

# Knowledge and practice of condom use among first year students at University of the North, South Africa

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## Abstract

The aim of the study is to investigate knowledge and sexual practices with reference to correct use of condoms among first year South African University students. The sample consisted of 206 participants, 146 female and 60 male, the mean age was 20.9 years ( $SD=3.4$ ), with a range from 17 to 34 years. Results indicated that one third (29.2%) of the sample reported never using condoms, 35.4% always, 19.8% regularly and 8.5% irregularly in the past three months. About 90% levels of correct answers for condom use were found for the items of 'condoms as protection against STD and AIDS', 'expiry date of condoms', and

're-using condoms'. More than 15% were not aware that a condom should be put on before any contact with the vagina. The most common mistakes with respect to condom use were ignorance about the correct moment to put on a condom (56%), and when to take off a condom (55%). Male sex and especially increasing recent sexual encounters was associated with correct condom knowledge. The most common reasons for not using a condom were 'I do not have the AIDS virus' and 'I thought I was safe' seems to indicate a low perceived susceptibility. Findings are discussed in view of condom promotion programmes.

## Introduction

Condoms are an integral part of Sexually Transmitted Diseases (STD) and Human Immunodeficiency Virus (HIV)/Acquired Immunodeficiency Syndrome (AIDS) prevention, and their use has increased significantly over the past decade. Correct use of them reduces the risk of HIV transmission by almost 100 percent. Therefore, condom promotion has received considerable attention in the fight against the AIDS pandemic (WHO 1995). This is particularly important in sub-Saharan Africa where HIV transmission is mainly through sexual contact. Yet condom use is among the most difficult issues to address in designing programmes to reduce the sexual transmission of HIV in Africa.

Campbell (1997: 186) summarises for sub-Saharan Africa that negative attitudes toward condom use are often based on cultural factors, e.g. the desire for children and female sexual compliance as ways to achieve economic status. Lule and Gruer (1991: 15-17) found among Ugandan students that only a minority saw the condom as an effective preventive method against HIV/AIDS: most saw it as unsafe or an encouragement to promiscuity. Condoms had been used by 35% of men and 24% of women but were currently always used by only 9% of men and 11% of women. The condom was approved of by only one quarter of respondents. Kaya and Kau (1994: 12) found among social science students at the University of North West, South Africa, that 84% felt that the best way of preventing HIV infection was 'using condoms during sexual intercourse'. Kidan and Azeze (1995: 9) surveyed condom use among Ethiopian college students and reasons given for not using condoms included: unavailability (44.3%), partner trust (43%), shortage of condoms (8%), and partner's disagreement (5.1%). Zambian

University students felt at greater sexual risk for HIV/AIDS but were less rigorous in condom use than British students (Baggaley et al. 1997: 88). Abdool-Karim et al. (1992: 109) did an explorative qualitative study to find out reasons for lack of condom use among high school students in Natal (South Africa). They complained among others that condom use was not sufficiently well understood and that condoms were not accessible or available when required.

Research also shows that the spread of HIV/AIDS is on the increase. It is expected that the prevalence of AIDS will reach about 27% of the sexually active population in South Africa by the year 2010 (Webb 1997: 214).

There is a paucity of data concerning male condom use, especially regarding knowledge about the correct use of male condoms by the target group of the youth in South Africa. However, such data are crucial for prevention programmes. Since heterosexual contact and the use of male condoms are the predominant forms of sexual contact and condom use respectively in South Africa, the study was restricted to heterosexual contact and male condoms. Therefore the present study investigates knowledge and sexual practices with reference to correct use of male condoms (prevalence of condom use and factors associated with the use/non-use of condoms) among university students in the Northern Province of South Africa.

The objectives of the study are:

- (1) To assess the knowledge about the correct use of condoms;
- (2) To determine the frequency of condom use;
- (3) To assess the reasons for not using a condom; and
- (4) To identify the relationship between independent variables (biographic data, sexual behaviour, condom use) and dependent variables (condom knowledge).

# Methods

## Sample and procedure

The sample consisted of a convenient sample of 206 first year psychology students at the University of the North, 146 female and 60 male, the mean age was 20.9 years (SD=3.4), with a range from 17 to 34 years. Most were Northern Sotho (73.6%), Tsonga (13.2%), Venda (4.4%), Zulu (3.3%), and others (5.5%). The students were clearly informed that the purpose of the survey was to find out about the use and knowledge of the condom and that their responses would be totally anonymous. Each student was requested to complete the questionnaire or indicate that he or she did not wish to do so. In either cases, they were asked to put it in the envelope provided and hand it back to the researcher within approximately half an hour.

## Measure

The instrument, which was essentially a questionnaire, was pre-tested on 15 male and 15 female students, who did not form of the final sample. The final questionnaire consisted of questions about: (a) biographic data (8 items), (b) sexual activity and male condom use (5 items) (cf. Eshetu et al. 1997: 11), (c) knowledge about correct use of male condoms (10 items) and (d) reasons for not using a male condom (18 items) (cf. Calzavara 1998: 277). Knowledge about correct use of condoms was evaluated as per standard guidelines for use of condoms (Sharma et al. 1997: 711, WHO 1990). There were ten closed-ended questions, each with one possible correct answer (e.g. when to put on a condom, how to use it correctly, how and when to take it off, the use of lubricants, etc.) and for each correct answer one point was awarded; the total points comprised the knowledge score range from 0 to 10. Regarding reasons for not using condoms, respondents were given a list of 18 reasons and asked to indicate which applied to them.

For the 10-item scale on knowledge about correct use of condoms the Cronbach alpha as well as split-half reliability coefficient were .78 for this sample, for the 18-item scale on reasons for not using a condom the Cronbach alpha as well as split-half reliability coefficients were .72 and .68 for this sample, and for the 5-items on sexual activity and condom use the Cronbach alpha as well as split-half reliability coefficients were .67 and .65 respectively for this sample.

## Results

Table 1 indicates the knowledge about correct condom use among the participants. About 90% levels of correct answers were found for the items of 'condoms as protection against STD and AIDS', 'expiry date of condoms', and 're-using condoms'. More than 15% were not aware that a condom should be put on before any contact with

the vagina.

The most common mistakes with respect to condom use were ignorance about the correct moment to put on a condom (56%), when to take off a condom (55%), and whether a condom should be unrolled before being put on the penis (28%), in this order. Male students (7.31 mean correct answers) had a higher correct knowledge on condom use than female students (6.76 mean correct answers) did. In particular, there was a significant gender difference on items 8 'Is it essential for a person using a condom to withdraw his penis immediately after ejaculation?' and 9 'Is it alright to put on a condom just before ejaculation' (both:  $p < .01$ ).

Table 2 indicates sexual activity and condoms use by the participants.

More than half of the respondents (57%) was aware of condom use prior to their first sexual encounter while less than 20% used a condom on first sex. About 40% of male students (46.5%) and female students (38.6%) had a sexual encounter within the last month and about 60% within the last three months. Regarding the frequency of sexual encounter during the last three months 39.6% of men and 21.1% of women said three times or more, and 20.7% of the men and 28.7% of the women reported none. Almost one third (29.2%) of the sample reported never using condoms, 35.4% always, 19.8% regularly and 8.5% irregularly in the past three months.

Table 3 indicates factors associated with knowledge about condom use by the participants.

There is a significant relationship between sex, frequency of sexual encounters in the last three months and condom knowledge. Men had more correct condom knowledge than women, and increasing recent sexual encounters seem to be associated with correct condom knowledge. Current condom use and condoms use intentions seem not to be related to correct knowl-

**Table 1: Knowledge about correct male condom use by gender and rank in percent of "yes" answers (as against "no" answers)**

Items	Male	Female	Total#
1. Do condoms offer protection against STDs?	93	90	91
2. Do condoms offer protection against AIDS?	86	91	89
3. Do condoms have an expiry date?	95	86	90
4. Can a condom be re-used? ®	88	88	88
5. Should a condom be checked for leaks and holes?	88	86	87
6. Can an oil-based lubricant (e.g. oil, Vaseline, cold cream) be used with a condom? ®	84	88	86
7. Should a condom be put on before any contact with the vagina?	81	85	83
8. Should a condom be unrolled before being put on the penis? ®	75	69	72
9. Is it essential for a person using a condom to withdraw his penis immediately after ejaculation?	56	34	45
10. Is it all right to put on a condom just before ejaculation? ®	53	35	44

® Reverse scored, #Total=Percent of total sample

**Table 2: Sexual activity and male condom use by gender and in percent of "yes" answers (as against "no" answers)**

Item	Male	Female	Total#
Knowledge of condom prior to the first sexual encounter	54	58	57
Use of condom on the first sexual encounter	17	19	18
Last sexual encounter			
-none	05.2	07.9	6.6
-1-2 weeks	24.1	30.7	27.4
-3-4 weeks	22.4	07.9	15.2
-1-3 months	19.0	20.7	19.9
-more than 3 months	29.3	32.9	31.1
Frequency of sexual encounter during the last 3 months			
-None	20.7	28.7	24.7
-Once	19.0	30.8	24.9
-Twice	20.7	17.5	19.1
-Three times	15.5	09.8	12.7
-Four or more	24.1	13.3	18.7
Condom use when having sexual intercourse in the past 3 months			
-every time	37.5	33.3	35.4
-regular <sup>1</sup>	17.9	21.6	19.8
-irregular <sup>2</sup>	10.7	06.3	08.5
-never	25.0	33.3	29.2

<sup>1</sup> Regular: almost always, more often than not

<sup>2</sup> Irregular: about half the time, somewhat less than half the time, rarely

#Total=Percent of total sample

edge about condoms.

Table 4 indicates reasons for not using condoms in the past. The most common reasons for not using a condom were 'I do not have the AIDS virus' (65%), 'I thought I was safe' (61%), and 'I was with my steady sex partner' (59%). On most items men scored higher than women on reasons for not using condoms. Striking is that 26% of the women and 14% of the men said that they did not use a condom because they were forced to have sex against their will.

There was a significant relationship between reasons for not using a condom (in particular 'I didn't think of using a condom', 'I find condoms painful', and 'I was using alcohol or drugs') and condom use intentions ( $p < 0.05$ ). Younger age was associated with 'I can't obtain condoms here', 'I find condoms painful', 'I thought I was safe', 'Wanted pregnancy', and 'My partner said he or she did not have the AIDS virus'.

## Discussion

In this study almost one-third (29.2%) of the sample reported never using male condoms, 35.4% always, 19.8% regularly and 8.5% irregularly in the past three months. This finding is similar to that found in other studies, e.g. among Ugandan students the frequency of condom use was reported as: always, 29% male users, 49% female users; mostly, 24% males, 20% females; and sometimes, 47% male and 31% female (Lule & Gruer 1991: 17). The use female condoms should also be studied.

The overall knowledge about correct con-

dom use was high in this sample. In a study among sexually active men in India a much higher level of ignorance about condom use was found. However, the type of the most common mistakes were similar as in this sample, e.g. the correct moment to put on a condom (10.1% correct answers), when to take off a condom (13.7% correct answers), and whether a condom should be unrolled before being put on the penis (12.9% correct answers).

In the following, factors identified in this study are highlighted, which should be incorporated into HIV/AIDS prevention pro-

grammes: (1) Men had more knowledge than women about correct male condom use, and increasing recent sexual encounters seem to be associated with correct condom knowledge. (2) The most common reasons for not using a condom were 'I do not have the AIDS virus' and 'I thought I was safe' seems to indicate a low perceived susceptibility. (3) One of the significant factors associated with condom use intentions was 'I find condoms painful'. (4) Younger age was associated with unavailability of condoms, low perceived susceptibility and the wish for pregnancy. (5) Barriers between (steady) partners to use condoms such as 'my partner did not want to use one' (34%), 'could not talk about it' (27%), and 'forced to have sex against my will' (17%). (6) The reported barriers and unavailability of condoms such as 'too embarrassed to get condoms' (23%), 'I can't obtain condoms here' (18%) or 'I could not

**Table 3: Factors associated with knowledge about condom use**

Independent variables	Total condom knowledge score
	<i>p</i>
Age	-.054
Sex	.138*
Number of sexual encounters in last 3 months	.254**
Use of condom in last 3 months	.021
Condom use intention	.100

\*\*  $p < .01$ ; \*  $p < .05$

**Table 4: Ranked responses of reasons for not using a male condom in the past by gender, current male condom use, and male condom use intentions and in percent of “yes” answers (as against “no” answers)**

Item	Men	Women	Total#	Gender	Age	Current condom use	Condom use intention
				<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>
1. I do not have the AIDS virus	74	58	65	-.122	-.049	.014	.153
2. I thought I was safe.	67	55	61	-.114	-.166*	-.143*	.167*
3. I was with a steady sex partner	60	57	59	-.029	-.101	-.006	.076
4. The sex was so exciting	48	37	48	-.101	-.008	-.008	.071
5. My partner said he or she did not have the AIDS virus	61	35	48	.152*	-.142*	-.096	.102
6. My partner did not want to use one	44	30	37	-.130	-.037	.037	.174*
7. I did not have a condom at that time	30	34	32	.038	-.009	-.065	0.57
8. I didn't think of using a condom	36	26	31	-.101	-.055	.003	.229**
9. Could not talk about it	30	26	28	-.037	.079	-.035	.001
10. I did not want to use one	32	20	26	-.123	-.037	-.071	.179*
11. I was too embarrassed to get condoms	23	23	23	.003	.014	-.086	.146*
12. My partner got angry for suggesting using one	29	17	23	-.125	-.070	-.050	.080
13. I was forced to have sex against my will	14	26	20	-.148*	-.021	-.035	.130
14. I can't obtain condoms here	16	19	18	.033	-.240**	-.083	.067
15. I could not afford to buy any condoms	25	10	18	-.182*	-.064	-.024	.102
16. I find condoms painful	14	19	17	.059	-.182**	.100	.219*
17. Wanted pregnancy	14	13	14	-.021	-.144*	.044	.171*
18. I was using alcohol or drugs	18	10	14	-.109	-.093	-.035	.192**

afford to buy any condoms' (15%). Nicholas (1999: 893) suggests from a survey of South African university students that condom-vending machines and a wider range of distribution points for free condoms could ease the unpleasantness. Education programmes should foster positive attitudes toward condom use and teach mechanics for effective use. The study has the limitation that only a convenient sample of psychology students at the University of the North was chosen. This would limit the extent of the generalisations of the results of this research to other students in South Africa.

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