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Progress and challenges to male and female condom use in South Africa

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Abstract

South Africa has responded to the STI and HIV epidemic with a rapid expansion of its national-level public sector condom programme. Male condoms are available widely, at no cost in the public sector, with expanded access via social marketing and the private sector. The female condom programme is one of the largest and well-established globally. National surveys show progressive increases in rates of condom use at last sex. Yet inconsistent and incorrect use and likelihood that condoms are discontinued in longer-term partnerships are some of the challenges impeding the condom programme's successes in the fight against STIs and HIV. This article reviews the current condom program, related guidelines and policies, the existing data on male and female condom use, including distribution and uptake. We discuss the main challenges to condom use, including both user and service-related issues and finally how these challenges could be addressed.

Keywords

Male and female condoms; Sexually transmitted infections; HIV/AIDS; South Africa

Background

Sexually transmitted infections (STIs), including HIV, are a major public health burden in South Africa (SA). The epidemic is complex and thought to be influenced by a number of behavioural, historical and structural factors including patterns of sexual partnerships, heavy episodic alcohol use, gender inequality, violence and poverty.^{1–5} The HIV prevalence is one of the highest in the world, with an overall population prevalence of 11% in 2008. In women, HIV prevalence peaks in the 25–29 year age group at 32.7%, whereas in men the peak is lower at 25.8% and occurs in the 30–34 year age group.⁶ There are some positive signs that the infection rate is stabilising, and in the same national survey, HIV prevalence decreased in youth, from 10.3% in 2005 to 8.6% in 2008.⁶ In the most recent South Africa Demographic and Health Survey (SADHS), 7.7% of women who had ever had sex reported an STI, vaginal discharge or genital ulcer in the past 12 months.⁷ Although the contraceptive prevalence rate is high in SA, at 64.6% among sexually active women, unplanned and teen pregnancies are an on-going problem.^{7–9}

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This paper reviews a range of issues regarding the progress and challenges to both male condom (MC) and female condom (FC) use in SA. We describe the current condom program and related guidelines and policies implemented by the SA National Department of Health (NDOH). We provide an overview of the existing data on condom use in SA, including distribution and uptake. We discuss the main challenges to condom use, including both user and service-related issues, and finally discuss how these challenges could be addressed.

The National HIV and AIDS and Strategic Plan for South Africa 2007–2011 (NSP) has a primary aim of reducing the rate of new HIV infections by 50% by 2011.¹⁰ One of the four key priority areas is prevention, with an emphasis on the promotion and distribution of male and female condoms, both of which are provided in government public state health sector services at no cost to the user, predominantly through an extensive network of primary health care (PHC) clinics of which there are over 4,000 in SA. Specifically, the objectives and activities related to condoms under the National Government HIV and AIDS and TB Programme are as follows:

- Ensure an un-interrupted supply of good quality condoms to all provinces.
- Expand condom supply to non-traditional outlets like hotels, clubs, spaza shops and taxi ranks.
- Make the female condom available in areas where there is a demand and to popularise it.
- Motivate for the provision of condoms in institutions of higher learning.
- Ensure condom supply in high transmission areas like trucking routes and single sex hostels, and where commercial sex work is prevalent.

Source <http://www.doh.gov.za/aids/Index.html>

In SA, key STI and HIV prevention messages are promoted through national mass media by government and non-governmental organisations.¹¹ In addition, numerous national HIV awareness and prevention programmes and interventions have been implemented in the last 10 years, many targeting youth aged 15–24 years.¹² These programmes and interventions have been successful in raising awareness of STIs and HIV and disseminating prevention messages, with 90.2% of youth and 83.6% of adults reporting exposure to at least one HIV/AIDS communication programme in 2008.⁶ Some HIV interventions aimed at young people have included a component of condom behaviour change.¹² In this systematic review of South African HIV prevention interventions aimed at youth of eight rigorously designed programs, five demonstrated a significant impact on HIV-related risk behaviours including condom use.¹²

The National Contraceptive Policy lists male condoms as a core contraceptive method that should always be available in public sector facilities, and the FC as a method to be available in selected facilities.¹³ The policy further advocates that male condoms be promoted for dual protection against pregnancy and STIs/HIV. A 'National Condom Policy and Management Guidelines' currently in preparation (personal communication, NDOH 2010) focuses on both MC and FCs and will be a comprehensive guide to funding, specifications, procurement, quality assurance, distribution, and monitoring and evaluation. It will also address barriers to condom use and promote relevant operational and other research to inform the programme further.

Distribution, Products and Accessibility of Male and Female Condoms in the Public Sector

The NDOH has been implementing a national male condom programme since 1992. Public sector male condoms are further distributed through a range of non-governmental organisations (NGOs) and parastatals. Following concerns about the quality of public sector condoms in SA, in 2004 the NDOH launched the rebranded male condom named “Choice™”, targeted at 18–35 year olds, repackaged in attractive colours in an effort to increase condom usage, and promoted in the national Khomanani (caring together) mass media campaign.¹¹ The NDOH initiated the National Introduction of the Female Condom Programme in June 1998. Following a pilot programme, FCs were introduced into selected sites in all 9 provinces. The programme has since expanded and the total number of designated FC distribution sites has grown from 19 to over 300 nationally. In addition to these facilities, there has been considerable informal distribution from the designated sites to non-designated sites.¹⁴ A strong social marketing sector complements the public sector distribution. Managed by the Society for Family Health (SFH), male condoms are distributed across SA under the “Lovers Plus™”, and “Trust™” brand and FCs as the “Care™” brand.

All public sector facilities are expected to record total condom distribution for the District Health Information System, from which the indicator ‘condom distribution rate’ is calculated.¹¹ Over 350 million male condoms were distributed annually by the NDOH in 2008/09 which translated to 12.3 male condoms per male 15 years and older. This was up from 9.1 male condoms in 2005. National distribution rates, however, vary considerably, with a low of 4.3 condoms per male in a rural district in Free State Province and a high of 47.0 per male in the Cape Metro urban district.¹⁵ At the end of 2009 it was announced that in 2010, the year SA hosted the FIFA Football World Cup, distribution would be increased to around 2.5 billion.¹⁶ There is less information on male condoms that have not been used (lost, discarded and expired). Wastage of public sector condoms has been estimated as 8.5% which is fairly low.¹⁷ FC distribution has been increasing yearly and was in the region of 4 million units in 2008; whereas FC distribution in SA is one of the highest in the world, it is only a fraction of the current male condom distribution.¹⁶ The challenges to the condom programme are mainly centred on cost as the FC is approximately 18 times more expensive than the male condom and this is a limiting factor. The introduction of the nitrile FC2 female condom, which has replaced the polyurethane FC1 female condom, has reduced the price and will increase availability. FC public sector distribution also differs from that of the male condom in that they are only available directly through provider contact, not through condom cans and dispensers like the male condom. This is to ensure that users are properly instructed in their correct use and an attempt to limit wastage.

Access to condoms and non-barrier contraception is mandated to be a reproductive health right for children aged 12 and older.¹⁸ Schools present the ideal venue for HIV and pregnancy prevention interventions, including education and access to condoms. The South African Department of Education (DOE) allows individual schools to decide whether condoms should be distributed and how; however, few schools have taken up the opportunity to provide condoms, due to concern that such access will encourage sexual activity. This limits condom access to a group who urgently need good HIV prevention options.^{18–19}

^IAn organization wholly or partly supported by the government

^{II}The male condom distribution rate is an indicator that measures the number of condoms that are distributed by the Department of Health via public health facilities and other outlets in a year to males aged 15 years and older.

Condom Uptake

Condom use at last sex is a key indicator for progress toward the Millennium Development Goal (MDG) for combating HIV/AIDS. Since 2002, three comprehensive HIV surveys have been conducted by the South African Human Sciences Research Council (HSRC). Across the 3 surveys - conducted in 2002, 2005 and 2008 -- condom use at last sex in youth (14–24 years) increased from 57.1% to 87.4% as reported by men, and 46.1% to 73.1% reported by women.^{6,20–21} Amongst men in the 25–49 age group, rates more than doubled -- from 26.7% to 56.4%. Women aged 25 to 49 years who had reported lower rates than men in 2002 and 2005 had made greater gains, with 58.1 % using a condom at last sex in 2008 compared to 19.7% in 2002. Education plays a major role in condom uptake, particularly in women, with only 16% of women without education using a condom at last sex compared to 63% of those with higher education.⁷ Condom use is also lower in rural areas compared to urban settings.⁷

Compared to condom rates reported at last sex in SA, condom use as a primary method for contraception is much lower. Although use of the male condom was 12% in sexually active women in 2003, with a peak of 18% in the 15–19 age group, the proportion of married or cohabiting users fell to 5%.⁷ While more than half of women (54%) had heard of the FC, current use was low, at <1.0%; however, the programme was still in its early phase of distribution in 2003.⁷ The data from the 2003 SADHS are considerably out of date and more recent national data on condom use for contraception are not available. Rates of dual protection with condoms only or with condoms plus another contraceptive method (e.g. hormonal contraceptives) are not easy to assess. For instance, many women using both a hormonal method and condoms will only report the hormonal method when asked about pregnancy prevention.^{22–23} In one national study of adolescent women, only 7% reported using dual methods; however this increased to 28.1% when those who only mentioned a hormonal method were asked about condom use at last sex.²³ Secondary analysis of the 1998 SADHS reported similar findings and also found that of sexually active women reporting no use of a contraception method, 5.5% indicated a condom was used at last sex.²²

Paradoxically, high rates of condom use reported in National surveys recently undertaken in SA are at odds with continued high incidence of STIs, HIV and high rates of teenage and unintended pregnancies.^{6–9, 15, 24} This contradiction could be the result of the confluence of several factors which dilute and even erode the reported gains made in condom use. While good progress in condom programming has been made in SA, there are still considerable user- and service-level challenges which affect uptake. These are discussed in the next section.

Challenges to Male and Female Condom Use

User Issues

Knowledge of the protective effect of condoms—Using condoms is one of the most effective ways of preventing STIs and HIV.²⁵ Although South African men and women of all ages are generally very aware of HIV, and almost all men (95%) and women (93%) have heard of AIDS,⁷ their knowledge about how to prevent HIV transmission is inadequate. A number of surveys have included questions on whether people know that using condoms in general, or more specifically, using a condom every time they have sex and limiting the number of sexual partners, can prevent transmission. The 2003 SADHS showed that most men (85.2%) but fewer women (71%) agreed that condoms reduce the risk of HIV infection.⁷ Limiting sex to one uninfected partner was seen as a method to prevent HIV by 82% of men and 75% of women. Overall, on the two measures combined, just over two-thirds of women (67.3%) and slightly more men (72.7%) mentioned both strategies to avoid

HIV transmission. This level of knowledge has not improved in recent years. Between 2005 and 2008 accurate knowledge about prevention of HIV transmission, which included a measure on knowledge about consistent condom use, declined from 60% to between 40 and 50%.⁶

Consistency of condom use—Consistency of condom use is a challenge in SA,^{2, 26–35} and definitions of what consistent condom use actually means varies considerably thus comparisons are not always appropriate. Most data on consistency of use have focused on adolescents and young adults, with limited information on older couples in married and stable partnerships. In three Durban tertiary institutions, condom use among students at last sex was high -- 75%, yet consistent condom use was reported by only 24% of males and 28% of females,³¹ however, this was measured as always using condoms since first sexual intercourse. This pattern continues in most studies where high rates of condom use at last sex are accompanied by considerably lower rates of consistent use. In a national study among SA youth aged 15–24, 52% used a condom at last sex, while fewer (33%) reported consistent condom use --defined as always using condoms with their most recent sex partner.²⁸ Two studies in young rural populations defined consistency as always using condoms in the 12 months prior to interview.^{33–34} Consistent condom use was 27% in a large sample (N=3,914) of men and women aged 15–24 years who were interviewed as part of a large demographic surveillance survey.³³ The second study interviewed rural women of a similar age and found 19.9% reporting consistent condom use.³⁴

The gap between rates of condom use at last sex and consistent use may be in part explained by relationship status, with many studies showing that condom use in stable partnerships is lower than that found in casual or new partnerships.^{2, 8, 27–29, 32–33} In a national survey of 15–24 year olds, consistent condom use fell by almost half, from 48.4% in partnerships of a year or less to 27.3% in those longer than a year.²⁸ Although condom use may be seen as acceptable and even essential in early stages of a relationships, condom use may be abandoned over time. In one study of married or cohabiting couples, only 15% of men and 18% of women reported consistent or occasional condom use.³⁵ Once a relationship is established, monogamy is expected and condom use declines.^{31–32}

Incorrect condom use and condom failure—For greatest effectiveness, condoms need to be used correctly with every act of sex. There is some information on incorrect male condom use and failure in SA.^{31,34, 36–38} In a high risk population attending sexually transmitted infection services, 41% of men and 37% of women had ever experienced condom failure. In a sub-sample of this group, 12% reported use of oil-based lubricants which can cause male condoms to break.³⁷ In another STI clinic population observed over a 1-year period, 33% had ever experienced condom failure, with nearly half of these (48%) reporting failure in the past month. Condom use failure was found to be associated with alcohol and other drug use and sexual exchange in this group.³⁸ Two studies looked at correct use in those who said they used a male condom at last sex. In a rural sample of women, 12% reported a problem in use at last sex.³⁴ Similarly, in a survey of tertiary students, 13% of men and 10% of women reported incorrect condom use, specifically mentioning that the condom was not put on before penetration.³¹ Data for FC failure and problems in use in the general population is lacking. Available data from early acceptability studies and later comparative FC performance trials show problems in use are generally low.^{39–41}

Accuracy of self-reported condom use—The high rates of reported condom use found in a range of studies may be a result of respondents giving socially desirable responses, with some showing that self-reports of condom use may be unreliable, as found in microbicide trials using pregnancy or an HIV or STI diagnosis as a biomarker event.^{26,42}

In one investigation of self-reported sexual behaviour from a microbicide trial in SA, many women (79%) reported they misinformed interviewers at least once on a range of issues, including condom use. Reasons given included politeness, avoiding criticism and embarrassment.⁴² Although accuracy of self-reports and adherence is being investigated in sexual behaviour trials, there is a need to address this area in large-scale surveys which provide crucial data on population-level behaviour.

Vaginal practices—Studies on the use of vaginal practices, such as intravaginal cleansing (douching) and insertion, have shown that condom use was lower among women who report vaginal practices.^{43–46} In a household survey undertaken among 867 women in KwaZulu-Natal Province, women who said they used condoms inconsistently or not at all in the past month had 1.8 times higher odds of undertaking intravaginal practices than women reporting consistent condom use.⁴³ Use of condoms, particularly lubricated ones, may be incompatible with the reasons for using vaginal practices, with “skin-to-skin” contact to create warmth and friction for increased sexual pleasure being highly desired.^{44–46} Further, vaginal practices and products may lead to condom breakage.⁴⁴

Acceptability—Few studies undertaken in the last two decades have investigated male condom acceptability, with most studies on male condoms focusing on use and predictors of use. In the early 1990s, a study among high school students in KwaZulu-Natal reported that condoms were disliked because they reduced sexual pleasure, called into question partners’ fidelity, and challenged notions of masculinity. This study also raised the stigmatisation of condoms, as they were seen to be linked to STIs.⁴⁷ As the HIV pandemic escalated in SA, the need for condom use has become more acceptable, and has been described as ‘normative’ in a study among higher education students.³¹ In another study among female higher education students, there was agreement about the need to ‘condomize’.⁴⁸ In this study, it was also reported that use of condoms may be more acceptable for pregnancy prevention than for STI/HIV prevention. As described above, the use of condoms in stable relationships is less acceptable than in casual or new relationships.

Negative perceptions regarding public sector male condoms have been reported in two studies with tertiary students.^{49–50} In both these studies, the free “Choice” brand condoms were seen to be inferior in quality to the commercially available and socially marketed condoms. Concerns regarding comfort and breakage,⁴⁹ and unpleasant smell,^{49–50} were cited as reasons for not wanting to use free government condoms. Despite high levels of awareness of the availability of “Choice” public sector condoms, a third of participants in the Second National Communication Survey indicated substantial scepticism that these condoms would prevent HIV infection.¹¹

Early acceptability studies undertaken in SA reported a mixed reaction to the FC and an evaluation of the FC introductory strategy in South African public sector clinics reported that it is acceptable to some women.⁴⁰ In a more recent study of two FC types, overall experience of use was good for over half the participants, with features such as the type of material and lubricant viewed most positively. Negative aspects commonly reported were the appearance and too much lubricant.⁴¹ The media have often portrayed the FC in a negative light, often focusing on aspects of acceptability such as noise and appearance which have only been reported as minor user issues in FC acceptability and performance studies in SA.^{39–41}

Gender and gender-based violence—Another challenge to condom use is gender inequality and the threat of gender-based violence (GBV). There have been an abundance of studies that have linked intimate partner violence with increased risk of HIV infection in SA, which has one of the highest rates of sexual violence worldwide.^{5, 51} The effects of GBV on

women's ability to engage in condom-protected sexual intercourse are manifest in gender relations, and are reinforced by the broader context of socioeconomic inequalities that make women dependent on men. Some studies have found that partner violence reduces women's ability to control sexual encounters and condom use because of gender power inequities favouring male dominance.^{51–52}

While concerns have been voiced about women being physically or verbally abused if they introduce the FC to a partner, there is little empirical evidence to support this claim. We are aware of only one qualitative study in the United States with female drug users in methadone maintenance treatment indicating that promotion of FCs increased women's risk of violent behaviour by their male partners.⁵³

Condoms and under-represented groups at-risk—Condoms have not been adequately promoted and made available among a number of populations at risk for HIV in SA, including prisoners, older adults, men who have sex with men (MSM), and persons with disabilities. An estimated 22.8% (10,730) of the 47,011 incarcerated in SA who have been tested are HIV-positive.⁵⁴ Condom distribution is permitted in prisons, but only under the proviso that inmates undergo counselling and education programmes.⁵⁴

There has been relatively little recognition of the problem of HIV/AIDS among older SA adults although an estimated 12.6% of people ≥ 50 years were living with HIV in 2007.^{55–56} With the “aging” of the AIDS epidemic due to increased survival via access to antiretrovirals, their numbers are likely to increase. Secondary analysis of the HSRC 2005 HIV prevalence and behaviour survey data²¹ showed that the 50+ age group had less HIV knowledge and more inconsistent condom use than their younger counterparts. A condom-use generation gap was also noted in the Second National Communication Survey; among the sexually active 50–55 year-old age group, only 11% of women and 8% of men reported condom use at last sex (compared to 43% of women and 51% of men aged 25–29).¹¹

Until recently, there have been few attempts to target MSM for HIV prevention. Although MSM have not been included in South Africa's national HIV surveillance, MSM are now considered one of the most-at-risk populations in SA, as noted in the 2007–2011 NSP.¹⁰ Several studies show widespread unprotected intercourse amongst MSM.^{57–59} For instance, a survey of 285 sexually active MSM found 46% reporting unprotected anal intercourse in the past 12 months, and 4% with a known HIV-positive partner.⁵⁷ Over half (55%) reported not having a condom available when needed, nearly three-fifths (58%) reported at least one incident of condom breakage and more than two-fifths (42%) condom slippage, in the past 12 months. In addition, a significant number of participants reported using oil-based lubricants known to damage condoms.⁵⁷

SA has begun to recognize the need for access to HIV prevention and treatment information and services among persons with disabilities who are now included as an at-risk group in the 2007–2011 NSP.¹⁰ People with disabilities (the deaf, physically and developmentally impaired), who comprise 5% of the population,⁶⁰ have an HIV prevalence of 14%.⁶ Yet, they have not been systematically targeted for HIV prevention.^{61–62} A knowledge, attitudes and practices study of HIV/AIDS and sexuality among 286 people with disabilities found low levels of HIV knowledge, but that awareness of condom use as an HIV measure did not differ from the non-disabled population.¹⁰ Similarly, in the 2008 HSRC survey, only 21% of people with disabilities could both correctly identify strategies for preventing HIV sexual transmission and reject major misconceptions about HIV transmission.⁶

Service-Level Factors

Although generally available in all public health service facilities, male and female condoms are provided within a vastly overstretched public health care system. The burden of the HIV epidemic, alongside considerable human resource shortages, has resulted in a number of service-level related challenges to the condom programme. The NDOH is responsible for procurement and distribution of male condoms to primary distribution sites in all provinces. The distribution system was improved by the introduction and maintenance of the Logistic Management Information System, which facilitates the continuous supply of condoms on the basis of consumption and should ensure that no stock outs occur. Although supply of male condoms has generally improved over the years, local logistics, tendering and contract issues created male condom shortages. A national survey conducted in 2003 found that a small proportion of facilities reported current stock outs of male condoms (4%) and FCs (1%).¹⁴ Male condom dispensers were available in 83% of facilities surveyed; however, less (37%) had instructions available on how to use male condoms.¹⁴

Male condom accessibility is reported to be high, with both youth and adults reporting they are easily accessible.^{21, 28} However, providers may be reluctant to promote barrier methods exclusively for pregnancy and STI/HIV prevention when effective hormonal contraceptive methods are available. SA relies heavily on the long-acting injectables Depo Provera and Nuristerate, with over half of women on contraception (55.6%) using injectables or oral contraception as a pregnancy prevention method,⁷ and providers do not always consider male condoms as a method of pregnancy prevention.

Conclusion

SA is making good progress in meeting the MDG indicator of condom use at last sex, with increases in this indicator reported in consecutive surveys over time. While many people have come to accept the need to use condoms, the data on consistency in use, coupled with incorrect use and likelihood that condoms are discontinued in longer-term partnerships, paint a less optimistic picture. The high rates of reported condom use at last sex are at odds with equally high rates of unplanned pregnancies and STI/HIV infection. It has been shown that inconsistent condom use can result in risk of HIV transmission as high as no condom use at all,⁶³ and advantages gained in condom use in early stages of a relationship may be lost as couples abandon condom use and change to hormonal contraception.

Health providers involved in the provision of contraceptive services are in an ideal position to counsel clients about the need for dual protection practices where this is appropriate. This can also be used as an opportunity to train users in correct condom use. The National Condom Policy which will be available in 2011 focuses on many aspects of user issues, including counselling in correct and consistent use condom use. The HIV counselling and testing programme is a further opportunity, in particular to target men in condom use issues. Increased availability of the FC should be encouraged as this increases women's choice of barrier methods, and some women may be better able to negotiate use of the FC than the male condom. A growing body of evidence suggests that providing the FC along with the male condom increases the number of protected acts of vaginal sex.⁶⁴ FC promotion is lacking, as distribution is limited to selected facilities, people need to know where and how they can be accessed. There have recently been calls for urgent action to widen distribution and improved accessibility.⁶⁵ As the only African country with a comprehensive public sector condom programme including both male and female condoms, this opportunity needs to be exploited. Promotion and wider accessibility of emergency contraception are key to ensuring condom use has as a back-up method in situations of unplanned sexual activity, coercive sexual encounters and condom failure. There is a need to investigate condom use in more detail, including user problems, condom failures and to develop more accurate

measures of correct and consistent use. In particular, the recent expansion in male condom distribution and its effect on uptake needs evaluation. Although the FC programme is well established, there remains a paucity of data on FC uptake and type of user. By addressing the challenges noted above, SA will continue its leadership in condom programming and serve as role model for other countries on the African continent.

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