

COMMUNICATING FOR ACTION

A contextual evaluation of
youth responses to HIV/AIDS



Sentinel Site Monitoring
and Evaluation Project
Stage One Report



BEYOND AWARENESS CAMPAIGN
HIV/AIDS AND STD DIRECTORATE
DEPARTMENT OF HEALTH



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**SENTINEL SITE MONITORING
AND EVALUATION PROJECT**
Stage One Report

COMMISSIONED BY
Beyond Awareness Campaign
HIV/AIDS and STD Directorate
Department of Health

FEBRUARY 2000

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*A project conducted through
'The national evaluation network'*

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Warren Parker and Professor Lynn Dalrymple
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Kevin Kelly
February 2000

EXECUTIVE SUMMARY

This research project was conducted by Dr Kevin Kelly, a social psychologist based at Rhodes University in Grahamstown. Sentinel site data gathering was conducted by locally based, qualified site facilitators. Research design was developed in collaboration with Warren Parker and Professor Lynn Dalrymple of the Beyond Awareness Campaign, HIV/AIDS and STD Directorate of the national Department of Health.

In conceptualising this research two important aspects were considered.

Firstly, there is a considerable lack of behavioural research in South Africa. Furthermore, few studies have been conceptualised to give insight into sexual behaviours and practices of adolescents and young adults as they apply to a range of contexts. Such research is vital to the development of HIV/AIDS communication and other strategies.

Secondly, it is recognised that HIV/AIDS information reaches target audiences through diverse sources and it is more important to understand the impact of this diversity, than it is to attempt to extract the impact of specific campaigns. This research therefore sets out to provide a vital cornerstone to the understanding of adolescents and young adults with regard to behaviours and practices that are relevant to HIV/AIDS strategy development, with an emphasis on HIV/AIDS communication.

This research represents the first stage of a three stage study. This first stage involved primary data collection through a questionnaire and was supplemented with qualitative cross-checking of data and trends. The second stage, set to take place in mid-2000, involves deeper qualitative research and will allow for further analysis of trends emerging in the first stage. A further quantitative study will be conducted within the forthcoming 18-months.

In general the results of this first stage are extremely affirming of activities that have taken place to date. There is strong evidence that a range of key messages have been internalised, and that the sexual behaviour and practices of a large proportion of respondents have been developed in relation to their perceptions of HIV/AIDS. This research also provides vital insights into the direction HIV/AIDS communication and other activities should be taking in future. Readers are urged to review the final section of this report which provides insight into future research directions.

The research was undertaken between June and August 1999 at six sentinel sites in South Africa. The sites range from deep rural to urban and draw on samples of some 100 adolescents and young adults (15-30 years of age) in each site. The sites are:

- Eastern Cape: A cluster of villages in the Amatole Basin, a deep rural area near Alice in the former Ciskei area
- KwaZulu-Natal: A ward in the Macambini area, a rural site just north of the mouth of the Tugela River
- Western Cape: Rocklands suburb in Mitchell's Plain, a low to middle income residential area on the outskirts of Cape Town
- Northern Cape: Galashewe, an urban township of Kimberley
- Northern Province: A tertiary institution
- Gauteng: A mixed race upper-income high school in Johannesburg

The research focuses on contextual factors influencing youth responses to HIV/AIDS within specific sites. In this report province names are used as descriptors for each site. It must be noted, however, that the differences between sites are not specific to the provinces where they are

located. Rather, these differences relate to the specific socio-economic conditions and cultural contexts at each site.

Youth responses with respect to both HIV prevention practices and 'care' are reviewed. The latter refers to attitudes towards people living with HIV/AIDS and social network mobilisation and advocacy around HIV/AIDS issues.

The data reported on in this report was drawn from a comprehensive questionnaire administered to a total of 618 respondents administered across six sentinel sites. Focus groups were also run with groups of 8-10 youth in each site and contextual information gathered through interviews with health workers and other relevant people in those communities.

This study will be followed by a qualitative study in early 2000 to explore in greater detail, themes that have emerged as requiring fuller investigation.

Summary of key findings

Readers are strongly encouraged to scan the contents page of this report and to look more closely at some of the detailed findings of the study in specific areas.

There are strong indications that the youth in this study have good access to accurate HIV/AIDS information and that they are regularly being exposed to HIV/AIDS media from a range of different sources. There has been relatively little input at the school level.

The findings of this study run contrary to the findings of much previous South African research which suggests that there has been a negligible positive response on the part of youth to the HIV/AIDS epidemic. The present study shows a generally high perception of vulnerability to HIV infection (personalising of perception of risk), although with varying levels of preventive response to such awareness. In sites where such perception has not translated into pervasive preventive behaviour there are higher levels of 'worry' about HIV infection and more active attempts to dispel the perception of risk, for example, through cultivation of attitudes of bravado or indifference. This is especially evident in the two rural areas in this study.

In sites with high levels of media penetration and where there is evidence of community mobilisation around HIV/AIDS, youth show strong signs of responding actively and appropriately to reduce HIV infection risk. There are signs that in high response sites there are developing cultures of risk prevention which are self-perpetuating, such as the taken for granted use of condoms amongst non-cohabiting sexually active youth.

Significantly the sites with highest penetration of media show that the further information that they require is perceived as being available within their social network rather than through experts. This is an indication that these communities feel empowered in the sense of having the knowledge available to deal with HIV/AIDS. Poor rural communities show lowest media penetration and are lower on most prevention indices.

There is evidence of inconsistency in risk prevention practices and there appears to be a greater need to emphasise maintenance of risk prevention practices, rather than simply encouraging their adoption.

Data on when and how sexual experience begins, and understanding of patterns of age differentials in sexual relations have led to some disturbing conclusions. There is a strong need for policy makers and campaign designers to look carefully at the changing trends in adolescent sexuality. This research has shown that the past fifteen years have seen a marked decline in the age of first having sexual intercourse. Further research needs to be conducted into the reasons behind the lowering of the age of first intercourse.

The large age differentials between sex partners in the first sexual intercourse experience and also in subsequent sexual relationships is another disturbing finding of this research. The tendency to have a much older first sex partner is particularly strong amongst females and suggests that much early sexual experience is conducted in contexts where there are such marked power and maturity differentials that manipulation must be considered an important determinant of early sexual experience. This data needs to be taken into account in planning HIV risk reduction programmes and it needs to be carefully looked at by policy makers currently developing legislation on childhood and adolescent sex practices.

Condoms are widely available although there are still some constraints attached to acquisition and use. Confidentiality in acquisition appears to increase chance of acquisition, as does the advertising of condom distribution points, and placing of such points in easily accessible places. These conditions are not met in all sites and it appears that condom distribution systems need to be more strategically thought about.

There is a higher level of condom usage in the last sexual encounter than has been previously reported, suggesting that the message about condom use has been reasonably effective. There is, however, a cohort of those who sometimes use condoms and who plan to use condoms, who have accepted the idea of using condoms, but who are for various reasons explored in the study, not regular users. Social marketing of condoms should aim at establishing patterns of more consistent condom use and maintenance of condom use as a social norm amongst non-cohabiting, sexually active youth.

By contrast the other risk prevention options have been underplayed by the media including: sticking to one partner; abstinence (both for those already sexually active and those not yet active); and delay of onset of sexual experience. Of these 'sticking to one partner' is the most socially supported option. Discontinuation of sexual activity after already having become sexually active is the option which appears to have been least strongly supported by the media and HIV/AIDS campaigners. There is evidence that reversal from being sexually active to sexually inactive is an attractive option to some, especially for the surprisingly high proportion of youth, especially women, who are ambivalent about sexual relationships.

There are high reported rates of having more than one concurrent sexual partner in some areas and this is a problem requiring more attention by campaign planners. The study shows that it is one of the areas in which youth are able to curb risk more easily, without having to become sexually abstinent. The infection risks associated with rapid serial monogamy poses a different challenge to campaign planners, than does the problem of multiple concurrent partners, and is possibly not as easy to address.

Most respondents profess to have positive attitudes towards people living with HIV/AIDS, but there are also signs of negative and intolerant attitudes, particularly in the two rural sites.

There are high levels of social advocacy and mobilisation in certain areas and there is extensive communication between peers in many areas. However, the patterns of communication, advocacy and mobilisation around HIV/AIDS differ strongly between sites and are poorly developed in rural sites. It has been suggested that the context of change be conceived of at a community level and it has been shown that targeting individuals for change is subject to a ceiling effect, which is one of the reasons for the much mentioned difference between knowledge/understanding and practice.

There is a high level of willingness to become involved in HIV/AIDS community oriented work, but there is a paucity of opportunities for this or youth do not seem to know of them. There is also very little organisation around HIV/AIDS in the rural sites and promotion of the same would seem to be a priority.

There is a need to conduct ongoing monitoring in sentinel sites to develop an understanding of the development of trends over time. The findings of this study provide a baseline against which comparisons can be made across sites and it is important to conduct longitudinal studies to know what trends are developing in response to HIV/AIDS. In fact, it might safely be said that the greatest value of the present study will only emerge when such comparative study across time is conducted. Baseline data such as has been collected in this study might be expected to change with the success of HIV/AIDS intervention programmes, and can be used as a standard of comparison to measure whether or not progress is being made.

There is a great deal in the data that requires more in-depth exploration of the context and meaning of youth sexuality, and into specific problem areas identified in this study. Patterns of behaviour are outcomes of complex interactions between a large range of factors and more research needs to go into deciding what factors are most important and should be monitored.

Work needs to be put into the development of indicators of youth responses to HIV/AIDS and the range of indicators explored in this study could be reduced to a list of 20 to 30 key behavioural indicators which might then be used in a standardised way for purposes of comparative and longitudinal research. Suggestions have been made in the report about useful indicators. This is essential for an integrated national HIV/AIDS behavioural research programme. It has been suggested that this would assist us in better understanding and interpreting existing data sets, such as antenatal clinic HIV prevalence data. Behavioural surveillance amongst the sampled antenatal population would, together with comparative data for other sectors of the population, be of value in developing more accurate extrapolations of the antenatal data to the population as a whole.

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A contextual evaluation of youth responses to HIV/AIDS

**SENTINEL SITE MONITORING
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Summary of findings

COMMISSIONED BY

Beyond Awareness Campaign
HIV/AIDS and STD Directorate
Department of Health

MARCH 2000

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Kevin Kelly
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INTRODUCTION

In conceptualising this research two important aspects were considered:

Firstly, there is a considerable lack of HIV/AIDS behavioural research in South Africa. Few studies have been conceptualised to give insight into sexual behaviours and practices of adolescents and young adults as they apply to a range of contexts. Such research is vital to the development of HIV/AIDS communication and other strategies.

Secondly, it is recognised that HIV/AIDS information reaches target audiences through diverse sources and it is more important to understand impacts within the context of this diversity, than it is to attempt to extract the impact of specific campaigns. This research therefore sets out to provide a vital cornerstone to the understanding of adolescents and young adults with regard to behaviours and practices that are relevant to communication strategy development.

This research represents the first stage of a three stage study. This first stage involved primary data collection through a questionnaire and was supplemented with qualitative cross-checking of data and trends. The second stage involves deeper qualitative research and will allow for further analysis of trends emerging in the first stage.

In general the results of this first stage are extremely affirming of activities that have taken place to date. There is strong evidence that a range of key messages have been internalised, and that contrary to much public and professional opinion, youth response to HIV/AIDS is significant and gives cause for optimism. This research describes youth response in a number of key areas across six diverse sites, showing that responses vary greatly between sites. Understanding of differences between sites provides insight into future directions for HIV/AIDS communication and other activities promotive of an appropriate response to the AIDS crisis.

The present report is a summary of a more comprehensive report which is available from mediaids@icon.co.za. It should be noted that the second stage of this research project, which involves in-depth qualitative research of trends described in the first stage, is intended to interpret and explain the reasons behind some of the findings which are outlined descriptively and quantitatively in the present report.

Sentinel Sites

The research was undertaken between June and August 1999 at six sentinel sites in South Africa. The sites range from deep rural to urban locations and draw on samples of some 100 adolescents and young adults, 15-30 years of age, in each site. The sites are:

- Eastern Cape: A cluster of villages in the Amatole Basin, a deep rural area near Alice;
- KwaZulu-Natal: A ward in the Macambini area, a rural site just north of the mouth of the Tugela River;
- Western Cape: Rocklands suburb in Mitchell's Plain, a low to middle income residential area on the outskirts of Cape Town;

- Northern Cape: Galashewe, an urban township in Kimberley;
- Northern Province: A tertiary institution;
- Gauteng: A mixed race upper-income high school in Johannesburg.

The research focuses on contextual factors influencing youth responses to HIV/AIDS within specific sites. In this report province names are used as descriptors for each site. It must be noted, however, that the differences between sites are not specific to the provinces where they are located. Rather, these differences relate to the specific socio-economic conditions and cultural contexts at each site.

Key findings

- There are strong indications that the youth in this study have good access to accurate HIV/AIDS information and that they are regularly being exposed to HIV/AIDS media from a range of different sources. There has however been relatively little input at the school level.
- The findings of this study run contrary to the findings of much previous South African research which suggests that there has been a negligible positive response on the part of youth to the HIV/AIDS epidemic. The present study shows a generally high perception of vulnerability to HIV infection (personalising of perception of risk), although with varying levels of preventive response to such awareness. In sites where such perception has not translated into pervasive preventive behaviour there are higher levels of 'worry' about HIV infection and more active attempts to dispel the perception of risk, for example, through cultivation of attitudes of bravado or indifference. This is especially evident in the two rural areas in this study.
- In sites with high levels of media penetration and where there is evidence of community mobilisation around HIV/AIDS, youth show strong particularly strong signs of responding actively and appropriately to reduce HIV infection risk. There are signs in high response sites of development of cultures of risk prevention which are self-perpetuating, such as the taken for granted use of condoms amongst non-cohabiting sexually active youth.
- Significantly the sites with highest penetration of media show that the further information that youth require is to a large extent perceived as being available within their social networks. This is an indication that youth in these communities feel empowered in the sense of having the knowledge available to deal with HIV/AIDS. Poor and rural communities show lowest media penetration, the highest need for information and dependence on experts for this, and are lower on most prevention indices.
- Data on when and how sexual experience begins, and understanding of patterns of age differentials in sexual relations are disturbing. Although the average age of first intercourse for males across all sites is 15.7 years and for females 17 years, 42% of the 71% of respondents who have had sex before had their first sexual experience before 15 years old. There are particularly high levels of early adolescent sex in rural areas, notably the Eastern Cape site. This research has shown that the past fifteen years have seen a marked decline in the age of first having sexual intercourse. Further research needs to be conducted into the reasons behind this phenomenon.

- ❑ The large age differentials between sex partners in the first sexual intercourse experience and also in subsequent sexual relationships is another disturbing finding of this research. The tendency to have a much older first sex partner is particularly strong amongst females. Twenty three percent of females had their first sexual experience with someone five or more years older than themselves. The data suggests that much early sexual experience is conducted in contexts where there are such marked power and maturity differentials that manipulation must be considered an important determinant of early sexual experience. This data needs to be taken into account in planning HIV risk reduction programmes and it needs to be carefully looked at by policy makers currently developing legislation on childhood and adolescent sex practices.
- ❑ Condoms are widely available although there are still some constraints attached to acquisition and use. Eighty four percent of respondents report that condoms are 'easy to get hold of'. Confidentiality in acquisition appears to increase chance of acquisition and use, as does the advertising of condom distribution points, and placing of such points in easily accessible places. These conditions are not met in all sites and it appears that condom distribution systems need to be developed more strategically.
- ❑ There is a higher level of condom usage in the last sexual encounter than has been previously reported, suggesting that the message about condom use has had a significant effect. The average 'ever used a condom' indicator across all six sites is 70% (range 40% - 86%) of the 71% of respondents who have had sex before. The average reported condom use in last sexual intercourse across all sites is 52% (range 22% - 79%). Note that this latter indicator applies only to youth who have had sex before and who are not cohabiting with partners.
- ❑ Notwithstanding the fact that there is a higher than expected rate of condom usage in most sites there is a cohort of those who sometimes use condoms and who plan to use condoms, who have accepted the idea of using condoms but who are not regular users. This suggests that promotion of condoms should aim at establishing patterns of more consistent condom use and maintenance of condom use as a social norm amongst non-cohabiting, sexually active youth.
- ❑ By contrast the other risk prevention options have been underplayed by the media including: being faithful to one partner; abstinence (both for those already sexually active and those not yet active); and delay of onset of sexual experience. Of these 'being faithful to one partner' is the most socially supported option in the sense of youth suggesting that it would be relatively easy to achieve. However, the indicator in this area suggests very high reported rates of having more than one concurrent sexual partner in some sites. There is an average of 30% (male - 42%; female - 18%; inter-site range 19% to 55%) having more than one concurrent partner, amongst those who have had sex in the past six months.
- ❑ Discontinuation of sexual activity after already having become sexually active is the option which appears to have been least strongly supported by the media and HIV/AIDS campaigns. But there is qualitative evidence to suggest that reversal from being sexually active to sexually inactive is an attractive option to some, especially for the surprisingly high proportion of youth, especially women, who are ambivalent about sexual relationships.

- ❑ Most respondents profess to have positive attitudes towards people living with HIV/AIDS, but there are also signs of negative and intolerant attitudes, particularly in the two rural sites.
- ❑ There are high levels of social advocacy and mobilisation in certain areas and there is extensive communication between peers and partners in most sites. Sixty percent of those who have had a boyfriend/girlfriend have discussed the risk of AIDS with the partner. However, the patterns of communication, advocacy and mobilisation around HIV/AIDS differ strongly between sites and are poorly developed in rural sites.
- ❑ There is a high level of willingness to become involved in HIV/AIDS community oriented work, but there is a lack of opportunities for this. There is also very little organisation around HIV/AIDS in the rural sites.
- ❑ There is need to conduct ongoing monitoring in sentinel sites to develop an understanding of the development of trends over time. The findings of this study provide a baseline against which comparisons can be made across sites and it is important to conduct longitudinal studies to know what trends are developing in response to HIV/AIDS. Work needs to be put into the development of indicators of youth response to HIV/AIDS and the range of indicators explored in this study could be reduced to a list of 20-30 key behavioural indicators which might then be used in a standardised way for purposes of comparative and longitudinal research. Suggestions have been made in the main report about useful indicators. This is essential for an integrated national HIV/AIDS behavioural research programme.

Implications for intervention

The following are some of the more general implications of this research for campaign design and intervention.

- ❑ The success of basic education and the evidence which this research has produced of positive youth response to AIDS, gives reason for optimism. There are promising signs of intention to change, actual change and advocacy for change in both prevention and care areas. This suggests the need to emphasise consolidation of changes, and to support, reinforce and develop the impetus towards change, which is already well underway.
- ❑ It must be recognised that youth have considerable knowledge about HIV/AIDS and over-emphasis on information they already have access to is at best not likely to lead to further progress, and at worst, it is speculated, to lead to dulling of interest in HIV/AIDS issues. To the extent that further information about HIV infection is needed, it needs to be directed by an understanding of what people already do or don't know, as there is already saturation of particular kinds of information; for example, knowledge that HIV is sexually transmitted. This research has pointed to questions which youth are uncertain about, and information campaigns should give priority to such questions. It should also be said, however, that information dissemination should not be seen as a priority at this stage. Indications are that it is not information that is lacking so much as: support for maintenance of adopted behaviours; promotion of more widespread adoption of positive responses including the range of responses beyond condom use; and a greater presence of local HIV/AIDS initiatives to support youth perceptions of the need to respond, especially in rural areas where AIDS issues are not perceived as a priority at this stage.

- ❑ There is need for improved condom distribution systems in terms of location of condom distribution points, advertising of the same, and confidential access to condoms.
- ❑ The promotion of condoms shows definite signs of having been at least partially successful, although there are indications in some sites of resistance to condom use, and of irregular condom use. Intervention would appear to need to be focussed on improving condom distribution systems and promoting not necessarily the initiating but rather the maintenance of condom using behaviour.
- ❑ By contrast to condom promotion other risk prevention options have been underplayed in HIV/AIDS communications including: limiting the number of partners; abstinence (both for those already sexually active and those not yet active); and delay of onset of sexual experience. Qualitative data in this study suggests that of these 'being faithful to one partner' appears to be the practice most likely to be readily adopted, and given the extent of youth having concurrent partners in a few of the sites in this study, this should be regarded as a priority area for intervention. Discontinuation of sexual activity after already having become sexually active is the option that appears to have been least strongly supported by the media and HIV/AIDS campaigners. There is evidence that reversal from being sexually active to sexually inactive is an attractive option to some, especially for the surprisingly high proportion of youth that are ambivalent about sexual relationships. There need to be more campaign support for people predisposed to this risk prevention measure.
- ❑ The problem of significant age differences between partners in the first sexual experience is an issue of broad social concern which needs to be closely looked at through further research and appropriate interventions need to be conceived.
- ❑ The decrease in the age at which youth are having intercourse over the past fifteen years is an issue of deep significance, as a social issue, and in terms of the AIDS epidemic. Research needs to be commissioned to examine the factors which lie behind this and to look at what, if anything might be done to counteract the trend.
- ❑ This research has shown that exposure to people living with HIV/AIDS, both in the media and through personal contact, plays a decisive role in sensitising people to HIV/AIDS care issues. Furthermore change at a care level seems to directly impact on prevention behaviours. Projects which make people aware of the plight of children with HIV/AIDS and stories of people with HIV/AIDS appear to have a particularly powerful affect on public perceptions and such programmes require more exposure.
- ❑ Youth in rural and poor communities without access to anything other than *ad hoc*, once off campaigns, lag behind their urban and wealthier counterparts, in almost all indices of prevention and care. It seems that these youth, as evidenced strongly in the sentiments expressed by rural youth in the Eastern Cape site in this study, will only respond when there is a stronger and more consistent local presence of HIV/AIDS related activities. To the extent that these sites reflect a more general trend in rural and deep rural areas, there is reason to develop strategies for reaching rural areas, and for shifting the apportionment of resources towards addressing this need.
- ❑ The kind of input that youth now need must be more focussed and designed with the specific goal of maintaining rather than capturing

their interest. In all sites in this study there was interest in the HIV/AIDS problem and its implications – but there was great variance in the way in which this interest manifests in relation to action in both prevention and care domains. To develop well honed programmes of action, a satisfactory system of easy to use indicators needs to be developed which can readily be deployed in planning and evaluation. This would need to include not only indicators of behavioural change, but also indicators which assess dimensions of development processes towards change. This encompasses indicators relating to the capacities of the health services to provide appropriate services and indicators relating to the development of communities in all areas which directly and indirectly impact on community responses to HIV/AIDS. It is one of the goals of the broader study, including the qualitative study, to define such meaningful indicators.

CONCEPTUAL FRAMEWORK

Over the past decade there has been little systematic behavioural research related to HIV/AIDS in South Africa, particularly at the broader national level. The consequence of this lack of data has often been to rely overly on the annual ante-natal data as an assumed indicator of national and provincial behavioural trends. Indeed, it has been common for lay persons and researchers alike to conclude that the ante-natal data show that HIV preventive behaviours are not occurring. It must be stressed however, that whilst the ante-natal prevalence data (which is based on analysis of blood drawn from female ante-natal public sector clinic attendees) provides a sound indication of HIV prevalence, this data is limited in its scope and should not be used to draw conclusions about HIV preventive behaviour.

Behavioural surveillance research also needs to be cautiously approached. The concept of 'behaviour change' is often thought of as the primary focus of HIV prevention work and there are reasons for us to think critically about this. In particular there must be caution about the assumption that individuals are largely empowered, both contextually and ideationally, to make proactive choices about their sexual practices. There is much research that demonstrates that socio-economic and cultural factors considerably influence risk of HIV infection, and, in the case of resource poor environments, can dramatically limit personal empowerment and the ability to make safer sexual choices. These factors include poverty, limited access to health and social services, labour migration, urbanisation, unemployment, poor education, inferior social position of women, diversities in language and culture, and crime, amongst others.

There are many instances where choices around sexual practice are undermined by the socio-economic and cultural conditions that frame them. For example, an under-resourced criminal justice system, amongst other factors, has contributed to escalating incidence of rape in South Africa and this impacts on the incidence of HIV infection. Similarly, within prisons, rape is a primary risk factor for HIV infection. Clearly, individuals cannot make proactive sexual choices about rape.

Furthermore, there are instances where individuals are disempowered around sexual choices – for example, the exchange of sex for economic or other benefits. In other instances, individuals may adopt safer sexual strategies – for example remaining faithful to their sexual partner – but still face HIV infection because their partners are unfaithful. Separation from families and partners through the economic imperatives of labour migrancy, or work circumstances such as long-distance trucking, offer further examples of the influence of socio-economic conditions on HIV infection.

It is also important to understand the direct relationship between promotion of HIV preventive behaviours and the availability of services and resources on the ground. For example, condom use can be shown to escalate in environments where condoms are readily and consistently accessible. Promotion of condoms where they are available irregularly, less accessibly, or even not at all, serves little purpose.

Behaviour change approaches

The applicability of 'behaviour change' approaches to HIV/AIDS was established in the early years of the epidemic when at risk groups were relatively well defined and where risk could be attached to particular sexual relationships and risk behaviours – for example, the epidemic amongst gay men in the United States, or groups such as truckers, sex workers and injecting drug users. In the case of such target groups the main patterns of transmission were fairly easy to determine and success depended on the adoption of particular behaviours. The measurement of such success could be effected through using indicators of specific behavioural change.

However, advanced epidemics are different in a number of respects, and desirable outcomes and the processes leading to the same, do not simply require change of behaviour, for some of the following reasons:

- ❑ Target audiences are larger and more diverse. Those who are at risk and especially the relationships and behaviours through which the virus might be transmitted can no longer be readily isolated or targeted.
- ❑ The concept of 'change' is not always appropriate in such contexts. Not all youth need to change their behaviours, and certainly not all are exposed to the same degrees of risk. There are some who are not yet sexually active, some who have decided to abstain from sex, some who use condoms consistently, and some who are in mutually faithful relationships. However, although they do not need to change their behaviours, their practices nonetheless need to be understood, supported and endorsed. Thus, intervention for these individuals needs to be about maintaining and endorsing their practices rather than changing their behaviour.
- ❑ It is vital to develop strategic approaches to prevention that recognise the broader context of health behaviours. It has been argued above that much HIV risk behaviour depends upon contextual factors which are often not within the power of the individual to change. In such contexts development and empowerment models of change may be more appropriate than models based on individual thought processes. To the extent that this is the case, the kinds of indicators of interest would centre on social development processes focusing on less direct, but strategically important goals – for example, promotion of youth cultural and sporting activities.
- ❑ It is worth extending thinking about HIV prevention beyond the realm of sexual practice. For example, regularly wearing a red ribbon, may considerably influence other aspects of an individual's response to HIV/AIDS, but it does not involve 'change' of behaviour so much as the creation of new practices. Similarly promotion of male participation in community AIDS initiatives may lead to a greater involvement of men in sexual health promotion, and ultimately to the reduction of risk. Behaviour change models which try to persuade people to use condoms or not to discriminate against people with HIV/AIDS may fail to address the need to create 'contexts' of change, and communities of practice which are conducive to the desired behavioural outcomes.
- ❑ Finally, given that individual behaviours always depend upon practical and material conditions, behaviour change models need to be supported and sustained by changes at a structural level where such conditions are determined. For example, amongst a target population of irregular condom users the problem may lie not in the minds of individuals, so much as in the lack of availability of condoms, or in the way in which

condoms are dispensed. Change at this level would need to proceed through the channelling of appropriate resources in the health system, and training of condom distributors, which in turn depends upon organisational factors far removed from the minds of the potential condom user. Again, whilst behaviour change models aim to directly achieve desired outcomes, they need at the outset to take into account and to address what may seem to be apparently remote determinants of the desired outcomes.

Care aspects

Increasingly in South Africa HIV/AIDS communications campaigns are focusing on 'care' as well as 'risk reduction' as areas of intervention. This reflects the development of the HIV/AIDS epidemic to the point that a considerable proportion of the population is directly affected by HIV/AIDS.

Risk reduction practices refer to practices which directly or indirectly reduce the risk of HIV infection. 'Care' practices refer to the relationship of individuals and society to those directly affected by HIV/AIDS. Care involves direct health care (e.g. counselling, treatment, care of the ill) as well as creation of a climate for psycho-social well-being – for example, through minimising discrimination and stigmatisation. Care also includes social mobilisation and advocacy around human rights and support for those who are infected or directly affected by HIV/AIDS.

Social impact research and evaluation of health communication campaigns needs to consider both HIV preventive practices and issues related to care and support, but also needs to provide insight into the relationship between these two aspects.

The need for strategy-oriented research

There are a wide range of models for understanding how behaviour change takes place and these have been reviewed in Piotrow et al (1997) and UNAIDS (1999b) amongst others.

These models include: focus on individuals (for example, the health belief model; learning theory; the theory of reasoned action; stages of change model and risk reduction model); social theories (for example, diffusion of innovations; social influence models; social networks models, and theories of gender and power); structural and environmental models (for example, individual/social empowerment models; socio-economic frameworks); and trans-theoretical models.

Of concern is the fact that there are few HIV/AIDS initiatives and strategies in South Africa that are located within one or more of these theories, and furthermore, that the relevance of these models to a South African context remains untested. An analysis of such models (UNAIDS, 1999) however, does conclude that campaigns which are theory led, in the sense of following strategic approaches, are more likely to be successful. Indeed, campaigns that are strategic and are oriented by a theoretical framework are also far more readily measured in terms of objectives and impact.

While it is easy enough to think about how a particular campaign might be evaluated according to the extent to which it meets its own specific objectives (e.g. increasing knowledge about HIV infection) it is often conceptually and practically difficult to determine the outcomes of specific

campaigns. For example, it is necessary to recognise that there are direct and indirect ways in which campaigns might make a difference. In the evaluation literature 'impact' and 'outcome' are distinguished apart with impact referring to the direct and intended consequences of a campaign and 'outcome' to the sum of all consequences, whether specifically set out in the campaign objectives or not.

It is well understood that target audiences receive information about HIV/AIDS from diverse sources, and it is therefore difficult to conclude that impacts and outcomes are specific to individual campaigns, even in situations where baseline data have been gathered. It is also difficult to know the extent to which a campaign may develop the conditions for later change or draw its impacts and outcomes from activities that have preceded it. By developing an understanding of how different elements interact in bringing about changes, we would better positioned to develop models for practice and evaluation.

The need for monitoring and evaluation in sentinel sites

A sentinel site is a clearly defined community that is used for monitoring and evaluation of trends over time. There is a need to establish baseline data for such sites so that comparisons can be made to develop a longitudinal understanding of changes. In addition, if we can understand how, in a designated type of community represented by a sentinel site, indicators relate to and change in relation to each other, we have a useful tool for planning and development.

Sentinel sites are typically selected because they represent a particular type of community or context. This means that extrapolations cannot readily be made to other types of communities. Yet if the demographic and other features of these sites are well described, comparisons with similar sites can be made.

RESEARCH OBJECTIVES

This research was commissioned to address the aforementioned issues in relation to the Beyond Awareness Campaign, but also to understand the HIV/AIDS communication environment as a whole – that is, as a product of various campaigns conducted by a variety of agencies and organisations within and outside of government. It is also important to include informal communications and contextual factors related to HIV/AIDS that occur as a matter of course within the context of the epidemic.

This evaluation places emphasis on where and how youth in each of six carefully selected sites receive information about HIV/AIDS and how the manner, form and content of the communication impacts on them in different ways.

For the purpose of this study 'youth' are defined as people between the ages of 15 and 30.

Specific objectives

The specific objectives of this research are:

- To describe the exposure of youth in each of six selected sentinel sites in South Africa to HIV/AIDS media and to ascertain the levels of penetration of HIV/AIDS intervention campaigns in each of these contexts.
- To assess the HIV/AIDS knowledge, attitudes, beliefs and practices profile of youth in the six sentinel sites with respect to HIV prevention practices and care issues.
- To describe the cumulative effect of the range of HIV/AIDS interventions, both formal and informal, that are present in each context.
- To explore aspects of Beyond Awareness Campaign interventions that are present in each context.
- To monitor changes within each context with respect to HIV prevention practice, and to understand factors which mediate existing HIV prevention and care practices in each context.
- To provide strategic insights to those implementing the Beyond Awareness Campaign, and other national, provincial and local HIV/AIDS communication campaigns. In particular, to identify enabling and reinforcing factors that promise to make the most marked and sustained difference in promoting HIV preventive behaviour and a culture of HIV/AIDS care.
- To identify the key indicators that are useful in discriminating between levels of risk exposure, risk reduction practices and different responses in relation to care.

METHODOLOGY

Qualitative and quantitative methods were used and the study took the form of a multiple case study approach. Analysis and interpretation was developed both within (intra-) and between (inter-) sites.

Sampling and recruitment of respondents for questionnaire study

The use of narrow population parameters significantly reduced the need for a very large sample. Within each site a different probability sampling method was used according to local conditions and the availability of data relating to the target population. The sampling methodology included a mixture of random, systematic and stratified sampling elements. In each site a total of 100 respondents were targeted, except in the high school site where the entire grade 11 and 12 class was used, in which case the number of respondents was 125. Generally there was an equal proportion of male and female respondents. A total of 618 respondents were included in the study.

Focus groups and contextual data

An eight to ten person focus group was selected in each site and the way in which AIDS media had penetrated participants' lives was assessed in the focus groups. Respondents experience was also used to understand the sentinel community in terms of AIDS interventions and AIDS related activities.

Site co-ordinators were supplied with an 'Information gathering protocol' which they were required to use as a guide in gathering relevant information about the sites. This involved interviewing key people within the communities and making observations that would assist in interpretation of the data.

Data processing and analysis

- Quantitative data was entered into a database and analysed statistically. Standard descriptive and inferential statistics were employed to discover the trends within each community with respect to the indicators measured.
- Qualitative data from both questionnaires and focus groups was thematically analysed and used to validate the findings of the quantitative survey.

Sentinel sites

The following descriptions provide some of the main identifying characteristics of each site. Thereafter some demographic and other relevant descriptive features related to each site are described.

- Rural site, Eastern Cape: A cluster of villages in Amatole basin between Alice and Hogsback in former Ciskei area; deep rural site; dirt road

access; no electricity; limited piped water; migrant labour; no permanent health facilities besides a daily clinic staffed by out of town nurses; few youth facilities; a high school and number of primary schools; tribal authority; agricultural area but little development or commercial interests in the area; housing in permanent brick and wattle and daub structures; multi-generational 'households' clustered together in group of a few houses.

- ❑ Rural site, KwaZulu-Natal: A rural ward in Macambini district on Empangeni side of Tugela river; community members mainly employed in factory town 25 km away; strong tribal authority and few youth structures or facilities; electricity; clusters of houses in households situated on small plots on average about 100 m from each other; some small scale forestry and sugar cane; close to highway.
- ❑ Suburb, Western Cape: Rocklands, a community in Mitchell's Plain, outskirts of Cape Town; low- to middle-income area; sampling limited to out of school youth; relatively high exposure to multiple sources of information; small houses close to each other.
- ❑ Urban school, Gauteng: High school representing mainly socio-economically advantaged youth of all races; good access to media; representing youth predominantly from LSM (living standards measure) 7-8 range; live in more affluent suburbs.
- ❑ Township, Northern Cape: Galashewe, a peri-urban township on the outskirts of Kimberley; township youth; houses ranging from shanties, to old government houses, to RDP houses and bonded houses.
- ❑ Tertiary Institution, Northern Province: Students at a large tertiary institution; evaluating communication in relation to more educated youth who have promising future prospects; students mainly from Northern Province; sample of residence students staying away from home.

Demographic and other descriptive features per site

The following data is useful for understanding the above communities in terms of social demography features.

Age and gender

	Average age	Median age	Min-max age	Interquartile	Male %	Female %
Rural site, KZN	19	18	15-30	16-20	46	54
Rural site, EC	20.5	20	15-30	17-24	42	58
Suburb, WC	22	22	16-30	19-25	48	52
Urban school, Gau	17	17	15-19	16-17	50	50
Township, NC	22	22	15-30	18-26	49	51
Tertiary Inst. NP	23	23	17-30	21-25	52	48
ALL	20.4	20	15-30	17-24	48	52

The urban school, Gauteng, respondents are the youngest age group (average 17) and the peri-urban NC, and tertiary institution NP sites are the oldest (average 22 and 23 respectively). Fifty percent of the sample falls between the ages of 17 and 24 (interquartile range) and thus to the extent that general claims are made which pertain to all sites, this is the central age cluster. The median age below and above which 50% of all cases fall is 20. In all sites there is an almost equal male/female split.

Media resources in the home

	Rural site KZN	Rural site EC	Suburb WC	School Gau	Township NC	Tertiary Inst NP	ALL
Television	70	45	97	98	77	89	81
Radio	96	86	96	99	80	94	92
Daily newspaper	41	10	49	79	33	25	42
Sunday newspaper	15	2	34	86	23	42	36
Magazines	49	11	71	90	37	57	54
Telephone in home	28	2	77	92	16	41	45
M-net or Satellite tv	11	4	46	65	10	10	26
Internet	1	2	1	49	0	2	11
Ave. sum of media resources in home (rank)	3.1 (4)	1.6 (6)	4.7 (2)	6.6 (1)	2.8 (5)	3.6 (3)	3.9

As a general trend across all sites there is a much higher level of broadcast media in homes as compared to levels of print media and other media. At least 50% of all households do not have Sunday or daily newspaper access and there is greater access to magazines than newspapers in all sites. The school in Gauteng and suburb in WC are exposed to a much wider range of media than are the other sites as illustrated in the average sum of media resources in the home. The ranking of these sites in terms of exposure to number of media resources in the home corresponds perfectly with the rating of financial status of the household above. This means that the range of types of media exposure in the home relates directly to financial status.

Cohabitation status: Living together with a partner

	Yes	No
Rural site, KZN	24	76
Rural site, EC	8	92
Suburb, WC	17	83
Urban school, Gau	0	100
Township, NC	29	71
Tertiary Inst. NP	9	91

The rural site KZN and township NC are the sites with the highest rates of living with partners, followed by the suburb in WC. It can be seen from the above that most respondents are not living with partners. It is important to note this general trend, because patterns of response to HIV risk prevention are shown in this study to be different for those cohabiting and those not.

FINDINGS

HIV/AIDS INFORMATION EXPOSURE AND ACCESS

1. Media sources of information

Heard or seen information about HIV/AIDS from specific sources in the past month (*% of respondents*)

	Rural site KZN	Rural site EC	Suburb WC	School Gau	Township NC	Tertiary Inst NP	ALL
Television	57	49	94	90	85	90	78
Radio	88	69	82	73	75	89	79
Newspapers	43	26	68	74	49	90	59
Road signs	10	5	10	30	10	19	15
Taxis	18	14	37	29	35	30	27
Magazines	42	20	76	70	51	79	58
Posters	35	16	63	66	26	68	47
Leaflets	21	16	47	47	11	38	31
Photo-comics	18	16	19	16	6	18	16
Painted walls	17	6	30	43	38	23	27
T-shirts/ clothes	49	9	46	48	47	74	46
Talks	33	15	54	61	44	58	45
Meetings	19	6	8	5	30	3	12
Plays	32	15	23	20	27	20	23
Stickers	18	16	43	41	22	0	24
Other	3	11	4	1	6	1	4
Number of sources HIV/AIDS media	5.3	2.8	7.3	7.5	5.6	7.4	3.8

The purpose of this analysis is to provide an indication of the level of exposure to various forms of media. Highlights of the above data are:

- ❑ There are high levels of media exposure to HIV/AIDS with a total of 79% having received information about HIV/AIDS from radio in the past month (June 1999) and 78% from television. This ranges from 49% and 69% in rural Eastern Cape, to 82% and 94% for the high school pupils in Gauteng.
- ❑ In all sites youth are being exposed to a broad range of media types with the average number of sources of HIV/AIDS messages being 6. Three sites (Gauteng, NP, WC) average above 7 sources of media. This suggests a media environment which is highly penetrated by HIV/AIDS content. A notable exception is the rural site in EC which is very much lower than all other sites in terms of all forms of media. Radio and television are the most common sources of information about HIV/AIDS with 79% and 78% of all respondents reporting having received information about HIV/AIDS from these two sources in the past month.
- ❑ Print media (newspapers 59%; magazines, 58%), when looked at across all sites, lag behind broadcast media as sources of HIV/AIDS message exposure. Only in the school and tertiary institution sites do newspapers compete with broadcast media as sources of HIV/AIDS exposure. In the

two rural sites and the NC township, the newspaper exposure lagged behind the broadcast media much more markedly. These three sites also lag in exposure to posters.

2. Community based sources of information

If you had a question or wanted more information about AIDS where would you first try to get information from? You may choose two. (✓ only two). Results reported as percentage of respondents noting the item as one of their two choices.

	Rural site KZN	Rural site EC	Suburb WC	School Gau	Township NC	Tertiary Inst NP	ALL (rank)
Parent	16	15	28	37	21	10	22 (5)
Teacher/lecturer (only for those presently studying)	6 (N=48)	2 (N=59)	0 (N=1)	13 (N=125)	34 (N=32)	1 (N=94)	11 (7)
Health educator	40	38	34	25	28	26	31 (2)
Nurse	42	71	18	3	34	12	28 (4)
Doctor	42	37	46	32	34	31	37 (1)
Community AIDS group	28	26	37	20	39	33	30 (3)
Relative	0	1	1	9	3	30	8 (8)
Friend	12	2	16	39	12	34	20 (6)
Telephone	2	0	3	2	2	1	2 (10)
Priest/ minister	1	0	0	0	0	1	0 (11)
Work	2	4	1	5	0	0	2 (10)
Peer educator	0	0	1	2	0	18	3 (9)

The following features of this table are worth noting:

- ❑ Health sources of information are favoured above other sources, with all three of the health resources falling within the top four resources.
- ❑ Doctors ranked highest overall. However, there is a possibility that there may have been confusion between medical doctors and traditional healers. The latter were not included as a specific category due to an oversight.
- ❑ Community AIDS groups and health educators were ranked second after doctors overall as information resources. The category of 'community AIDS groups' is a relatively vague category and might have been interpreted in a number of different ways, with the emphasis being on 'community' and involvement of members of the community. The high rating of this item shows that the idea of community AIDS groups has penetrated the public domain to a significant extent and that the idea is well received.
- ❑ Parents rated fifth overall as a resource for further 'more information' with 22% of all respondents choosing their parents as one of their top two sources of information. Further analysis shows that the younger respondents (15-22) are significantly more likely (27%) to choose their parents as a source of information than are the 23-30 year age group (11%).
- ❑ 'Friends' was the most highly rated item in the two education settings (Gauteng and NP). In these sites, if one adds 'friends', 'relatives' and 'parents', it becomes evident that youth in these sites believe that within their immediate social environment there is sufficient information available to address their unanswered questions about HIV/AIDS. This,

together with high levels of accurate information about HIV/AIDS knowledge in these sites (see later) suggests that there are not strong needs for additional information about transmission and prevention of HIV/AIDS in these contexts.

- ❑ There is considerably less saturation of information in the immediate social network in the rural areas. These findings are also significant in that the Gauteng and NP sites have lower tendencies to selecting health professionals as their preferred sources of information on HIV/AIDS. This is further evidence that there is a significantly stronger belief that the necessary HIV/AIDS information is less reliant on the formal health system for its delivery in these two provinces, and that the social network is seen as the information 'resource' of choice.
- ❑ Teachers and lecturers fared poorly in the above ratings. It would appear that the extent to which HIV/AIDS is a topic dealt with and discussed in educational institutions is subject to a high degree of variation. It is troubling that in the rural sites sites, schools are apparently not widely considered as sites of HIV/AIDS information dissemination and discussion, especially since these two sites are also the most under-resourced in terms of penetration by other media.

3. AIDS Helpline

Heard of AIDS Helpline	Yes	Not sure	No
Rural site, KZN	62	18	20
Rural site, KZN	44	24	32
Suburb, WC	55	20	25
Urban school, Gau	69	15	16
Township, NC	69	15	15
Tertiary Inst. NP	81	11	8
ALL	64	17	19

The AIDS Helpline is well known. In one site as many as 81% of respondents reported that they had heard of the Helpline and in no site did more than 32% of respondents say that they had not heard of the Helpline. Thirty five percent (range 18%-49%) of all respondents knew where to get the number of the Helpline if they wanted to use it. It is worth noting that within the context of the Beyond Awareness Campaign, radio advertisements related to the helpline were only broadcast from June 1999 onwards. All leaflets, posters and other items however include the helpline number.

4. Red ribbon logo

The red ribbon has been adopted world-wide as the universal HIV/AIDS symbol and has been vigorously promoted by the Beyond Awareness Campaign.

Red ribbon recognition and branding (*% of all respondents*)

	Rural site KZN	Rural site EC	Suburb WC	School Gau	Township NC	Tertiary Inst NP	ALL
Do you know of any sign or symbol that stands for AIDS?	59	30	47	69	60	72	57
Have you ever seen this symbol before? (red ribbon)	74	40	65	92	66	94	74

Features worth noting from the above table include:

- ❑ Respondents were asked to name a “symbol that stands for AIDS” and only thereafter were they shown the red ribbon symbol and asked whether they had seen it before. Recognition of having seen the red ribbon before is much higher than the ability to think of a symbol that stands for AIDS.
- ❑ Exposure to the red ribbon symbol was generally high with the lowest exposure being rural EC (40%) and the next lowest being suburban WC (65%). Seventy four percent of all respondents report having seen the red ribbon symbol before (range 40-94%).

Would you be prepared to wear a red ribbon? (*% of all respondents*)

Site	Yes	Maybe	No
Rural site, KZN	55	19	26
Rural site, EC	42	25	33
Suburb, WC	74	18	7
Urban school, Gau	66	29	6
Township, NC	69	23	7
Tertiary Inst. NP	84	8	8
All	65	21	14

The following are notable features:

- ❑ Sixty five percent of all respondents say that they would be prepared to wear a red ribbon (range: 42% in EC to 84% in NP).
- ❑ The average ‘no’ in the rural areas is 30% which is in keeping with a greater degree of unwillingness/refusal to see HIV/AIDS as a social problem in the two rural areas, and a much higher degree of stigma attached to HIV/AIDS in these areas.

5. PWA contact

In the following table we consider whether respondents have been in close proximity to people who are HIV infected, including attending a talk given by someone who is HIV positive. This index is useful because it may tell us something about personal contact which has been argued by some to be an important mediator of change in both prevention practices and care.

Have you ever been in the same room or listened to a talk by a person who you know is HIV infected?

	Yes	No
Rural site, KZN	26	74
Rural site, EC	20	80
Suburb, WC	18	82
Urban school, Gau	57	43
Township, NC	28	71
Tertiary Inst. NP	47	53
All	34	66

The following features of the above table are notable:

- The school and tertiary institution sites are significantly higher on respondents having been in the same room or having listened to a talk by a person who is known to be HIV positive. In the school site there have been school activities which exposed pupils to HIV positive children and this had an important impact on these pupils' ways of thinking about HIV/AIDS. In the tertiary institution site there have been visits by HIV positive speakers. There was a wealth of qualitative evidence suggesting that empathy with those directly affected by HIV/AIDS is a powerful catalyst in bringing about change. There is also much evidence to suggest that exposure to stories, principally through mass media, which show the human drama of HIV/AIDS is a very important factor in developing a sense of the realities of HIV/AIDS.
- In other sites there seems to have been fairly little exposure to people with AIDS or projects that include interaction with HIV positive individuals. This is especially marked in the suburban WC site where only 18% have been in the presence of someone who is HIV positive.

RISK PREVENTION TRENDS

1. Knowledge of HIV/AIDS

Although as was pointed out in the introduction to this study that knowledge is considered a doubtful indicator of effective change, accurate knowledge is an important precondition of effective action. Knowledge was found to be high with regard to basic knowledge questions. Commonly reported unanswered questions about HIV/AIDS were also reported. These included:

- How safe are condoms?
- What are the risks associated with kissing given the possibility of the other person having sores in the mouth?
- What are the risks associated with oral sex?
- What are the risks associated with transmission through body fluids other than blood and saliva, including whether urine or perspiration might be modes of transmission?
- What is the risk of transmission through insect bites?
- What is the risk of transmission through contact sports?
- When will a cure be found?
- Can washing after sex help to prevent infection?

- How does one go about obtaining an “AIDS test”?
- How does one see the symptoms of HIV/AIDS and how does one know if someone has it?
- How long can you survive with HIV/AIDS?
- There were numerous questions about the origins of HIV/AIDS.
- There were quite a number of questions about the safety of ear piercing.

2. Perception of and response to risk

The findings of this study with respect to the perception of risk run contrary to the findings of previous South African research. The present study shows that HIV infection risk awareness is generally present, and in those sites where this does not translate into effective or consistent risk management practices, there is greater evidence of ‘worry’ and more active attempts to dispel the perception of risk, through, for example, attitudes of bravado or machismo.

Perception of risk (% responding quite a lot/very much)

	Rural site KZN	Rural site EC	Suburb WC	School Gau	Township NC	Tertiary Inst NP	ALL
HIV is a threat to our society	82	71	83	96	67	88	82
Have you worried before that you might be HIV infected? (n=all including non sexually active)	22	52	16	3	39	29	26
Have you worried before that you might be HIV infected? (n=had sex in the past year)	23	56	21	7	40	36	34
What do you think are your chances of becoming infected?	13	16	16	12	25	17	17

The following features of the table are notable:

- ❑ There is a generally high perception that HIV is a threat to our society.
- ❑ It is interesting to compare responses to the first question to answers to the next three questions which relate to estimation of personal exposure to risk. There is much greater sense that HIV/AIDS is a threat to the society as a whole, than there is a sense of it being a personal threat.
- ❑ There is a relatively elevated ‘worry’ about infection level in the rural EC site. This is the community where there is the most notable social denial of HIV/AIDS.

RISK MANAGEMENT IN SPECIFIC AREAS OF SEXUAL PRACTICE

1. Sexual activity and frequency

The practice of sexual intercourse, its onset and frequency, are important predictors of HIV exposure risk. It appears that few if any campaigns have focussed on decision making in relation to sexual onset; that is with a view to delaying the onset of sexual intercourse. In this section we look at the sexual intercourse experience of respondents and consider the levels of current sexual activity.

Have you had sexual intercourse? (% of all respondents)

	All			Male			Female		
	Ever	In the past year	Never	Ever	In the past year	Never	Ever	In the past year	Never
Rural site, KZN	65	57	35	78	69	22	54	47	46
Rural site, EC	92	83	8	97	94	3	90	77	10
Suburb, WC	78	73	22	87	84	13	69	63	31
Urban school, Gau	30	25	70	38	31	62	23	20	77
Township, NC	88	76	12	88	78	12	87	76	13
Tertiary Inst. NP	87	69	13	88	70	12	85	66	15
ALL	71	63	29	78	68	22	66	57	34

The following are some notable features of this table:

- ❑ A total of 71% of all respondents report having had sexual intercourse before; ranging from 92% in the rural EC site to 30% in the Gauteng school site. It is important to note that this does not imply current sexual activity and a total of only 63% of respondents reported having had sexual intercourse in the past year, with the range being from 83% in the EC site to 25% in the Gauteng site.
- ❑ There is a difference between males and females in terms of previous experience of sexual intercourse.

Last sexual intercourse (as % of all those who have had sex before – 71% of respondents). The % scores below are cumulative such that last month includes last week, and so on.

	Rural site KZN	Rural site EC	Suburb WC	School Gau	Township NC	Tertiary Inst NP
Sex in the last week	38	57	44	19	40	34
Sex in the last month	64	78	63	24	68	50
Sex in the last 6 months	72	82	86	54	79	65
Sex in the last year	77	90	91	84	88	78
Had sex a year or more ago	(23)	(10)	(9)	(16)	(12)	(22)

One of the most important aspects of the above table are the bracketed figures in the last row which illustrates the percentage of those who have had sex before who are not currently sexually active.

The implications of this data are that in most of the sites sexual intercourse is intermittent rather than regular and frequent. This is consistent with the qualitative data which points to the opportunistic nature of sexual contact between youth who are not cohabiting. An exception to this is the rural EC site which has the highest 'sex in the last week' percentage. This is especially remarkable considering that so few of the EC respondents are living with a partner (8%). The high levels of sexual activity in this site are confirmed in the qualitative data.

Last sexual intercourse for those not living with a partner

N = those who have had sex before (71% of sample)

	Rural site KZN	Rural site EC	Suburb WC	School Gau	Township NC	Tertiary Inst NP
Sex in the last week: non-cohabiting respondents	33	58	40	19	31	31
Sex in the last week: cohabiting respondents	38	57	44	19	40	34

Rural EC has by far the highest percentage of respondents who are non-cohabiting and have had sex in the last week.

Looking at sexual frequency in terms of the number of days that youth have had sex in the past month, we see similar trends. Note that in the following table only those who have had sex in the last four weeks were included in the study sample.

Sexual frequency past month: How many days did you have sex in the last four weeks?

(% of only those who have had sex in the last four weeks)

	Rural, KZN	Rural, EC	Suburb, WC	School, Gau	Township NC	TI, NP	ALL
Cohabiting	5	2	8	-	2.5	8	5
Non-cohabiting	2	5	4	1	2	2	3

Perhaps the most significant feature of the above is that sexually active youth who are not cohabiting with their partners are by *not very frequently* sexually active, although there are relatively high proportions who are sexually active. In all sites except the rural EC site the non-cohabiting respondents are less sexually active than those who have cohabiting partners. (Note that the finding for cohabiting respondents in the EC should not be given much significance as only 8% of the sample are cohabiting and general trends cannot be inferred from such a small sample).

With respect to financial status of household there is a significant difference between sites with respect to the incidence of having had sex before. The difference between the following four financial categories are statistically highly significant.

Financial status of household related to having had sex before (% of respondents)

Across all sites	
Not even enough money for basic things like food and clothes	84
Money for food and clothes, but short on many other things	84
Most of the important things, but few luxury goods	69
Some money for extra things such as going away for holidays and luxury goods	42

2. Age and first sexual intercourse experiences

The age at which sexual intercourse is first initiated is an important factor to understand in considering ways to promote HIV prevention practices. It can be assumed that young adolescents would be likely to engage in sexual activities in contexts quite different to those of older adolescents, and they are unlikely to have the same means and understanding to negotiate HIV preventive practices, or at least, are likely to approach the problem in different ways. We need to understand sexual activity at different age levels

if we are to design education programmes that suit adolescents at different stages of their sexual development.

The following table gives an indication of the age of first intercourse across the six sites.

Age at first sexual intercourse: included only for cases 11 years and older

N=those who have had sex before, but were 11 or older (63% of total)

	Have had sex before		Average age of first intercourse		Median		Interquartile range (middle 50%)	
	M	F	M	F	M	F	M	F
Rural site, KZN	78	54	15.8	15.9	16	16	15-17	15-17
Rural site, EC	97	90	14.8	15.9	15	16	14-17	14.5-17
Suburb, WC	87	69	15.6	17.8	15	18	15-18	16-20
Urban school, Gau	38	23	14.8	15.9	15	16	14-16	15-17
Township, NC	88	88	15.7	17.6	16	18	15-18	16-19
Tertiary Inst. NP	88	85	16.7	18	16	18	16-18.5	17-19
All	77	66	15.7	17	16	17	14-17	16-18

The age of first intercourse average differs markedly between men and women across all sites and the average age of first intercourse across all sites for men is 15.7 as opposed to 17 for women.

Breakdown of age of first sexual intercourse: Male/female focus

N = those who have had sexual intercourse before (71% of sample). All sites combined.

First sex at:	Male and female	Male	Female
	Cumulative %	Cumulative %	Cumulative %
≤11 yrs	10	16	2
≤12 yrs	13	20	4
≤13 yrs	18	28	6
≤14 yrs	27	39	14
≤15 yrs	42	56	26
≤16 yrs	60	73	44
≤17 yrs	74	84	63
≤18yrs	87	93	79
≤19 yrs	92	96	88
≤20 yrs	96	98	94
≤21 yrs	98	98.6	98
≤22 yrs	99	99	99
≤23 yrs	99	99	99
≤24 yrs	99	99	99
≤25 yrs	99.3	99	99.5
≤26 yrs	99.5	99	100
≤27yrs	99.8	99.5	
≤28yrs	100	100	
	n=430	n=222	N=206

The data under A is cumulative as one reads down the table, until the 100% point is reached, which is situated at the age which all respondents who have had sex before had had their first sexual experience.

- For those who have had sexual intercourse before, 10 % had sexual intercourse at or below the age of 11 years. It is puzzling to imagine what might be the nature of sexual intercourse below the age of 11

years, and how these respondents became sexually active. The qualitative study will be exploring this in more detail.

- Forty two percent of those who have had sexual intercourse had their first sexual experience at or below the age of 15 years. There is a strongly significant difference between males and females with females tending to become sexually active older. At the age of 15 whereas 56% of males had had a sexual intercourse experience, only 26% of females had.

We now turn to consider cumulative and increment data about first sexual intercourse ages, compared across sites. The data is presented in a similar way to the above table.

Breakdown of age of first sexual intercourse: Site comparisons

N = those who have had sexual intercourse before (71% of sample).

First sex at	Male and female combined – Cumulative %					
	KZN	EC	WC	Gau	NC	NP
≤11 yrs	14	22	1	11	2	7
≤12 yrs	17	28	5	17	2	9
≤13 yrs	25	35	9	19	7	13
≤14 yrs	33	45	22	39	18	14
≤15 yrs	48	62	39	58	31	23
≤16 yrs	68	72	57	81	49	45
≤17 yrs	86	86	67	97	63	59
≤18 yrs	97	94	82	100	80	77
≤19 yrs	98	96	86		93	86
≤20 yrs	100	99	89		99	93
≤21 yrs		99	95		100	97
≤22 yrs		100	97			98
≤23 yrs			97			98
≤24 yrs			97			98
≤25 yrs			99			98
≤26 yrs			100			98
≤27 yrs						99
≤28 yrs						100

A number of points stand out from the above:

- Rural sites have much earlier starting ages for sexual intercourse with as many as 25% in the KZN site and 35% in the EC site reporting having had sex by the age of 13 years.
- The 15-16 year old range, across all sites is the age at which there is the largest increment in onset of sexual intercourse.

Age of first sexual intercourse by age groups: 15-19; 20-24; 25-30

(N = the respondents falling within a particular age group who have had sex before.)

1st sex at or below	KZN			EC			WC			Gau			NC			NP		
	Present age 15-19yr	Present age 20-24yr	Present age 25-30yr	Present age 15-19yr	Present age 20-24yr	Present age 25-30yr	Present age 15-19yr	Present age 20-24yr	Present age 25-30yr	Present age 15-19yr	Present age 20-24yr	Present age 25-30yr	Present age 15-19yr	Present age 20-24yr	Present age 25-30yr	Present age 15-19yr	Present age 20-24yr	Present age 25-30yr
≤11 yrs	25	0	0	28	17	21	0	0	5	12	-	-	4	4	0	20	5	7
≤12 yrs	28	0	0	36	17	32	5	3	10	18			4	4	0	20	9	7
≤13 yrs	36	12	0	47	21	37	14	3	14	21			16	4	3	30	14	7
≤14 yrs	44	18	13	67	21	42	38	15	19	42			36	11	10	30	16	7
≤15 yrs	58	35	25	83	48	47	76	21	33	54			48	21	26	40	25	14
≤16 yrs	78	65	38	92	62	53	81	48	48	79			72	39	39	50	50	38
≤17 yrs	97	76	63	100	83	68	86	61	57	97			92	50	52	60	61	59
≤18yrs	100	94	100	93	89		100	82	62	100			100	75	68	100	77	72
≤19 yrs		100		97	95			91	62				86	94		89	79	
≤20 yrs				100	100			94	71				100	97		93	93	
≤21 yrs								97	86					100		98	97	
≤22 yrs								100	90							100	97	
≤23 yrs									90								97	
≤24 yrs									90								97	
≤25 yrs									95								97	
≤26 yrs									100								97	
≤27yrs																		100
N	36	17	8	36	29	19	21	33	21	33	-	-	25	28	31	10	44	29

Italic represents ≤20% bold represents ≤40% underlined represents ≤60%

- The most remarkable feature of the above table is the difference between the three age categories within each site, with respect to the age at which 20%, 40% and 60% of the category had first sexual intercourse experiences. The trend is consistent across all sites, with older respondents having had later sex starting ages than younger respondents. This suggests that the starting age for sexual intercourse has dropped quite remarkably in the past fifteen years.
- The main report carries inter-site and intra-site analyses, and sites can be seen to differ with respect to the extent and nature of this change over time. The qualitative study will examine the factors which underlie these trends. The trends are particularly noteworthy given the age differentials between sex partners in the first sexual experience, reported in the following section.

3. Age differentials between sex partners

An area of great concern is the high incidence of first sexual experience with a 'partner' who greatly differs in age. The principal way of accessing this is through data reporting age of first sexual intercourse and the age of the partner.

Age difference between self and partner in first sexual experience.

N = had sex before (71% of sample).

	Partner 10 or more years older		Partner 5 or more years older		Partner 1 or more years older		Partner same age		Partner 1 or more years younger		Partner 2 or more years younger	
	M	F	M	F	M	F	M	F	M	F	M	F
Rural site, KZN	3%	8%	6%	28%	24%	96%	12%	4%	64%	0%	39%	0%
Rural site, EC	0%	2%	0%	17%	27%	100%	5%	0%	68%	0%	32%	0%
Suburb, WC	0%	6%	2%	29%	49%	82%	24%	3%	27%	15%	15%	9%
Urban school, Gau	5%	7%	5%	21%	43%	86%	33%	14%	24%	0%	5%	0%
Township, NC	0%	0%	0%	23%	13%	92%	20%	8%	68%	0%	23%	0%
Tertiary Inst. NP	0%	5%	5%	23%	17%	88%	19%	13%	64%	0%	26%	0%
ALL	1%	4%	3%	23%	28%	91%	18%	6%	54%	3%	24%	1%

- ❑ There are no statistically significant differences between females across sites, suggesting a common trend across all sites in respect of women. The trend towards having older partners in the first sexual experience is most pronounced at the “partner one year older level” (91%), but also at the 5 year level (23%).
- ❑ Given that 44% of female respondents were 16 years or younger when they had their first sexual experience, this presents a disturbing picture. It is unlikely that girls of this age would be able to properly assert themselves in the context of a relationship with someone five or more years older.
- ❑ A consistent trend is evident amongst males with 54% reporting a first sex partner one or more years younger than themselves and 24% two or more years younger. A negligible percentage of males had partners five or ten years older.
- ❑ Unfortunately the data obtained does not include the ages of current sex partners so we do not know whether the above trends reflect the current age differentials, and in future research it would be advisable to include questions relating to this.

4. Factors affecting sexual negotiation and decision making

The concepts of sexual negotiation and decision making are not only important in relation to HIV/AIDS, but have been perennial concerns in the field of sexual and reproductive health. In contexts where there are significant power differentials between partners, the less powerful partner is liable to be manipulated or coerced. There has been much written about the gender dynamics of such coercion, with women having been shown in many societies not to be in a position to assert themselves in sex contexts, or to make choices about sexual participation.

In the following table the study looks at the extent to which the risk of AIDS has been discussed with sexual partners.

Discussed the risk of AIDS with your boyfriend, girlfriend or partner

Site	... of those for whom the question was applicable	% of total for whom the question was applicable
	Yes %	
Rural site, KZN	45	82
Rural site, EC	55	91
Suburb, WC	47	78
Urban school, Gau	54	48
Township, NC	77	90
Tertiary Inst. NP	73	100
ALL	60	80

- ❑ In KZN, EC, WC and Gauteng sites approximately half of those who found the question applicable have discussed the risk of AIDS with a boyfriend, girlfriend or partner. In total, 60% of youth in this study who found the question applicable (who have or who have had a boyfriend, girlfriend or partner) have discussed the risk of AIDS with their partners. This does not say anything, however, about the outcome of such discussion, and the way in which it was conducted, which will be explored in the forthcoming qualitative part of this research programme.
- ❑ In the NP tertiary institution site where all respondents found the question applicable to them, 73% have discussed the risk of AIDS. This is consistent with the high levels of conscientisation and awareness of HIV risk in this site. This does leave 27% of respondents who have not discussed AIDS risk with partners, but nevertheless indicates high penetration of AIDS risk concerns into the domain of intimate relationships. This trend is clearly much more established in some sites than others, although the underlying reasons for differences remain to be explored.

Having looked at a general indicator of communication between partners about HIV/AIDS risk, we turn to examine indicators that throw light on other features of sexual communication that may have a bearing on the capacity to adopt HIV risk prevention measures.

The first indicator concerns the ability to say “no” to sex.

Are you able to say no to sex if you do not want it?

N = all respondents

	All respondents			Male	Female
	Yes	No	Don't Know	% Yes	% Yes
Rural site, KZN	57	23	19	59	56
Rural site, EC	82	15	3	81	82
Suburb, WC	62	27	11	68	57
Urban school, Gau	52	5	43	47	57
Township, NC	86	11	3	85	88
Tertiary Inst. NP	68	22	10	65	71
All	67	17	16	66	68

- ❑ Only 67% of respondents reported that they are able to say no to sex if they don't want it. Although there is no standard against which to measure these levels of response this seems like a high proportion of

people who cannot assert themselves in negotiation of their own sexual involvement (33% responded “no” or “don’t know”, and suggests that there is need for intervention at the level of promoting sexual self-assertion.

- There is surprisingly not much difference between males and females with respect to the ability to say no to sex if they don’t want it. The finding goes against the generally accepted belief that men are sexually assertive and that women find it more difficult to sexually assert themselves.

We now turn to the question of ‘forced sex’. In future surveys it would perhaps be advisable to operationalise the concept of forced sex to refer specifically to physical coercion. The intention of this question was to create a category of sexual coercion which would include both rape and being required to have sex against one’s will, which does not necessarily involve physical force. The question was intended to capture the trends which occur within relationships, rather than, for example, incidents of rape by a stranger.

Ever in the past been forced to have sex by a sex partner?
N = those who have had sex before (71% of respondents)

	Yes		
	M	F	ALL
Rural site, KZN	17	13	15
Rural site, EC	15	28	23
Suburb, WC	16	21	18
Urban school, Gau	4	0	2
Township, NC	7	14	10
Tertiary Inst. NP	29	24	27
All	15	19	17

Averaged across all sites there was only a slightly higher prevalence of women reporting having been forced to have sex by a sex partner. This mirrors the puzzling finding in respect of responses to the question of ‘saying no to sex’. A much higher proportion of men than was expected indicated that they have had experiences of sexual coercion. Qualitative investigation will pursue this question further, but preliminary investigation suggests that the interpretation of ‘forced’ as meaning “even when I didn’t desire it” may obscure a significant difference between men and women with respect to coercion.

The following question was intended to evaluate the extent to which the mix of sex and alcohol may be a problem leading to non-negotiated sexual encounters. Evidence gathered under the following question tends to suggest that for youth in these sites the consumption of alcohol is not a factor which strongly mediates exposure to HIV infection risk.

Have you ever had sex when drunk?

N = those who have had sex before (71% of respondents)

Site	Yes		
	M	F	All
Rural site, KZN	0	0	0
Rural site, EC	0	0	0
Suburb, WC	0	5	3
Urban school, Gau	0	0	0
Township, NC	0	0	0
Tertiary Inst. NP	41	14	28
All	12	4	8

It would seem that drunkenness and sexual activity are not closely associated in five of these sites and that the sexual activities reported in this study for the most part do not take place in drunken states.

The following table presents responses to the question: “Do you like sex?”. Whilst this may seem like an odd question, the meaning of which is subjective in the extreme, it seems to say something meaningful at a broad sentiment level, and it was included for this reason.

Do you like sex?

	Combined M&F			Male			Had sex before M			Female			Had sex before F		
	Y	U	N	Y	U	N	Y	U	N	Y	U	N	Y	U	N
Rural KZN	42	14	44	64	11	25	75	7	18	25	17	58	48	24	28
Rural EC	60	13	27	84	5	11	83	6	11	42	19	38	47	19	34
Suburb WC	72	17	10	84	9	7	93	5	3	62	24	13	81	16	3
Gauteng	47	44	9	63	29	8	87	4	9	30	61	9	77	23	0
ALL	55	24	21	73	15	12	85	6	10	39	31	30	59	20	21

Y = yes U = unsure N = no

The above data represents only four sites, as the question was added only after the NC and NP sites had been surveyed.

The following are some of the notable features of this table:

- Many respondents are unsure about whether they like the idea of sex (24%), and also many say that they do not like it (21%).
- Of particular note are females who have had sex before, 41% of whom respond either ‘unsure’ or ‘no’. Notice that in KZN and EC sites the ‘no’ scores for females are particularly high (28% and 34% respectively). This, taken together with the high levels of current sexual activity in these sites indicates that many of these respondents who don’t like sex are having it nonetheless.
- The significant differences between males and females in respect of answers to this question affirms the idea that sex is more positively thought of by males than females.

It would be inadvisable to draw strong conclusions from the above given the vagueness of the indicator, other than to say that the sex context for these youth is by no means a terrain in which they feel comfortable and at home. Youth are in fact far from being unequivocally positive about their sexual experiences.

5. Condom use

This section first looks at rates of condom use. Thereafter the observed patterns of use are explored through examination of factors influencing condom acquisition, and beliefs and attitudes associated with condom acquisition and use.

Have you ever used a condom?

N = those who have had sex previously (71% of respondents)

	Yes	No
Rural site, KZN	46	54
Rural site, EC	40	60
Suburb, WC	82	18
Urban school, Gau	86	14
Township, NC	78	22
Tertiary Inst. NP	85	15
ALL	70	30

- ❑ The average across all sites for 'ever' condom use was 70% (range 40%-86%). Note that this is not a percentage of all respondents, but a percentage of the 71% of the respondents who have had sex before. It would not be meaningful to give this as a percentage of the population as a whole as the intention is to evaluate risk prevention practices.
- ❑ There are strong differences between sites with the two rural areas notably lagging the other areas in terms of ever having used a condom before.

The following table presents the use of a condom in the last sex act. The percentages in this case are percentages of all those who have had sex before and who are not living with a partner. Those who are cohabiting with partners were shown to have different perceptions of risk and different rates of condom usage, and as a special risk case they were thus excluded from the following count.

Did you use a condom the last time you had sex?

(N = those who have had sex, excluding those cohabiting with partners)

	Yes	No
Rural site, KZN	22	78
Rural site, EC	27	73
Suburb, WC	42	58
Urban school, Gau	79	21
Township, NC	63	37
Tertiary Inst. NP	75	26
ALL	52	48

- ❑ Condom use in the last sex act amongst this group of youth is higher than expected. The average reported condom use during the last act of sex was 52% (range 22%-79%). There were significantly lower rates of reported condom use amongst youth from the two rural areas. The sample of high school students in Gauteng (79%) and tertiary students in Northern Province (75%) have very high rates of condom use.

- ❑ The percentage difference between ‘ever’ used a condom and ‘used a condom last time’ is 18% overall. The difference across sites is KZN- 24%; EC – 13%; WC – 40%; Gauteng – 7%; NC - 15%; NP – 10%. The area of greatest difference is WC and KZN, whilst Gauteng is the area with least difference. Ideally one would be looking for a small difference between percentages on these two indicators, with a high percentage on ‘ever’ score. The E Cape site has a low difference but has a low (40 %) ‘ever’ score. Gauteng, N Cape and N Province sites by contrast have a low difference off a high ‘ever’ score.

Regularity of condom use

N = those who have had sex previously (71% of respondents)

	Rural KZN	Rural EC	Suburb WC	School Gau	Township NC	TI NP	ALL
Always use condoms for HIV protection	25	20	36	77	66	62	46
Sometimes use condoms for HIV protection	13	27	24	13	8	0	14
Never use condoms for HIV protection	26	18	14	0	7	0	12
Plan to use condoms in future, but do not use them yet	16	22	8	6	7	20	14
Do not use condoms because me and my partner are not HIV infected	20	13	18	3	12	18	15

From the above table and graph we may conclude:

- ❑ The table above shows higher than previously reported consistent condom use (average: 46%; range: 20%-77%). The average (46%) correlates closely with reported ‘last time’ condom use (52%), as would be expected.
- ❑ Fifteen percent of all sexually active youth have the conviction that they and their partners are not HIV infected, and therefore they do not need to use condoms. Unfortunately we do not have access to their reasons for believing this. The qualitative study will take this as a focus of enquiry.

6. Condom acquisition

Each site in the study proved to have different sources of access to condoms, and different distribution strategies on the part of health workers. The first issue addressed concerns ease of access to condoms.

Condoms are easy to get hold of

	All			Those who have used a condom before			Those who have not had sex before		
	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know
Rural site, KZN	69	11	20	79	13	8	55	6	39
Rural site, EC	82	9	9	88	3	9	43	14	43
Suburb, WC	93	4	3	100	0	0	76	14	10
Urban school, Gau	94	2	4	100	0	0	93	2	5
Township, NC	77	9	14	79	8	13	91	0	9
Tertiary Inst. NP	84	0	16	88	0	12	85	0	15
All	84	6	11	89	3	8	81	5	15

- Those who have used a condom before are more strongly of the view than are all of the respondents summed together, that condoms are easy to get hold of, meaning that this is not only a perception but that experience shows the easy availability of condoms. This trend holds across all sites.
- Even those who have not had sex before perceive condoms as being easy to acquire.

We now turn to consider the question of whether respondents have condoms easily available should they need them. It is one thing to be able to get hold of condoms, and another to have ready access to one.

Do you have a condom where you can easily get it if you need it?
N = 'sexually active' respondents only

Site	Yes	No	Only 1 partner and perception of no HIV risk in relationship
Rural site, KZN	70	20	9
Rural site, EC	73	23	4
Suburb, WC	66	29	5
Urban school, Gau	78	22	0
Township, NC	73	23	4
Tertiary Inst. NP	90	10	0
ALL	75	21	4

- The above question was confusing to some participants and had to be explained. The question was intended to refer to the ready availability of condoms should they be needed. 'Yes' responses could refer to easy access to a 24-hour condom distribution point, a friend who always has condoms, personal possession of condoms or any other means of obtaining condoms easily and at short notice.
- There is a surprisingly high availability of condoms which can be easily accessed if needed. Not only are condoms easily available, but as many as 75% of sexually active youth have easy access to condoms should they require them.

Factors which may mediate condom use are now examined.

If you use condoms, where do you get them? (*more than one choice permitted*)

	Rural KZN	Rural EC	Suburb WC	School Gau	Township NC	TI NP	ALL		
							M	F	All
1. Chemist or shop	12	11	42	75	28	12	34	23	29
2. Clinic or community HC	74	83	73	63	82	40	71	66	69
4. Vending machine (pay)	6	4	8	45	9	2	16	6	11
5. Hospital	40	50	24	45	52	28	45	34	40
6. Friends	19	24	35	59	28	23	41	19	30
7. Family planning clinic*	13	49	55	38	48	10	24	46	35
8. AIDS centre	15	35	15	39	39	13	28	22	26
9. Free condom boxes	23	45	41	45	41	20	41	29	35
10. Other	8	1	8	21	3	61	17	19	18

*Family planning clinic refers to either a dedicated family planning centre or a specific service dedicated to family planning, even if it is located in a more general clinic or community health centre.

This table illustrates the sources from which youth acquire condoms in each site. It is important to note that the question allowed multiple responses, allowing respondents to indicate that they acquire condoms from various sources.

- ❑ In all but the two educational settings the most frequently used source of condoms is 'clinic or community health centre'. Clinics and community health centres visited in the course of conducting the research all had condoms available although these were not always made easily accessible.
- ❑ The manner of distribution of condoms differed across clinics and clinic staff interviewed showed varying levels of proactivity in distributing condoms. In some clinics condoms were available but there was no advertising on the outside of the clinic. Other clinics (notably in the tertiary institution NP and in the NC township sites) had signs on the outside of the clinic saying 'Free condoms available here'. In the EC site condoms are available in the only clinic in the area, but this is quite a few kilometres away from some of the villages.
- ❑ The 'chemist or shop' were the most frequently named sources of condoms in the Gauteng school site (75%), and third most frequent in the suburban WC site (43%). There was a surprisingly high 28% of condom using respondents in the NC township who named 'chemist and shop' as sources of condoms. The two rural sites are, not surprisingly, low in this area and although information is not known about the commercial availability of condoms in the rural KZN site, the rural EC site does not have a shop which sells condoms. The NP tertiary institution site is also low in this area, and this is possibly accounted for by the fact that free condoms are very easily available to youth in this site.
- ❑ Family planning clinics are almost twice as likely to be used by females as a source of condom distribution.
- ❑ An interesting finding and which also says something about the social aspects of HIV risk prevention and HIV discourse, concerns the degree to which respondents acquire condoms from friends. Thirty percent of all respondents named this as a source of condoms. Even if youth do not personally have condoms if these are needed they can be obtained socially.

What follows is a list of problems associated with condom distribution in clinics, as identified by focus groups respondents and which became apparent in visits to clinics on the part of site co-ordinators, although not all of these points apply in all cases. There were some notable exceptions which could be considered models of good practice in condom distribution including advertising, confidential access and self-help condom distribution. Problems encountered included:

- Condoms were available only during clinic hours;
- Condoms were available in places which were not easily accessible;
- Condoms were personally given to people who asked for them. This required an interpersonal encounter which was embarrassing for some youth;
- Condoms were distributed on request but not proactively promoted. Availability of condoms was not advertised on outside walls of health centres;

- Condom boxes were not being replenished and people arrived to collect condoms only to find stocks depleted.
- Access to the condom distribution point at local clinics meant being seen by others who would know that the person was collecting condoms. In closely knit communities such as the two rural sites this was problematic and prevented people from collecting condoms.
- An attitude on the part of some clinic staff that people would waste condoms by blowing them up and toying with them, makes people feel that they were treated with disrespect.
- Expired condoms were distributed at some centres.
- There was some dissatisfaction about the quality of condoms distributed at clinics (“smelly”, “too thick” and inclined to tear).

7. Number of partners

The risk factor of having multiple sex partners is now considered. This data should be read in relation to other data concerning sexual practices in order to build a composite picture of sexual practices in each site. Each new indicator adds another facet to the developing picture for each site.

The following table presents the prevalence of youth having more than one partner.

More than one sex partner at the moment
N = those who have had a sexual partner in the last six months

	Yes	Male	Female
Rural site, KZN	55	72	37
Rural site, EC	28	41	17
Suburb, WC	19	26	8
Urban school, Gau	21	29	9
Township, NC	26	36	16
Tertiary Inst. NP	30	44	15
All	30	42	18

Some notable findings reflected in the above table are:

- ❑ The site with the highest reported rate of having more than one concurrent sexual partner is rural KZN, with almost double the rate of any other site.
- ❑ The general prevalence of having more than one current sexual partner is high at 30%.
- ❑ The sites with the least likelihood of someone having more than one sexual partner at the moment are suburban WC and the Gauteng school.
- ❑ There is a strong difference between men and women with respect to the likelihood of having more than one partner at the moment and this relationship holds true in all sites. Males have a much stronger tendency to have more than one sexual partner and this tendency needs to be addressed in HIV/AIDS education efforts.

8. Abstinence

It is important to understand whether or not there is a trend towards abstinence but unfortunately such a trend is more difficult to assess than is sexual activity. Qualitative data suggests that at least some respondents have delayed onset of sexual experience through an active decision not to have sex. A selection of answers produced in response to the questions “List things which you have done to protect yourself from AIDS” and “Have you changed your sexual behaviour because of AIDS, even a little? Explain.” illustrates:

- Not listening to my boyfriend when he tried to get me in bed (NC);
- Not having sex at all (NC);
- I haven't yet had sex and so because of AIDS I have to tell myself that I'll have sex when I get married (NP);
- Controlled myself when we were just kissing mouth to mouth and not going further (Gau);
- I stayed a virgin (Gau);
- Abstained from sex (Gau).

The possibility of sexually active youth choosing to become sexually inactive has received very little attention in HIV/AIDS campaigns. The emphasis, to the extent that abstinence has been a focus, has been on abstaining from having sex in the first place. But it seems, based on responses to the request to talk about how they have responded to HIV/AIDS, quite a number of respondents, and especially women, said that they had decided to become sexually inactive after having had previous sexual experience. Selected quotes well illustrate this point:

- I became sexually inactive (Gau);
- Yes, I'm scared of AIDS so I've decided to chill and not have sex for a while (Gau);
- I always use a condom, sometimes I'm reluctant to even have sex (Gau);
- I tried having sex once but later got scared to do it because of AIDS (Gau);
- I have changed because I have no sexual partner now (EC);
- I stopped sexual practices. I'm on my own (EC).

There are surprisingly high degrees of ambivalence about sexual relationships (see section 5 above), even amongst those who are sexually active, and especially amongst women. The extent of this ambivalent sentiment towards sex suggests that programmes aimed at abstinence and at becoming sexually abstinent after already having had first sexual relationships would have a strong and receptive target market.

CARE TRENDS

Most broadly speaking ‘care’ practices refer to the relationship of individuals and society to those directly affected by HIV/AIDS.

1. Attitudes and changes in attitudes

Attitudes are predispositions to certain kinds of behaviour. The study of attitudes includes the deliberately general question: “Has your attitude to people with AIDS changed over time?” The response to the question should

be treated cautiously, because whereas we may show attitudes in our behaviour and opinions, we are not always in a position to describe them accurately or to report them. Another problem with the question is that the response 'no' could mean, in the words of one respondent, "My attitude towards people with AIDS has not changed, because it doesn't need to change. It has always been good...", or it could mean, in the words of another respondent, "Het al gehoor maar ek het nie AIDS, so waarom moet ek worry?" ("I have heard of AIDS, but I don't have AIDS, so why should I worry?") indicating no attitude change because of indifference. What is of most value are the responses given to the request to explain their responses and a summary of some of the trends are provided below. For the record the quantitative responses are also provided, showing that 42% of all respondents said that their attitude towards people with AIDS has changed over time. The variations between sites are difficult to interpret without further qualitative investigation.

Has your attitude to people with AIDS changed over time? (% of all respondents)

Rural KZN		Rural EC		Suburb WC		School Gau		Township NC		TI NP		ALL	
Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
60	40	46	54	27	73	59	41	27	73	29	71	42	58

Asked to elaborate on the type of changes which have occurred, a wide range of responses emerged. Below is a selection of 'positive attitude' statements, followed by a range of 'negative attitude' statements. Positive attitude statements fall into two categories. The first relates to the question of blame and the second to acceptance.

Shift away from blame

Sample statements reflecting a change in relation to the attitude of blame are:

- I used to think that they deserved it. Now I think its not always their fault;
- The more I learn the more I'm comfortable with them;
- I don't blame them anymore;
- I realise it could also happen to me. They are not to blame.

The question of personal blame has been important, and has been a central construct in mediating people's attitudes to people living with HIV/AIDS (PWAs). What respondents are saying by the above statements is that one of the important parameters of change in attitude has been to move away from an attitude of blame. Quantitative analysis showed that only 13% of respondents in total feel that people with AIDS are personally to blame, and deserve it.

Acceptance

Sample statements indicating attitudes of acceptance include:

- Because they are people like other normal people (NP);
- They are also humans (KZN);
- People with AIDS are also human and need soulmates(NP);
- They are ordinary people who also need our support and care and love (NP);
- They are still the same persons (NP);
- I show them love by eating with them (NP);

- I was afraid if I see someone has AIDS but I change now I fall in love with those people (KZN);
- I think they too need love and support (WC);
- Because they are still humans and deserve respect just like each of us (WC).

There are signs in at least one site that that health care workers are not all that well informed and may be perpetuating prejudice. The following statement from an assistant health worker in one of the sites attests to this (site name withheld for reasons of confidentiality): “I visited the clinic when I saw a child whose mother had died of AIDS. And the child also had sores on the body and on the mouth. I reported the case to the Sister. Tests were done. I also talked to the grandmother not to send the child to the crèche, because she would scratch herself and pass it on to others. Children with AIDS should not go to school. We are scared of our children being infected.”

An unexpected and perhaps important trend emerged in the rural EC site concerning perceptions around the relation between HIV and tuberculosis (TB). It was independently mentioned by a number of different respondents, including the local school principal, nurses and focus group respondents. Having TB appears to have become stigmatised because of its relation with HIV/AIDS. In the words of a school principal “Here, if you have TB, you have AIDS. In the township, if you have TB you don’t hide it. Nurses come and visit, there is information on the TV. Here people hide it... You are a black stain. You are treated differently. At traditional gatherings you cannot drink from the same jug”. Such trends would be important to track.

Finally two anecdotes from one rural site are provided to reflect the range of attitudes that may coexist within a community, leading us to be cautious about drawing conclusions about communities in general:

- “Near my home there is a girl who died last week. She had AIDS. It was a problem because she had absconded from home. It has been 11 years that she went away. She just came back last month because she was sick. Her mother abused her and even chased her away from home. She died in some other home. She did not die even in her home. She came back home when dead. The mother did not even take her to the mortuary but buried her the following day wrapping her in a sleeping mat and said that she won’t even mourn for her.”
- “At home there was a sick person with AIDS but she was not treated so badly. They were washing for her. She died in hospital and was buried with dignity. There was no problem. They treated her well.”

2. Personal involvement and advocacy

This section explores the extent of people’s personal involvement in HIV/AIDS related activities and their willingness to be involved in HIV/AIDS related activities.

- Fifty two percent of respondents report having thought they they should become involved in helping somehow with the HIV/AIDS problem. This was more or less consistent across all sites.
- There was an elevated ‘yes’ response to the question ‘Have you ever thought you should become involved in HIV/AIDS work?’ in the NC township site, where 68% responded ‘yes’. This response is consistent with evidence that there is a relatively high level of community activity around HIV/AIDS issues in this site, although there is not evidence of

there being a particularly noteworthy single effort on the part of any one group or project.

3. Interpersonal communication and advocacy

In this section communication and advocacy are examined as they play out at the level of interpersonal relationships and communication. This is an important indicator of penetration of HIV/AIDS issues into people's interpersonal world's and in this section we look at the nature of interpersonal communication about HIV/AIDS and the implications thereof.

Communication about sex and HIV/AIDS (% of all respondents)

	All		Rural KZN		Rural EC		Suburb WC		School Gau		Township NC		TI NP	
	✓	X	✓	x	✓	X	✓	X	✓	X	✓	x	✓	x
I feel comfortable in talking about sex to people my age	88	12	74	26	89	11	95	5	93	7	84	16	89	11
Sex was not discussed with my parents	57	43	52	48	74	25	59	41	41	59	60	40	62	37
Can discuss AIDS with at least one family member	71	29	49	51	70	31	68	33	78	21	81	19	77	22

✓ = True/ mostly true X = Not true/ mostly not true

- ❑ KZN is the site where discussion of AIDS within the family context is least likely to have happened. It is also the site where talking about sex to peers is experienced as least comfortable. In all other sites there is a much higher likelihood of having discussed AIDS 'with at least one member of my family' than of having 'discussed sex with parents', but in KZN these two are about the same value, although the discussion of AIDS in the family is lower in this site than anywhere else.
- ❑ Gauteng is the site where there is most likely to have been discussion about sexual matters with a parent. The families of these high school students are mostly socially mobile, cosmopolitan, professional families where it appears that there is a much greater openness to discussion of sex matters.

The following table looks specifically at relationships with friends to assess what kinds of level of support might be available to youth in discussing anxieties related to AIDS.

Discussed AIDS with friends

	Not at all	A little	Quite a lot/ Very much
Rural site, KZN	40	25	34
Rural site, EC	27	45	28
Suburb, WC	36	31	33
Urban school, Gau	10	50	39
Township, NC	20	22	59
T Inst. NP	*	*	*
ALL	26	35	39

*Data not available for this site as this item was added only after site had been surveyed.

- Thirty nine percent of respondents report having discussed AIDS with friends quite a lot or very much. This is as high as 59% in NC and is lowest in the EC site (28%).
- The sites which stand out as having the lowest profile of having discussed AIDS with friends are KZN and WC. In the KZN site a picture appears to be emerging of avoiding discussion about AIDS, both in the family and with friends. The finding for the KZN site is particularly surprising considering the high HIV infection rate in this province. The evidence of the above table and chart confirms other findings of this study that the levels of social and interpersonal communication about AIDS in this site are low. In the WC a 36% 'not at all' response is not surprising and is consistent with much other data in this study indicating a low general level of response to HIV/AIDS.

THEMES AND DIRECTIONS FOR QUALITATIVE RESEARCH

Qualitative study often helps to move from description of the presence of absence of particular phenomena in relation to each other, to understanding contingent and causal relationships. Through qualitative research we may begin to generate ideas about what processes mediate observed changes. Until further qualitative data is gathered we can but speculate about what lies behind some of the trends observed. For instance there is little to go on in the current database which helps to explain the cross-contextual trend of earlier sex starting ages, and qualitative data may help us to develop understanding of this trend.

As Parker in Gillies (1996) comments, sex research has always been a low priority in the social sciences, and the HIV/AIDS pandemic has raised the need for an understanding of sexual behaviour. But he goes on to point out that “As the epidemic has continued to expand, dissatisfaction with current sexual behaviour research has increased.” (p. 137). In response to this dissatisfaction with largely descriptive survey type research, there has been an increasing emphasis on contextual studies of sex practice, often using qualitative methods. The current trend according to Gillies (1996) is to combine large-scale KABP (knowledge, attitudes, beliefs, and practices) studies with those that attempt to understand why the outcomes described in KABP studies are what they are. In keeping with this trend the present study was modelled on the need to pursue both lines of enquiry, but it has become clear that much still remains unanswered and the next stage of qualitative enquiry is intended to pursue some of the following issues:

- In the area of sexual interaction and risk prevention the following need to be more closely understood: negotiation of HIV risk prevention measures which depends on how, where, and under what conditions sexual experience is negotiated; factors associated with coercion and lack of choice in this context; gender relationships in sexual negotiation; sexual decision making with respect to abstinence and becoming sexually inactive despite having had sex before; maintenance and consistency of risk prevention practices; understanding the conditions which sustain high levels of risk exposure; understanding the changing dynamics of early and childhood sexual experience including the influence of media on the changing trends which have been shown in this study; the place of material transactions and favours associated with sexual practice and negotiation; the relationship between condom use and birth control practices and especially *depo provera*; and the changes in sex practice around male initiation.
- In terms of care the following issues need to be pursued: the relationship between care and prevention behaviour based on the qualitative data collected in this study suggesting that these are interconnected; the taboo on discussion of HIV/AIDS in family contexts in some sites; the experiences of PWA's in these communities; the relationship between exposure to PWA's and care; and the presence and role of care-oriented organisations in the sentinel sites.

BIBLIOGRAPHY

- Attawell, K. (1998). Literature review: HIV/AIDS knowledge, attitudes, beliefs and behaviours in South Africa. Research report for the National Directorate HIV/AIDS and STD, Pretoria.
- Campbell, C. (1999). Moving beyond health education: The role of social capital in conceptualising 'health enabling communities'. Unpublished paper, London School of Economics and Political Science.
- Department of Health. (1998). Report of the Ninth National HIV Survey of Women Attending Antenatal Clinics in the Public Health Services in South Africa.
- Demographic and Health Survey – 1998: Preliminary report. Medical Research Council, South Africa.
- Gillies, P. (1996). The contribution of social and behavioral science to HIV/AIDS prevention. In J. Mann, D. & Tarantola D. (Eds), AIDS in the World II: Global dimensions, social roots, and responses. Oxford University Press.
- Gregson, S., Zaba, B., Garnett, G.P. and Anderson, R.M. (1998). Projections of the magnitude of the HIV/AIDS epidemic in Southern Africa. In A. Whiteside (Ed.) Implications of AIDS for demography and policy in Southern Africa. Pietermaritzburg: University of Natal Press.
- Henry, K. (1999). Family Health International and the Joint United Nations Programme on HIV/AIDS. Meeting the behavioural data collection needs of national HIV/AIDS and STD programmes. IMPACT on HIV, 1 (2). <http://www.fhi.org>
- Kelly, K.J. (1996). DramAide: Method evaluation. Evaluation report submitted to DramAide.
- Mann J, Tarantola D (Eds). AIDS in the World II: Global dimensions, social roots, and responses. Oxford University Press, 1996.
- Mantell, J.E., DiVittis, A.T., Auerbach, M.I., (1997) Evaluating HIV Prevention Interventions, Plenum, New York
- Parker, W., Dalrymple, L., Durden, E. (1998). Communicating Beyond AIDS Awareness: A manual for South Africa, Department of Health, South Africa.
- Piotrow, P., Kincaid, D., Rimon, J. & Rinehart, W. (1997). Health communication. London: Praeger Publishers.
- Pisani, E., Brown, T. Saidel, T. Rehle, T. & Carael, M. (1998). Meeting the behavioural data collection needs of national HIV/AIDS and STD programmes: A joint IMPACT, FHI. UNAIDS workshop: Report and conclusions. FHI/ UNAIDS. Impact on HIV. <http://www.fhi.org>
- Richter, L. M. (1996). A survey of reproductive health issues among urban black youth in South Africa. Research report for Centre for Epidemiological Research in South Africa, Medical Research Council, Pretoria.
- UNAIDS (1999) Sexual behavioural change for HIV: Where have theories taken us? Geneva: UNAIDS.
- UNAIDS (1999) Trends in HIV incidence: Natural course of the epidemic or results of behavioural change? Geneva: UNAIDS.