

PROMOTING CONSISTENT CONDOM USE AMONG YOUNG ADULTS IN THE VHEMBE DISTRICT, LIMPOPO, SOUTH AFRICA

Namadzavho J. Muswede

orcid.org/0000-0002-8600-8788

University of South Africa

muswej@health.gov.za

Azwihangwisi H. Mavhandu-Mudzusi

orcid.org/0000-0002-6916-8472

University of South Africa

mmudza@unisa.ac.za

ABSTRACT

Condoms are considered useful in the prevention of unplanned pregnancies and sexually transmitted infections including the human immunodeficiency virus. However, condom use is a challenge among young adults in rural areas. This paper reports the views of young adults regarding the strategies which can be utilised for promoting condom use in one of the rural clinics in the Vhembe district, Limpopo, South Africa. This quantitative, cross-sectional, descriptive study was conducted at one of the clinics in the Vhembe district. Data were collected using structured questionnaires administered to 372 young adults who came to visiting the clinic. Data analysis was done using Statistical Package for Social Sciences (SPSS) version 28. Results indicate that condom use among the youth can be promoted through (i) improving the attitudes of healthcare providers to condom issuing and use, (ii) involving other stakeholders who have an influence on the use of condoms, and (iii) promoting condom use. Retraining of healthcare providers to improve their attitudes to condom distribution is a matter of priority. In-service training should focus on disseminating information about patients' rights to health. The following recommendations were put forth: enhancement of communication strategies for marketing condom use, broadening sex education in the school curriculum, and improving the attitudes of healthcare providers to the promotion of condom use.

Keywords: condom use; promotion; rural clinic; young adults

INTRODUCTION AND BACKGROUND INFORMATION

Young adults were reported to have unprotected sexual intercourse with casual partners. Such sexual practices have implications such as unplanned pregnancies and the acquisition of sexually transmitted infections, including human immunodeficiency virus (HIV) infections (Van Rossem and Meekers 2011, 1471). According to Burgard and Lee-Rife (2009, 293), most young people in South Africa are at a high risk of being infected with HIV through heterosexual intercourse. A study by Kabikira (2010, 118) noted that though people were knowledgeable about HIV and its modes of transmission, there was a general lack of willingness among young adults to use condoms during sexual intercourse (Kabikira 2010, 118). A study by Oyedele, Wright and Maja (2013, 101) reported limited condom use despite involvement in multiple sexual partners and unprotected sexual intercourse. Some young adults do not believe that condoms would protect them from contracting HIV (Beltzer et al. 2013, 1011; Mascolini 2013, 18; Ramathuba 2013, 5).

Religion and religious beliefs are important predictors for condom use among young adults (Njau, Mwakalo, and Mushi 2013, 1). Studies revealed that a major barrier to condom distribution and usage is religious affiliation (Shakil 2011, 10). However, some religions promote the use of condoms while others discourage its use. For instance, the Catholics are less likely to use condoms than the Muslims and the Protestants (Njau, Mwakalo, and Mushi 2013, 1). Besides religion, some cultures in southern Africa perceive condom use as bad, especially where the ejaculation of semen into the vagina is considered an essential, mandatory part of the sexual act, particularly in intimate sexual relationships (National Department of Health 2011, 3).

Other social barriers related to condom use include female passivity in sexual relationships (Lammers, Van Wijnbergen, and Willebrands 2013, 283). Thus, requesting condom use by a female partner during sexual intercourse could be perceived as unfeminine (Lammers, Van Wijnbergen, and Willebrands 2013, 283). Masculinity, on the other hand, has become associated with rejecting condoms (Mash, Mash, and De Villiers 2010, 55). Apart from the notion of masculinity in southern Africa, men's perception of circumcision has been reported to also influence condom use. The use of condoms was associated with a perceived lack of "real" love, intimacy and trust by young adults (Exavery et al. 2012, 1097).

In the African region, some men believe that male circumcision could prevent the transmission of HIV (Bridges et al. 2011, 12). Circumcised men assume that they are immune from HIV contagion. The problem of non-condom use is usually exacerbated, particularly among young adults when under the influence of alcohol (Parks et al. 2011, 1332).

Non-condom use is a concern that requires urgent action. Macphail and Campbell (2001) agree with this concern and assert that the use of condoms among young adults in South Africa is a challenge to healthcare workers. A study by Tschann et al. (2010, 145) highlighted that young women were more likely than young men to

express an intention to use condoms. Both verbal and non-verbal communication were noted as effective strategies for enabling young adults to use condoms during sexual intercourse. Van Rossem and Meekers (2011, 132) indicated that young adults look for social approval in order to use condoms. The frequency of condom use was also affected by the respondents' attitudes to condom use, socio-economic status, self-efficacy, the range of persons with whom they discussed reproductive health matters, and perceived severity of risky sexual behaviour (Van Rossem and Meekers 2011, 132). These results suggested that interventions targeting young adults should not focus exclusively on peers but should also include other groups, such as parents and community leaders.

PROBLEM STATEMENT

The South African government, specifically its Health Department, made condoms readily available for use at health facilities. In South Africa, the Department of Health is the primary supplier and distributor of condoms to health facilities. However, non-governmental organisations (NGOs) also play an important role in improving access to condoms and promoting their use (Beksinska, Smit, and Mantell 2012, 52). Despite the free availability of condoms, sexually transmitted infections and teenage pregnancies continue to rise among young adults. Though there are several studies conducted in relation to the perceptions of the youth, limited studies have been conducted focusing on the promotion of condom use among young adults in Vhembe district. Few studies conducted to focusing on the promotion of condom use from the policymakers' points of view were mostly focusing on general population. Thus this study focused on the promotion of condom use from the perspective of young adults in the Vhembe district, Limpopo province of South Africa.

RESEARCH QUESTION

What can be done to promote condom use from the perspective of young adults in the Vhembe district, Limpopo province of South Africa?

PURPOSE OF THE STUDY

The purpose of the study is to determine the perspective of young adults in the Vhembe district regarding strategies which can be used for increasing condom use.

DEFINITIONS OF KEY CONCEPTS

Condom: The *Encyclopaedia Britannica* defines a condom as a rubber sheath worn on the penis during sexual intercourse as contraception or to protect against infections.

Condom use: Weller and Davis-Beaty (2002, 99) define condom use as using a condom for all acts of penetrative sex. For the purpose of this study, consistent condom use will mean using a condom consistently and correctly at every sexual encounter.

Perceptions: A psychological experience resulting from the stimulation of the senses (Bergh and Theron 2009, 11). For the purpose of this study, perceptions will mean the views and beliefs of young adults with regard to condom use.

Young adults: The *Macmillan English Dictionary* (2012, 1076) defines young adults as having lived or existed for only a short time, suitable for or typical for adults. For the purpose of this study young adults will refer to people aged 18 to 24 years.

RESEARCH DESIGN AND METHODS

In line with the post-positivists paradigm, the researchers used quantitative, descriptive, cross-sectional design.

Contextual Details

The study was conducted in one of the primary healthcare clinics in the Vhembe district, Limpopo province of South Africa. The clinic is situated in a rural area which caters for people from the rural villages and the farms. The clinic has a high incidence of sexually transmitted infections, with about 15 to 18 new cases per month. The average headcount of people utilising the clinic varies between 4 200 and 4 600 monthly.

Population and Sample

The population of this study was composed of all young adults of the Vhembe district who visit the five primary healthcare clinics for healthcare services. Currently there are no data on condom use and young adults in the Vhembe district. However, Burgard and Kusunoki (2009, 3) conducted a study on condom use among young adults in South Africa. They noted that about 41 per cent of young adults failed to use condoms during sexual intercourse. The sample size for this study was therefore calculated using the statistics from this South African study. The characteristics of the Burgard and Kusunoki (2009, 3) study population can be considered similar to those of the young adults of the Vhembe district of Limpopo. Based on the results of the Burgard and Kusunoki (2009, 3) study, the minimum required sample size for this study was 372 respondents in line with the following calculation, a figure also consistent with that offered by a statistician following consultations with the same:

$$n = \frac{(Z^{\alpha/2})^2 P(1-P)}{\epsilon^2} = \frac{(1.96)^2 0.41(1-0.41)}{0.05^2} = 372$$

where

$\alpha = 0.05$ is the significance level for the 95% confidence interval. This means that there is 1 chance in 20 or 5 in 100 that any difference found was not due to the hypothesis reason but for some unknown reason.

$(Z^{\alpha/2}) = 1.96$ is a critical value from the normal distribution tables.

$P =$ is the estimate of the proportion of young adults who failed to use condoms.

$\epsilon =$ margin of error (5%).

Respondents were selected using convenient purposive sampling based on accessibility, and proximity to the researcher, and meeting the inclusion criteria. The inclusion criteria were: being a young adult aged 18 to 24 years, able to speak English or Tshivenda, and being not critically ill. All people who did not meet those criteria were excluded. All young adults were given information about the study, and those who met the inclusion criteria and expressed a willingness to participate were approached individually while in the waiting area and encouraged to complete a consent form. A total of 372 young adults agreed to participate in the study by signing a consent form. Only young adults who signed the consent forms were given questionnaires to complete.

Data Gathering Procedures

Data were collected from March to June 2014 using a structured questionnaire. For those respondents with difficulty in reading and writing, data were collected through structured face-to-face interviews. Respondents capable of reading and writing were given questionnaires to complete. These respondents were encouraged to contact the researcher or interviewers if they needed clarification on any aspect of the questionnaire. A structured interview is a data gathering tool that involves a standard set of questions asked in the same manner and order (Katzenellenbogen, Joubert, and Abdool Karim 1997, 107). Face-to-face interviews had an advantage in that the interviewer established rapport with the interviewees, which enhanced the latter's willingness for participation. Nurses and counsellors who were fluent in Tshivenda and English, and who worked at the study site were trained as interviewers. The emphasis of training was on understanding the content of the tool and ensuring consistency in its application and confidentiality.

DATA ANALYSIS

In order to manage the data, all the completed questionnaires were captured and organised in the database management system of Statistical Package for Social Science

(SPSS) version 19. The data were then cleaned to ensure that only valid responses to questions were present in the database. Logic checks were also conducted. In order to make the data more meaningful, frequency tables or percentages, descriptive statistics, and inferential statistics were used to analyse and present the data.

RELIABILITY AND VALIDITY OF THE STUDY

To ensure reliability, the study utilised a structured questionnaire as a data collection method. Because reliability is a multi-component concept, researchers need to decide in advance aspects of reliability (internal consistency, stability, or equivalence) when selecting instruments for their studies. In this study, all these aspects were critical. The instrument used in this study was piloted on a similar population. Cronbach's alpha was used to ensure internal consistency. The Cronbach's alpha for the questionnaire is 0.6. Cohen's Kappa was used to measure equivalence. The agreement was noted between scores of different items. Added to this, an agreement was also noted between raters or interviewers (Joubert and Ehrlich 2007, 79).

An aspect of validity was taken into consideration. According to Polit and Beck (2012, 236), validity is the degree to which a research instrument measures what it is supposed to measure. To enhance the quality of this study, interviewers were trained, the data collection process was closely monitored by the researcher, and the data collection instrument was tested before application. The external validity refers to the degree to which study findings can be generalised beyond the study target population (Polit and Beck 2012, 250). To ensure external validity, though the sample was not randomly selected, its size was determined using a significance level or error rate of 0.05 (95%), meaning there was a 95 per cent chance of obtaining the same or similar results if the study was to be repeated. Sufficient data were collected using the minimum sample size of 371.

ETHICAL CONSIDERATIONS

According to Polit and Beck (2012, 753), research ethics refers to the system of moral values that are concerned with the degree to which the research procedures adhere to professional, legal and social obligations for the study participants. Ethical clearance to conduct the study was obtained from the Higher Degrees Committee of the Department of Health Studies, University of South Africa (Ethics Clearance number HSHDC/249/2013). Permission to conduct the study was granted by the Limpopo Provincial Department of Health (Permission reference number 4/2/2). Further permission was sought and granted by the Vhembe district and the research site. All participants were given relevant information and also information leaflets which covered the purpose of the study, issues of confidentiality, respect, voluntary participation and withdrawal, informed consent, risks related to being part of the study, and the benefits of participating before they signed informed consent. Names of the participants and of the clinic are not written anywhere to protect the institution and the participants.

RESULTS

Demographic Characteristics

The descriptive characteristics of the entire sample (n = 371) are presented in Table 1.

Table 1: Demographic characteristics of respondents

	n (Count)	Percentage
Gender		
Male	139	37
Female	233	63
Age		
18–25	356	97
26+	12	3
Marital status		
Married	18	5
Single	349	94
Divorced	2	1
Separated	3	1
Do you have a partner, among respondents not married		
Yes	227	64
No	127	36
Religion		
Christianity	358	97
Islam	6	2
Hinduism	1	0
Ancestral worship	1	0
Other	4	1
No of children		
None	282	76
One	59	16
Two	24	6
Three	5	1
Four	1	0

Ever had sexual intercourse		
Yes	212	57
No	159	43
Age at first sexual intercourse		
<10	2	1
10–18	97	47
18–25	106	51
25+	3	1
Condom use during first sexual intercourse		
Yes	165	78
No	46	22

The age of the majority of respondents of this sample (97%) ranged from 18 to 25 years. This means that the minority of respondents (3%) were over 25 years of age. Out of the 372 respondents, nearly two-thirds (63%) of the respondents were female and 37 per cent were male. Thus, the survey respondents were mainly female. In relation to marital status, the majority of the respondents (94%) were single, and only five per cent were married. Approximately 64 per cent of the respondents who were single had a partner, and 36 per cent had no partner. The dominant religion among the survey respondents was Christianity (97%), and a small number were Muslims (2%). With regard to the number of children, most of the respondents (76%) had no children during the period of this study, 16 per cent had one child, and six per cent and one per cent had two and three children respectively.

In relation to sexual intercourse, most of the respondents (57%) reported that they had experienced sex before the data collection, while 43 per cent claimed they had never been sexually active. Respondents were also asked about their age when they had their first sexual intercourse. Forty-seven per cent (47%) reported having had their sexual debut when they were 10 to 18 years of age, whereas 51 per cent claimed to have had sexual intercourse at 18 to 25 years of age. Eighty per cent (80%) of the respondents who had sexual intercourse agreed to have used a condom during their sexual debut, while 20 per cent reported not to have used condoms.

Suggested Strategies to Promote Condom Use by Young Adults

The respondents identified the following aspects as part of the strategy for promoting condom use among young adults in the Vhembe district: (i) accessibility to condoms, (ii) improving the attitudes of health workers, and (iii) promoting the correct and consistent use of condoms.

Improving Accessibility to Condom Use

Respondents were given three options to choose how accessibility can be improved. Most of the respondents (79%) agreed that the distribution of condoms to public places would enhance condom use, and 76 per cent claimed that making condoms available at schools would also promote use. Approximately 68 per cent of the respondents believed that condom use can be promoted by using peer educators to distribute the condoms. (Figure 1.)

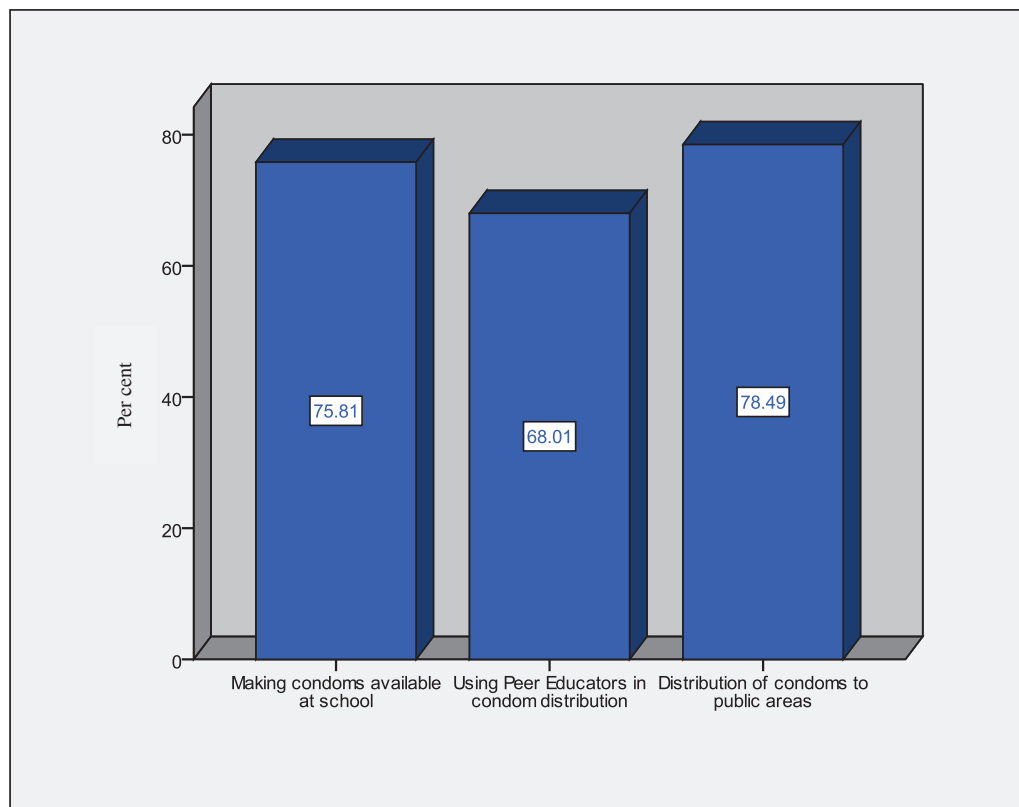


Figure 1: How to improve accessibility to condom use

IMPROVING THE ATTITUDES OF HEALTH WORKERS

The respondents mentioned that improving the attitudes of healthcare providers could assist in improving condom use by young adults in the Vhembe district. Figure 2 illustrates approaches for improving the attitudes of health workers to condoms and their use. About 88 per cent of the respondents reported that training would improve health workers' attitudes, while only 12 per cent disagreed. The majority of the respondents

(72%) claimed that effective management of complaints would improve the attitudes of health workers. About 64 per cent of the participants agreed that meaningful involvement of stakeholders would help in improving the attitudes of healthcare personnel.

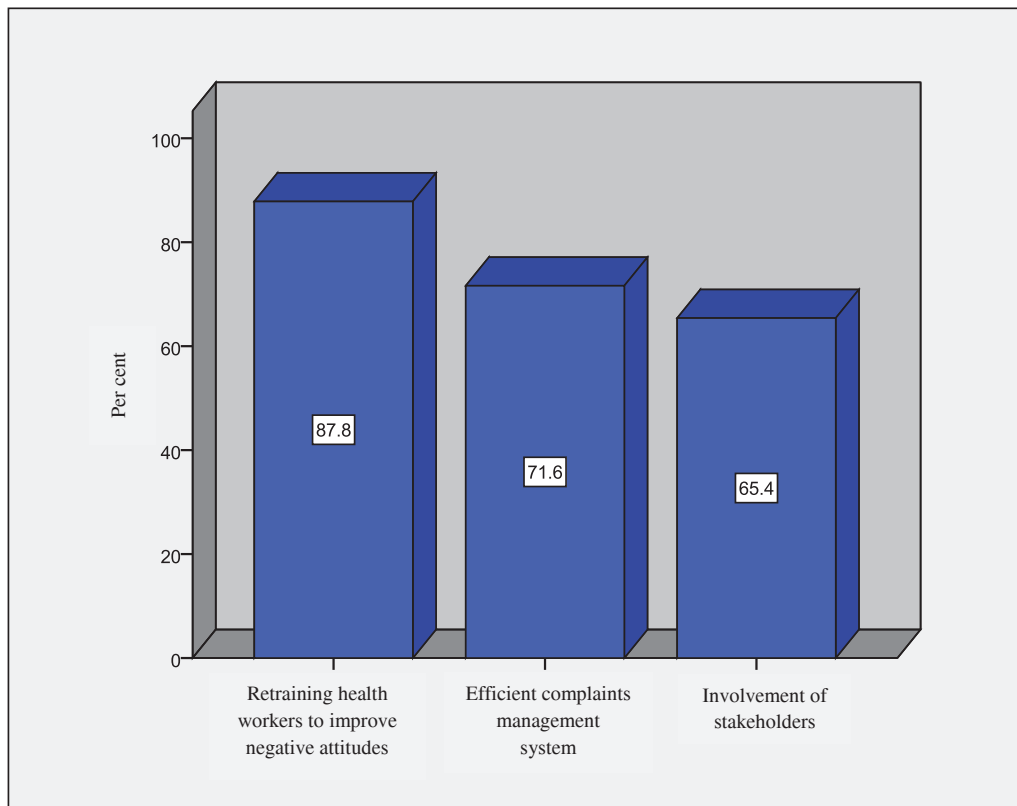


Figure 2: Strategies for improving attitudes of health workers

Promoting Correct and Consistent Use of Condoms

Figure 3 shows strategies for promoting the correct and consistent use of condoms. The use of several modes of media was considered by most respondents (57%) an effective strategy for increasing the correct and consistent use of condoms among young adults. Sex education at schools was the second most preferred strategy as about 41 per cent of the respondents claimed that it would promote condom use. Involvement of peer educators and partnerships working with stakeholders were the least preferred methods for promoting correct and consistent condom use.

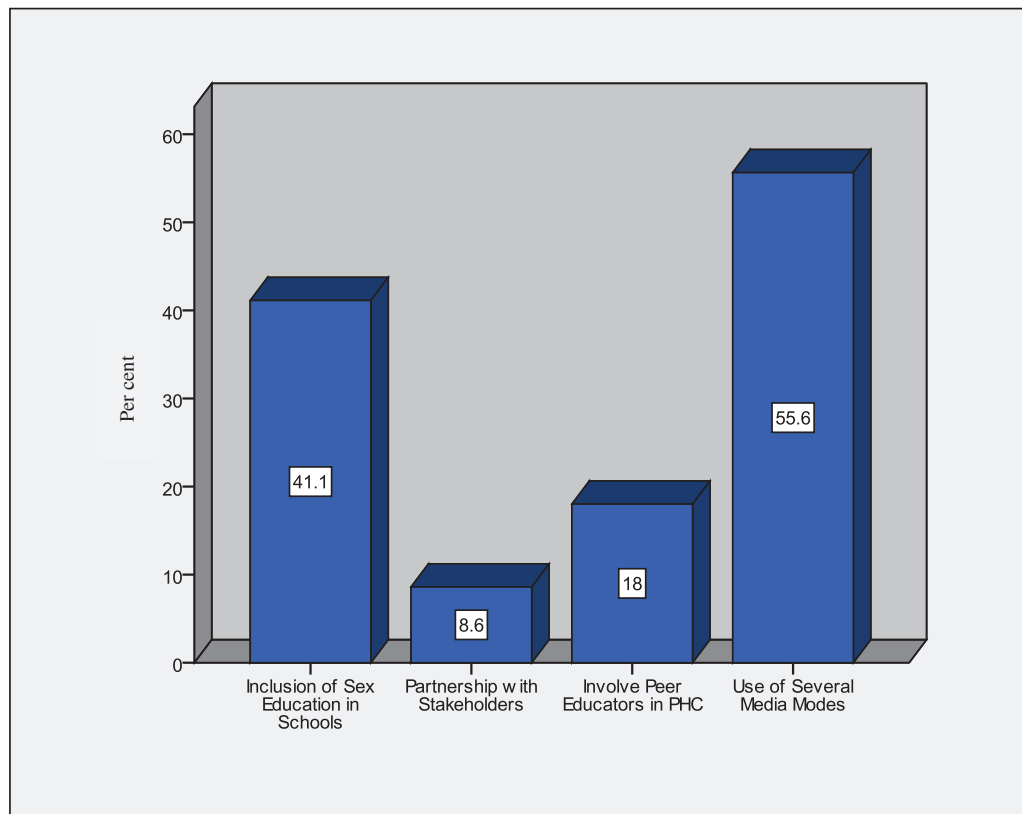


Figure 3: Promoting correct and consistent use of condoms

DISCUSSION

A closer look at the demographic data revealed that more female young adults than male young adults participated in this study. This disproportionate gender distribution of respondents might have been influenced by the sampling approach used in the study. In addition, the disproportionate gender distribution of respondents could also be a reflection of the population of the catchment area of the study site, which the clinic serves, and the mix of the population of youths who attended this clinic for healthcare assistance. The fact that nearly half of the respondents reported having had their sexual debut when they were 10 to 18 years old, emphasises the need for enhancing sex education and provision of condoms at schools. The vast majority of young adults who attended the clinic were single and were aged 18 to 25 years. Young adults of this age group are regarded as highly sexually active, a view acknowledged by Burgard and Lee-Rife (2009, 293). Acknowledging this, it is not surprising to note in this study a high proportion of young adults who had multiple sexual partners and had engaged in sexual intercourse.

The involvement of multiple sexual partners leads to unwanted pregnancies and sexually transmitted infections, including HIV. Burgard and Lee-Rife (2009, 293) attest to this by stating that most young people in contemporary South Africa are at a high risk of being infected with HIV through heterosexual sexual intercourse. The risks of unwanted pregnancies and the transmission of HIV are particularly high when young adults engage in unprotected sexual intercourse. Again, Burgard and Lee-Rife (2009, 293) support this assertion when stating that about one-third of young adults experienced at least one pregnancy before their twentieth birthday. According to Burgard and Kusunoki (2009, 3), this outcome indicates low condom use. Thus, if young adults' knowledge of this contraceptive increases, it would result in consistent and correct condom use, which in turn may lead to a reduction in unwanted pregnancies and incidence of HIV infections.

In addition to education, religious beliefs could also influence young adults' condom use. For example, Catholicism tends to discourage condom use relative to Islam and other forms of Christianity (Njau, Mwakalo, and Mushi 2013, 1). The vast majority of respondents of this study were Christians. The study failed to differentiate or allocate respondents to the different forms of Christianity. Even though this is the case, it is noted in this study that a good number of the respondents have used condoms, while some have never used this contraceptive. This assertion is influenced by the view that some churches discourage condom use, as this contraceptive is perceived as promoting sexual promiscuity (Shakil 2011, 10). Thus, to promote condom use, religious leaders should be involved in health promotion programmes to change some of the perceptions people have against condoms and their use.

The respondents noted a number of approaches or strategies for condom enhancement. Most of the respondents of this study suggested that improving accessibility would increase the use of condoms among young adults. This means that condoms should be made available in public places and schools. In addition to this, there is a need for training and education about the benefits of condoms. Respondents claimed that the use of media such as television, newspapers and chatting sites would help to increase condom use. Health promoters would use these forums to educate young adults about the benefits of the condom as a contraceptive as well as a tool to prevent transmission of infections. It is also critical to involve peer educators.

CONCLUSION

The study indicated the need for improving the attitudes of healthcare providers, promoting condom use, and involving other relevant stakeholders as the possible strategies for promoting condom use among young adults in the Vhembe district.

RECOMMENDATIONS

Negative staff attitudes were cited as a barrier that hinders access to condoms at facilities. Retraining of healthcare providers to improve their attitudes is a matter of priority. In-service training should focus on disseminating information about patients' rights. A clear picture needs to be drawn so that the healthcare professionals would be able to see the positive impact of promoting condom use in the healthcare fraternity.

The mass media should be used as an avenue to communicate consistent and correct condom use. This means that healthcare providers and the relevant directorates of the Department of Health should aggressively intensify campaigns by using the mass media (radio, television, printed materials, imbizos and community meetings) to disseminate accurate information about the benefits of consistent condom use. This will strengthen the prevention of sexually transmitted infections, including HIV.

What also came out strongly from this study was the fact that sex education should be included in the school curriculum. Curriculum designers should review the current curriculum so that Life Orientation as a subject includes all aspects of sexuality, sex, and the benefits of condom use. Doing so would empower learners even before they reach secondary school. Intensifying condom distribution at public places and making condoms available at schools to improve accessibility are important. Peer educators and community healthcare workers can assist to distribute condoms to local schools and hot spots in communities. It was evident from the findings that female young adults were unable to negotiate condom use with their partners. Male young adults use condoms more than female young adults. Further research will be essential to explore why female young adults are not using female condoms.

LIMITATIONS

The study was conducted at only one healthcare facility which serves people from the rural villages. Convenience sampling was used in this study. While this sampling approach has advantages of being quick and cheap, it does not give a sample that is representative of target populations. Thus, in addition to the risk of bias, a generalisation of the findings is not feasible (Saks and Allsop 2013, 473). It is, however, important to note that most of the findings are in agreement with studies that have been made elsewhere as discussed above. The findings can, therefore, be adopted in other settings similar to the one in which the study was conducted.

ACKNOWLEDGEMENTS

The researchers are grateful to the University of South Africa and the Limpopo province for providing ethical clearance and permission for conducting the study. A special thanks to all the young adults who participated in the study.

REFERENCES

- Beksinska, M. E., J. A. Smit, and J. E. Mantell. 2012. "Progress and Challenges to Male and Female Condom Use in South Africa." *Sexual Health* 9 (1): 51–58. <https://doi.org/10.1071/SH11011>.
- Beltzer, N., L. Saboni, C. Sauvage, N. Lydié, C. Semaille, and J. Warszawski. 2013. "An 18-Year Follow-Up of HIV Knowledge, Risk Perception, and Practices in Young Adults." *AIDS* 27 (6): 1011–9. <https://doi.org/10.1097/QAD.0b013e32835e1583>.
- Bergh, Z. C., and A. L. Theron. 2009. *Psychology in the Work Context*. 4th ed. Cape Town: Oxford University Press.
- Bridges, J. F., F. W. Selck, G. E. Gray, J. A. McIntyre, and N. A. Martinson. 2011. "Condom Avoidance and Determinants of Demand for Male Circumcision in Johannesburg, South Africa." *Health Policy and Planning* 26 (4): 298–306. <https://doi.org/10.1093/heapol/czq064>.
- Burgard, S., and Y. Kusunoki. 2009. *Gender and Condom Use among Black South African People*. Ann Arbor: University of Michigan.
- Burgard, S., and S. Lee-Rife. 2009. "Community Characteristics, Sexual Initiation, and Condom Use among Young Black South Africans." *Journal of Health and Social Behavior* 50 (3): 293–309. <https://doi.org/10.1177/002214650905000304>.
- Encyclopaedia Britannica Online*, s.v. "condom", accessed 10 October 2014. <https://www.britannica.com/science/condom>.
- Exavery, A., A. M. Kanté, E. Jackson, J. Noronha, G. Sikustahili, K. Tani, H. P. Mushi, C. Baynes, K. Ramsey, A. Hingora, and J. F. Phillips. 2012. "Role of Condom Negotiation on Condom Use among Women of Reproductive Age in Three Districts in Tanzania." *BMC Public Health* 12: 1097. <https://doi.org/10.1186/1471-2458-12-1097>.
- Joubert, G., and R. Ehrlich. 2007. *Epidemiology: A Research Manual for South Africa*. 2nd ed. Cape Town: Oxford University Press.
- Kabikira, F. 2010. "Knowledge, Attitudes, and Practices of Condom Use in a Time of Highly Active Antiretroviral Therapy in a Rural Area in Uganda." Master's dissertation, University of South Africa.
- Katzenellenbogen, J., G. Joubert, and S. S. Abdool Karim, eds. 1997. *Epidemiology: A Manual for South Africa*. 2nd ed. Cape Town: Oxford University Press.
- Lammers, J., S. J. van Wijnbergen, and D. Willebrands. 2013. "Condom Use, Risk Perception, and HIV Knowledge: A Comparison across Sexes in Nigeria." *HIV/AIDS* 21 (5): 283–93. <https://doi.org/10.2147/HIV.S31687>.
- Macmillan English Dictionary*. 2nd ed. Oxford: Macmillan, 2012. <http://www.macmillandictionaries.com/dictionary-online>.
- Macphail, C., and C. Campbell. 2001. "'I Think Condoms are Good but, aai, I Hate Those Things': Condom Use among Adolescents and Young People in a Southern African Township." *Social Science and Medicine* 52 (11): 1613–27. [https://doi.org/10.1016/S0277-9536\(00\)00272-0](https://doi.org/10.1016/S0277-9536(00)00272-0).

- Mascolini, M. 2013. "Young Adults in France Fear AIDS, Use Condoms Less in Recent Years." Accessed 28 August 2014. <http://www.aidsmap.com/Young-people-know-less-about-HIV-and-are-less-trustful-of-condoms-French-survey-finds/page/2562082/>.
- Mash, R., B. Mash, and P. de Villiers. 2010. "“Why Don’t You Just Use a Condom?”: Understanding the Motivational Tensions in the Minds of South African Women." *African Journal of Primary Health Care and Family Medicine* 2 (1): 55–59. <https://doi.org/10.4102/phcfm.v2i1.79>.
- National Department of Health. 2011. *National Condom Policy and Management Guidelines*. Pretoria: National Department of Health.
- Njau, B., V. Mwakalo, and D. Mushi. 2013. "Correlates of Use of Condoms among Sexually Active Youth in Southern Highlands, Tanzania." *Sage Open* 3 (2). <https://doi.org/10.1177/2158244013491406>.
- Oyedele, O. A., S. C. D. Wright, and T. M. M. Maja. 2013. "Prevention of Teenage Pregnancies in Soshanguve, South Africa: Using the Johnson Behavioural System Model." *Africa Journal of Nursing and Midwifery* 15 (1): 95–108. <http://hdl.handle.net/10520/EJC136700>.
- Parks, K. A., Y. Hsieh, R. L. Collins, and K. Levonyan-Radloff. 2011. "Daily Assessment of Alcohol Consumption and Condom Use with Known and Casual Partners among Young Female Bar Drinkers." *AIDS and Behaviour* 15 (7): 1332–41. <https://doi.org/10.1007/s10461-010-9829-2>.
- Polit, D. F., and C. T. Beck. 2012. *Nursing Research: Generating and Assessing Evidence for Nursing Practice*. 9th ed. Philadelphia: J. B. Lippincott.
- Ramathuba, D. U. 2013. "Secondary School Girls’ Knowledge, Attitudes and Sexual Behaviour regarding Teenage Pregnancy, Emergency Contraception and Sexuality in Thulamela Municipality, Limpopo Province, South Africa." *African Journal for Physical Activity and Health Sciences* 19 (1): 1–9.
- Saks, M., and J. Allsop. 2013. *Researching Health: Qualitative, Quantitative and Mixed Methods*. 2nd ed. London: Sage.
- Shakil, S. 2011. "HIV/AIDS: How Sub-Saharan Africa Can Win the Battle." Accessed 4 November 2014. <https://www.nyrecord.org/hiv-aids-how-sub-saharan-africa-can-win-the-battle-2/>.
- Tschann, J. M., E. Flores, C. L. de Groat, J. Deardorff, C. J. Wibbelsman. 2010. "Condom Negotiation Strategies and Actual Condom Use among Latino Youth." *Journal of Adolescent Health* 47 (3): 254–62. <https://doi.org/10.1016/j.jadohealth.2010.01.018>.
- Van Rossem, R., and D. Meekers. 2011. "Perceived Social Approval and Condom Use with Casual Partners among Youth in Urban Cameroon." *BMC Public Health* 11: 632. <https://doi.org/10.1186/1471-2458-11-632>.
- Weller, S., and K. Davis-Beatty. 2002. "Condom Effectiveness in Reducing Heterosexual HIV Transmission." *Cochrane Database of Systematic Reviews*. <https://doi.org/10.1002/14651858.CD003255>.