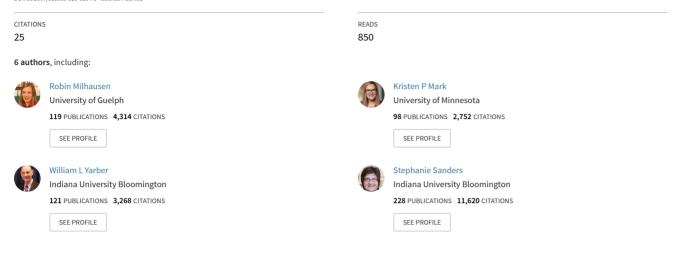
See discussions, stats, and author profiles for this publication at: https://www.researchgate.net/publication/235376958

Understanding Problems with Condom Fit and Feel: An Important Opportunity for Improving Clinic-Based Safer Sex Programs

Article *in* The Journal of Primary Prevention · January 2013 DOI: 10.1007/s10935-013-0294-3 · Source: PubMed



ORIGINAL PAPER

Understanding Problems with Condom Fit and Feel: An Important Opportunity for Improving Clinic-Based Safer Sex Programs

Richard A. Crosby · Robin R. Milhausen · Kristen P. Mark · William L. Yarber · Stephanie A. Sanders · Cynthia A. Graham

© Springer Science+Business Media New York 2013

Abstract The purpose of this study was to investigate gender differences and other demographic correlates of condom fit and feel problems among a diverse sample of adult condom users and to examine men's and women's perceptions and experiences with condom fit and feel problems. Participants were recruited from an electronic mailing list. The analytic sample (N = 949) included self-identified heterosexual men (n = 771) and women (n = 178) who reported using condoms for penile–vaginal or penile–anal intercourse in the past 3 months. Both quantitative and qualitative methods were applied. Of the sample, 38.3 % reported experiencing at least one condom fit or feel problem. Problems with condom fit during sex did not differ

R. A. Crosby \cdot R. R. Milhausen \cdot W. L. Yarber \cdot S. A. Sanders \cdot C. A. Graham The Kinsey Institute for Research in Sex, Gender, and Reproduction, Indiana University, Bloomington, IN, USA

R. A. Crosby · R. R. Milhausen · W. L. Yarber · S. A. Sanders · C. A. Graham Rural Center for AIDS/STD Prevention, Indiana University, Bloomington, IN, USA

R. A. Crosby (⊠) Department of Health Behavior, College of Public Health, University of Kentucky, 121 Washington Ave., Lexington, KY 40506, USA e-mail: crosby@uky.edu

R. R. Milhausen Department of Family Relations and Applied Nutrition, University of Guelph, Guelph, Canada significantly by gender (p = .73). Perceptions of specific condom use problems were organized into five themes: (1) decreased sensation, (2) lack of naturalness, (3) condom size complaints, (4) decreased pleasure, and (5) pain and discomfort. In this diverse sample, there was a high prevalence of condom fit and feel issues among women as well as men. These issues, mostly focused on loss of pleasure, represent a substantial public health problem and thus warrant attention in safer sex programs.

K. P. Mark · W. L. Yarber Department of Applied Health Science, Indiana University, Bloomington, IN, USA

W. L. Yarber · S. A. Sanders Department of Gender Studies, Indiana University, Bloomington, IN, USA

C. A. Graham Department of Psychology, Brunel University, Uxbridge, UK

Introduction

The use of male latex condoms remains highly important in the prevention of sexually transmitted infections (STIs), including HIV (Centers for Disease Control and Prevention, 2010). Recent data suggest that, in the United States, sexually active people are using condoms at least sporadically (on average, males use a condom during 25 % of intercourse events and females during 22 %; Reece et al., 2010). Although consistent condom use can be highly protective against STIs, a rapidly expanding body of evidence suggests that user errors and problems may greatly compromise the effectiveness of condom use (Crosby, Noar, Head, & Webb, 2011; Crosby, Sanders, Yarber, & Graham, 2003; Sanders et al., 2012). Thus, understanding and correcting these user errors and problems are key aspects of effective safer sex programs (Crosby, DiClemente, Charnigo, Snow, & Troutman, 2009; Jemmott, Jemmott, & O'Leary, 2007; Kamb et al., 1998; Shain et al., 2004).

A primary source of condom use errors and problems may be the lack of acceptable "fit and feel." In a recent study, for example, one of the most commonly cited complaints with male condom use was that "the condom just didn't feel right" (Crosby, Milhausen, Yarber, Sanders, & Graham, 2008). Poor condom fit and feel has been associated with breakage (Crosby, Yarber, Graham, & Sanders, 2010; Crosby et al., 2007); slippage (Crosby et al., 2007, 2010); condom-associated erection loss (Crosby et al., 2010; Graham et al., 2006); incomplete use of condoms (Yarber et al., 2007); and lack of sexual pleasure (Crosby et al., 2010). Although the prevalence of fit and feel complaints has been extensively documented in the published literature (Crosby et al., 2008, 2010; Reece et al., 2007; Reece, Herbenick, & Dodge, 2009; Sturges et al., 2009), little is known about the specific issues surrounding people's reports of poor fit and feel. Furthermore, most of the research conducted to date has been focused solely on men. The relatively limited research available on women suggests that lack of sensation may be an important problem associated with condom use, as well as pain and discomfort (Von Sadovszky, Ryan-Wenger, Germann, Evans, & Fortney, 2008; Williamson, Buston, & Sweeting, 2009).

For both men and women, then, problems with condom fit and feel may interfere with sexual pleasure, increase improper condom use, and/or lead to discontinuation or avoidance of subsequent condom use (Crosby et al., 2010; Williamson et al., 2009). Thus, understanding the specific concerns associated with condom fit and feel may be an important aspect of improving both the consistency and correctness of condom use. Furthermore, identifying subpopulations of people most likely to experience problems with condom fit and feel may lead to improved targeting and tailoring of clinic-based safer sex programs. This is especially true for women, as they have been historically neglected in studies of condom use problems. Accordingly, the purposes of this study were to compare condom fit and feel problems between women and men and to identify demographic correlates of condom fit and feel problems among a diverse sample of condom users. An in-depth investigation and comparison of men's and women's perceptions and experiences with condom fit and feel problems were also conducted.

Methods

Study Sample

Individuals were recruited from an electronic mailing list for a large, Internet-based sexual enhancement product company. Individuals were included on the mailing list if they had previously purchased products online from the company, or if they had e-mailed the company with a question about one of their products. The mailing list comprised 65,859 e-mail addresses. An e-mail invitation contained an embedded link to the study website. Each link included a random number code that could only be activated one time; this prevented individuals from participating in the study multiple times or forwarding the e-mail invitation to allow others to participate.

Clicking on the study link directed individuals to the Study Information page. The page summarized the study procedures and details about participant rights. Only individuals who were over the age of 18 and were able to read English were eligible to participate in the study. Individuals gave their consent to participate by clicking on a link. All study procedures were anonymous, and approved by the Human Subjects Committee at the University of Windsor, Ontario, Canada. Nearly 2,000 (N = 1,987) individuals completed the survey. The analytic subsample (n = 949) included only self-identified heterosexual men and women who reported using condoms for penile–vaginal or penile– anal intercourse in the past 3 months.

Measures

In addition to gender, demographic correlates assessed were: age, education, income, marital status, and number of lifetime sexual partners. Condom use assessments were limited to the last time a condom was used for vaginal or anal intercourse within the past 3 months. Participants were first asked if there was a problem with the way the condom fit. They were also asked if they or their partner experienced a problem with the way the condom "felt during sex." For those answering yes to either question, a text box was provided for them to type in what kind of problem(s) they or their partner had with the fit or feel of the condom.

Data Analysis

Age, education, income, and number of lifetime sexual partners were dichotomized using the median split, as these variables were not normally distributed. Age was dichotomized as 35 or younger versus 36 or older. Education was dichotomized as less than a bachelor's degree versus a bachelor's degree or higher. Income was dichotomized as less than \$50,000 versus \$50,000 or more. Number of lifetime sexual partners was dichotomized as 7 or fewer partners versus 8 or more partners. Chi square tests were conducted to determine associations between the assessed demographic correlates and condom fit and feel problems. All comparisons were evaluated using the .05 level of significance. Responses to the two questions regarding condom fit and feel were coded by two independent raters and grouped into themes using Braun and Clarke's (2006) approach to thematic analysis. Rare disagreements were resolved through discussion until consensus was reached.

Results

Characteristics of the Sample

The analytic sample consisted of 771 men and 178 women. Participants ranged in age from 18 to 69, with most participants (60 %) being between the ages of

27 and 44. The mean age of participants was 35.9 years (SD = 9.7). Two-thirds of participants (64.9 %) were married; 21.6 % were seriously dating or living with a partner. A minority of participants indicated that they were single (4.2 %), casually dating one or more people (3.6 %), separated or divorced (5.6 %), or widowed (.1 %). The majority of participants identified as White (82.6 %), with a minority identifying as Hispanic, Black, Asian, or Biracial/Multiracial. Men and women did not differ in their geographical location or their rural/urban status. Most participants lived in the United States (90.7 %), with a minority reporting that they lived in Canada, the British Isles, Australia, New Zealand or Hawaii, or Western Europe. The majority of participants reported living in a "large city or the suburban area surrounding it" or a "medium city or the surrounding area" (66.8 %). Most participants had an education level beyond high school (59.4 %). Participants varied in terms of how important religiosity or spirituality was to them, with 20.1 % indicating that it is "very important," 30.2 % indicating that it is "important," 31.1 % indicating that it is "slightly important," and 18.5 % indicating that it is "not important at all." Religious affiliation varied widely between Protestant (22.1 %), Catholic (20.4 %), Other Christian (22.1 %), Agnostic/Atheist/Irreligious (15.5 %), Jewish (2.3 %), and Other (17.5 %).

Demographic Correlates of Condom Fit and Feel Problems

Almost 1 in 10 participants (9.5 %; n = 90) reported that condom fit was a problem the last time a condom was used. Problems with condom fit during sex did not differ significantly by gender (p = .73), age (p = .87), education (p = .37), income (p = .11), marital status (p = .46), or number of lifetime sexual partners (p = .10).

Nearly one in three participants (31.0 %; n = 294) reported that they had a problem with how condoms felt during sex. Problems with the way the condom felt during sex were reported significantly more often by participants who had 8 or more lifetime sexual partners compared with those who had 7 or fewer (36.3 vs. 26.7 %, respectively; p < .01), and by participants who were married compared with those who were not (27.1 vs. 20.4 %, respectively; p = .02). However, problems with condom feel did not differ significantly by gender (p = .11), age (p = .12), education (p = .50), or income (p = .40).

About one in five participants (20.8 %; n = 197) reported that their partner had a problem with how condoms felt during sex. Women were significantly more likely than men to report that their partner experienced discomfort (36.4 vs. 19.7 %, respectively; p < .01). Partner problems with condom feel were reported more often by those who were 35 or younger compared with those who were 36 or older (28.3 vs. 15.5 %, respectively, $\chi^2 = 20.18$, p < .01). However, problems with condom feel for the partner did not differ significantly by education (p = .95), income (p = .06), marital status (p = .20), or number of lifetime sexual partners (p = .19).

Perceptions Related to Condom Fit and Feel Problems

Of the 949 participants, 363 (38.3 %) indicated experiencing at least one of the three condom fit or feel problems. Of these, 342 (94.2 %; 273 men and 69 women) used the text box provided in the survey to elaborate on their fit or feel problems. Five distinct, overarching themes were identified: (1) decreased sensation, (2) lack of naturalness, (3) condom size complaints, (4) decreased pleasure, and (5) pain and discomfort. Of note, some participants gave more than one reason for the fit or feel problem; thus, the percentages that follow do not sum to 100 %.

The predominant theme was decreased sensation, accounting for 54.1 % of the responses. Most of these participants explicitly stated that condoms markedly decreased sensation. Representative statements for this category included "serious loss of sensation for both parties," "I get almost no sensation when wearing a condom," "I felt a dulling of sensation," "condoms deaden sensation for me," "decrease of all tactile sensations," and "lack of stimulation."

Lack of naturalness was a concern for 16.1 % of participants. This theme reflected comments regarding the loss of a "natural" feeling associated with sex while using a condom. Specifically, participants made references to disliking rubber or plastic, and being "unable to feel" their partner. Representative statements for this category included "don't like the rubbery feel," "did not feel as natural or as arousing as skin," "just not as natural as without," "it felt like I was being penetrated by a water balloon," "not natural—feels like a plastic bag," and "he compared it to a sausage casing."

Condom size complaints were reported by 15.5 % of participants. These responses typically involved problems with condom width, length, and shape. Representative comments in this category included "condom too loose," "condom too snug," "the condom felt too tight on the base of my penis," "it never seems to fit right," "need more slim condoms so they won't slip off," and "it bunched up a bit around the head of the penis."

Decreased pleasure was described by 8.8 % of participants. Most comments in this category referred to condom use leading to sex not feeling as good, thereby, reducing sexual pleasure. Typical statements were "it's better without," "obviously not as good as without," "much less pleasure with condom," and "I felt less pleasure than usual."

Pain and discomfort were reported by 7.3 % of participants. This theme was predominantly mentioned by women. Representative responses in this category included "soreness from the rubbing of the latex"; "I have a little itch in vagina afterwards"; "after sex with a condom, I feel burning in my vagina"; "my wife feels vaginal tugging when using condoms"; "female does not like the way it rubs/drags inside"; "condoms stick and they make me sore afterwards"; and "burning sensation from the chemicals."

Discussion

Overall, almost 40 % of this sample reported experiencing at least one condom fit and feel problem during the last time they used one for penile-vaginal or penile-anal intercourse. Given the use of such a narrow period of recall (i.e., the last time sex occurred within the past 3 months), this high prevalence of condom fit and feel problems is a potential public health issue that warrants intervention. The findings of this study further suggest that any corresponding intervention efforts may need to target women as well as men, and that women should be targeted for intervention relative to condom fit and feel issues regardless of age, education, income, marital status, and number of lifetime sexual partners. In addition, this is the first study that provides data pertaining to men's and women's perceptions about the specific issues underlying their reasons for reporting poor fit and feel of condoms. Lack of sensation was a feel issue, for example, that could become the focal point of intervention efforts, especially structural-level efforts focused on the design of condoms and the accessibility of water-based lubricants. These efforts are clearly well placed in the context of clinics that diagnose and treat STIs. Rather than simply supplying men and women with a limited selection of low-bid condoms, a more progressive approach would be to offer an extremely large selection of condoms of varying sizes, shapes, and brands. This large selection can then be used as a teaching tool by providing counseling about condom fit and feel while patients select a maximum number of condoms as dictated by clinic resources. The same logic applies to single-use vials of water-based lubricants.

Although it is reasonable to expect that condom fit and feel issues differ between men and women, the only significant difference by gender was that women, more often than men, reported that their partners experienced problems with the way condoms felt during sex. Essentially, women in this study reported that their partners had issues with poor condom feel. Indeed, when given the opportunity to elaborate on the problems stemming from poor fit or feel of condoms, women were more likely to do so than were men.

With the exception of younger age being associated with increased prevalence of partner-reported condom fit and feel issues, and the exception of issues with condom feel being more prevalent among those who had a relatively greater number of lifetime sexual partners and those who were married, the findings suggest that condom fit and feel problems may be ubiquitous. Thus, although young men's complaints about condom use problems are well documented in the literature (Bell, 2009; Crosby et al., 2007; East, Jackson, O'Brien, & Peters, 2007; Sanders et al., 2012; Sturges et al., 2009), our findings suggest that both men and women of all ages experience these problems. The null findings regarding demographic differences are important and facilitative because they imply the potential use of universal interventions such as condom manufacturer's placing more design emphasis on proper fit and enhanced overall sensation/feeling.

Of great interest, each of the five themes identified can be viewed as being amenable to intervention. Thus, the myriad of safer sex programs that promote condom use could potentially be expanded to transcend the often singular goal of using condoms to a more comprehensive goal of using condoms without losing pleasure. This sex-positive approach to prevention is important given the unvielding incidence rates of STIs worldwide. For example, only a limited range of condom sizes currently exists (Reece et al., 2009). Even if a broader selection of condom sizes were developed and marketed, men may be uncertain about their own size or unaware of their size options, thus, purchasing sizes that fit poorly. As another example, intervention opportunities exist regarding the use of water-based lubricants to compensate for the dulling sensation associated with condom use, and possibly even the pain and discomfort, reported in this study. Thus, clinic-based counseling interventions may benefit sexually active people by emphasizing that adding sufficient lubrication to the inside and outside of condoms will enhance pleasure. These same programs may emphasize that experimenting with different sizes and types of condoms may resolve condom feel issues and enhance overall sexual pleasure for both partners. In addition, intervention approaches may benefit sexually active people by facilitating communication between partners about preferences for types, brands, and sizes of condoms, as well as lubricants.

One obstacle to having sexually active people experiment with different types of condoms and lubricants may be cost and availability. Another obstacle may be the embarrassment associated with shopping for condoms (Bell, 2009). For example, condoms are not typically sold in variety packs that would enable couples to easily try out a range of products. Condom manufacturers should consider developing such variety packs (complete with lubricants) and making them readily available at stores and on the Internet. Clinics and community-based organizations that distribute condoms could also offer a broader selection of condoms and lubricants to women as well as men.

Limitations

The current study is limited by the use of an online convenience sample. The study is also limited to heterosexual couples and is, therefore, not generalizable to all condom users. Further research is needed to determine whether men who have sex with men experience similar problems with condom use that may affect their sexual health risk. In addition, differences in condom fit and feel experiences between individuals who reported vaginal versus anal intercourse at last sex were not assessed. Furthermore, participants were recruited from an electronic mailing list of a sexual enhancement product company. Thus, this sample may be particularly attuned to sexual sensation and prioritize sexual pleasure during sex. This sample may also be particularly comfortable experimenting with condoms; thus, it is intriguing that they nonetheless reported so many issues with condom fit and feel, and that nearly 4 in 10 participants had an issue with fit and feel during the last time a condom was used. This research should be extended to other populations of sexually active people.

Conclusion

In this diverse sample of condom-using adults, we found a high prevalence of condom fit and feel issues that may represent a substantial public health problem. These issues appear to be universal across subpopulations, meaning that women as well as men can potentially benefit from intervention efforts designed to rectify issues with condom fit and feel. Specific perceptions surrounding condom fit and feel issues were largely based on loss of pleasure. Consequently, it is possible that sex-positive intervention approaches that facilitate pleasurable sex for condom-using men and women may be extremely useful in the prevention of STIs, HIV, and even unintended pregnancy.

Acknowledgments Support for this project was provided, in part, by The Social Justice and Sexual Health Research Centre at the University of Windsor, Ontario, The Kinsey Institute for Research in Sex, Gender, and Reproduction, Indiana University, and the Rural Center for AIDS/STD Prevention, a joint project of Indiana University, the University of Colorado, and the University of Kentucky.

References

- Bell, J. (2009). Why embarrassment inhibits the acquisition and use of condoms: A qualitative approach to understanding risky sexual behaviour. *Journal of Adolescence*, 32, 379–391.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77–101.
- Centers for Disease Control and Prevention. (2010, October). Condom distribution as a structural level intervention.

Retrieved from http://www.cdc.gov/hiv/resources/factsheets/ condom_distribution.htm.

- Crosby, R., DiClemente, R. J., Charnigo, R., Snow, G., & Troutman, A. (2009). A brief, clinic-based, safer sex intervention for heterosexual African American men newly diagnosed with an STD: A randomized controlled trial. *American Journal of Public Health*, 99, 96–103.
- Crosby, R., Milhausen, R., Yarber, W. L., Sanders, S. A., & Graham, C. A. (2008). Condom 'turn offs' among adults: An exploratory study. *International Journal of STD and AIDS*, 19, 590–594.
- Crosby, R. A., Noar, S., Head, S., & Webb, E. (2011). Condoms and other barrier methods of STI and HIV prevention. In S. Gupta & B. Kumar (Eds.), *Sexually transmitted infections* (2nd ed., pp. 1174–1191). New Delhi, India: Elsevier India.
- Crosby, R., Sanders, S., Yarber, W. L., & Graham, C. A. (2003). Condom use-errors and problems: A neglected aspect of studies assessing condom effectiveness. *American Journal* of Preventive Medicine, 24, 367–370.
- Crosby, R. A., Yarber, W. L., Graham, C. A., & Sanders, S. A. (2010). Does it fit okay? Problems with condom use as a function of self-reported poor fit. *Sexually Transmitted Infections*, 86, 36–38.
- Crosby, R. A., Yarber, W. L., Sanders, S. A., Graham, C. A., McBride, K., Milhausen, R. R., et al. (2007). Men with broken condoms: Who and why? *Sexually Transmitted Infections*, 83, 71–75.
- East, L., Jackson, D., O'Brien, L., & Peters, K. (2007). Use of the male condom by heterosexual adolescents and young people: Literature review. *Journal of Advanced Nursing*, 59, 103–110.
- Graham, C. A., Crosby, R., Yarber, W. L., Sanders, S. A., McBride, K., Milhausen, R. R., et al. (2006). Erection loss in association with condom use among young men attending a public STI clinic: Potential correlates and implications for risk behaviour. *Sexual Health*, *3*, 255–260.
- Jemmott, L. S., Jemmott, J. B., 3rd, & O'Leary, A. (2007). Effects on sexual risk behavior and STD rate of brief HIV/ STD prevention interventions for African American women in primary care settings. *American Journal of Public Health*, 97, 1034–1040.
- Kamb, M. L., Fishbein, M., Douglas, J. M., Jr., Rhodes, F., Rogers, J., Bolan, G., et al. (1998). Efficacy of risk-reduction counseling to prevent human immunodeficiency virus and sexually transmitted diseases: A randomized controlled trial. Project RESPECT Study Group. *The Journal of American Medical Association*, 280, 1161–1167.
- Reece, M., Dodge, B., Herbenick, D., Fisher, C., Alexander, A., & Satinsky, S. (2007). Experiences of condom fit and feel among African-American men who have sex with men. *Sexually Transmitted Infections*, 83, 454–457.
- Reece, M., Herbenick, D., & Dodge, B. (2009). Penile dimensions and men's perceptions of condom fit and feel. *Sexually Transmitted Infections*, 85, 127–131.
- Reece, M., Herbenick, D., Schick, V., Sanders, S. A., Dodge, B., & Fortenberry, J. D. (2010). Condom use rates in a national probability sample of males and females ages 14 to 94 in the United States. *The Journal of Sexual Medicine*, 7(7 Suppl. 5), 266–276.
- Sanders, S. A., Yarber, W. L., Kaufman, E. L., Crosby, R. A., Graham, C. A., & Milhausen, R. R. (2012). Condom use

errors and problems: A global view. Sexual Health, 9, 81-95.

- Shain, R. N., Piper, J. M., Holden, A. E., Champion, J. D., Perdue, S. T., Korte, J. E., et al. (2004). Prevention of gonorrhea and chlamydia through behavioral intervention: Results of a twoyear controlled randomized trial in minority women. *Sexually Transmitted Diseases*, 31, 401–408.
- Sturges, J. W., Sims, J. M., Omar, K., Balian, R., Angell, C., & Davenport, J. (2009). It doesn't feel good: The biggest obstacle to condom use among college students. *The Behavior Therapist*, 32, 36–40.
- Von Sadovszky, V., Ryan-Wenger, N., Germann, S., Evans, M., & Fortney, C. (2008). Army women's reasons for condom use and nonuse. *Women's Health Issues*, 18, 174–180.
- Williamson, L. M., Buston, K., & Sweeting, H. (2009). Young women and limits to the normalisation of condom use: A qualitative study. *AIDS Care*, 21, 561–566.
- Yarber, W. L., Graham, C. A., Sanders, S. A., Crosby, R. A., Butler, S., & Hartzell, R. M. (2007). "Do you know what you are doing?" College students' experiences with male condoms. *American Journal of Health Education*, 38, 322–331.