

Dual Method Use in South Africa

CONTEXT: Dual method use is featured in South Africa's new reproductive health policies as an important means of family planning as well as of prevention of infection with HIV and other sexually transmitted infections (STIs). However, little is known about current levels and predictors of dual method use in South Africa or about interventions that might promote dual protection.

METHODS: A total of 554 individuals procuring public-sector condoms were recruited from 12 primary care facilities across South Africa. Participants responded to a semistructured baseline interview and returned for qualitative follow-up interviews over the next five weeks.

RESULTS: Of the 554 subjects participating in baseline interviews, 16% had used both a condom and another form of contraception at their most recent sexual encounter. In a multivariate analysis, dual method use was independently associated with increased schooling (odds ratio of 1.1) and previous instruction on condom use from health care providers (1.7). Qualitative data from follow-up interviews suggest that dual method use occurs when a man's desire to protect himself against HIV or other STIs coincides with his female partner's desire to prevent pregnancy.

CONCLUSIONS: The implementation of STI and pregnancy risk assessment and counseling and the promotion of dual protection in primary health care settings have the potential to increase dual method use in South Africa.

International Family Planning Perspectives, 2002, 28(2):119–121

By Landon Myer,
Chelsea Morroni,
Catherine Mathews
and Francesca
Little

Landon Myer is a senior scientist in the HIV Prevention and Vaccine Research Unit, South African Medical Research Council, Hlabisa, South Africa, and fellow, Fogarty AIDS Information, Training and Research Program, Mailman School of Public Health, Columbia University, New York. Chelsea Morroni is a scientific officer in the Department of Public Health and Primary Health Care, University of Cape Town, South Africa. Catherine Mathews is a senior scientist in the Health Systems Research Unit, South African Medical Research Council, and an honorary lecturer in the Department of Public Health and Primary Health Care, University of Cape Town. Francesca Little is a lecturer in the Department of Statistical Sciences, University of Cape Town.

Dual protection, defined as any strategy that prevents both unwanted pregnancy and sexually transmitted infections (STIs), including HIV, is emerging as an important preventive approach in reproductive health.¹ It may include various combinations of pregnancy and STI prevention, such as the use of condoms with hormonal contraceptives, or it may consist of other risk reduction behaviors such as nonpenetrative sex or abstinence.

In South Africa, the predominance of hormonal contraceptives, particularly injectables, means that the simplest approach to dual protection is through the combination of a barrier method, most commonly the male condom, with a nonbarrier (primarily hormonal) contraceptive. South Africa's new reproductive health policies promote dual method use as an important means of preventing both unwanted conceptions and transmission of HIV and other STIs.² Nevertheless, little is known about the current levels of, and barriers to, dual method use in sexually active South African populations. In this article, we explore the current levels and predictors of dual method use among condom users in South Africa and consider potential interventions to promote dual protection.

METHODS

The study was undertaken during 1998–1999 in 12 public health facilities from four health regions of South Africa. (Detailed data collection methods have been published previously.³) Consecutive individuals leaving these sites with

condoms were invited to participate in the study. Eligible respondents included clinic clients who had asked for condoms as well as family planning and STI patients who had obtained condoms from health care providers during their clinic visit. Of the 594 individuals approached, 554 men and women (93%) completed a baseline interview, which used a semistructured questionnaire to collect demographic data and information on recent sexual behavior and on condom-related knowledge and attitudes. At the end of this interview, the respondents were scheduled for two follow-up interviews over the next five weeks. At each follow-up, the respondents participated in loosely structured in-depth interviews exploring sexual behaviors; condom and contraceptive use; and their attitudes and those of their partners toward HIV/AIDS, other STIs and pregnancy. All interviews took place in a private room at the health care facilities and were conducted in the respondents' own language by trained fieldworkers.

Statistical analysis used chi-square tests and t-tests to identify the factors associated with dual method use, defined as the use of condoms with another form of contraception (including sterilization, the IUD or the diaphragm) during their most recent sexual encounter. Factors shown to have crude associations with dual method use were entered as independent variables into a logistic regression model that adjusted for participant age and gender; variables were removed if they did not appear to be associated with dual method use in the model and if their presence did not significantly

TABLE 1. Means and percentage distributions of respondents, by whether they used dual protection at their most recent sexual encounter, according to selected characteristics

Characteristics	All (N=554)	Dual method use (N=88)	No dual method use (N=466)
MEANS			
Age (mean yrs.)	25.8	25.4	25.9
Schooling (mean yrs.)	9.6	10.7	9.4
PERCENTAGE DISTRIBUTIONS			
Gender			
Female	42.6	48.9	41.4
Male	57.4	51.1	58.6
Previous instruction on condom use from health care worker			
Yes	28.0	40.9	25.5
No	72.0	59.1	74.5
Condom use at last sex			
Yes	50.5	100.0	41.2
No	49.5	0.0	58.8
Other contraceptive used at last sex			
Yes	34.1	100.0	21.7
No	65.9	0.0	78.3
Type of contraceptive used at last sex†			
Injectable	66.7	64.8	68.3
Pill	27.0	27.3	26.7
IUD	1.1	1.1	0.9
Diaphragm	0.5	1.1	0.0
Sterilization	1.6	1.1	2.0
Rhythm	0.5	0.0	0.9
Other/traditional method	2.6	4.5	0.9

†Ns are 189 for all respondents, 88 for dual method use and 101 for no dual method use.

influence the associations between the other covariates and dual method use. For qualitative analysis, interviews were sorted by gender and by condom and contraceptive practices, and then individually coded and grouped into themes.

RESULTS

The respondents' mean age was 26 years (range 14–63), and 43% were women (Table 1). About half the participants (51%) reported having used a condom during their most recent sexual encounter, and 34% reported having used a contraceptive other than a condom. Of that 34%, the vast majority (94%) reported having used the pill or the injectable. The 189 participants who had used a contraceptive (with or without a condom) at last intercourse were slightly less likely to have used a condom during that episode than were the 365 participants who had used only a condom or no method (47% vs. 53%); the difference between the two groups, however, was not statistically significant ($p=.09$). Eighty-eight sexually active participants (16%) had used both a condom and another method of contraception during their last sexual encounter. In a logistic regression model adjusted for age and gender, dual method use at most recent sexual encounter was associated with increased schooling (odds ratio of 1.1 for each additional year; 95% confidence interval, 1.1–1.2) and previous instruction on condom use from health care providers (1.7; 95% confidence interval, 1.1–2.8).

Three hundred and eighty-four (69%) of those surveyed at baseline also completed the qualitative interviews. Respondents who were successfully followed up were more likely to be male and were more likely than those lost to follow-up to report having used a condom during their last sexual encounter before the study.⁴ In follow-up interviews, male and female participants agreed that the primary function of condoms was to protect against HIV and other STIs, but were less comfortable with the use of condoms as contraceptives.

Although the protection condoms provide against HIV and other STIs benefits both partners equally, study participants perceived condoms primarily as a means of protecting men from infection by their female partners. Although many female respondents had an opinion on condom use, both males and females felt that the final decision on whether to use condoms as STI prophylaxis was the man's. Conversely, men and women concurred that although men usually expressed a preference about the use of methods to prevent pregnancy in their relationship, the decision was ultimately up to the female partner. These and other qualitative findings from participants across all sites suggest a framework in which decisions about condoms and other contraceptives are considered the domain of either the male or the female partner, but not of both. Dual method use, rather than being a consensual choice, generally occurs only when a man's aim of protecting himself from STIs coincides with his female partner's goal of preventing unwanted pregnancy.

DISCUSSION

To our knowledge, this is the first study of dual method use in South Africa. Although most previous dual method use research has focused on female family planning clients,⁵ this study interviewed both men and women who had obtained condoms about their condom and contraceptive use. Despite differences in study populations and locations, our finding of a low level of dual method use is broadly consistent with previous studies, which have found levels of dual method use ranging from 13% among family planning clients in Kenya⁶ to 17–20% in various U.S. populations.⁷

All of the participants in this study had access to primary health care facilities; dual method use may be lower in the general population. Although further research is needed to evaluate the levels of, and barriers to, dual method use in different South African populations, the next step in national and local policy-making is to develop concrete guidelines for the promotion of dual protection as part of primary care services. Such guidelines could focus on the integration of family planning and STI services (which remain separate in many South African health care settings), and seek to implement strategies for primary care providers to provide individuals with risk assessment and counseling on HIV and other STIs as well as on unwanted pregnancy.

This research has highlighted the gender-specific nature of existing contraceptive and prophylactic options. New reproductive health choices, such as the female condom, vaginal microbicides and male hormonal contraception,

have the potential to rearrange the gender-specific obstacles to use of contraceptives and barrier methods by giving partners of both sexes a range of options through which to achieve dual protection.

REFERENCES

1. Woodsong C and HP Koo, Two good reasons: women's and men's perspectives on dual contraceptive use, *Social Science and Medicine*, 1999, 49(5):567-580.
2. South African Department of Health, *National Framework and Guidelines for Contraceptive Services, Second Draft*, Pretoria: Department of Health, 1999.
3. Myer L et al., The fate of free male condoms distributed to the public in South Africa, *AIDS*, 2001, 15(6):789-793.
4. Ibid.
5. Kuyoh M et al., *Dual Method Use Among Family Planning Clients in Kenya*, final report, Arlington, VA, USA: Family Health International, and Nairobi, Kenya: Family Planning Association of Kenya, 1999; Riehman KS et al., Dual method use among an ethnically diverse group of women at risk of HIV infection, *Family Planning Perspectives*, 1998, 30(5):212-217; Sangi-Haghpheykar H, Poindexter AN and Bateman L, Consistency of condom use among users of injectable contraceptives, *Family Planning Perspectives*, 1997, 29(2):67-69; Cushman LF et al., Condom use among women choosing long-term hormonal contraception, *Family Planning Perspectives*, 1998, 30(5):240-243; Plichta SB et al., Partner-specific condom use among adolescent women clients of a family planning clinic, *Journal of Adolescent Health*, 1992, 13(6): 506-511; and Humphries HO and Bauman KE, Condom use by Norplant users at risk for sexually transmitted diseases, *Sexually Transmitted Diseases*, 1994, 21(4):217-219.
6. Kuyoh M et al., 1999, op. cit. (see reference 5).
7. Riehman KS et al., 1998, op. cit. (see reference 5); Santelli JS et al., Combined use of condoms with other contraceptive methods among inner-city Baltimore women, *Family Planning Perspectives*, 1995, 27(2): 74-78; and Lindberg LD, Ku L and Sonenstein FL, Adolescent males' combined use of condoms with partners' use of female contraceptive methods, *Maternal and Child Health Journal*, 1998, 2(4):201-209.

RESUMEN

Contexto: Las nuevas políticas de salud reproductiva de Sudáfrica recomiendan el uso simultáneo de dos métodos anticonceptivos como un importante componente de la planificación familiar, así como una medida de prevención del VIH y otras infecciones transmitidas sexualmente (ITS). Sin embargo, poco se sabe de los actuales niveles y variables de predicción del uso de dos métodos en Sudáfrica o acerca de las intervenciones que promueven esta práctica.

Métodos: Se reclutó a un total de 554 personas que procuraban condones en 12 clínicas de atención primaria de salud del sector público, localizadas en diversos lugares de Sudáfrica. Los participantes respondieron a un cuestionario de base semi-estructurado y regresaron para entrevistas de seguimiento cualitativas después de transcurrido un período de cinco semanas.

Resultados: De las 554 personas que participaron en las entrevistas de referencia, el 16% habían utilizado un condón y otro método anticonceptivo durante la última relación sexual. Mediante el análisis multivariado, el uso de dos métodos estu-

vo independientemente relacionado con un mayor nivel de educación (razón de momios, 1,1) y con la instrucción previa sobre el uso del condón recibida por parte de los proveedores de servicios de salud (1,7). Los datos cualitativos recogidos de las entrevistas de seguimiento sugieren que el uso de dos métodos tiene lugar cuando el hombre desea protegerse contra el contagio del VIH y otras ITS, y ello coincide con el deseo de la mujer de prevenir un embarazo.

Conclusiones: La implantación de una evaluación de riesgos de las ITS y del embarazo, junto con la consejería y la promoción de la práctica del uso de dos anticonceptivos en las clínicas de atención primaria, tienen el potencial de aumentar el uso simultáneo de dos métodos en Sudáfrica.

RÉSUMÉ

Contexte: La nouvelle politique de santé génésique d'Afrique du Sud souligne l'importance des méthodes doubles dans le planning familial et la prévention de l'infection à VIH et d'autres infections sexuellement transmissibles (IST). Les niveaux et prédicteurs courants de pratique de méthode double en Afrique du Sud sont toutefois peu connus, de même que les interventions aptes à promouvoir cette double protection.

Méthodes: Un total de 554 utilisateurs de préservatifs distribués par le secteur public ont été recrutés dans 12 centres de soins primaires dans l'ensemble du pays. Les participants ont répondu à une interview de référence semi-structurée, puis à des interviews de suivi qualitatif durant les cinq semaines suivantes.

Résultats: Des 554 participants aux interviews de référence, 16% avaient utilisé le préservatif et une autre forme de contraception lors de leurs derniers rapports sexuels. L'analyse multivariée a révélé que la pratique de méthode double était indépendamment associée à une scolarisation supérieure (rapport de probabilités de 1,1) et à une instruction antérieure reçue des prestataires de soins de santé sur l'usage du préservatif (rapport de probabilités de 1,7). Les données qualitatives des entrevues de suivi laissent entendre que la pratique d'une méthode double intervient lorsque le désir de l'homme de se protéger contre le VIH ou d'autres IST coïncide avec le désir de sa partenaire d'éviter une grossesse.

Conclusions: La mise en œuvre de mesures d'évaluation des risques et de conseil sur les IST et la grossesse et la promotion de la double protection dans le contexte des soins de santé primaires offrent un potentiel d'accroissement du recours aux méthodes doubles en Afrique du Sud.

Acknowledgments

The study from which these data were drawn was sponsored by the HIV/AIDS & STD Directorate of the South African Department of Health, with support from the South African Medical Research Council. The authors thank Joanne Mantell for her comments on early drafts of the article.

Author contact: Landon.myer@mrc.ac.za