



Predictors of Condom Use Among South African Youth aged 15 – 24 years

Research Report, MPH
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Introduction (1)

- Young people aged 15 - 24 years in Sub-SA, account for 62% of people living with HIV/AIDS (UNAIDS, 2006).
- SA, with an estimated HIV prevalence of 10.6% has one of the highest HIV infection rates in the world. Also continues to have the largest number of PLWH globally (Shisana et. al, 2009). Most of the HIV infections in SA are sexually transmitted
- Sexually active youth aged 15 - 24 years contributes to the large number of people living with HIV in SA.
- Youth, being the most sexually active group, are at high risk of HIV infection
- Changes in sexual behaviour are required to counter HIV prevalence rates and new infections among this population
- Condom use is one of the most effective means to prevent HIV infection among sexually active people, and has contributed to reductions in HIV infections in SA and other countries (Singh et al., 2003)

Introduction (2)

- In SA, HIV prevalence among the youth aged 15-24 years has decreased over the years from 9.3% in 2002 to 8.7% in 2008, (Shisana et al., 2008).
- Reported condom use at last sex increased dramatically from 57% in 2002 to 87% in 2008 among young males, and correspondingly from 46% to 73% among young females (Shisana et al., 2008).
- This shows, a very strong orientation towards condom use by youth, likely to contribute to HIV incidence reduction in the youth population (HSRC survey).
- Important to investigate factors predicting condom use among SA youth, since very little information has been documented about these factors
- Predictors, important in informing HIV prevention programmes that focus on promoting condom use among youth in South Africa

Aim

- The aim of the study was to determine the association between various characteristics and condom use at last sex among youth aged 15 – 24 years in South Africa, using data from the 2008 national HIV population-based survey

Objectives

To determine the association between condom use at last sex (in the last 12 months) and

- socio-demographic characteristics,
- HIV perceptions/attitudes,
- behavioural characteristics,
- and HIV knowledge/awareness

Literature Review (1)

Factors:

- *Socio-demographic:*

↑ in condom use, younger age groups and in males, (Rahamefy et al., 2009), unmarried (Yotiebeng et al., 2009), higher education levels (Lugoe et al., 1996; Prata et al., 2006), urban areas (Prata et al., 2006)

↓ condom use has been associated with older age groups, being married, female, less educated (Cobat et al., 2008; Dhalla et al., 2009; Calazans et al., 2005).

- *Perceptions about condom use:*

high perceived risk of STI associated with ↑ condom use among youth in Madagascar (Meekers et al., 2003)

perception of personal risk of HIV associated with ↑ condom use among youth in Cameroon and Ghana (Adih et al., 1999; Meekers & Klein, 2002)

belief that condoms prevent HIV infection was associated with ↑ condom use, in Tanzania (Maswanya et al., 1999).

perceived barriers to condom access and use have been associated with condom use in Kenya (Volk et al., 2001).

Literature Review (2)

- *behavioural factors:*

Later sexual debut was associated with ↑ condom use, Tanzania (Lugoe et al., 1996)

Among young South African adults, the strongest predictor of condom use at last sex was condom use at first sex (Hendricksen et al., 2007).

Having more than one sexual partner, associated with ↑ condom use (Madagascar, Dar es Salaam) (Meekers et al., 2003; Msamanga et al., 2009)

Having only one sexual partner, ↑ condom use (Tanzania, Kenya)

Awareness/knowledge of HIV status was associated with ↑ condom use

Methods

Study design, setting & sampling

- Secondary data analysis
- Data from 2008 SA National HIV Prevalence, Incidence, Behaviour and Communication Survey (SABSSM 3).
- SABSSM 3 is a cross-sectional population-based household survey
- A multi-stage cluster sample was stratified by province, geographical location and predominant race group in each area
- Detailed survey methodology, in SABSSM 3 Report.

Methods

Sample

- A total of 2418 youth aged 15 – 24, who indicated having sex in the last 12 months were involved in this study
- Further, the analysis included only respondents who indicated ever using condoms,
- and then responded to the question “Did you use a condom the last time you had sex, in the past 12 months?”.

Methods

Measures

- Youth questionnaire for individuals aged 15-24 years.
- included questions on demographics, condom use, knowledge and perceptions of HIV/AIDS, sexual debut, HIV testing, male circumcision and others.

Methods

Measures

- *Dependent variable*: Condom use at last sex
 - o 'Did you use a condom the last time you had sex?'.
 - o response options were 'yes', 'no' and 'I don't know/cannot remember'.
 - o Recoded, either 'yes' and 'no/I don't know/cannot remember'.

Methods

Measures

- *Independent variables: 3 groups*

1. Socio-demographic variables:

sex, race, marital status, level of education, and geographical location (urban or rural)

2. Perceptions or attitudes about HIV/AIDS:

Perceived HIV risk, perceived access to condoms and HIV/AIDS stigma

3. Behavioural factors:

age of sexual debut, condom use at first sex, knowledge of HIV status, number of sexual partners in the past 12 months

Data Management and Analysis

- STATA version 10
- Weighted data analyses
- Firstly, descriptive analysis, to determine socio-demographic and other characteristics of the sample.
- Secondly, bivariate analysis, separately for males and females to determine factors associated with condom use
- Finally, logistic regression was used to model condom use among males and females separately on all variables which indicated significant associations in the bivariate analysis.
- A p -value of less than 0.05 was considered statistically significant for all analyses

Ethical Considerations

- HSRC's Research Ethics Committee, the CDC's Institutional Review Board (IRB) and the Global AIDS Programme
- Informed consent was obtained from the participants either written or verbally
- Confidentiality
- Permission was obtained from the SABSSM 3 principal investigators to use part of the survey data for the purposes of this study.
- Research ethics clearance was obtained at the University of Pretoria (209/2009).

RESULTS: Socio-demographic Characteristics

Characteristic	Overall (n=1917) n (%)	Males 813 (33.6%) n (%)	Females 1104 (66.4%) n (%)
African	1359 (86.3)	538 (84.0)	821 (88.5)
White	105 (5.0)	56 (6.7)	49 (3.4)
Coloured	335 (7.4)	156 (7.8)	179 (7.0)
Indian	115 (1.3)	62 (1.5)	115 (1.3)
Single	1623 (88.2)	752 (93.7)	871 (83.0)
< Matric	1123 (61.0)	464 (59.1)	659 (62.7)
Matric	637 (31.0)	281 (32.5)	356 (29.5)
>Matric	138 (7.6)	58 (7.7)	80 (7.5)
Urban Formal	1025 (51.1)	502 (58.4)	523 (44.1)
Urban Informal	308 (10.2)	92 (7.2)	216 (13.1)
Rural Informal	462 (33.2)	180 (29.5)	282 (36.7)
Rural Formal	122 (5.5)	39 (4.9)	83 (6.1)

Behavioural Characteristics

Characteristic	Overall (n=1917) n (%)	Males 813 n (%)	Females 1104 n (%)
Condom use at last sex	1291 (81.2)	631 (88.0)	660 (74.0)
Number of sexual Partners			
One	1587 (82.1)	559 (69.2)	1028 (94.1)
Two or more	319 (17.9)	249 (30.8)	70 (5.9)
HIV status Knowledge			
Yes	962 (96.3)	252 (96.3)	710 (96.3)
Age of sexual debut			
Late	1477 (80.2)	582 (77.8)	895 (82.3)
Early	378 (19.8)	190 (22.2)	188 (17.7)
Condom use at first sex			
Yes	1147 (60.4)	469 (41.3)	514 (62.2)
No	766 (39.6)	297 (37.8)	633 (58.7)

Perceptual Characteristics

Characteristic (Perceptions)	Overall (n=1917) n (%)	Males 813 n (%)	Females 1104 n (%)
Perceived HIV risk			
High	1376 (70.0)	607 (72.0)	769 (68.0)
Low	529 (30.0)	202 (28.0)	327 (32.0)
AIDS Stigma			
Yes	1803 (94.4%)	763 (93.6)	1040 (95.1)
Perceived access to condoms , Easy			
	1506 (95.9)	677 (94.6)	829 (97.3)

Prevalence of condom use & Characteristics associated with condom use (1)

	Male		Female	
Socio-demographic Characteristics	Used Condom	No condom use	Used Condom	No condom use
	631 (88.0)	124 (12.0)	660 (74.0)	260 (26.0)
African	434(89.7)	68(10.3)	534 (76.1)	162(23.9)
Coloured	108 (69.4)	38 (30.6)		
	<i>p = 0.000</i>		<i>p = 0.001</i>	
Single	604 (89.4)	100 (10.6)	579 (78.8)	166 (21.2)
Married/living together	17 (50.5)	20 (49.5)	72 (48.0)	90 (52.1)
	<i>p = 0.000</i>		<i>p = 0.000</i>	
< Matric	360(89.6)	63(10.4)	386 (73.6)	146 (26.4)
Matric	214(84.5)	53(15.5)	218 (72.6)	94 (27.4)
> Matric	50 (93.0)	5(7.0)	52 (83.6)	17 (16.4)
	<i>p = 0.186</i>		<i>p = 0.361</i>	
Urban formal	390(87.5)	84(12.5)1	302(73.3)	137(26.7)
Urban informal	68(83.2)	5(16.8)	128(73.7)	47(26.3)
Rural informal	146(89.7)	21(10.3)	189(77.7)	51(22.3)
Rural formal	27(91.9)	4(8.1)	41(55.5)	25(44.5)
	<i>p=0.599</i>			<i>p =0.066</i>

Prevalence of condom use & Characteristics associated with condom use (2)

	Male		Female	
Perceptual Characteristics	Used Condom	No condom use	Used Condom	No condom use
	631 (88.0)	124 (12.0)	660 (74.0)	260 (26.0)
Perceived HIV risk, High	483 (90.7)	82 (9.3)	472(77.4)	165(22.6)
Low	145(81.0)	42(19.0)	184(66.2)	93(33.8)
	$p = 0.003$		$p = 0.006$	
Perceived access to condoms Easy	561(88.6)	107(11.4)	590(74.3)	223(25.7)
	$p = 0.997$		$p = 0.038$	
AIDS Stigma Yes	601 (88.2)	113 (11.8)	622 (73.5)	250 (26.5)
	$p = 0.851$		$p = 0.329$	

Prevalence of condom use & Characteristics associated with condom use (3)

	Male		Female	
Behavioural Characteristics	Used Condom 631 (88.0)	No condom use 124 (12.0)	Used Condom 660 (74.0)	No condom use 260 (26.0)
Sexual debut				
early (<15yrs)	144(88.3)	32(11.7)	111(77.1)	41(22.9)
late (≥15yrs)	461(88.5)	82(11.5)	538(73.5)	212(26.5)
	<i>p=0.944</i>		<i>p=0.460</i>	
No. of sexual Partners				
One	423(86.8)	90(13.2)	612(74.2)	241(25.8)
Two & more	203(89.8)	34(10.2)	46(72.7)	16(27.3)
	<i>p=0.306</i>		<i>p=0.854</i>	
Condom use at first sex				
Yes	443 (90.8)	56 (9.2)	444 (75.3)	148 (24.7)
No	188 (83.2)	67 (16.8)	214 (71.3)	112 (28.7)
	<i>p=0.01</i>		<i>p=0.32</i>	
HIV status knowledge				
Yes	186(84.0)	47(16.0)	398(69.7)	187(30.3)
No	9(75.5)	4(24.5)	11(79.3)	5(20.7)
	<i>p=0.517</i>		<i>p=0.524</i>	

	Male		Female	
Characteristic (Predictor)	Adjusted OR (95% CI)	<i>P</i>	Adjusted OR (95% CI)	<i>P</i>
Coloured vs. African	0.13 (0.06; 0.30)	0.000	0.30(0.15; 0.57)	0.000
Indian vs. African	0.47 (0.12; 1.79)	0.267	0.22(0.06; 0.78)	0.019
Single vs. Married	7.94 (2.09, 29.99)	0.002	5.03 (2.35, 10.77)	0.000
>Matric vs. Matric	1.45 (0.44, 4.78)	0.545	3.07 (1.16, 8.11)	0.024
Perceived HIV Risk Low vs. High	0.42 (0.23, 0.78)	0.006	0.41 (0.24, 0.69)	0.001
Perceived access to condoms Easy vs. Not easy	1.06 (0.33, 3.41)	0.922	5.02 (1.14, 22.04)	0.033
Condom use at first sex, Yes vs. No	2.47 (1.28, 4.78)	0.007	0.99 (0.62, 1.57)	0.950

Overall Findings

- Overall, more males reported using condoms at last sexual intercourse compared to females.
- Being single, and being African, were significantly associated with condom use among both sexes.
- Among females, having >matric and a perception that access to condoms is easy were significantly associated with condom use.
- Among males, condom use at first sexual intercourse was significantly associated with condom use.
- Low HIV risk perception was significantly associated with lack of condom use among both sexes.

LIMITATIONS

- Condom use was only measured on the last sexual act, but not also for consistency of use
- Self-reported responses on knowledge, attitudes, beliefs, and behaviours related to HIV/AIDS – social desirability bias
- In spite of these, findings are generally valid and reliable

Conclusion

- Although condom use at last sex act has improved over the past years among youth in SA, there is still room for improvement especially among females, married people, less educated, and low HIV risk perception, and who perceive condoms as not being easily accessible.
- Clearly, efforts to promote condom use should be intensified among the groups of youth mentioned above.
- Condom use programme developers targeting the youth need to pay attention to the highlighted gender differences in order to make their programmes more meaningful and focused.
- Condom marketing and distribution programs should work hard to make condoms widely accessible to every young person.

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KE A LEBOGA!

THANK YOU!