

Kelly, M. J. (2002). *Challenging the challenger: Understanding and expanding the response of Universities in Africa to HIV/AIDS.* Lusaka: University of Zambia.

Leap, W. L. (1991). AIDS, linguistics, and the study of non-neutral discourse. *The Journal of Sex Research*, 28(2), 275-287.

Leclerc-Mdlala, S. (2000). Silence, AIDS and sexual culture in Africa. *AIDS Bulletin,* 9(3), 27-30.

Link, B.G., & Phelan, J.C. (2006). Stigma and its public health implications. *The Lancet*, 367(9509), 528-529.

Lucas, S.B., De Cock, K.M., Hounnou, A., Peacock, C., Diomande, M., Honde, M., et al. (1994). Contribution of tuberculosis to slim disease in Africa. *British Medical Journal*, 308(6943), 1531-1533.

MacPhail, C.L., Pettifor, A., Coates, T., & Rees, H. (2008). 'You must do the test to know your status': Attitudes to HIV voluntary counseling and testing for

adolescents among South African youth and parents. *Health Education and Behavior,* 35(1), 87-104.

Mawadza, A. (2004). Stigma and HIV/AIDS discourse in Zimbabwe. *Alternation,* 11(2), 420-439.

Mays, N., & Pope, C. (2000). Qualitative research in health care: Assessing quality in qualitative research. *British Medical Journal,* 320(7226), 50-52.

Mbiti, J. S. (1969). *African religions and philosophy.* New York: Praeger.

Mbwambo, J. (2003). *Understanding HIV-related stigma and resulting discrimination in sub-Saharan Africa Emerging themes early data collection in Ethiopia, Zambia and Tanzania:* Washington D.C.: International Center for Research on Women.

Moto, F. (2004). Towards a study of the lexicon of sex and HIV/AIDS. Nordic *Journal of African Studies, 1*3(3), 343-362.

Nyblade, L., Pande, R., Mathur, S., MacQuarrie, K., Kidd, R., Banteyerga, H., et al. (2003). *Disentagling HIV and AIDS stigma in Ethiopia, Tanzania and Zambia.* Washington DC: International Centre for Research on Women.

Piot, P., Bartos, M., Ghys, P. D., Walker, N., & Schwartlander, B. (2001). The global impact of HIV/AIDS. *Nature,* 410(6931), 968-973.

Posel, D. (2004). *Sex, death and embodiment: reflections of the stigma of AIDS in Agincourt, South Africa.* Johannesburg: University of Witwatersrand. WISER Symposium.

Ross, J. (Ed.). (1988). *An ethics of compassion, a language of division: working out the AIDS metaphors.* New York: Hemisphere.

SADC. (2006). *Expert think tank meeting on HIV prevention in high-prevalence countries in southern Africa*. Gaborone: SADC.

Scalway, T. (2002). *Critical challenges in HIV communication.* London: Panos.

Sherry, M. S. (Ed.). (1993). *The language of war in AIDS discourse*. New York: Columbia University Press.

Simbayi, L., Strebel, A., Cloete, A., Henda, N., Mqeketo, A., & Kalichman, S. C. (2006). HIV status disclosure to sex partners and sexual risk behaviors among HIV positive men and women in Cape Town, South Africa. *Sexually Transmitted Infections*, 83(1), 29-34.

Sontag, S. (1989). *AIDS and its metaphors.* London: Penguin Books.

Strauss, A. (1987). *Qualitative analysis for social scientists.* New York: Cambridge University Press.

The Henry J. Kaiser Family Foundation. (2004). *The Global HIV/AIDS Epidemic.* HIV/AIDS policy fact sheet Retrieved October 15, 2007, from

http://www.kff.org/hivAIDS/upload/3030-08.pdf

UNAIDS. (2005). *AIDS Epidemic Update*. Geneva: UNAIDS.

UNAIDS. (2006). *Global AIDS epidemic continues to grow.* Press Release. Geneva: UNAIDS Retrieved October 15, 2007, from http://data.unAIDS.org/pub/PressRelease/2006/061121_2006_EPI_Update_en.pdf

Washer, P., & Joffe, H. (2006). The 'hospital superbug': Social representations of MRSA. *Social Science & Medicine,* 63(8), 2141-2152.

Watney, S. (Ed.). (1989). *Talking liberties: An introduction.* London: Serpent's Tail.

Whitehead, E., Mason, T., Carlisle, C., & Watkins, C. (2001). The changing dynamic of stigma. In: T. Mason, C. Carlisle, C. Watkins & E. Whitehead (Eds.), *Stigma and social exclusion in healthcare.* London, New York: Routledge.

WHO (2006). *AIDS Epidemic Update*: Geneva: World Health Organisation.

WHO (2007). *Global AIDS epidemic continues to grow.* Geneva: World Health Organisation. Retrieved 15 October, 2007 from http://www.who.int/hiv/mediacentre/news62/en/index.html.

# Health Communication In Southern Africa ~ Edutainment Television Programmes: Tackling HIV/AIDS On The South African Broadcasting Corporation

*Abstract*

The last couple of decades have seen an increase in the use of edutainment to intervene in the socio-political problems faced by people in the developing world. Drama, soap operas and even children's programmes are used to educate citizens about issues ranging from sanitation to safe sex. In South Africa today, edutainment is especially utilised to intervene in the country's ongoing battle with HIV/AIDS. While many studies laud the success of these programmes, this article argues that the programmes are not without flaws. Though great strides have been made in terms of de-stigmatizing the disease in certain communities by encouraging open discussion and in some cases even nationwide policy changes, the often racialised, gendered and classist portrayal of people infected and affected by HIV/AIDS remains problematic. To some extent, much of these portrayals are a manifestation of the increasing ressure on South Africa's public service broadcaster (SABC 1 & 2) to commercialise. This article explores the representation of HIV/AIDS on the South African Broadcasting Corporation (the SABC) in the context of the SABC's increasing dependence upon advertising revenue.

*Introduction*

This chapter evaluates the role of the SABC in South Africa's fight against HIV/AIDS through an ideological analysis of television texts and qualitative interviews. It asks what happens to HIV/AIDS when it is mediated through a public service broadcaster in a highly politicised country. In this respect, the chapter explores the extent to which the SABC functions as an empowering public sphere, with regard to HIV/AIDS intervention in South Africa. Can the SABC play an advocacy role in the fight against HIV/AIDS that would be true to its public service mandate without marginalizing certain groups or stigmatizing others? The chapter argues that the SABC's role in the fight against HIV/AIDS is strained by the difficulty to develop focused messages for specific groups as the country's history of segregation makes it difficult to distinguish and define risk groups and other addressees in ways that would avoid old apartheid divisions of issues, groups and people. This chapter therefore concentrates on the SABC's constitution of audiences for development communication and the implications thereof for edutainment.

The constitution of audiences figures programmatically in the programmes and frameworks of development communication on the one hand, and it also occupies a prominent position in the SABC and their policies. It figures pragmatically in the actual conduct of programmes and media operations and it figures representationally in the edutainment genre supported by the SABC. Because representation does not happen devoid of context, one should also focus on the relationships and processes through which representations are produced, valued, viewed and exchanged. Thus, this chapter strives to bring together theories of the public sphere and public service broadcasting with theories of health communication (specifically edutainment) to contextualise the analysis of the SABC's HIV/AIDS-centred edutainment programmes. To this end, three general purposes emerge:

1. First, to explicate the theories of the public sphere as it concerns public service broadcasting. In this respect, the extent to which the post-apartheid SABC revised its audience segmentation strategies will come under scrutiny. It will be argued that the SABC's revised segregation policies, and especially its increasing reliance upon advertising revenue and the resultant focus on lucrative audiences can potentially lead to a stereotyping, caricaturing and even marginalisation of issues of importance to the poor.

2. Secondly, an exploration of the theories and practice of edutainment will follow. This explication will pay attention to stages of change-theory's usefulness for edutainment and will also explicate post-colonial theory's concern with the power-relations of development communication. It will then be argued that the commercialisation of the SABC has had a dire impact upon the broadcaster's interpretation of the place and focus of edutainment.

3. Finally the chapter will strive to illustrate the arguments advanced in the first two sections by providing an ideological analysis of Gazlam and Tsha Tsha drawing on theory from edutainment and identity politics. The analysis will focus on an explication of the ways in which the SABC's audience segmentation policies and commercialisation initiatives shapes the broadcaster's representation of HIV/AIDS.

*Literature review*
This section discusses theories of the public sphere in relation to Public Broadcasting Services (PBS, specifically the SABC) and health communication.

The discussion will open with an overview of theories linking the public sphere to public service broadcasting. This will be followed by a discussion of the SABC, focussing specifically on the broadcaster's history as a divisive institution and its currentsegregation policies. To conclude, an overview of theories of edutainment will be presented, highlighting the possibilities that this genre holds for the SABC to act as an empowering public sphere.

*The SABC*
The SABC can be seen as a metaphor for the South African society: it is unsettled, it is in transition and is in many ways not unlike the society it represents and reflect on. It is therefore important to examine the impact that the changing local (and global) environment has on the SABC's construction of its audience. These constructions are of crucial importance if the broadcaster wishes to become a bona fide public service broadcaster, operating as a public sphere that adheres to the principles stipulated above. The broadcaster's construction of its audiences is also pertinent for its activism policies as it pertains to HIV/AIDS in South Africa. South Africa's socio-political and economic content is an important subtext to understanding the way meaning is constructed through the processes of production and consumption (interpretation). Thus, it is necessary that the structure of the SABC be studied within the context of a changing South African society.

[Before 1994], *in line with the apartheid philosophy, [the SABC's] service provision was meant to favour the advantaged according to the criteria of colour, class, geographic location and language. Apart from disseminating racial stereotypes and fragmenting the South African population on racial lines under the apartheid policy of 'divide and rule', content provided by the system was often political, particularly, the coverage of news and political events. The hallmarks of this broadcasting system were political censorship and the dissemination of the White Minority regime's propaganda on all services* (Mtimde, 2003, p.3).

The SABC's apartheid-history has been adequately dealt with in other publications (Duncan, 2000; Nixon, 1994; Steenveld & Strelitz, 1994; Theunissen et al., 1996), therefore I will suffice with the acknowledgement that for decades the South African broadcasting system was one of the most politicised broadcasting systems in the world. For this discussion, it is more important to focus on how current changes in the SABC's audience segmentation policies impact upon its ability to intervene in South Africa's HIV/AIDS crisis.

Following the first democratic elections in 1994, SABC television transformed into a national public broadcaster funded through TV license fees, advertising and sponsorship revenue, and other business services. It is under the control of a board, which is selected through public hearings (of Parliament) and appointed by the country's president. Under a new law, the Broadcasting Act of 1999, the SABC became a limited liability company with the state as 100 shareholder, and was restructured into two arms: commercial service (SABC 3) and public services (SABC 1 and SABC 2). As is the case in broadcasting elsewhere, the new Government's move to downscale direct state support in the form of subsidies to the public broadcaster led to a greater reliance on programme funding through advertising. In television, the results have been major cuts in programming, and its replacement with infomercials, rebroadcasts of cheap imported programmes, and a re-racializing of the audience into 'market' segments which coincide with the racial divide and the emerging class divisions within the majority black population (Jacobs, 2004).

Thus, at the same time as South Africa witnessed the separation of state and broadcasting, reduction in state subsidies have meant just as television held the promise of greater access for the black majority, it would be governed more indirectly by the market. Its programme choices and audiences are increasingly being dictated by market decisions as its management and board scrambles and competes for revenue from advertisers (Jacobs, 2004). Given that the SABC has identified "talking, listening and hearing" as part of its core values, this increasing reliance on advertising revenue has led to a crisis of accountability for this public service broadcaster (Tleane & Duncan, 2004). As argued above, public (service) broadcasting should play a critical role in shaping the ability of individuals to participate effectively in the normal life of a society – i.e., create publics, not audiences for advertisers. When a public (service) broadcaster is faced with the contradiction of delivering service to the public mainly on a commercial funding base however, it could lead to a marginalisation, caricaturing and stereotyping of those groups and issues not deemed saleable to advertisers (Tleane & Duncan, 2004; Jacobs, 2004). This claim is substantiated by the Freedom of Expression Institute's (hereafter the FXI's) response to the SABC's application for the amendment of its licence. Focusing mainly on PBS radio, their research noted several trends flowing from the SABC's reliance on revenue income. Some of these trends are equally applicable to the SABC's public service television channels:

* The drive towards self-suffiency have led to a commercialisation of stations;
* Commercial imperatives have forced a bias towards the educated class;
* Commercial imperatives have forced an urban bias on stations;
* Commercialisation has led to a bias towards English;
* Commercial imperatives had led to changes in uneconomic formats; and
* Dropping of uneconomic programmes.

The research further showed that despite the fact that it claims to be catering for all sectors of the society, those within the broadcaster agreed that the SABC is geared at catering for the higher LSM listeners and viewers. In South Africa, targeting of audiences for adspend takes place by putting together programming mixes that will target the most lucrative audiences using a marketing research tool called the Living Standards Measure (LSM). The LSM is used in South Africa as an audience ratings measure that values level of income above racial categorisation, using criteria such as salary levels, degree of urbanisation and ownership of cars and major appliances. The LSM supposedly replaces the racially divisive segmentation policy of the past.

However, given South Africa's troubled history of disenfranchising citizens of colour, race intersects with the market in interesting ways. This means that the most affluent viewers remain white and thus more attractive to advertisers, while the least affluent viewers remain black and a poor market for advertisers. Tleane & Duncan (2004) note in this regard that the lack of ongoing government funding for the SABC has forced it to continue a process of commercialisation carried over from the apartheid years. While the ultimate objective of this drive is to achieve financial self-sufficiency, it has in turn led to the SABC's programming being increasingly unable to address the needs of the majority of South Africa's people. For example, as will be illustrated later, while the SABC do indeed address the issue of HIV/AIDS – which affects the poor more then the rich, their representation of the disease and those affected by it draws on gross stereotypes of certain groups in South African society.

*Unity in diversity*
While it could be argued that audience segmentation is not a new idea, the problem of HIV/AIDS seen within the context of the particular socio-political circumstances of South Africa, presents the SABC with numerous challenges. Like media in other postcolonial states, the SABC is under constant pressure to adapt its depiction of the colonised. However in a truly democratic South Africa this

task is complicated by the hybridity of identities caused by South Africans' constant negotiation between the racial, ethnic, gender, class, and geographic identities of the apartheid era and a post-apartheid rainbowism that celebrate South Africa's diversity (see also Zegeye & Harris, 2003). Of course, the concept of unity is difficult to come by in the media, which segregates its audiences according to taste, income, age, and in the old South Africa, by race. In fact, development communication usually assumes that there is no homogenous audience and that messages therefore have to be tailored for specific constituencies. Where the SABC of the past had specific channels for different racial groups, the new SABC employs the supposedly colour-blind LSM to structure its audiences. To this end the SABC divided into two legs: public services (catered for by SABC1 & SABC2) and commercial services (catered for by SABC3). It is however precisely in this binary division, that the SABC's segmentation policies hark back to the past. In line with its slogan, Ya Mampela (meaning the real thing), SABC 1 provides "aspirant" and youthful" broadcasting in Nguni and English, addressing the young, black audience. SABC 2's slogan, "Feel at home", fits the channel's family focus.

Broadcasts on this channel are in Sotho, Afrikaans and English. The commercially-driven SABC 3 strives to be "much better", "spirited" and "cosmopolitan" in its appeal to more up-market English-speaking audiences. It could be argued that the SABC, even in the process of nation-building, held fast to a formula of diverse channels. And even though these channels do not wear their racial/ethnic affiliations on their sleeve, as was the case before 1992, the programming and scheduling for the different languages and programmes on current SABC television make this clear. The SABC's Gloria Britain for example states that SABC1, the television channel that airs the majority of the SABC's edutainment interventions for HIV/AIDS, is called a "black station". This observation was not lost on the respondents in my original study. Black respondents unanimously listed their channels of preference as SABC1, 3 or e-tv, because they understood the language and because SABC2 is seen as mostly Afrikaans or "for Afrikaners", in the words of a black male respondent from rural Gauteng. The majority of white and coloured viewers who watch SABC regularly pointed out that they watch SABC2, because they could at least hear "some Afrikaans and see some remnants from the past" on this channel (quote from a white male's response to the new SABC). These issues highlight the contradictions underlying the SABC's transformation. Contrary to their SABC's

assertions about nation-building and unity, current transformations of the SABC imply further divisions, perhaps even argue a return to/continuation of apartheid divisions (Orgeret, 2004). Until 2002, SABC 1's slogan was "Simunye, we are one", however the different channels are increasingly structured after distinctive social groups, following a logic that may conspire against the implied idea of a unified nation (Orgeret, 2004, p. 156).

In theory and on paper, it would seem as if the broadcaster has indeed succeeded in becoming a sphere with which all South Africans can identify, but research indicates that though much have changed in terms of who gets represented and what gets reflected on, the broadcaster still appears to hold on to its divisive class and racial practices (Orgoret, 2004; Duncan, 2000). In terms of the SABC's mandate towards nationbuilding this leaves us with one important question, i.e. who is the nation that the SABC is envisioning? With regard to the SABC's desire to fulfill an advocacy role in the fight against HIV/AIDS, the question becomes even more complicated, i.e. who is or should be the face of HIV/AIDS on South Africa's public (service) broadcaster? Raboy (1996, p. 4) states that "identity today is increasingly multifaceted, and national identity is a particularly contested issue in many countries, even among some of the politically stable". As a result there is pressure on public service broadcasting to keep up with fragmented identities, forcing it to rethink its approach to one of its most cherished objectives, i.e. "nation-building" if it is to speak to the real concerns of its public. Is it possible for South Africa's public service broadcaster to craft a space wherein a shared culture as advocated by the proponents of the revised public sphere, can begin to take meaning? This is an important question to answer if the SABC is to function as a space for HIV/AIDS intervention, not only because the media seems to be the main arena where the AIDS fight is being formulated and played out, but also because AIDS is still such a politicised issue in South Africa. If the SABC is going to intervene in the pandemic and fulfil its nation-building mandate at the same time, it has its work cut out. That is not to say that it cannot be done.

*Finding a genre for HIV/AIDS intervention*
Fighting HIV/AIDS on the public broadcaster would have been challenging regardless of the broadcaster's segmentation policies. People watch television to escape from the realities of life and are not always in the mood to confront unpleasant issues like disease when they sit down in front of their television-sets.

Thus, just getting the audience to sit down and watch requires careful planning and creativity. Singhal and Rogers (2002) argues in this regard that when the "first law of mass entertainment" is observed and people are confronted with a choice between deriving pleasure from serious non-entertainment fare or from non-serious entertainment fare, they will choose the latter. In response to this, it was necessary for the SABC to find a format that combined education content with entertainment appeal. That format also had to be able to support the empowerment of people by allowing them to distinguish "positive" from "negative" identification, so that viewers could recognise contradictory messages and make informed choices. To this end, the SABC embraced the format of edutainment as a viable solution for intervening in the HIV/AIDS crisis, without losing commercial appeal; and by all appearances it seems to be working well. The SABC (2004) argues that although most audiences prefer entertainment to educational material, the broadcaster has made a great deal of headway in cultivating a taste among South Africans for local content in "providing very powerful infotainment such as Yizo Yizo and Tsha Tsha, "which have attracted significant audiences". Infotainment is used by the SABC to refer to the academic concept of edutainment (entertainment- education). To accommodate different tastes and age groups, and to attract audiences of LSM 4+, the HIV/AIDS interventions are spread across genres, with educational content inserted into entertainment-formats to varying degrees (SABC, 2004). Because edutainment programmes differ in their scope, size, reach, intensity and other attributes, it is necessary to point out that the programmes chosen for the present study, were designed specifically for the purpose of intervening in the HIV/AIDS (and other social) problem(s) over a long period of time.

*Edutainment*

Edutainment, defined as the intentional placement of educational content in entertainment messages, has received increasing attention from communication scholars in recent decades (Singhal & Rogers, 2002). The format has its most current roots in the work of Miguel Sabido. In the 1970's and 1980's Miguel Sabido, created six telenovelas with educational-developmental messages (Brown, 1992). Today, these programmes are also refered to as either "prodevelopment soap operas" or "entertainment-education soap operas". The last term is used especially in academic circles to refer to the growing corpus of works that the entertainmentmedia uses for educational purposes.

An entertainment-education soap opera is described as "… a melodramatic serial that is broadcast in order to both entertain and convey subtly an educational theme to promote some aspect of development" (Nariman, 1993, p. 2). These soap operas are unique in the sense that – without sacrificing commercial appeal – they are designed according to specific elements of communication and behavioural theories to reinforce specific values, attitudes and behaviour that viewers can use to their own advantage. Sabido created the programmes to work in concert with other public information campaigns to promote certain socially desirable behaviours. These behaviours (for example family planning, adult literacy, etc.) enable citizens to take an increased degree of control over the quality of their lives and contribute to the national development goals in Third World countries. Development as it is used here, refers to "…a widely participatory process of directed social change in a society, intended to bring about both social and material advancement (including greater equality, freedom and other valued qualities) for the majority of the people through their gaining greater control over their environment" (Nariman 1993, p. 2). It is clear from Sabido's definition of development that he envisioned the edutainment-format employing a variety of strategies from both the diffusion model and the participatory model of development (communication). For example, he did not intend for the format to be a stand-alone solution, but rather saw it is part of other development interventions that are geared towards behavioural change and ultimately empowerment. Singhal and Rogers (2002), echoes this sentiment, suggesting that, "in the future, E-E (edutainment) interventions are likely to see more integration with participatory communication". Similarly, in her survey of the field of development communication, Morris (2003) found that even though the edutainment format rely heavily on the mass media as the agent of message diffusion, study after study also cites the importance of interpersonal communication to supplement the media-messages. According to her a salient factor in many people's decision-making is informal interpersonal communication with friends, family, peers and other potential opinion leaders. Morris (2003) sees the academic divide between mass communication and interpersonal communication as a false dichotomy, as the studies in her review shows that mass communication can trigger interpersonal communication.

The implications of erasing the aforementioned divide for edutainment has been discussed by several scholars, including Slater (1999), Vaughan and Rogers (2000), Singhal and Rogers (2002), Kincaid (2002), and Slater and Router (2002).

These authors all advocate a prolific interaction between diffusion and participatory strategies, with Kincaid (2002) and Slater & Router (2002) focusing specifically on implications for narrative-building while the rest address in various ways the usefulness of the "stages-of-change" (hereafter SOC) framework as a vehicle for facilitating such interaction. Slater (1999, p. 335) argues that "the major theories of persuasion and behaviour change are complimentary and not competing... because their foci and boundary conditions make them useful in solving different types of communication problems". He posits that SOC has become increasingly influential in the health communication field as "it can be used to describe the kinds of behaviour change, campaign problems, and audiences for which each theory (of persuasion and behaviour change) is most appropriately applied" (Slater, 1999, pp. 336-337).

The SOC approach evolved primarily to better understand the process of behaviour change, particularly change in addictive behaviours (Slater, 1999). Slater (1999) identifies five major stages as outlined by the approach: precontemplation, contemplation, preparation, action and maintanance. To these stages, Vaughan & Rogers (2000) add another category between preparation and action, which they call "validation". A detailed discussion of these falls outside the purview of the present study. This chapter is more interested in the implications of SOC for edutainment.

A glance at the extended SOC model as presented by Vaughan & Rogers (2000) shows that it makes provision for both cognitive and affective processes in the internal state of the individual (primarily the first three stages of the model), and interpersonal communication processes in the external environment of the individual (primarily the last three stages of the model). The authors point out that exposure to a mass media message is a prerequisite for media effects and argues that with such a message exposure would function differently at the various stages of the extended SOC model. Exposure might promote cognitive, affective, role-modeling or interpersonal communication processes by audience individuals (Vaughan & Rogers, 2000). To illustrate their point, Vaughan & Rogers (2000) uses the example of a Tanzanian radio edutainment soap opera to discuss how the SOC model can be applied to the edutainment format. A brief summary of their key assertions follows.

In the precontemplation stage, the aim is to stimulate both cognitive and affective processes. For knowledge change to take place, the uninitiated audience

members (or the non-believers) must in the first place be enticed by the rational argument of the message content so that they will be able to recognise and understand the educational content. Through identification (a key element of Sabido's vision for edutainment), the audience members should than be able to recognise themselves and/or their situations in the characters/storyline which might lead to empathy for these characters. Identification is the process through which an individual sees himself or herself in the role of another person and empathises with the circumstances of that person (Vaughan & Rogers 2000, p. 209). Identification would make it possible for the audience to perceive that the message is relevant to people like them (Kincaid, 2002; Slater & Rouner, 2002). The edutainment programme would thus have to come up with highly realistic characters and storylines to help make the message relevant to an audience.

In the contemplation, preparation and validation stage the media's role is to persuade those who believe the relevancy of the educational message to their situation, but lack the willingness or self-efficacy required to engage in the suggested behaviour. Edutainment messages that feature rewards for prosocial behaviour by positive characters and punishment for antisocial behaviour by negative characters provide vicarious reinforcement of the trustworthiness of the educational message and the consequences of various behavioural alternatives. Through identification with positive characters the audience members can come to believe that others who are similar to them have adopted the innovation successfully, thus increasing audience members' self-efficacy with respect to the innovation and belief in the social/cultural acceptability of the modeled behaviour. In the contemplation stage individuals frequently seek the judgments of their peers or opinion leaders to reduce their uncertainty about an innovation, to reinforce the merits of the innovation and to demonstrate the cultural acceptability of the innovation. Edutainment programmes can stimulate interpersonal communication through role modelling, increasing individual self-efficacy to discuss the innovation with others and setting the agenda of topics to be discussed interpersonally. In this phase, the edutainment format fulfills a reinforcement role as it continues with its agenda-setting function and reinforces character likeability to enhance audience identification and ultimately role modelling of positive characters.

The agendasetting function includes information about service providers and their locations. This role extends to the preparation, validation and action stages as

audience members in these three stages become increasingly ready to adopt the innovation and thus draws from positive characters to model their negotiation skills and weigh the pro's and con's of different service providers for their situations. To ensure that audience members reach the maintenance stage and consistently use the new idea advocated by the media messages because they recognise the benefit of such action in their own lives, the edutainment should provide role models of satisfied adopters of the new idea for audience members to observe and emulate. Edutainment assumes that the media have the power to intervene (or be used as a tool for intervention) on issues of social importance. For Livingstone and Lunt (2000, p. 10) it is precisely herein that the ambivalence felt by many towards the mass media (read television) can be discerned – the feeling that here is a great power, but can it be harnessed for the public good? They argue that

*… pessimistic answers tend to underestimate the complex and fragmentary nature of the contemporary mass media which opens the way for some escape from institutional control, while more optimistic positions often set too high ideals for the public sphere. Those alternative formulations of the public sphere which recognise and build on the complex and fragmentary nature of the media suggests more positively that the media could facilitate and legitimise the public negotiation – through compromise rather than consensus – of meanings among oppositional and marginalized groups.*

The extent to which the SABC's edutainment programmes succeed in creating a public sphere as outlined here is explored in the next sections.

*Method*
Hall (2001, p. 224) argues with regard to representation that "…how things are represented and the 'machineries' and regimes of representation in a culture do play a constitutive, and not merely a reflexive, after the event role". It would therefore make good methodological sense to explore these representations through qualitativeapproaches. The explication that follows thus uses ideological analysis to uncover the impact of the SABC's audience construction policies on the broadcaster's interpretation of the HIV/AIDS pandemic as reflected in its edutainment programmes. The analysis that follows focuses mainly on two edutainment dramas, – namely Gazlam and Tsha Tsha , however where applicable, I may also refer to other edutainment interventions, such as Siyayinqoba Beat It!, Soul City and Soul Buddyz.

*Methodologically, ideological analysis enables the analyst to capture attributes of the text that cannot be reduced to ordinal or even categorical variables. It also offers theoretical linkages between the institutional realities of producing media content and the type of content that is produced* (Davidson, 2004).

According to Stokes (2003), there isn't a method called "ideological analysis", but any method can be used as part of an ideological project. It would thus be fair to say that ideological analysis draws on the insights and methods of different approaches to textual analysis – in the present case, these would include semiotics, genre study, and narrative analysis – to discern what meanings are made available through the medium and its programmes.

To explore the ways in which the SABC represents HIV/AIDS, a textual-visual analysis was undertaken to discover recurring discourses and themes/images and to identify frameworks of ideas and beliefs that the SABC's edutainment programmes produce about HIV/AIDS and those infected/affected by it. The choice of programmes was informed by their health focus and their status as "best practice" projects. To gain a perspective on what is being offered; I watched one season of each programme and identified different storylines that deal with HIV/AIDS, sex, love and relationships. To explore the ways in which the SABC represents HIV/AIDS, I followed a two-tiered approach. This approach reflects the diverse responses to the interventions in terms of their "value" for the South African society: on the one hand they do indeed lead to more open discussion of HIV/AIDS, on the other hand they tend to broaden divisions between different social groups even more. Thus, following the example set by other studies (Bouman, 2004; SOUL CITY, CADRE), the different storylines were analyzed first by using a code scheme based on health behaviour theories. Textual analysis is however an approach that also allows for the interpretation of texts in relation to the cultural contexts in which they operate (Fair, 1996). I could therefore broaden the scope of my analysis by taking the critical-analytical position of ideological textual analysis, to move the discussion from the "intended messaging" to the unintended "othering" of the HIV+- person. The intersection of this discourse with the socio-political context of contemporary South Africa is also explored. To ensure that the discussion does not reflect only my opinion, I interviewed different stakeholders positioned in various spheres in relation to the SABC and HIV/AIDS. These included representatives from the SABC (particularly Gloria Britain), NGO content producers, and a forprofit media production company:

Ochre Media's Indra de Lanerolle (producers of Gazlam), Warren Parker from CADRE (Tsha Tsha's producers) and SOUL CITY's Tuli Shongwe (producers of Soul City and Soul Buddyz). I also looked at selfdisclosures on the programmes' websites, and interviewed Gauteng television viewers.

*Fighting HIV/AIDS on the SABC*
To contextualise this discussion, it is necessary to provide a brief introduction of the plot structure for at least Gazlam and Tsha Tsha. Producers for these programmes operate from the premise that HIV/AIDS cannot be treated in isolation, but should be situated in the context of people's real life experiences. Drawing on the theoretical underpinnings for edutainment dramas proposed by amongst others Sabido (in Nariman 1993) and Vaughn and Rogers (2000), the programmes employ a three-step process of reinforcing prosocial values by:

• Depicting social problems and value conflicts associated with such problems,
• Motivating the audience toward prosocial values and depicting the positive consequences associated with such values and beliefs, and
• Creating role models through soap opera characters who symbolically represented specific value orientations (Nariman,1993).

In line with edutainment-practices elsewhere, the stories follow a typical narrative structure that mirrors their more entertainment-oriented counterparts: they are characterised by an ongoing story line with several concurrent plots linked together by the characters' personal relationships. Each episode ends with a hook, or cliffhanger, that creates interest in the next episode. Unsurprisingly then, the programmes tackle the same main themes and in almost similar ways: they focus on sex, love and relationships, and the impact of poverty, urbanisation and HIV/AIDS on these. Where they differ slightly from their international counterparts is that most of them – including the seasons of Gazlam and Tsha Tsha analyzed here – do not include an epilogue that poses rhetorical questions, neither do they necessarily always provide information such as the number of a telephone hot line (Vaughn and Rogers, 2000).

Most of the interventions follow Bouman's (1998) suggestions for successful edutainment interventions. They are purposely designed, with the potential of entertaining and educating people in order to enhance and facilitate different stages of prosocial behavior (my emphasis of Bouman, 1998, p. 25). Some, like Tsha Tsha and Soul City even have a strong evaluation component (comprising of

both formative and summative evaluation) as informed by the theory and practise of edutainment advocated by Sabido and others. On the surface, they therefore appear to be exemplary examples of the edutainment genre. Many of the storylines provide representations of how the issue of HIV/AIDS can be treated in "real" life situations.

These include storylines focussing on how characters deal with HIV/AIDS when they are in relationships – especially focussing on how sex is negotiated in certain neighbourhoods and also when one partner discovers he/she is HIV+. The issue of peer pressure and choice with regard to sexual relationships also form a main point of focus for most of the interventions and as such it is not strange to find storylines dealing with rape or abuse, alongside storylines detailing happily married couples or couples in committed relationships and people engaging in promiscuous sexual relationships. Another important focus of the programmes deals with the support and understanding that one can expect from your community and the government, usually highlighting both negative and positive responses. However, when one probes a little deeper, it would appear that, for some at least, the dramatic nature of the dramas overshadows their educational potential. Space does not allow for a detailed scrutiny of all the aforementioned. I would thus like to offer an ideological analysis of one of the main themes that runs through all of the interventions, i.e. their treatment of sex, love and relationships, against the backdrop of HIV/AIDS.

*Love in the time of HIV/AIDS*
The programmes deal with the theme of sex, love and relationships and the impact of HIV/AIDS on these. The theme is highlighted in the edutainment dramas by emphasizing the entertainment component, and leaving the viewer to infer meanings from the context of the texts and from comments made by secondary characters. In Tsha Tsha for example, Andile's alcohol-induced sex-capades with Mimi often leads to morning-after remorse and reprimands from his friends. The issues of violence within the family and love relationships are also addressed, but again, here the viewer is to infer "best practice" by following the lead of positive role models. One particularly tricky issue that is dealt with in both Tsha Tsha and Gazlam, is the issue of sex after HIV. This issue is raised continuously towards the end of Gaz'lam's first season and even more so in subsequent seasons of this intervention. The consensus in all the representations appears to be that certain kinds of sex is still possible – as long as people act responsible, use a condom and

avoid "dangerous" sexual activity. Emphasis is placed on nursing the relationship in terms of becoming closer to one another, being there for one another, supporting the efforts of each other and validating the humanity of one another. The message appears to be that while sex might be important in a relationship, it is the closeness of mind and spirit that will carry couples through difficult times. There is however also another side to the discourses surrounding sex and HIV/AIDS, i.e. the message of destruction and devastation that follows irresponsible sexual conduct.

Gaz'lam especially, focuses on the destruction that sex can cause to relationships – not only between couples, but also between friends – when dealt with irresponsibly. However, even though at a first glance it appears that sex becomes the scapegoat for everything wrong and bad, the programmes highlight the fact that it is not wrong to be quirky and have fun with sex, as long as you act responsibly. In other words, avoid drinking and then jumping into bed with someone, always use a condom and to a lesser extent be faithful to your partner.

However, it would seem that in their attempts to appeal to the largest common denominator (with money) sex scenes are sometimes overplayed to such an extent that the positive message gets lost. A case in point would be episodes three and eight in Gaz'lam. Episode three features Portia's return from celibacy (Portia is the first character in Gaz'lam to disclose her HIV status). Here viewers are subjected to her backseat-of-a-car sex adventure. Of course, three episodes later, in episode seven, we find out that the character is now HIV+, presumably following her one-night stand in episode three. However, the very next episode, number eight, opens with a rather raunchy sex scene where viewers are greeted by screams of supposed ecstasy, while the camera moves between the intertwined bodies of the lovers and the other occupants in the building who cannot sleep due to the volume of the lovemaking.

Later in that same episode, viewers are faced with a lingerie party where the main attraction is an oversized vibrating, black dildo that the host sticks into a cream cake to demonstrate its flexibility, before she passes it around amongst the ladies to touch and observe. Not only does this specific scene appears strangely out of place with the black cast, but the fact that all of this happen during the pre-watershed period before 21:00, makes it even more risqué.

Though this is by far the most graphic sexual scenes encountered in the media

scan, viewers in my original study also expressed discomfort with the sex scenes between Andile and Mimi in Tsha Tsha. In response to a remark from one viewer about the necessity of showing the condom during a specific sexual encounter between Andile and Mimi for example, one of the older participants pointed out that doing so is in "bad taste", especially since "they felt the need to show her bare breasts". In fact, it is my contention that the message about the devastation and destruction caused by all the sex is almost overshadowed by the shockingly graphic nature of some of the sex scenes and the sometimes vulgar language. This concurs with Smith's (2001) analysis of Yizo Yizo. Smith (2001) asked if the series succeeded to educate kids or if it merely entertained them and eventually concludes that the latter is true. Smith contends that the reason why the critical reflections about Yizo Yizo failed to deal with the real issue of violence in schools (which was the focus of the series), results from the contradictions of representations of violence in the series, where violence is commodified in the process of representing the "real". The same argument holds true for the impact of graphic sexual content on perceptions of the HIV/AIDS edutainment programmes.

*A little bit of Monica in my life, a little bit of Erica by my side...*
Being able to trust your partner forms an undercurrent in all relationships, especially where sex is involved. Indra de Lanerolle notes that sexual negotiations are about personalities, human relationships and trust. HIV/AIDS has the potential to create an environment of mistrust if a language of risk and terror is used. It is thus no easy task to create a storyline that can deal with issues of sex, love and relationships – that is basically founded on the concept of trust – while at the same time advocating caution in your dealings with people. It is perhaps easier to have a storyline where a one-night stand leads to HIV, as the issue of trust does not come into play as much. However, in married or other committed relationships, one needs to be able to trust that your partner will be faithful to you if the relationship is to stay healthy (personal interview with Indra de Lanerolle).

The "faithfulness" storylines in the scrutinised texts however tend to fall victim to the same problem of an overload of entertainment at the expense of educational content. Since this is entertainment television, faithfulness storylines run at the same time as storylines depicting couples happily cheating on each other. Again, due to the dramatic format of edutainment, you cannot abruptly end a storyline when the episode ends – storylines usually run over several episodes. So, even

though the faithfulness message is pushed, it sometimes takes a while for the consequences of not being faithful to be seen, and by that time you might have lost some viewers or others might already be identifying with what seems to be "fun and spontaneous", rather than with the predictable and boring. This especially happens when viewers of the edutainment format are also staunch supporters of soap operas such as The Bold and the Beautiful and Days of our Lives where the sanctity of relationships are often discarded for more sensational, scandalous extra-marital affairs, and cheating on your boyfriend or girlfriend. Gazlam's Indra de Lanerolle noticed in this regard that one cannot look at the SABC in isolation, but has to view it as part of a broader media landscape. Although his caution was meant to suggest that there is a host of media-interventions into the HIV/AIDS crisis and that that is a positive thing, it is also possible that the plethora of messages can become confusing if interventions and entertainment fair are not streamlined. If every intervention carries its own message and they're all out there in the public's face, just how exactly are we to know which message/lesson to follow? For example, close scrutiny of the various edutainment programmes reveal that their message about sex, at once advises viewers to "abstain", to enjoy sex, but be weary of AIDS, but also "not worry if you contract HIV, as you can live positive(ly)". Little wonder then that one of the viewers in my original study exclaimed, "hell, I'm confused" when trying to explain to me what he thought the main message of the various edutainment programmes about HIV/AIDS might be. Tomaselli and Shepperson's (1996) suggestion that media interventions abide by the slogan "one message, many media" thus seem especially apt here.

Confounding the issue of streamlining messages is the fact that confusion does not only reside in the actual conduct of the interventions, but that media interventions also compete with a host of other messages that has nothing at all to do with HIV/AIDS prevention. In this respect it is important to note that the media do not only consist of programmes geared towards development, but that the majority of the media's messages actually have nothing at all to do with development, and these more often than not stand in direct contradiction to the messages portrayed in development campaigns. If one for example considers that, according to Audience Ratings, the American soap opera The Bold and the Beautiful was amongst the top ten programmes for South African kids aged 10-15 (SAARF, 2004), one has to wonder how these children deal with the total contradiction in terms of family and personal values in these programmes as

opposed to something like Soul Buddyz. The Bold and the Beautiful has storylines about a mother sleeping with her daughter's husband, a woman who sleeps with a father and both his sons and women getting pregnant without knowing who the father of their baby is. How do you reconcile the absolute abundance of sexual immorality (there is never any mention of condoms in The Bold and the Beautiful) with messages of trust, faithfulness and sexual caution in HIV/AIDS edutainment programmes? Again, it would seem that media moguls err on the side of entertainment (read ratings), rather than education. Of course, it could be argued that it is not television's main job to act as a social teacher, but in this case, you have a broadcaster that actually states its intent to do just that. One could further argue that viewers should be trusted to make the right moral choices as it pertains to their own lives as we have moved beyond the hypodermic needle school of thinking to a point where researchers agree that viewers generally make up their own minds about issues of importance. However, such claims would run counter to the edutainment claim that exposure to media can positively influence viewers towards prosocial change. If we accept that the media can affect positive change, than it stands to reason that the media could similarly encourage negative role-modeling. Thus, in a situation where viewer participation in broadcasting is still a relative novelty, it would make a lot more sense for the public service broadcaster to err on the side of safety rather than ratings. Where edutainment content might eventually point out the disastrous consequences of such "immoral" behaviour, these "regular" soap operas tend to either "reward" characters by letting them get away with the same kind of behaviour over and over again, or it is represented as a byproduct of success. If these soap operas thus keep touting messages contrary to the message that the edutainment programmes are trying to get across, it could counteract the desired behaviour change strived for by edutainment television.

*The face of HIV/AIDS*
A final comment about the representations of HIV/AIDS concerns the face of HIV/AIDS on the SABC. Added to the graphic nature of the sex scenes as well as the difficulty to streamlining messages in the scrutinised interventions, a further problem arises when one consider that all the HIV+ characters and those represented in the sex scenes, are black. These representations would have been problematic regardless of who is represented under these circumstances, given that the programmes aired before the 9 pm watershed period. But considering South Africa's troubled racial history and the racialised nature of the HIV/AIDS

discourse in the country, the fact that all these programmes feature predominantly black casts immediately adds another dimension to the problem. One of the black viewers in my original study for example noted about the representations of sexual relations that "these are not romanticised portrayals of sex, but rather an in your face, raw display of the realities of shagging". He argued that he does not necessarily have a problem with the graphic displays ("that's how its done in real life my man!") however he does feel that the portrayals perpetuate stereotypes about deviant sexuality in blackpeople. Given that these shows are flighted on SABC1, the Nguni-language channel that professes an ebonics-style "realness", representations often functions on the level iconicity rather than indexicality. By this I mean, viewers are encouraged to read the representations as "the real thing", telling (showing) it like it is. Thus, in response to a black discussant's comment that these sexualised portrayals are "the real thing", one of the female black discussants responded with "in whose world?", indicating a clear desire to distance herself from this type of representation. This distancing has to do with a specific desire not to be seen as "like that" – the other females in the group and one of the males affirmed this distancing, proclaiming that "it is disgusting portrayals such as these, that's holding us (and I read that to mean a collective, black us) back in life". While efforts are being made to break the class-barrier in HIV/AIDS representations, the racialised portrayals remain. The majority of the characters portrayed as HIV+ are black. The programmes with documentary inserts tend to break this rule more often then the others, while Soul City, and Siyayinqoba Beat It! introduced non-black HIV+ characters as part of the cast.

Another factor that apparently dictates who becomes the face of HIV/AIDS in the analyzed programmes, is the fact that they are all predominantly in African languages with English subtitles. Furthermore, the music scores for the programmes feature music-genres popular amongst urban black youth (such as "kwaito" and "house") and uses mainly black music artists to develop and perform the music. It is possible to derive from these that the target audience for these programmes is urban, young, black South Africans, and therefore the face of the HIV-affected/infected people is also predominantly black. However, before judgment is passed, one has to consider that regulations regarding local content stipulated by Independent Communication Association of South Africa (ICASA) was meant specifically to ensure that previously marginalised communities and groups get access to the airwaves and are given a voice. Furthermore, if a purely

statistical logic is followed, it makes a lot of sense to focus on the communities most affected by the disease.

Why then do I feel the need to highlight this as a separate issue? Though only two of the programmes make explicit claims towards dealing with issues of race and class (Soul City/Soul Buddyz and Isidingo), it is clear from my observations that both issues are important subtexts to understanding of the programmes. Whether intentionally or not, the kind of behaviour these interventions seek to address is that which is allegedly found predominantly in resource poor settings- adding classist (and inevitably also a racial) agenda to the interventions. I have written (Milton, 2004, 2006) and spoken (Annual Cultural Studies Conference, 2003) before about the racialised portrayal of HIV/AIDS in South African and international news reports about the disease. In both the article and the presentation, I have noted that when I complain to people about the racialised portrayal of HIV/AIDS in the news media covering Africa, the most common response is, well, HIV/AIDS is the highest amongst the black population – what is your problem? Certainly it is true that seropositivity is the highest in the black community. The problem however is that portraying the disease as exclusively black obscures the fact that HIV/AIDS also affect people from other communities (i.e. white, coloured and Indian communities) in South Africa. A 2002 study conducted by the Human Science Research Council in South Africa for example points out that seropositivity for whites in South Africa is six times the number for Europe and the United States, while both regions have much larger white populations (Shishana & Simbayi, 2002).

When the SABCinterventions therefore conform to the majority portrayal of HIV/AIDS as "black", one could argue that a double function is served: first, HIV/AIDS is framed as a 'black' disease. Hawk (1992) discusses the ideological positioning of hierarchies being invoked by such portrayals – an uncivilised "they" who cannot even take care of themselves, the 'that's just the way they are' factor. Secondly, such portrayals, as have been argued by Parameswaran (1996) & Hawk (1992) serve to subject those portrayed to an inferior positioning, by normalizing the culture and rituals of the creators (and those like them) as both "normal" and "better". Taylor (1992) argues in this regard that our identity is partly shaped by recognition or its absence, often by misrecognition of others. Therefore, it is argued, a person or a group of people can suffer real damage, real distortion, if the people or society around them mirror a confining or contemptible picture of

themselves.

*Nonrecognition or misrecognition*
can inflict harm; it can be a form of oppression, imprisoning someone in a false, distorted and reduced mode of being. In the fight against HIV/AIDS as portrayed by the SABC's edutainment programmes, widely circulated images tended more towards misrecognition in that they reinforce hierarchies and mirror back to black South Africans a distorted and in some instances contemptible picture of themselves. Whether intentionally or not, processes of othering serve to feed sensationalism and tend to obscure critical issues that need to be highlighted. I have mentioned earlier that the problem with these portrayals is that they obscure the fact that AIDS affects South Africans regardless of their racial (or class) affiliations. At the same time these portrayals also serve to pit black against white. By framing the disease as black and resultant of 'the nature of the black' the media not only serve to homogenise the group into oneness it also perpetuates a universal discourse in which the black African is seen as 'deviant and so different' that any chance to redeem 'them' is doomed to failure. Black students pointed out that it is erroneous to assume that SABC1 caters for "black" South Africans (personal communication), since those black South Africans who speak minority languages and who are from rural areas are often also excluded from the channels' scheduling. These black South Africans have to read the subtitles with the rest of us non-Nguni language speakers and that the so-called "reality" that the channel so proudly proclaim to portray is one that they are not familiar with.

*Conclusion*

*Why do all the black people mostly have to have AIDS? They always show black people with AIDS, they never show the white people, they [television] always show the black people* (9-year-old coloured male).

*I don't think AIDS is such a reality in our communities as it is in black communities.There is less risk in white encounters than there would be in black [encounters]* (22-year-old white female).

The quotes cited here are taken from interviews I conducted in 2004 with television viewers about the South African Broadcasting Corporation's HIV/AIDS intervention programmes. The sentiments expressed in these quotes were echoed

at the 2004 Entertainment-Education conference held in Cape Town, South Africa, where more than one black participant got up and asked the same question: why are all the HIV/AIDS characters (we see in our media) black and why are most of the people developing the programmes/managing the Centres where the programmes are developed, white?

These quotes and questions have several characteristics that are pertinent to this study. They illustrate that HIV/AIDS exist also through the practices that conceptualise it, represent it and respond to it. They suggest that stories told by the media can be particularly powerful as tools of identification. In addition, they point to the difficulties faced in representing HIV/AIDS in complex, heterogoneous communities via mediums that, by design, have to segment their audiences. The multi-ethnic, multi-racial, post-apartheid character of today's South Africa complicates the notion of a public sphere. The strict racial categories enforced by the policy of apartheid assured not only separate living conditions for the four major racial groups (black, white, Indian and coloured), but also the development of very distinct worldviews. In fact, as I pointed out earlier, even the country's national media developed along divisive racial lines and this tendency is visible in the public service broadcaster of today. This is important, because it has implications for how specific programmes should target an audience, who the programmes should target and for how such targeting might be interpreted. It also has implications for who will be allowed to facilitate programmes in particular communities and parts of the country.

Because of the way the SABC's segmentation policies position the audience, and within South Africa's fragmented society, edutainment programmes commissioned by the SABC have created the perception that they are only meant for certain communities. This might create the perception that development problems do not concern everyone and actually are the fault of certain communities. Not only could this result in stigmatisation and discrimination against members of these communities, it can also weaken the impact of messages on those who neither see themselves as part of the problem nor as part of the solution.

How then can an SABC-advocacy strategy eradicate the hierarchy of blame, and give a voice to the marginalised without alienating viewers? It seems that the key would be for the SABC to embrace its own policy of "unity in diversity". The broadcaster must be more pro-active where its HIV/AIDS programmes are

concerned. It has to push the boundaries of representation until South Africans from all races, classes and groups can have a voice in the HIV/AIDS-battle – and it must do so without desensitizing viewers. In fact, it must entice viewers to debate HIV/AIDS in terms of its socio-political implications. In this respect, Bardhan's (2002) argument that the HIV/AIDS pandemic is a phenomenon that is as socially, symbolically and communicatively constructed, as it is a biomedical "reality" is especially apropos. Bardhan (2002) posits that the meanings attributed to HIV/AIDS are culturally diverse and emanate from the lived as well as mediated experiences of those directly and indirectly involved in its discursive and retroviral folds (my emphasis). It is however the views, values and perspectives that are privileged and endorsed at larger societal levels that rhetorically and politically shape the future courses of action, policy and signification.

Through the holistic approach that the broadcaster adopted with relative success (for some communities at least), viewers will be encouraged to debate other issues of importance regarding the disease, particularly as it relates to broadcasting responsibility. The public media is an integral thread of the democratic fabric of society and as such, should be the subject of much critical reflection.

*References*
Bardhan, N.R. (2002). Accounts from the field: A public relations perspective on global AIDS/HIV. *Journal of Health Communication*, 7, 221-244.
Bouman, M. (1998). *The turtle and the peacock. The entertainment-education strategy on television.* Netherlands: Thesis Wageningen Agricultural University.
Bouman, M. (2004). Health on screen: The portrayal of sex and relationships in soap and drama series. *Paper presented at the Fourth International Entertainment-Education Conference*, South Africa, Cape Town, September.
Brown, W.J. (1992). Sociocultural influences of prodevelopment television soap operas in the Third World. Journal of Popular Film & Television, 19(4), 157-164.

Davidson, R. (2004). Reconciling framing and ideological analysis: An exploratory study of business news, *Paper presented at the annual meeting of the International Communication Association*, New Orleans, May 2004.

Duncan, J. (2000). *Broadcasting and the national question. South African broadcast in an age of neo-liberalism*. Braamfontein: Freedom of Expression Institute.

Fair, J.E. (1996). The body politic, the bodies of women, and the politics of famine in U.S. television coverage of famine in the Horn of Africa. Journalism and Mass Media *Communication Monographs*, 158(August), 1-45.

FXI. (2004). Oral submission to the Independent Communications Authority of South Africa (Icasa), on the South African Broadcasting Corporation's (SABC) section 22 licence amendment application. Freedom of Expression Institute (FXI), 22 September 2004. Retrieved 5 May, 2005 from http://www.fxi.org.za/allframes.htm.

Hall, S. (2001). Cultural studies and its theoretical legacies. In: During, S. (ed.). The Cultural Studies Reader. (pp. 97-118) London: Routledge.

Hawk, G.H. (1992). Africa's media image. New York: Praeger.

Jacobs, S. (2004). Mapping the public sphere after 1994: The media set-up. Retrieved 1 August, 2005 from www.newschool.edu/tcds/Sean20Jacobs.pdf.

Kincaid, D.L. (2002). Drama, emotion, and cultural convergence. *Communication Theory* 12(2), 136-152.

Livingstone, S. & Lunt, P. (1994). Talk on television: Audience participation and public debate. London: Routledge.

Milton, V.C. (2004). Time's picturing of HIV/AIDS: International perceptions of disease in Africa. *Tydskrif vir Letterkunde*, 41(2), pp.99-112.

Milton, V.C. (2006). *Combating HIV/AIDS on the SABC: Public service broadcasting, rainbowism and media advocacy*. Ann Arbor, Mich.: UMI Dissertation Services.

Morris, N. (2003). A comparative analysis of the diffusion and participatory models in development communication. *Communication Theory*, 13 (2), 225-248.

Nariman, H.N. (1993). *Soap operas for social change: Towards a methodology for entertainment-education television.* Westport: Praeger/Greenwood.

Nixon, R. (1994). *Homelands, Harlem and Hollywood: South African culture and the world beyond*. New York: Routledge.

Orgeret, K.S. (2004). Unifying and dividing processes in national media: The Janus face of South Africa. *Critical Arts: a Journal of South-North Cultural and Media Studies: Transformation of the SA Media*, 18(1): 147-162.

Parameswaran, R. (1996). Coverage of "Bride Burning" in the Dallas Observer: A cultural analysis of the Other. *Frontiers Editorial Collective, 1*6 (2/3), 69-100.

Raboy, M. (1996). Public Service Broadcasting in the context of globalization. In: Raboy, M. (ed.). 1996. Public service broadcasting for the 21st century, *Academia research monograph* 17 (pp. 1-19). Luton, UK: University of Luton Press SAARF. (2004). South African Advertising Research Foundation. Children's most popular TV programmes. Retrieved December 17, 2004 from http://www.saarf.co.za/

Singhal, A. & Rogers, E.M. (1999/2000). *Entertainment-Education. A communication strategy for social change.* London: Erlbaum.

Shisana, O. & Simbayi, L. (2002). *Nelson Mandela/HSRC study of HIV/AIDS: South African National HIV prevalence, behavioural risks and mass media household survey.* Cape Town: Human Sciences Research Council.

Slater, M.D. (2000). Integrating application of media effects, persuasion, and behavior change theories to communication campaigns: A stages-of-change framework. *Health Communication*, 11(4), 335-354.

Slater, M.D. & Router, D. (2002). Entertainment-Education and Elaboration Likelihood: Understanding the processing of narrative persuasion. *Communication Theory*, 12(2), 173-191.

Smith, R. (2001) *Yizo yizo: This is it? Representations and receptions of violence and gender Relations*, Unpublished MA-thesis, University of Natal, Durban.

Steenveld, L. & Strelitz, L. (1994). 1922 and South African Television. *Screen* 35 (Spring), 36-50.

Stokes, J. (2003). *How to do media and cultural studies*. London: Sage.

Taylor, C. (1992). *Multiculturalism and the politics of recognition.* USA: Princeton University Press.

Tleane, C. and Duncan, J. (2003). *Public broadcasting in the era of cost recovery: A critique of the South African Broadcasting Corporation's crisis of accountability.* Johannesburg: FXI.

Theunissen, M.(ed.). 1996. *The voice, the vision. A 60 year history of the SABC and the path to the future.* Johannesburg: Advent Graphics.

Tomaselli K., & Shepperson, A. (1996). Working document for task team for media, Department of Health. Unpublished manuscript, Durban: University of Natal.

Vaughan, P.W., & Rogers, E.M. (2000). A staged model of Communication Effects: Evidence from an Entertainment-Education Radio Soap Opera in Tanzania. *Journal of Health Communication* 5, 203-227.

Zegye, A., & Harris, R.L. (eds). (2003). *Media, identity and the public sphere in*

*post-apartheid South Africa*. Leiden: Brill.