# CONDOM USE AMONGST STUDENTS REQUESTING EMERGENCY CONTRACEPTIVE PILLS AT TERTIARY INSTITUTIONS

## AHelen Mavhandu-Mudzusi

#### **VO Netshandama**

Campus Health: HIV/AIDS Unit Advanced Nursing Sciences

Student Affairs: University of Venda Community Engagement: University of Venda

Mudzusi@univen.ac.za Vhonani.Netshandama@univen.ac.za

## **AP Kutame**

**Professional Studies** 

School of Education: University of Venda

Philip.Kutame@univen.ac.za

#### Abstract:

Students tend to request emergency contraceptive pills after they have had sexual intercourse without using a condom. This is a cause for concern as condom use is central to the management of HIV and AIDS. It is a strategy to encourage safe sex practices amongst youth in tertiary education institutions. This study reports on the investigation of condom use by students requesting emergency contraceptives in a tertiary institution. A total of 1252 female students seeking for Emergency Contraceptive Pills completed the pre-emergency contraceptive questionnaires to identify reasons for not using condoms as a means of contraception. The reasons pointed to students' use of condoms during the previous sexual intercourse when they requested the pill. Results show that while some respondents never attempted to use condoms when having sexual intercourse for some reasons, others used or were intending to use a condom during their sexual intercourse but experienced problems. A considerable number of respondents (43.5%) indicated that they did not have a definite reason for not using a condom during sex; that it just happened that they ended up having sex without putting on a condom. Reasons given for not using a condom during sex included that they blamed the male partner. Risky sexual behavior with regard to sexually transmitted diseases (STIs) and Acquired Immune Deficiency Syndrome (AIDS) was prevalent among students and age and place of residence were associated with condom use. Some recommendations are made regarding investigation into students' attitudes towards male and female condom use and their perceptions towards safer sex practices.

Key words: condom use, emergency contraceptive, HIV and AIDS, safer sex

#### Introduction

Teenage pregnancy is a problem as these pregnancies are neither planned nor wanted and often lead to abortion (Swartz, 2002). Young women under the age of 24 are more likely than older women to have an unplanned pregnancy, even where contraceptives are readily available (Klofkorn, 1998). Emergency Contraceptive Pills (ECPs) or the Emergency Birth Control (EBC), commonly

called the morning after pill or day after pill, are an important emergency contraceptive option for sexually active young people. They can significantly reduce risk of pregnancy after sex by about 75% (Klofkorn, 1998; Miranda, 2005). Hirsch (2007) reports further that on average, '*Plan B*, the most popular progestin-only Emergency Birth Control (EBC) pill, reduces the risk of becoming pregnant by 89 percent. When taken within 24 hours of having unprotected sex, it is up to 95 percent effective. However some studies indicate that many young people are not aware of the existence of ECPs as a means to prevent unintended pregnancy (Klofkorn, 1998).

Literature reports risky sexual behavior among youths (Rahamefy, Rivard, Ravaoarinoro, Ranaivoharisoa, Rasamindratroka & Morisset, 2008). A large number of students who have an age average of 19 years are sexually active. Sexual practices of 19, 21 and 20 years indicate preference of practices of vaginal, oral and anal sex respectively (Rahamefy et al., 2008; Uys, Ichharam, Martin & Alexander, 2001). Sex among young adults shows a tendency towards unplanned casual sex, without necessarily practicing safe sex using a condom (Klofkorn, 1998; Uys, Ichharam, Martin & Alexander, 2001). These South African and global studies further show that there seemed to be a generally negative attitude towards using a condom. A study done by Bell (2009) indicates that embarrassment is considered as one of the reasons for young people not to use condoms. Another study indicates that adolescents with maladaptive coping strategies engage in high risky behaviors following negative events in their life (Auerback, Abela, Zhu & Yao, 2007).

Rahamefy et al. (2008) found that during the past 12 months of their study, 94% of respondents had not used a condom. This study further indicated that about half of the women had never used a condom, a rate estimated at nearly one-third of the men. In another study, the prevalence of condom use in Mozambique showed a low overall use in 2001: twenty-two percent of men and 10% of women reported use at last sex and the difference was statistically significant (Prata, Morris, Mazive, Vahidnia & Stehr, 2006). Prata et al. (2006) further reported that prevalence among never-married women was much higher than average (25%) and was similar to the level among never-married men (26%). The likelihood of

condom use was positively related to age only among never-married men; in all subgroups, it was higher in urban areas than in rural areas, and it increased with level of education. A study by Cornelissen (2005) showed students' high awareness of condom use.

The most frequently reported reasons for non-condom use were: sexual intercourse with a steady partner, sex during off-ovulation, decrease of sexual pleasure, trust in partners, wanting to have a child, and being involved in a monogamous relationship (Eaton, Flisher & Aaro, 2003; Hawken, Melis, Ngombo, Mandaliya, Ng'ang'a Price, Dallabetta, & Temmerman, 2002; Prince & Bernard, 1998). However, some students mentioned what authors considered as less common reasons like: trust in the partner, feeling uncomfortable when using a condom, condom breakages, lack of knowledge on how to use condoms and unaffordable costs of condoms (Rahamefy et al., 2008). Infrequently, students in this study (Rahamefy et al., 2008) indicated several reasons including the fear that the condoms were contaminated with Human Immunodeficiency Virus (HIV) or other pathogens, the fear that condoms generated side-effects, partner refusal, immediate unavailability of condoms and intention to procreate.

A study of the risk perception and condom use in South Africa among married and cohabiting couples found that women who considered themselves at risk of HIV because of their husbands were four times as likely to use condoms as women who did not (Maharaj & Cleveland, 2005). In a study in Mozambique (Prata et al., 2006) sexually experienced men overall were more likely to use condoms if they correctly assessed their risk of HIV infection than if they did not. Males (for males, 30% vs. 14%; for females) who had used counseling and testing services were more likely to use condoms than were those who had not. Prata et al. (2006) concluded that the use of counseling and testing services was associated with a significantly higher likelihood of condom use, but only among never-married women (19%).

Several studies suggest that alcohol use and peer pressure were two important factors impacting on the tendency towards casual sex combined with the absence of safe sex practices (Brown & Vanable, 2007; Friedland et al., 1991;

Kaya & Kau, 1994; Marcus, 2001; Smith, De Visser, Akande, Rosenthal & Moore, 1998). Youth, both married and unmarried are commonly ineffective users of contraceptives as they begin to establish their sexual and birth control practices. However, students tended to be more worried about falling pregnant than becoming infected with HIV (Marcus, 2001). Study done by Black, Mercer, Johnson and Wellings (2006) showed that use of Emergency contraceptives is more common among young single women who are engaged with more than one sexual partner within the past year and for those who are using condoms for contraception.

It was observed that students at a South African tertiary institution who have unprotected sexual intercourse - visit the HIV/AIDS Unit seeking ECPs. This raised a concern from researchers to explore these tendencies and to understand why students practice unprotected sex. The main aim of this study was to find out why students request emergency contraceptive pills and to determine the reasons for not using condoms during sexual intercourse despite their availability on campus in order to enhance safer sex practice thus contributing to reduction of spread of HIV at tertiary institutions.

It was hypothesised that reported risky sexual behavior was prevalent among students. It was further hypothesized that age and place of residence of the students were associated with their use of condoms during sexual intercourse.

## **METHOD**

# Sample

A total of 1252 female respondents who visited the HIV/AIDS Unit which is responsible for issues related to HIV and AIDS at the University of Venda between January 2006 and December 2008 (494 in 2006; 437 in 2007 and 321 in 2008) seeking Emergency Contraceptive Pills, completed the pre-emergency contraceptive questionnaires to identify reasons for not using condoms as a means of contraception.

#### Instrument

Data collection used a questionnaire constructed with the aid of information in the Emergency Contraceptive Pill Register which captures responses of students who visit the unit seeking for emergency contraceptive pills. Some items were developed following a literature review on the use of condoms and ECPs, and the content was validated by an expert in the field of HIV and AIDS. The questionnaire was pilot tested with five students seeking emergency contraceptives. The wording in the questionnaire was reviewed and modified to reduce ambiguity and ensure clarity, comprehensiveness and simplicity of items guided by the responses of the five pilot students.

The questionnaire was designed to capture respondents' information through seven (7) items grouped in two categories: biographical information and reasons for wanting to use the Emergency Contraceptive Pills. The items have been specifically customized for higher education institutions and classified to fit local context. Demographic variables included "age", "place of residence" and "level of studies at the institution". Behavioural variables included "reasons for not using condoms", and "period between unprotected sexual intercourse and seeking for ECPs". A list of various reasons for not using condoms was provided for respondents to select from. They needed to identify and only select one which they considered their reason for not using the condom. A space was provided for them to indicate any other reason for not using the condom in case none of those listed reflected their reason.

#### **Ethical considerations**

The survey was carried out during the visit each student made to get emergency contraceptive pills from the University HIV and AIDS Unit. We ensured that potential participants were informed about this part of the study on condom use. Students who volunteered to participate in the study were requested to complete the self-administered questionnaire anonymously after getting assistance in the unit. It was clearly indicated to them that they were under no obligation to answer as a condition to get assisted, no name or nay form of identification is required and that anonymity will be ensured.

#### **Procedure**

Students who visited the unit for emergency contraception were first assisted and thereafter informed about the ongoing study that they were invited to participate should they wish to do so. Thereafter, those who volunteered to participate were guided on questionnaire completion to ensure as far as possible, standardized administration. No name or any form of identification was requested from them. Participants were asked to themselves put the completed questionnaire in the secured box provided at the HIV/AIDS Unit reception area.

# Data analysis

Each questionnaire was identified through a number to ensure that data capturer was able to go back to it should there be some queries. Data analysis was performed with the Statistical Package for Social Science (SPSS) version 16.0, a programme for data analysis for social science researchers. The data was then cleaned and analysed. Descriptive statistics were computed to describe the data through frequency tables and bar graphs. The researchers used chi-squares to compare the proportions of respondents, within and across subgroups, who assessed their reasons for non condom use and seeking for emergency contraceptive pills. Cross-tabulations were computed using chi-squares, Phi and Cramer's V to determine the meaningful relationship between variables and the extent to which the relationship is significant at a five per cent level of significance (p< 0.05). Only age of respondents produced meaningful results and was therefore reported on.

## RESULTS

# **Description of sample**

The respondents consisted of students (99.6%) and 0.4% represented other individuals. Amongst the students, 59.4% were staying at the University Residence whilst 34.8% were staying outside the university residence. The remaining 5.4% were students who either visited the university during campaigns or sought ECPs whilst living at home. The majority of students (32.8%) were at the second year level, slightly fewer (32.7%) at third year level, and those at first year level comprising 22%. Post graduate students comprised 11.5% while staff members were only 0.5% and others only 0.6%.

Amongst those who completed the questionnaire 41.6% where aged between 18 and 20 years, 45% were aged between 21 and 23 years, and 10.9% aged between 24 and 26 years while only 2.5% were older than 31 years.

# Reasons for not using the condom

Students were requested to give reasons for not using a condom while having sex to prevent unplanned pregnancy. The majority of respondents (43.5%) indicated that they do not have a definite reason why they did not use a condom during sex; it just happened that they ended up having sex without putting on a condom. Of these respondents, 47.5% are aged 18 to 20 years, 43% are of the ages 21 to 23 years, while 8% are of the ages 24 to 26 years. One thousand, two hundred and fifty two questionnaires were analysed.

There is a decline in years of age from young (49% of those who are 18-20 years old; 44.8% of those who are 21-23 years old; 27.1% of those 24-26 years old; 22.2% those who are 27-30 years old and 16.7% of those who are 31 years and older). It is interesting to note that the cross-tabulation of the ratings for this issue with the age of the students reveals significant differences (Chi-Square = 1.364; p< 0.05; Cramers V = 0.272). Younger students significantly indicate that it just happened that they found themselves having sex without using a condom. It is significantly the younger students who indicate that it just happened and do not seem to have control over their sexual urge. As they grow older, there are fewer reports of participants reporting that it just happened that they found themselves having sexual intercourse without using the condom. Reasons given included that they blamed the partner (3.9% respondents blame the male partner) for not withdrawing his penis from vagina during ejaculation when they had agreed they would use withdrawal method. Of these, 44.4% are those of the ages 18 to 20 years, 38.9% are of the ages 21 to 23 years while those of the ages 24 to 26 years comprised 16.7%.

Fewer respondents (2.6%) blamed their partners for no longer putting on the condom during the second round of sexual intercourse after using it during the first round of sexual intercourse. The majority of respondents who no longer put on the condom during their second round of sexual intercourse are those aged 21 to 23 years. Others (1.3%) indicated that they trusted that their partners were putting on the condom during sex only to find out later that they had not. Of these, 66.7% are of the ages 18 to 20 years. Only 2.8% indicated that their partners removed the condom because they complained that it was hurting them

when they had sex wearing it (92.4% of these were respondents aged 18 to 23 years). There are also those (1.3%) who indicated that their partners forced them to have sex without putting on the condom, those aged 18 to 20 years being in the majority (66.7%). Some respondents (1.3%) blamed their male partners for ejaculating on their thighs and vagina during foreplay. This was frequently reported by respondents whose ages ranged between 18 and 23 years.

Some respondents indicated that they used conventional methods of preventing pregnancies: 5.4% indicated that they were on family planning (76% aged 18 to 23 years), and others (1.7%) mentioned that they had used the calendar method. These respondents were almost evenly spread over the three age groups (25% were aged 18 to 20 years, 37.5% were aged 21 to 23 age, and another 37.5% were aged 24 to 26 years). There are respondents (1.3%) who indicated that they used the morning after pill (MAP) as a regular family planning method. Half of these respondents were aged 18 to 20 years. Other reasons given for not using the condom include:

- knowing each other's sexual behavior
- because they were married intentionally did not want to use the condom due to the reason of wanting to have a baby or because they both tested and knew their HIV status. Another notable result is that of respondents (2%) indicating that both were drunk when they were engaged in their sexual relations and therefore were not be able to put on a condom before they started having sex. The majority (88.9%) of these respondents are those aged 18 to 20 years. These findings are in line with those of Brown and Vanable (2007) who mentioned that most of unprotected vaginal sex by non-steady partner occurred after alcohol consumption.

## Problems experienced during use or intention to use condom

Results indicate that students experience several problems when using or wanting to use condoms when having sex. Students regard the following as problems in the use of condom during sex which results in the failure of the intent of condom use and thus seeking ECPs:

- Condom bursting (60.6%),
- No condom in the house (19.5%),

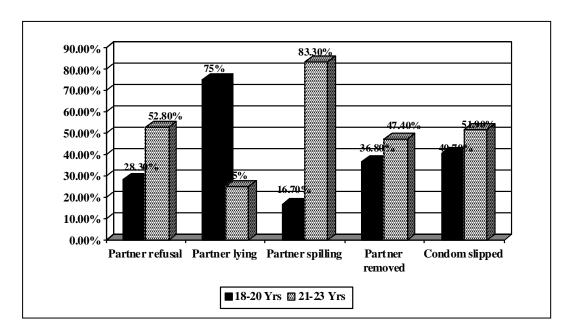
- Partner refusal (6.7%),
- Partner lied about using the condom (1.5%);
- Removing the condom by partner while having sex (2.4%);
- Both partners not sure whether the condom was used or not (1.8%);
- Semen spilling onto the private parts while removing the condom after partner ejaculated into the condom (0.8%);
- Female condom slipping resulting in the partner penetrating outside the condom but inside the vagina (0.1%)

The problem of condoms breaking during sex was mostly reported by females aged 21 to 23 years (46.2%) while younger females aged 18 to 20 years formed 43.5% of the respondents. The majority (48.4%) of those who indicated that they did not have any condom in the room where those aged 21 to 23 years, while 43.8% of respondents indicated that they never used a condom as a way of preventing unplanned pregnancy are those aged 18 to 20 years. More than a quarter (37.5%) of respondents, who are older (20 to 23 years) show that they use condoms. These results (37.5%) indicate that students who are older use condoms when they have sexual intercourse, probably to prevent unwanted pregnancy.

# Blame on partner

Respondents of different age groups (those who are aged 18 to 20 years and those who are 21 to 23 years old) blaming their partners for not using or misusing the condom during sexual intercourse were compared (see Figure 1).

Figure 1: Blame on partner



More than half (52.8%) of respondents whose ages range between 21 and 23 years blame their partners for refusing to use a condom during sexual intercourse; 83.3% blame their partners for spilling semen on their thighs and private parts during ejaculation, 47.4% blamed their partners for removing the condom while they were having sex and continued to have sexual intercourse without a condom while 51.9% indicate that their partners would indicate that the condom slipped while they were having sex.

Three quarters (75%) of younger respondents (those aged between 18 and 20 years) and only one quarter (25%) of those aged 21 to 23 years indicate that their partners lied during sexual intercourse that they were using a condom whereas they were not.

## DISCUSSION

Results indicate that the majority of students who visited the unit to seek for use of emergency contraceptive pills are undergraduates. This suggests that they are changing life styles in situations where they are beginning to be independent. Most of these students stayed in the university residences where partners have freedom to visit each other in their rooms away from parents, which may have induced them to engage in unsafe sexual intercourse. It is interesting to note that

a considerable number of students (18.7%) whose ages range between 18 and 23 years, indicate that 'it just happened' that they had sex without using a condom. Results indicated low systematic condom use which was not much different from reports in other studies among South African students (Eaton, et al., 2003) and Malagasy students (Rahamefy et al., 2008). It is interesting to note that the majority (41.5%) of those students are in their second year of study at tertiary institution. For students, the researchers would assume that studies were their first concern and that becoming pregnant before graduating was undesirable for them (Rahamefy et al., 2008). Since the use of condoms to prevent possible conception had failed, they resorted to using ECPs to prevent pregnancy.

Consistent with literature (Rahamefy et al., 2008) these results show that condom users were male rather than female in contrast with Turkish and Nigerian students where condom users were women rather than men (Gokengin, Yamazhan, Ozkaya, Aytug, Ertem, Arda, & Seter, 2003; Olley & Rotimi, 2003). The number of female condom users is too small (only one out of 1252 female respondents), suggesting that there is little or no female condom exposure to students. Female condoms are not easily or freely available as is the case with male condoms which are even put in condotainers in public toilets. This could have contributed to low rate of female condom use. People wanting to obtain a female condom can only get them from a supplier. The presence of suppliers at the point of collection of female condoms would have provided the opportunity to each prospective user to get to know how to use the condom. These results indicate that females are not exposed to use of female condoms and are therefore subjected to unprotected sex by their male initiative in use of condom. The results indicate the need to specifically target female students in condom use, both male and female condoms, which could reduce inappropriate use and other related problems.

Females blame their partners for non-condom use or inappropriate use thereof, citing reasons including refusal and inappropriate use. They do not regard condom use during sex as co-responsibility between partners. Consequently, students are vulnerable and there is a risk of pregnancy particularly for those who never had a steady partner, and are forced to resort to the use of ECPs. These

results suggest that males engaged in unprotected sexual intercourse in their relationships, and in this way, females are exposed to unplanned pregnancies and probably sexually transmitted infections (STI) and Human Immunodeficiency Virus (HIV) infection. This indicates the need to specifically target male students in attitudes towards condom use programmes. Furthermore, the observed age and reasons for non-condom use with respondents blaming their partners for non-condom use should be taken into consideration when defining condom promotion strategies. Messages tailored to men, women and couples are required, to drastically market couple counseling on the use of condoms to reduce the risk of pregnancy resulting from inappropriate use related to "burst condom" and that it "just happened".

In this study, students did not keep condoms in their rooms and are exposed to unsafe sex . This is a carefree sexual behaviour despite having freely available condoms which are visible in condotainers in the toilets and dormitories for use by students on university campus. Students however think of the consequences of unplanned pregnancy soon after having unprotected sex and seek for emergency contraceptives.

Some of the results were not surprising regarding their consistency with available data. For example, the earlier age (18-20 years old) at which students on university campus engage themselves with sex are consistent with those of Malagasy students who reported an approximate age (19 years old) at sexual debut (Eaton et al., 2003; Rahamefy et al., 2008) and some reasons for not using condoms were similar to those mentioned by students in Kenya and Nigeria (Anugwom, 1999; Hawken et al., 2002). It is possible students were not trained on the use of condoms, resulting in breakages and exposing females to pregnancies. Several types of condoms were used such as Choice (which is freely supplied by the government), Lovers plus, Cassanova and Trust. Breaking condom during use indicates that there is a need to demonstrate correct consistent condom use to reduce breakage or unnecessary pain. There is a need to supply a water-based lubricant to those who complain that the condom hurts them during use.

#### CONCLUSION

In this study, the researchers concluded that sexual behavior of teenagers who have just enrolled at this tertiary institution is carefree. This is clearly a cause for concern, not only for students indulging in such behaviour, but for authorities responsible for guiding entering students at tertiary institutions. This level of sexual indiscipline, if sustained, is likely to be detrimental to their performance and overall ethical standards and institutional performance (Travers & Coopers, 1991). The study confirms that the age and place of residence of the students is to a certain extent associated with their use of condoms during sexual intercourse. It would appear that a lack of discipline, care free attitude is also influenced by the thought that they are now at a university setting where they can do as they wish.

The high level of students who have unprotected sex and visit the unit for emergency contraceptive pills illustrate, contrary to findings by Klofkorn (1998), that teenage at this institution are conscious of the possible results of pregnancy, causing them to drop out since they are still young and unmarried. Potential ethical issues are inherent in any sexual behaviour that demonstrates care free behaviour. The fact that 'it just happened' illustrates that the students fail to take control of their sexual behaviour and end up having unplanned sex which could result in unplanned pregnancy. These attitudes may be attributed to the degree of perceived freedom the students have. To most of them, residence life is exciting and far removed from the discipline of parents.

The difference between this study and others (for example, Malagasy or Nigerians' data) might be accounted for by the fact that the survey among the participants in this study happened during the visit to the HIV/AIDS unit by students as a result of an unfortunate sexual experience which was later regretted by either of the partners or both. The use of condoms in tertiary institutions needs to be explored by conducting in-depth studies when implementing any condom use programme. Contraceptives should, as indicated by Marston (2005) form part of an integrated reproductive health service like in other countries - Netherlands and UK- (Marston, 2005), where these services are freely available to those who require them.

While some respondents never attempted to use condoms when having sexual intercourse for some reasons, some used or were intending to use condoms during their sexual intercourse but experienced problems. These results suggest the need for a condom use campaign in tertiary institutions for all students focusing on correct, consistent condom usage. The results suggest the need for an investigation into attitudes of students towards condom use and establishing the level of female condom use by students at tertiary institutions.

## REFERENCES

- Anugwom, E. E. (1999). Perception of AIDS among university students in Nigeria. Implications for AIDS prevention programmes. In C. Becker, J. P. Dozon, C. Obbo, & M. Toure (Eds), *Experiencing and understanding AIDS in Africa* (589-597). Paris: Karthala and Codesria.
- Auerback, R.P.; Abela, J.R.Z.; Zhu, X. & Yao, S. (2007). A diathesis-stress model of engagement in risky behaviors in Chinese adolescents. Behavior Research and Therapy 45 (2007) 2850-2860.
- Bell, J. (2009). Why embarrassment inhibits the acquisition and use of condoms: Aqualitative approach to understanding risky sexual behavior. Journal of Adolescence, 32 (2009) 379-391.
- Black, K.I.; Mercer, C.H.; Johnson, A.M. & Wellings, K. (2006). Sociodermographic and sexual health profile of users of emergency hormonal contraception: data from a British probability sample survey. Contraception 74 (2006) 309-312.
- Cornelissen, G.M. (2005). HIV/AIDS knowledge, awareness and perception of undergraduate students at the University of Stellenbosch. Assignment presented in partial fulfillment of the requirements of the degree of Master of Philosophy (HIV/AIDS Management) at the University of Stellenbosch. Stellenbosch.
- Eaton, L., Flisher, A. J., & Aaro L. E. (2003). Unsafe sexual behavior in South African youth. *Social Science and Medicine*, 56 (1), 149-165.
- Friedland, R.H., Jankelowitz, S.K., De Beer, M., De Klerk, C., Khoury, V., Csizmadia, T., Padayachee, G.N. & Levy, S. (1991). 'Perceptions and Knowledge about the Acquired Immunodeficiency Syndrome among Students in University Residences.' South African Medical Journal, 79 (Feb): 149-154.

- Gokengin, D., Yamazhan, T., Ozkaya, D., Aytug, S., Ertem, E., Arda, B., & Seter, D. (2003). Sexual knowledge, attitudes, and risk behaviors in students in Turkey. *Journal of School Health*, 73 (7), 258-263.
- Hawken, M. P., Melis, R. D., Ngombo, D. T., Mandaliya, K. N., Ng'ang'a L.W., Price, J., Dallabetta, G., & Temmerman, M. (2002). Opportunity for prevention of HIV and sexually transmitted infections in Kenyan youth: Results of a population-based survey. *Journal of Acquired Immune Deficiency Syndromes*, 31 (5), 529-535.
- Hirsch, L. (2007). Birth Control: Emergency Contraceptive-What is it? *The Nemours Foundation*, February.
- Kaya, H.O. & Kau, M. (1994). 'Knowledge, Attitudes and Practice in Regard to AIDS: The Case of Social Science Students at the University of Bophuthatswana.'Curationis, 17(2): 10-14.
- Klofkorn A. (1998). Emergency Contraceptive Pills: An Important Option for Young Adults. Association for Reproductive and Family Health. *How to use Emergency Contraception:* 20:29. Ibadan, Nigeria.
- Maharaj, P. & Cleveland, J. (2005). Risk perception and condom use among married or cohabitating couples in KwaZulu-Natal, South Africa, *International Family Planning Perspectives*, 31(1): 24-29.
- Marcus, T. (2001). 'Kissing the Cobra: Sexuality and High Risk in a Generalised Epidemic.' *Paper presented at the AIDS in Context conference held by the History Workshop,* University of the Witwatersrand, April.
- Marston, C. (2005). BMJ Online First, July 8, WebMD Medical Reference from Healthwise: "Birth Control: Emergency Contraception." News release, BMJ.
- Miranda, H. (2005). Sex Habits and the 'Morning After' Pill. *WebMD Medical News*, July 7.
- Olley, B. O., & Rotimi, O. J. (2003). Gender differences in condom use behaviour among students in a Nigerian university. *African Reproductive Health*, 7 (1), 83-91.
- Prata, N. Morris, L. Mazive, E. Vahidnia F & Stehr M. (2006). Relationship between HIV Risk Perception and Condom use: Evidence from a population-Based Survey in Mozambique. *International Family Planning Perspectives*, 32(4): 192-200.

- Prince, A., & Bernard, A. L. (1998). Sexual behaviors and safer sex practices of college students on a commuter campus. *Journal of American College Health*, 47 (1), 11-21.
- Rahamefy, O.H., Rivard, M., Ravaoarinoro, M., Ranaivoharisoa, L., Rasamindratroka, A.J., & Morisset, R. (2008). Sexual Behaviour and condom use among university students in Madagascar. *Journal of Social Aspects of HIV/AIDS*, *5*(1): 28-35.
- Smith, A.M.A., De Visser, R., Akande, A., Rhosenthal, D. & Moore, S. (1998). 'Australian and South African Undergraduates' HIV-related Knowledge, Attitudes and Behaviors.' *Archives of Sexual Behavior*, 27(3): 279-294.
- Swartz, L. (2002). Fertility Transition in South Africa and its implications on the four major population groups. (Fertility- Current South African issues: Poverty, Youth and HIV/AIDS). Department of Social Development: Republic of South Africa.
- Travers, C. & Coopers, C. (1991). Psychological responses to teacher stress. *European Review of Applied Psychology*, 44:137-148.
- Uys, T., Martin, L., Ichharam, M. (2001). *HIV/AIDS and students at RAU*.

  Centre for Sociology Research. Johannesburg: Rand Afrikaans University.