

1998

Adolescents and HIV in developing countries: new research directions

Catherine L. Mac Phail
University of Wollongong, cmacphai@uow.edu.au

Follow this and additional works at: <https://ro.uow.edu.au/sspapers>



Part of the [Education Commons](#), and the [Social and Behavioral Sciences Commons](#)

Recommended Citation

Mac Phail, Catherine L., "Adolescents and HIV in developing countries: new research directions" (1998).
Faculty of Social Sciences - Papers. 3002.
<https://ro.uow.edu.au/sspapers/3002>

Adolescents and HIV in developing countries: new research directions

Abstract

Adolescents are of interest in HIV/STD studies as they are a group whose behaviour places them at increased risk of HIV infection (Hein, 1992). Adolescence is a period characterised by the development and formation of sexuality, a process which frequently involves a high turn-over of sexual partners (Krahe and Reiss, 1995; Lear, 1995). Teenage experimentation with drugs and alcohol frequently leads to the adoption of high risk behaviours or engagement in unplanned episodes of casual sex (Weatherburn and Project SIGMA, 1992). In addition, adolescents are particularly vulnerable to the normative social influences of their peers (DiClemente, 1990). These influences among adolescents tend to discourage the adoption of safe sexual behaviour by encouraging negative associations to be attached to condoms and their use. While the intense influence of normative social values on adolescents makes them increasingly vulnerable to HIV infection, if HIV-preventive behaviour can be made to seem the norm, teenagers may also be readily influenced by this (Fisher, Misovich & Fisher, 1992). Finally, aspects of teenagers' lives are dominated by feelings of invulnerability which allow them to take the chances they see as developmentally important (Memon, 1991; Ingham, Woodcock and Stenner, 1992). While adolescents know about HIV, most have not personalised the threat of AIDS (Edgar et al, 1992). The factors which place adolescents at risk of HIV tend to stereotype adolescence as a period of traumatic social behaviour. While much of the literature has encouraged this stereotype, adolescence should not be viewed as a completely negative developmental stage (Aggleton, 1991).

Keywords

hiv, developing, countries:, directions, adolescents, research

Disciplines

Education | Social and Behavioral Sciences

Publication Details

MacPhail, C. (1998). Adolescents and HIV in developing countries: new research directions. *Psychology in Society*, 24 69-87.

ADOLESCENTS AND HIV IN DEVELOPING COUNTRIES: NEW RESEARCH DIRECTIONS

*Catherine MacPhail
Epidemiology Research Unit
Johannesburg
Email: cmacphai@csir.co.za*

INTRODUCTION.

Adolescents are of interest in HIV/STD studies as they are a group whose behaviour places them at increased risk of HIV infection (Hein, 1992). Adolescence is a period characterised by the development and formation of sexuality, a process which frequently involves a high turn-over of sexual partners (Krahe and Reiss, 1995; Lear, 1995). Teenage experimentation with drugs and alcohol frequently leads to the adoption of high risk behaviours or engagement in unplanned episodes of casual sex (Weatherburn and Project SIGMA, 1992). In addition, adolescents are particularly vulnerable to the normative social influences of their peers (DiClemente, 1990). These influences among adolescents tend to discourage the adoption of safe sexual behaviour by encouraging negative associations to be attached to condoms and their use. While the intense influence of normative social values on adolescents makes them increasingly vulnerable to HIV infection, if HIV-preventive behaviour can be made to seem the norm, teenagers may also be readily influenced by this (Fisher, Misovich & Fisher, 1992). Finally, aspects of teenagers' lives are dominated by feelings of invulnerability which allow them to take the chances they see as developmentally important (Memon, 1991; Ingham, Woodcock and Stenner, 1992). While adolescents know about HIV, most have not personalised the threat of AIDS (Edgar et al, 1992). The factors which place adolescents at risk of HIV tend to stereotype adolescence as a period of traumatic social behaviour. While much of the literature has encouraged this stereotype, adolescence should not be viewed as a completely negative developmental stage (Aggleton, 1991).

While the factors mentioned above combine to make adolescents particularly vulnerable to HIV infection, intervention may be especially rewarding if directed towards them. A recent survey in the South African mining town of Carletonville indicated that HIV infection was almost non-existent in the 13-16 year age group. There is then a sharp increase in HIV infection rates in the age group 16-18 years with the peak infection rates of 40 percent for the community as a whole being experienced by the group aged 21-25 years. This indicates that in areas such as Carletonville, where general community infection rates are as high as 30 percent, preventive interventions may be the most effective if directed at adolescents below the age of 16 years (Epidemiology Research Unit, 1998). In the developed world HIV among adolescents has only recently become a priority, with the realisation that not only have rates among

adolescents increased, but that AIDS developing in people in their twenties is usually the result of infection during teenage years (Athey, 1991; Hein, 1992). Work among adolescents in the developing world has been concentrated in knowledge, attitudes, practices and behaviour (KAPB) surveys. While these types of surveys provide some valuable information, they are usually operationalised as narrow quantifiable variables, with little attention to the societal, normative or cultural contexts within which phenomena such as knowledge, attitudes and behaviour are negotiated or constructed. Research has to expand beyond the limitations of KAPB surveys in the following ways. First, the variables explored have to be extended beyond what can be measured quantitatively enabling the exploration of perceptions, beliefs and perceived norms. Second, exploration of sexuality cannot be divorced from the social context which informs behaviour and in which behaviour takes place. The use of KAPB surveys cannot explore these types of issues, necessitating the development of alternative methodologies. Third, research and the possible health promotion solutions stemming from research have to embrace more than just the individual. For adolescents to effectively access safe sex behaviour, research questions need to be directed towards the creation of enabling environments.

The results of KAPB surveys have led to the implementation of HIV and STD interventions but have, thus far, made only small contributions to debates about sexuality and the important normative and cultural contexts within which adolescent sexuality is negotiated and experienced. At present, the implementation of STD and HIV interventions is hampered by the narrow variables being investigated through KAPB surveys. Effective planning is not achieved as the variables measured in KAPB surveys are too narrow and repeatedly indicate that levels of knowledge are high but that behaviour change is lacking. In addition, interventions stemming from KAPB research are directed towards the individual and ignore the environment in which the individual functions, thus limiting the creation of enabling environments in which behaviour change is more likely to take place. An expanded research agenda which moves beyond KAPB would allow sexuality to be squarely placed in the community under investigation and therefore, encourage investigation of perceived norms and the impact of social and cultural contexts. A number of benefits for HIV and STD interventions would stem from the expansion of existing research agendas. Investigation of the influence of social, cultural and normative contexts on sexuality would encourage interventions to move towards the creation of enabling environments. An all-embracing starting point for interventions would be created as perceptions and beliefs form an important aspect of sexuality which is currently being left unexplored through the use of KAPB surveys.

Research in developed countries has made use of KAPB surveys, but has also been characterised by the emergence of work in which researchers have begun to explore broader issues of adolescent sexuality. For example, some researchers have moved to examine the context of adolescent sexuality and the ways in which sex is negotiated within the confines of societal norms and peer expectations. Implications for the success of the safe sex message are then discussed. For interventions to be effective, research has to consider more than basic knowledge, attitudes and behaviour in regard to HIV among adolescents. For the implementation of effective interventions, research needs to move beyond investigating isolated decontextualised issues such as “how often” and “with whom” people have sex and move towards seeing sex as an extremely complex social activity which “ ... occurs within a social context replete with

assumptions, values, ideals, attitudes and beliefs, and that the knowledge of this context is important in understanding sexual behaviour and the mechanisms of behaviour change" (Moore and Rosenthal, 1992:416).

A literature search on Medline and Current Contents of relevant key words yielded extensive literature on HIV among adolescents¹. Despite the large amount of research which concerns adolescents and HIV, few researchers have moved beyond basic surveys which establish the levels of knowledge among groups of adolescents. While knowledge about the HIV virus is of obvious importance, high levels of knowledge have been shown to have little impact on current and intended sexual behaviour (DiClemente, 1990; Slonim-Nevo, Ozawa & Auslander, 1991) and therefore, have limited applicability to the development of effective interventions. Knowledge among adolescents must be disaggregated into its various components. Awareness of the disease is relatively high among adolescents, however, understanding, comprehension and prediction is very low. Hillier, Harrison and Warr (1998:21) indicate this strongly when they mention that Australian students have high levels of knowledge about barrier methods of contraception but that " ... it is not clear that students know how to operationalize their knowledge". The literature search was divided in order to establish what research into adolescent sexuality has been conducted in the developed world, the developing world and within South Africa, where the author's current research is taking place. The issues of adolescent sexuality as a complex interaction of personal and social attitudes and expectations, need to be explored in developing countries in the way in which they have been investigated in developed countries. While many of the lessons learnt in the developed world may inform research in developing countries, sex as a social construct is location specific and research needs to reflect this. HIV intervention programmes in the developing world and in South Africa, in particular, need to be influenced by the social context of adolescent sexuality specific to each location.

EXPLORING ADOLESCENT SEXUALITY: RESEARCH IN DEVELOPED COUNTRIES.

HIV in the developed world is a well explored topic. Much of the published research has been conducted among college and high school students to establish their knowledge of HIV, attitudes towards the disease and the sexual behaviour of the general adolescent or young adult population (Bowie & Ford, 1989; Siegel et al,1991; Hingson & Strunin, 1992). However, a substantial number of these research projects are aimed at establishing baseline statistics, however conceptually limited, which may provide both direction and scope for future intervention programmes (Bowie & Ford, 1989). Researchers have also considered the potential for the use of condoms among adolescents (Edgar et al, 1992; Ku, Sonenstein & Pleck, 1994); many have looked into measuring and classifying the risks taken by adolescents in their sexual lives (Buzwell & Rosenthal, 1996; De Gaston, Weed & Jense, 1996; Rosenthal, Lewis & Cohen, 1996); and there have been attempts to consider the relevance of particular behavioural models to adolescent behaviour (Ingham, Woodcock & Stenner, 1991). At a narrower level, much of the work concerned with adolescents and HIV has been directed at particular adolescent groups which are believed to have higher levels of risk

¹ Keywords used in the search include a combination of the following: Adolescents, teenagers, youth, condoms, STDs, HIV, AIDS, sexuality, behaviour, health, sex, intervention. In addition, a hand search of available articles generated further literature.

behaviour and greater vulnerability to HIV transmission. Homeless, incarcerated and delinquent adolescents have been identified as being more concerned with survival than the distantly perceived threat of HIV infection (Matthews, Richardson, Price & Williams, 1990; Bond, Mazin & Jiminez, 1992; Anderson, Freese & Pennbridge, 1994) and in having greater life stresses than the general adolescent population (Rotherham-Borus, Becker, Koopman & Kaplan, 1991). For these reasons, vulnerable adolescents are seen to have greater numbers of sexual partners, make less frequent use of condoms and engage in other behaviours associated with risk for HIV such as IV drug use (Rickman et al, 1994).

While the research mentioned above provides interesting information which may indeed lead to the development of intervention programmes, it has significant shortcomings. Research has shown that knowledge of HIV does not change behaviour and that despite knowing that condoms prevent HIV transmission, condom use has remained disappointingly low (DiClemente, 1992), despite some evidence of condom up-take in developed countries (Zimet et al, 1992; Evans, et al, 1995; Stigum, Magnus, Veierod & Bakketeig, 1995; Rodden, Crawford, Kippax & French, 1996; Rosenthal, Smith, Reichler & Moore, 1996; Ostergaard, 1997). In addition, there has been the realisation that much of the risk behaviour associated with adolescence has its roots in the way in which adolescents construct their identities within the context of heterosexual society (Buysse & van Oost, 1997). This knowledge has informed a new body of research into adolescent sexuality and the ways in which sexuality most commonly influences behaviour. A number of interrelated themes emerge in the adolescent sexuality literature, which is for the most part concentrated in the United Kingdom, the United States of America and Australia. These themes have implications for the adoption of safe sexual behaviour and are partial explanations for continued high risk behaviours among adolescents despite high levels of HIV/AIDS knowledge (DiClemente, 1990; Hingson & Strunin, 1992). While the various themes are interrelated and cannot be understood in isolation of one another, desegregation allows the consideration of four major issues.

Female sexuality: feelings versus social norms.

Social pressures mean that young women are continually receiving messages about their own sexuality which contradict their feelings and desires (Fine, 1988). In many instances, adhering to society's expected norms of femininity means that adolescent girls take risks with their sexual health (Holland, Ramazanoglu, Scott & Thomson, 1994a). Tolman (1994) indicates that in a sample of 30 Australian female adolescents the majority have difficulty in experiencing their sexuality and sexual feelings without conflict. This conflict arises due to the realisation that while their sexual feelings could bring them pleasure, there are also dangers associated with female sexuality in society. This is manifest in a number of ways. Firstly, society's definition of feminine does not acknowledge female initiation of sex. Sex is viewed as the attrition of female resistance by male persuasion, and by asserting that sex was unexpected or "just happened" women maintain societal definitions of femininity but also place their sexual health in jeopardy. Not admitting that sex is a possibility means that young women have not discussed sexual histories with prospective partners and do not carry condoms. Secondly, not having condoms available at the time of sexual intercourse may not only be a function of the unexpectedness of sex. In many cases, women make conscious decisions not to carry condoms in order to preserve their social reputations. Carrying condoms implies a degree of sexual freedom and a need for sex which directly

contradicts society's norms of the pursued female and can lead to labels such as slut and slag (Holland et al, 1990; Hillier, Harrison & Warr, 1998).

Work in the United States of America among both heterosexual and lesbian female adolescents points out that denying their own sexuality is not universal among women. A small group of adolescents are prepared to acknowledge their sexual feelings and therefore make more attempts at not only initiating sex, but also guiding their partners in providing them with sexual pleasure. Women who are able to acknowledge their sexuality despite the restrictive messages from society have usually had extremely open relationships with their mothers who actively encouraged discussion of all aspects of sex and sexuality (Thomson, 1990). These women who are able to openly assert their needs in a sexual relationship have a better chance of being able to insist on safe sexual practices in these same relationships (Holland et al, 1990). Fine (1988) asserts, through her work in American schools, that openness about sexuality which encourages safe sexual behaviour should be a major component of school sex education policies.

While adolescent females are encouraged not to engage in sex, those who do are under a great deal of pressure to identify relationships as serious or committed as a justification for their sexual behaviour (Holland et al, 1990). Adolescent girls whose sexual relationships fall outside of this definition face societal and peer condemnation and therefore attempt to view all relationships as potentially serious until proven otherwise. In relationships where partners have known each other for only a short time, the opportunities to gain knowledge of their partner are very limited. In these cases, adolescents frequently turn to reputation or rumour to satisfy themselves of their partners' sexual histories (Ingham, Woodcock & Stenner, 1991). However, Ingham et al (1991) have pointed out that discussion of previous sexual relationships is most often motivated by "relationship issues" rather than the need to find out about the possibility of HIV/STD infection. Ambiguity about sexual matters is specifically maintained by a lack of appropriate language so that embarrassment can be avoided should one of the partners decide against sex (Lear, 1995). In addition, social norms internalised by young women encourage them to adopt elements of trust and assumed monogamy into relatively new relationships so that they can be viewed as permanent and therefore sexually justified. As an indication of the trust in relationships, partners tend to terminate condom use and in this way expose themselves to greater risk of both HIV and STD infection (Holland et al, 1990; Holland, et al, 1991).

Gendered power imbalances.

One of the most dominant discourses to emerge on adolescent sexuality has been a series of feminist orientated papers from the WRAP (Women, Risk and AIDS Project) by Janet Holland and her associates. Based on in-depth interviews with a large number of adolescent girls in London and Manchester, Holland, Ramazanoglu, Sharpe and Thomson (1992), and Holland et al (1992) have clearly illustrated the difficulties faced by women in negotiating safe sex within the gender imbalance of society. The dominance of male power over women in sexual relationships is clearly illustrated by the common experience of sexual initiation highlighted by many of the women interviewed. Attempts by men to coerce women into sexual relationships run the full range from gentle persuasion to violence and rape (Holland et al, 1990). When combined with the dominant views of male sexuality in which men are seen to "need" sex in way which women do not, the opportunities for women to either refuse sex or

take the time to negotiate safe sex are constrained (Wilton & Aggleton, 1991; Moore & Rosenthal, 1992; Ramazanoglu & Holland, 1993). While society does not accept male violence a matter of course, the imbalance of power relations between the genders make much of this coercion acceptable behaviour. Holland et al (1992:650) indicate that "... while individual men need not be violent, male and female sexualities have been socially constituted in western cultures in ways which make the differences between 'normal heterosexual sex' and 'rape' unclear". In a society where the negotiation of safe sex takes place with imbalanced gender power relations, successful female negotiation of condom use is generally low (Holland et al, 1991). Work among adolescents in Belgium by Buysse and van Oost (1997) further emphasises this by indicating that women in relationships characterised by male power are unlikely to achieve safe sex despite their intentions to do so. Literature on the ways in which young women resist male power in sexual relationships has been only briefly explored (see Lees, 1993), notwithstanding the importance successful resistance may have for promotion of sexual health in female adolescents.

While the majority of the young women interviewed had some experience of, and had internalised, the dominant views of society concerning male power, there are some exceptions. Holland et al (1990), and Holland, Ramazanoglu, Scott and Thomson (1992) point out that some young women are achieving empowerment by adopting a view of femininity that falls outside of the usual definitions entrenched by society. Empowerment may be at one of two levels. Intellectual empowerment refers to the realisation that the relations accepted by society are imbalanced and making the decision to confront these imbalances in future relationships. At a higher level, experiential empowerment takes the realisation women have achieved and translates it into actual behaviour. For women to achieve empowerment across a range of relationships and with different partners, intellectual and experiential empowerment must be combined (Holland, Ramazanoglu, Scott & Thomson, 1992).

Male sexuality.

The material dealing with adolescent sexuality has been largely concentrated on females. While female sexuality provides a number of answers to questions about the spread of HIV in heterosexual society, research on masculine sexuality is emerging. Masculine sexuality offers the flip side of the power relationships highlighted previously. Holland, Ramazanoglu, Sharpe and Thomson (1994b) in the MRAP (Men, Risk and AIDS Project) have indicated that masculine sexuality is manifest in society's classification of "normal" men whether individuals desire this identity or not. The authors point to a tension between men's vulnerability and the power which they are expected to exercise over women to achieve society's recognition. In addition, a double standard of sexual behaviour encourages men to engage in casual sex to prove their masculinity while disapproving of female sex as non-feminine. Combined with negative attitudes towards condoms which have been internalised by both men and women, this behaviour places adolescent men at greater risk of HIV/STD infections (Holland et al, 1990). Additionally, men place themselves at increased health risk due to their adoption of perceived health enhancing behaviours.

Buysse and van Oost (1997) indicate that while both male and female adolescents make use of partner selection as a method of ensuring safe sex, this is particularly true of men. Health promotion initiatives encourage adolescents to "know" their partners before engaging in sex, yet adolescents attempt to achieve this without actual

discussion of sexual histories (Ingham, Woodcock & Stenner, 1991). Waldby, Kippax and Crawford (1993) highlight the way in which this leads heterosexual adolescent men to feel that they can both identify and then avoid “risky types” by categorising women as “clean” or “unclean”. This definition is, however, usually based on unsubstantiated evidence gleaned from observing women as they function in society and is frequently grounded on whether women form part of the established social circle in which the man himself moves. Women who do not meet the criterion of “clean” are not necessarily then excluded as sexual partners but distanced through the use of condoms and limited social interaction. Male adolescents therefore negatively impact on their health behaviour by utilising inappropriate safe sex messages in a way which enables continued male pursuit of sex as a social norm. Feminine lack of empowerment has been explored in much of the literature, as mentioned above. Equally important and relatively unexplored, is the issue of a lack of male empowerment. Women are increasingly perceived by males to hold the balance of power, thereby limiting the empowerment of their male partners (Williams & Giles, 1978; see also Campbell, 1995, for developing world).

Normative values and beliefs of peers.

Norms and values of society are inherent in sexuality, but the norms of adolescent peers are particularly influential. A number of authors have begun to explore the role which peer norms hold in maintaining particular behaviours, values and beliefs. Reed and Weinberg (1984) provide an interesting re-evaluation of the data collected by the Kinsey Institute for Research by looking at the changing norms, or what they term scripts, of young people. Their results indicate that much of what young men and women do is influenced and entrenched by what others like themselves are doing. The data illuminated by Reed and Weinberg (1984) reflects the peer norms of the 1960s and 1970s but is still informative when read in conjunction with more recent work.

A later study with American college students indicated that whether friends discussed sex and practiced safe sex was a strong predictor of whether a participant was engaging in safe sexual behaviour. Within this group there were gender differences in the influence that friends were able to have over participants. Men, while prepared to discuss sexual matters, were less likely than women to morally pressure their friends into specific behaviours (Lear, 1995). The impression is that normative peer influences encourage sexual behaviour in the direction of safety, however, Fisher, Misovich and Fisher (1992) point to the failure of many HIV interventions as being the result of peer norms which encourage risk. They indicate that both behaviour-specific and general norms function to promote unsafe sexual behaviour and to encourage concern for sexual health to be seen in a negative light. These influences are born out by data collected from college students who indicated that they felt little support for safe sex from their friends. In terms of intervention, Fisher, Misovich and Fisher (1992) indicate that well-liked peers and influential others are needed to promote HIV prevention as the fashion or norm. Serovich and Greene (1997:441) also make this comment when they state that it is " ... important for educators who seek to reduce the transmission of HIV to develop programmes that seek to reduce overall positive attitudes towards risky behaviour and increase the salience of HIV".

Norm-related behaviour has negative implications for many of the corner-stones of HIV prevention. Societal notions of “feminine” discourage girls from ensuring that they are able to negotiate protected sex. While HIV interventions may promote the use of

condoms, they run counter to social dogma which entrenches the risk of a bad reputation among condom carrying women and take little heed of young women's lack of assertiveness and confidence to insist on condom use in sexual relationships. Macho constructions of man also hinder HIV preventive behaviour through maintaining gender imbalances in power and encouraging risk-taking behaviour among young men.

Research in developed countries has begun to uncover the complex relationships between societal norms and sexuality of adolescents. In many ways, the information is revealing and clearly indicates possible reasons for the continued failure of HIV prevention efforts directed at adolescents. The research is, however, also both challenging and disheartening. On one hand, there is the potential for HIV intervention to change many of perceived adolescent and indeed society norms for more than just HIV prevention. On the other hand, the norms entrenched by society are not easily altered and exploration of these facets of sexuality may bring change too late. Within developing countries investigations of adolescent sexuality indicate that advances in this branch of research fall behind that taking place in developed countries and have made few contributions to the promotion of health behaviour.

LIMITATIONS OF ADOLESCENT SEXUALITY RESEARCH IN DEVELOPING COUNTRIES.

Research in developing countries has tended to focus on HIV knowledge levels and reported sexual behaviour, rather than on the influence complex social negotiations of sex may have on HIV transmission. There is an urgent need for more attention to be paid to these social dimensions of adolescent sexuality so that HIV interventions can address societal sexual perspectives and therefore successfully promote safer sexual behaviour. While HIV/AIDS research is an obvious priority, the majority of studies have been conducted at the level of the general population (Lyttleton, 1994; Grosskurth et al, 1995; Schopper et al, 1995) or have isolated high risk groups other than adolescents. For the most part, research has concentrated on the risk of HIV infection among groups of commercial sex workers and the clients they interact with (Archibald et al, 1994; Asamoah-Adu et al, 1994; Bhave et al, 1995; Ford et al, 1996). In addition, much of the work on HIV in developing countries has focused on understanding HIV in a particular location, among particular groups, so that effective interventions can be implemented and measured. Development of programmes such as these are an important part of HIV intervention, yet they remain problematic. In most instances they assume that sexuality and sexual behaviour fall within rational decision making and that safe sex behaviour can, therefore, be both learnt and implemented. Their usefulness continues to be limited by the way in which they ignore complex social interactions and norms which influence sexuality and consequently the uptake of behaviour change. Within the large numbers of intervention-based research, there have been some which have been aimed at young adults (Wilson, Mparadzi & Lavelle, 1992; Caceres, Rosasco, Mandel & Hearst, 1994; Klepp et al, 1994; Ablasca et al, 1995), but have concentrated on basic knowledge, attitudes and behaviour, with no investigation of the social construction of sexuality and the implications for health behaviour. As well as research which has the development of HIV interventions as its end point there have also been basic descriptive studies of HIV-related issues among adolescents. An example of such a study is the examination of adolescent behaviour in Kenyan truck stops and the expected implications for HIV transmission (Nzyoku et al, 1997).

Studies in Tanzania have considered a number of variables such as age of sexual debut, levels of condom use, awareness of condoms and knowledge of AIDS (Kapiga, Nachtigal & Hunter, 1991; Mnyika et al, 1995; Lugoe, Klepp & Skutle, 1996). The research points to a significant association between later sexual debut and condom use but indicates relatively low levels of condom use across the adolescents sample as a whole (Lugoe, Klepp & Skutle, 1996) despite high levels of AIDS knowledge (Kapiga, Nachtigal & Hunter, 1991). These studies have, however, not looked at the norms of adolescent sexuality in Tanzanian society and have not delved into health behaviour change which requires changing normative beliefs.

A further research project among adolescents in India (Mathai, Ross & Hira, 1997) provides a brief insight into an aspect of adolescent sexuality which has been more fully explored in developed countries. While pointing out that HIV knowledge alone is not enough to promote healthy sexual behaviour and stating that "also crucial are the attitudes and motivational factors which influence children's and adolescents" propensities to engage in risk behaviour, perceptions of personal vulnerability, behavioural intentions, competence to negotiate social situations, and skills to implement prevention behaviour (Mathai, Ross & Hira, 1997:564), the study does little to address these factors. Indeed, issues of sexuality are only briefly mentioned when it is noted that the peer norms influencing the adolescents participating seem to encourage abstinence rather than the high risk behaviours usually encouraged in developed countries. This move towards abstinence may reflect a global trend towards the endorsement of fidelity and monogamy which has little to do with health interventions. The limited amount of interest in issues of adolescent sexuality among researchers in developing countries are mirrored, for the most part, in the research informing our knowledge of adolescent sexuality in South Africa. A review of the literature does, however, indicate that within South Africa a great deal is descriptively known about adolescent sex and related facts. Issues of sexuality have infiltrated South African research and these tentative beginnings need to be both encouraged and further developed.

THE WAY FORWARD: SEXUALITY RESEARCH IN SOUTH AFRICAN LITERATURE.

South African literature on adolescent sexuality has still to develop our understandings of the normative social influences which shape adolescent experience of sex. However, a number of studies lay promising seeds for future development. Currently, like much of the research in developing countries, South African research explores the basic relationships between knowledge of HIV, attitudes and subsequent behaviour (see Mathews et al, 1990) but in many cases the literature concentrates on describing factors such as age at sexual initiation, median number of partners and usual methods of contraception (see Flisher, Ziervogel, Chalton & Robertson, 1993; Flisher et al, 1993; Buga, Amoko & Ncayiyana, 1996). There has also been a continued emphasis on teenage pregnancy among South African youth, possibly to the detriment of the development of an informative body of work concerning sexuality (see Kau, 1988; 1991; Preston-Whyte & Zondi, 1991).

Much of South African work concerned with AIDS and adolescents has considered the particularly high risk situation of street children and homeless youth (Richter, Swart-Kruger & Barnes, 1994; Richter & Swart-Kruger, 1995; Swart-Kruger & Richter, 1997). The studies are, however, primarily directed towards knowledge, attitudes and

behaviour surveys, despite the interesting social constructions of sexuality which encompass survival sex, rape and relationship sex on the streets. The authors conclude their paper with a challenge of biomedical hegemony, illuminating the fact that AIDS prevention cannot be achieved without reflections on sexuality, yet this issue is not fully addressed (Swart-Kruger & Richter, 1997). As has been shown with adolescents in a variety of settings, homeless and street youth show high levels of knowledge but relatively rarely translate this into healthy sexual behaviour (Richter, Swart-Kruger & Barnes, 1994). Very little exploration has been conducted into the socially influenced constructs of adolescent sexuality and the impact this has on adolescent risk of HIV infection and health behaviour. This means that while we know that South African youth have relatively good knowledge of AIDS and HIV transmission, we know almost nothing about how sexuality is constructed among adolescents and the implications this has for high risk behaviour or the mechanisms of behaviour change.

Although stating that there has been no focused research into adolescent sexuality in South Africa, scattered references to important issues are appearing in the literature. It is unfortunate that the methodological focus in the majority of these studies has not encouraged further explorations of these factors. Preston-Whyte and Zondi (1991) explore a number of sexuality issues not found in the international literature. They indicate that one of the greatest barriers to the adoption of safe sex behaviours in South Africa, namely the use of condoms, is the pervasive view that girls should prove their fertility before marriage. In society where premarital sex no longer carries stigma, the children of unwed adolescents are loved and cared for in the extended family in a way which frequently contradicts the messages parents and adults give out about premarital sexual activity. The importance of fertility in South African society and the view among young men that condoms are incompatible with male notions of masculinity and pleasure (Abdool Karim, Abdool Karim, Preston-Whyte & Sankar, 1992; Akande, 1997) mitigate against preventing heterosexual transmission of HIV. The contraceptive value of condoms alone was highlighted by high school students interviewed in Natal as being sufficient reason for their non-use (Abdool Karim, Abdool Karim, Preston-Whyte & Sankar, 1992).

As well as being negatively viewed due to limiting pleasure, condoms are also viewed in a negative light as they are seen among adolescents to be unnecessary unless already infected with either HIV or STDs. The implications of suggesting condom use are seen to indicate concern with partner fidelity and disease (Abdool Karim, Abdool Karim, Preston-Whyte & Sankar, 1992). This aspect of the negative values attributed to condoms is particularly problematic for adolescent females in South Africa, as it is one of the common initiators of violence between sexual partners. The high rates of violence characterising heterosexual relationships in South Africa have been explored in relation to the control over health promoting behaviour female adolescents have in their sexual relationships (Wood & Jewkes, 1997). Interviews with pregnant adolescents in KwaZulu-Natal indicated that the imbalance in gendered power relations is such that women experience violence from partners if they refuse sex, request the use of condoms, use contraception or initiate discussion about AIDS (Varga & Makubalo, 1996). The influence of normative social values further entrenches the cycle of violence as young women internalise male notions of teenage love having to include sex and violence as an expression of love (Wood & Jewkes, 1997). Although not explored in much of the literature, some young South African women do make attempts to resist stereotype relationships dominated by men. In-depth interviews with young

South African women conducted by Catherine Campbell (1995) illustrate a range of ways in which certain young township women sought to resist society's acceptance of male domination through, for example, stating their intention to set up female-headed households (with "part-time" lovers) to avoid the conflicts and stresses associated with "permanent" heterosexual relationships. Furthermore, presumably not all young men interpret their masculinity in a completely homogenous way. A wide scope remains for further work on resistance to social constructions of adolescent sexuality.

If a key dimension of HIV-prevention programmes involves women working together to develop the confidence and solidarity to assert their rights to sexual health and non-violent relationships (Campbell, Mzaidume & Williams, 1998), there is a need to develop understandings not only of the ways in which young men and women reproduce stereotypical gender norms and relationships, but also to investigate the counter-stereotypical ways in which particular young people, in particular contexts, might already be developing strategies for resisting old-fashioned patriarchal sexual norms and for reshaping their sexual relationships in ways that are less undermining of young women's confidence and assertiveness in relation to their sexuality.

CONCLUSION.

This review has shown that research among adolescents in developing countries has tended to concentrate on the relatively narrow and decontextualised variables of knowledge of, and attitudes towards HIV, and on reported sexual behaviour. Much of the research has shown that adolescents have high levels of knowledge about the transmission of the HIV virus and are fully cognizant of the value of barrier contraception, such as condoms, in preventing HIV transmission. Despite the high profile given to HIV, few adolescents are able to translate their knowledge into adopting safe sex behaviour. Research in developing countries has also tended to concentrate on quantifiable aspects of adolescent sexuality such as age of sexual debut and number of partners. Interventions which have been based on the results of such research have shown that knowledge improved in areas where it was lacking but that this enlightenment had negligible impact on either intended or current behaviours. More attention needs to be paid to the way in which adolescent sexuality is a complex socially negotiated process embedded with norms and values rather than the result of informed decision-making.

Developing world research needs to be directed towards issues of adolescent sexuality which have been briefly explored in the past. The impact of dominant social discourses on the norms and values which influence adolescent sexuality have to be grasped in order to move understanding of sexual decision-making away from models that suggest rationality based on knowledge. Moving research in the developing world towards an understanding of adolescent sexuality has a two-fold importance in relation to interventions. First, the impact of norms, values and entrenched social beliefs provide some answers for the failure of existing HIV interventions. Second, future interventions will benefit from an understanding of the complexities facing adolescents in the decisions which govern their sexual lives. On a theoretical level, the development of a literature based in the developing world will encourage future research and increase knowledge in relevant countries rather than leaving researchers to glean what they can from the experience of developed countries.

Within the literature of the developed world there has been the realisation that norms and values entrenched in society have significant impact on the ways in which adolescents are able or unable to translate their considerable HIV knowledge into appropriate behaviour. Issues addressed thus far are the way in which female sexuality, male sexuality, gendered power imbalances and normative beliefs of peers discourage the adoption of safe sex practices advocated in HIV/STD interventions. While the lessons learnt from the experiences of developed countries provide researchers in developing areas with vital starting points, the local situation is frequently very different to that of developed countries such as the United States of America or the United Kingdom.

Within South Africa a number of meaningful issues surrounding adolescent sexuality have been identified, although their full investigation has been limited. The South African situation has been described as one with a particularly negative view towards condoms. Condoms are seen to be directly incompatible with social notions of masculinity and their use limited to persons already infected with either HIV or an STD. In many instances, women are expected to prove their fertility before marriage has taken place and condoms as a means of contraception rather than prophylaxis are frowned upon. Instrumental in continued low condom use has been the identification of large-scale gender imbalance, the ultimate outcome being in high levels of violence directed towards women who suggest condom use or initiate discussion about HIV or STDs.

The unique social norms and values affecting adolescents in South Africa require localised research which, although informed by work in the developed world, cannot be fully explained by it. In addition, there needs to be research in both the developed and developing world which considers the way in which a small minority of adolescents are breaking out of the mould cast for them by society and redefining their sexuality through their own experience. The potential for intervention success may be greatly enhanced by learning from the experiences of adolescents who have resisted stereotypical societal norms and thereby enhanced their safety in terms of sexual behaviour.

Acknowledgements.

This paper forms part of the preliminary research for the Epidemiology Research Unit's (ERU) on-going evaluation of the Mothusimpilo Project in Carletonville, co-ordinated by Brian Williams. Thanks to Catherine Campbell and an anonymous reviewer for comments and advice on the manuscript. The views expressed in this paper are the personal opinions of the author.

REFERENCES.

Abdool Karim, S S, Abdool Karim Q, Preston-Whyte, E & Sankar, N (1992) Reasons for lack of condom use among high school students. **South African Medical Journal**, **82**, 107-110.

Aggleton, P (1991) When will they ever learn?: Young people, health promotion and HIV/AIDS social research. **AIDS Care**, **3(3)**, 259-264.

Akande, A (1997) Black South African adolescents' attitudes towards AIDS precautions. **School Psychology International**, **18(4)**, 325-341.

Anderson, J E, Freese, T E & Pennbridge, J N (1994) Sexual risk behaviour and condom use among street youth in Hollywood. **Family Planning Perspectives**, **26(1)**, 22-25.

Aplasca, M R A, Siegel, D, Mandel, J S, Santana-Arciaga, R T, Paul, J, Hudes, E S, Monzon, O T, & Hearst, N (1995) Results of a model AIDS prevention program for high school students in the Philippines. **AIDS**, **9 (Supplement 1)**, S7-S13.

Archibald, C P, Chan, R K W, Wong, M L, Goh, A & Goh, C L (1994) Evaluation of a safe-sex intervention programme among sex workers in Singapore. **International Journal of STD and AIDS**, **5**, 268-272.

Asamoah-Adu, A, Weir, S, Pappoe, M, Kanlisi, N, Neequaye, A & Lamptey, P (1994) Evaluation of a targeted AIDS prevention intervention to increase condom use among prostitutes in Ghana. **AIDS**, **8**, 239-246.

Athey, J L (1991) HIV infection and homeless adolescents. **Child Welfare**, **70(5)**, 517-528.

Bhave, G, Lindan, C, Hudes, E S, Desai, S, Wagle, U, Tripathi, S P & Mandel, J S (1995) Impact of an intervention on HIV, sexually transmitted diseases, and condom use among sex workers in Bombay, India. **AIDS**, **9 (Supplement 1)**, S21-S30.

Bond, L,S, Mazin, R & Jiminez, M V (1992) Street youth and AIDS. **AIDS Education and Prevention (Supplement)**, S14-S23.

Bowie, C & Ford, N (1989) Sexual behaviour of young people and the risk of HIV infection. **Journal of Epidemiology and Community Health**, **43**, 61-65.

Buga, G A, Amoko, D H A & Ncayiyana, D J (1996) Sexual behaviour, contraceptive practice and reproductive health among school adolescents in rural Transkei. **South African Medical Journal**, **86(5)**, 523-527.

Buysse, A & van Oost, P (1997) "Appropriate" male and female safer sex behaviour in heterosexual relationships. **AIDS Care**, **9(5)**, 549-561.

Buzwell, S & Rosentha,l D (1996) Constructing a sexual self - adolescent's self perceptions and sexual risk taking. **Journal of Research on Adolescents**, **6(4)**, 489-513.

Caceres, C F, Rosasco, A M, Mandel, J S & Hearst, N (1994) Evaluating a school-based intervention for STD/AIDS prevention in Peru. **Journal of Adolescent Health**, **15**, 582-591.

Campbell, C (1995) The social identity of township youth: An extension of social identity theory (part 2). **South African Journal of Psychology**, **25(3)**, 160-167.

Campbell, C, Mzaidume, Z & Williams, B (1998-in press) Renegotiating gender relations as an HIV-prevention strategy: The Carletonville project. **Agenda**.

De Gaston, J F, Weed, S & Jense, L (1996) Understanding gender differences in adolescent sexuality. **Adolescence**, **31(121)**, 217-231.

DiClemente, R J (1990) The emergence of adolescents as a risk group for Human Immunodeficiency Virus infection. **Journal of Adolescent Research**, **5(1)**, 7-17.

DiClemente, R J (1992) Psychosocial determinants of condom use among adolescents, in DiClemente, R J (ed) **Adolescents and AIDS: A generation in jeopardy**. Newbury Park: Sage.

Edgar, T, Freimuth, V, Hammond, S, MacDonald, D & Fink, E (1992) Strategic sexual communication: Condom use resistance and response. **Health Communication**, **4(2)**, 83-104.

Epidemiology Research Unit (1998) Baseline results of population survey in Carletonville, South Africa. **Epidemiology Research Unit Series No. 37**.

Evans, B A, McCormack, S M, Kell, P D, Parry, J V, Bond, R A & MacPae, K D (1995) Trends in female sexual behaviour and sexually transmitted diseases in London, 1982-1992. **Genitourinary Medicine**, **71(5)**, 286-290.

Fine, M (1988) Sexuality, schooling and adolescent females: The missing discourse of desire. **Harvard Educational Review**, **58(1)**, 29-53.

Fisher, J D, Misovich, S J & Fisher, W A (1992) Impact of perceived social norms on adolescents' AIDS-risk behaviour and prevention, in DiClemente, R J (ed) **Adolescents and AIDS: A generation in jeopardy**. Newbury Park: Sage.

Fisher, A J, Ziervogel, C F, Chalton, D O & Robertson, B A (1993) Risk-taking behaviour of Cape Peninsular high-school students: Part I. Introduction and methods. **South African Medical Journal**, **83**, 469-473.

Fisher, A J, Ziervogel, C F, Chalton, D O, Leger, P H & Robertson, B A (1993) Risk-taking behaviour of Cape Peninsular high-school students: Part VIII. Sexual behaviour. **South African Medical Journal**, **83**, 495-497.

Ford, K, Wirawan, D N, Fajans, P, Meliawan, P, MacDonald, K & Thorpe, L (1996) Behavioural interventions for reduction of sexually transmitted disease/HIV transmission among female commercial sex workers and clients in Bali, Indonesia. **AIDS**, **10**, 213-222.

Grosskurth, H, Mosha, F, Todd, J, Mwijarubi, E, Klokke, A, Senkoro, K, Mayaud, P, Changalucha, J, Nicoll, A, ka-Gina, G, Newell, J, Mugenyi, K, Mabey, D & Hayes, R (1995) Impact of improved treatment of sexually transmitted diseases on HIV infection in rural Tanzania: Randomised controlled trial. **The Lancet**, **346**, 530-536.

Hein, K (1992) Adolescents at risk for HIV infection, in DiClemente, R J (ed) **Adolescents and AIDS: A generation in jeopardy**. Newbury Park: Sage.

Hillier, L, Harrison, L & Warr, D (1998) "When you carry condoms all the boys think you want it": Negotiating competing discourses about safe sex. **Journal of Adolescence**, **21(1)**, 15-29.

Hingson, R & Strunin, L (1992) Monitoring adolescents' response to the AIDS epidemic: Changes in knowledge, attitudes, beliefs, and behaviours, in DiClemente, R J (ed) **Adolescents and AIDS: A generation in jeopardy**. Newbury Park: Sage.

Holland, J, Ramazanoglu, C, Sharpe, S & Thomson, R (1992) Pleasure, pressure and power: Some contradictions of gendered sexuality. **The Sociological Review**, **40(4)**, 645-674.

Holland, J, Ramazanoglu, C, Scott, S, Sharpe, S & Thomson R (1991) Between embarrassment and trust: Young women and the diversity of condom use, in Aggleton, P, Davies, P & Hart, G (eds) **AIDS: Responses, interventions and care**. London: Falmer Press.

Holland, J, Ramazanoglu, C, Scott, S, Sharpe, S & Thomson, R (1992) Pressure, resistance, empowerment: Young women and the negotiation of safer sex, in Aggleton, P, Davies, P & Hart, G (eds) **AIDS: Rights, risk and reason**. London: Falmer Press.

Holland, J, Ramazanoglu, C, Scott, S, Sharpe, S & Thomson, R (1990) Sex, gender and power: Young women's sexuality in the shadow of AIDS. **Sociology of Health and Illness**, **12(3)**, 336-350.

Holland, J, Ramazanoglu, C, Sharpe, S & Thomson, R (1994a) Desire, risk and control: The body as a site of contestation, in Doyal, L, Naidoo, J & Wilton, T (eds) **AIDS: Setting a feminist agenda**. Southport: Taylor and Francis.

Holland, J, Ramazanoglu, C, Sharpe, S & Thomson, R (1994b) Achieving masculine sexuality: Young men's strategies for managing vulnerability, in Doyal, L, Naidoo, J & Wilton, T (eds) **AIDS: Setting a feminist agenda**. Southport: Taylor and Francis.

Ingham, R, Woodcock, A & Stenner, K (1991) Getting to know you ... young people's knowledge of their partners at first intercourse. **Journal of Community and Applied Social Psychology**, **1**, 117-132.

Ingham, R, Woodcock, A & Stenner, K (1992) The limitations of rational decision-making models as applied to young people's sexual behaviour, in Aggleton, P, Davies, P & Hart, G (eds) **AIDS: Rights, risk and reason**. London: Falmer Press.

Kapiga, S H, Nachtigal, G & Hunter, D J (1991) Knowledge of AIDS among secondary school pupils in Bagamoyo and Dar Es Salaam, Tanzania. **AIDS**, **5**, 325-328.

Kau, M (1988) Sexual behaviour and contraceptive use by adolescent pupils in the Republic of Bophuthatswana. **Curationis**, **11(4)**, 9-11.

Kau, M (1991) Sexual behaviour and knowledge of adolescent males in the Molopo region of Bophuthatswana. **Curationis**, **14(1)**, 37-40.

Klepp, K, Ndeki, S, Seha, A M, Hannan, P, Lyimo, B A, Msuya, M H, Irema, M N & Schreiner, A (1994) AIDS education for primary school children in Tanzania: An evaluation study. **AIDS**, **8**, 1157-1162.

Krahe, B & Reiss, C (1995) Predicting intentions of AIDS-preventive behaviour among adolescents. **Journal of Applied Social Psychology**, **25(23)**, 2118-2140.

Ku, L, Sonenstein, F L & Pleck, J H (1994) The dynamics of young men's condom use during and across relationships. **Family Planning Perspectives**, **26(6)**, 246-251.

Lear, D (1995) Sexual communication in the age of AIDS: The construction of risk and trust among young adults. **Social Science and Medicine**, **41(9)**, 1311-1323.

Lees, S (1993) **Sugar and spice: Sexuality and adolescent girls**. London: Penguin.

Lugoe, W L, Klepp, K I & Skutle, A (1996) Sexual debut and predictors of condom use among secondary school students in Arusha, Tanzania. **AIDS Care**, **8(4)**, 443-452.

Lyttleton, C (1994) Knowledge and meaning: the AIDS education campaign in rural northeast Thailand. **Social Science and Medicine**, **38(1)**, 135-146.

Mathai, R, Ross, M W & Hira, S (1997) Concomitants of HIV/STD risk behaviours and intention to engage in risk behaviours in adolescents in India. **AIDS Care**, **9(5)**, 563-576.

Mathews, C, Kuhn, L, Metcalf, C A, Joubert, G & Cameron, N A (1990) Knowledge, attitudes and beliefs about school students in Cape Town. **South African Medical Journal**, **78**, 511-516.

Matthews, B R, Richardson, K D, Price, J & Williams, G (1990) Homeless youth and AIDS: Knowledge, attitudes and behaviour. **The Medical Journal of Australia**, **153**, 20-23.

Memon, A (1991) Perceptions of AIDS vulnerability: The role of attributions and social context, in Aggleton, P, Davies, P & Hart, G (eds) **AIDS: Responses, interventions and care**. London: Falmer Press.

Mnyika, K S, Klepp, K I, Kvale, G, Schreiner, A & Seha, M (1995) Condom awareness and use in Arusha and Kilimanjaro regions, Tanzania: A population-based study. **AIDS Education and Prevention**, **7**, 403-414.

Moore, S & Rosenthal, D (1992) The social context of adolescent sexuality: Safe sex implications. **Journal of Adolescence**, **15**, 415-435.

Nzyuko, S, Lurie, P, McFarland, W, Leyden, W, Nyamwaya, D & Mandel, J S (1997) Adolescent sexual behaviour along the Trans-Africa highway in Kenya. **AIDS**, **11 (Supplement 1)**, s21-s26.

Ostergaard, L (1997) Sexual behaviour of adolescents before and after the advent of AIDS. **Genitourinary Medicine**, **73(6)**, 448-452.

Preston-Whyte, E & Zondi, M (1991) Adolescent sexuality and its implications for teenage pregnancy and AIDS. **CME**, **9(11)**, 1389-1394.

Ramazanoglu, C & Holland, J (1993) Women's sexuality and men's appropriation of desire, in Ramazanoglu, C (ed) **Up against Foucault: Explorations of some tensions between Foucault and Feminism**. London: Routledge.

Reed, D & Weinberg, M (1984) Premarital coitus: Developing and established sexual scripts. **Social Psychology Quarterly**, **47(2)**, 129-138.

Rickman, R L, Lodico, M, DiClemente, R J, Morris, R, Baker, C & Huscroft S (1994) Sexual communication is associated with condom use by sexually active incarcerated adolescents. **Journal of Adolescent Health**, **15**, 383-388.

Richter, L M & Swart-Kruger, J (1995) AIDS-risk among street children and youth: Implications for intervention. **South African Journal of Psychology**, **25(1)**, 31-38.

Richter, L M, Swart-Kruger, J & Barnes, J (1994) Street children and youth in South Africa: AIDS-related knowledge, attitudes and behaviour, in Grannon, B (ed) **Children and youth at risk: HIV/AIDS issues, residential care and community perspectives**. Papers from the 9th Biennial Conference and First All-Africa Child Care Conference of the National Association of Child Care Workers, NACCW, Cape Town.

Rodden, P, Crawford, J, Kippax, S & French, J (1996) Sexual practice and understandings of safe sex: Assessing change among 18- to 10-year-old Australian tertiary students, 1988 to 1994. **Australian and New Zealand Journal of Public Health**, **20(6)**, 643-649.

Rosenthal, D A, Smith, A M, Reichler, H & Moore, S (1996) Changes in heterosexual university undergraduates' HIV-related knowledge, attitudes and behaviour: Melbourne, 1989-1994. **Genitourinary Medicine**, **72(2)**, 123-127.

Rosenthal, S L, Lewis, L M & Cohen, S S (1996) Issues related to the sexual decision making of inner-city adolescent girls. **Adolescence**, **31(123)**, 731-739.

Rotherham-Borus, M J, Becker, J V, Koopman, C & Kaplan, M (1991) AIDS knowledge and beliefs, and sexual behaviour of sexually delinquent and non-delinquent (runaway) adolescents. **Journal of Adolescence**, **14**, 229-244.

Schopper, D, Doussantousse, S, Ayiga, N, Ezatirale, G, Idro, W J & Homsy, J (1995) Village-based AIDS prevention in a rural district in Uganda. **Health Policy and Planning**, **10(2)**, 171-180.

Serovich, J M & Greene K (1997) Predictors of adolescent sexual risk taking behaviours which put them at risk for contracting HIV. **Journal of Youth and Adolescence**, **26(4)**, 429-444.

Siegel, D, Lazarus, N, Krasnovsky, F, Durbin, M & Chesney, M (1991) AIDS knowledge, attitudes and behaviour among inner city, junior high school students. **Journal of School Health, 61(4)**, 160-165.

Slonim-Nevo, V, Ozawa, M N & Auslander, W F (1991) Knowledge, attitudes and behaviours related to AIDS among youth in residential centers: Results from an exploratory study. **Journal of Adolescence, 14**, 17-33.

Stigum, H, Magnus, P, Veierod, M & Bakketeig, L S (1995) Impact on sexually transmitted disease spread of increased condom use by young females, 1987-1992. **International Journal of Epidemiology, 24(4)**, 813-820.

Swart-Kruger, J & Richter, L M (1997) AIDS-related knowledge, attitudes and behaviour among South African street youth: Reflections on power, sexuality and the autonomous self. **Social Science and Medicine, 45(6)**, 957-966.

Thomson, R (1990) Putting a big thing into a little hole: Teenage girl's accounts of sexual initiation. **The Journal of Sex Research, 27(3)**, 341-361.

Tolman, D L (1994) Doing desire: Adolescent girls' struggles for/with sexuality. **Gender and Society, 8(3)**, 324-342.

Varga, C & Makubalo, L (1996) Sexual (non) negotiation among black African teenagers in Durban. **Agenda, 28**, 31-38.

Waldby, C, Kippax, S & Crawford, J (1993) Cordon Sanitaire: Clean and unclean women in the AIDS discourse of young heterosexual men, in Aggleton, P (ed) **AIDS: Facing the second decade**. London: Falmer Press.

Weatherburn, P & Project SIGMA (1992) Alcohol use and unsafe sexual behaviour: Any connection?, in Aggleton, P, Davies, P & Hart, G (eds) **AIDS: Rights, risk and reason**. London: Falmer Press.

Williams, J & Giles, H (1978) The changing status of women in society: An intergroup perspective, in Tajfel H, (ed) **Differentiation between social groups: Studies in the social psychology of intergroup relations**. London: Academic Press.

Wilson, D, Mparadzi, A & Lavelle, S (1992) An experimental comparison of two AIDS prevention interventions among young Zimbabweans. **The Journal of Social Psychology, 132(3)**, 415-417.

Wilton, T & Aggleton, P (1991) Condoms, coercion and control: heterosexuality and the limits to HIV/AIDS education, in Aggleton, P, Davies, P & Hart, G (eds) **AIDS: Responses, interventions and care**. London: Falmer Press.

Woods, K & Jewkes, R (1997) Violence, rape, and sexual coercion: everyday love in a South African township. **Gender and Development, 5(2)**, 41-46.

Zimet, G D, Bunch, D L, Anglin, T M, Lazebnik, R, Williams, P & Krowchuk, D P (1992)
Relationship of AIDS-related attitudes to sexual behaviour changes in adolescence.
Journal of Adolescent Health, 13(6), 493-498.