View metadata, citation and similar papers at core.ac.uk

brought to you by CORE

provided by KnowledgeBank at OSU

Running head: Army women's reasons

Army women's reasons for not using condoms in relationships

Megan Evans, Honors Student

Victoria von Sadovszky, PhD, RN, Faculty Mentor

The Ohio State University

College of Nursing

June 1, 2007

Introduction

Women are the most vulnerable population for sexually transmitted infections (STIs; Centers for Disease Control (CDC), 2003). Women have rates higher than men in chlamydia and ghonnorhea, are more likely to acquire HIV through heterosexual transmission, and die from AIDS (CDC, 2006). Most of the most common STIs do not present any symptoms in women, creating a barrier against early detection and treatment (Institute of Medicine, (IOM), 1997). Military women have higher rates of STIs than civilian women (McKee, et al., 1998). Condoms can help protect women against acquiring STIs. Reasons for condom use and problems with condom use among civilian women are well known (Oncale and King, 2001;Crosby, et al, 2003; Tawk, Simpson, and Mindel, 2004; Yarber, et al, 2004); however, reasons for condom use or disuse are not well known among military women. The purpose of this secondary analysis was to examine levels of condom use and reasons why or why not condoms are used. In civilian populations relationship status plays an important role in condom use & Richardson, 1998); therefore this was examined in this study. The specific research questions that guided this study were:

1. Examine condom use practices among military women by relationship status
2. Compare reasons for condom use and disuse based on relationship status
3. Compare the problems associated with condom use based on relationship status.

Review of Literature

Women bear an inordinately greater burden related to sexually transmitted infections. With the exception of syphilis, women have higher rates than men of most other major STIs (CDC,2006). Women are more likely to become infected compared to men and consequently remain undiagnosed and untreated (IOM,1997). Lack of treatment can result in complications such as pelvic inflammatory disease, infertility, and,

in some cases, peri-natal transmission of STIs with subsequent complications to newborns (CDC, 2006).

Condom Use in Civilian Women

Condom use can prevent transmission of many STIs and the HIV/AIDS virus when used effectively and appropriately (Grimely, et al, 2005). Predictors of condom use among women include multiple partners in a three month period, increased alcohol consumption, cigarette smoking, previous pregnancy, and English as a primary language (Tawk, Simpson, & Mindel, 2004). Reasons why condoms are not used among women include loss of partner erection, condom breakage and slippage (Crosby, et al, 2003). Lack of lubrication has also been identified as a barrier to condom usage (Yarber, et al, 2004) Oncale and King (2001) found various responses identified by women for condom disuse, including sex feeling better without a condom, perceived protection from pregnancy, perceived invulnerability to STIs, lack of access to a condom at time of intercourse, and intimacy.

Although condom use predictors and reasons for use and disuse have been identified in the civilian population, military women have been largely understudied in this specific sexual health issue.

Military Women, STIs, and Condom Use

Military women are a special and significant subpopulation of women. Women make up roughly 17% of the country's active duty forces (U.S. Census Bureau, 2005). Forty two percent of active duty women are white, 38.8% are black, 11.1% are Hispanic, 4.6% are Asian, and 3.8% are identified as "other" (Army Profile, 2004). Forty three percent of women in the military are married, 13.8% of women are single parents (Army Profile, 2004), and over 65% are in committed, long-term relationships (Wahl and Randall, 1996).

Sexual health issues and concerns arise from the fact that these women are in a minority amongst a hierarchal, male-dominated culture. During normal duty, many options for information and resources for prevention of STIs or pregnancy are available to women. During deployment, however, these specific health needs are likely to be met by medics, of which at least 25% of military women do not wish to access for gynecologic related issues (Ryan-Wenger & Lowe, 2000). This is especially concerning due to the rates of STIs and sexual risk behaviors in the military population.

In multiple studies military recruits and active duty personnel demonstrated higher than average rates of STIs. Active duty soldier rates are frequently higher than civilian populations. Chlamydia rates were 3 to7 times higher in military populations compared to civilian populations residing directly around the military installation (Sena, et al, 2000). Sexual risk behaviors among military women are related to being younger in age (Boyer, et al, 2006), coming from a rural residence, (Boyer, et al), more years of sexual experience (Boyer, et al.), having multiple sexual partners (Yen, et al., 2003), and having a lower frequency of hormone contraceptive use (Boyer, et al., Yen, et al.).

Problems related to condom use or disuse are under explored in a sample of military women. Although these reasons are well known in civilian populations (Crosby, et al, 2005; Grimley, et al, 2005), reasons for condom use and problems military women have had with using condoms have yet to be as definitively determined. Therefore, the purpose of this secondary analysis was to examine levels of condom use and reasons why or why not condoms are used. In civilian populations relationship status plays an important role in condom use (source); therefore, this was examined in this study. The specific research questions that guided this study were:

1. Examine condom use practices among military women by relationship status
2. Compare reasons for condom use and disuse based on relationship status

3. Compare the problems associated with condom use based on relationship status.

Methods

This secondary analysis used and exploratory design to address the research questions.

Participants

Participants (N=131) for this study were Army women assigned to Army Posts or Reserve Units throughout the United States. The average age of the sample was 30.8 (SD=10.5). Just over half of the women reported being Caucasian (52.8%), while the rest of the group reported being African American (27.5%), Hispanic (14.5%), with 5% reporting being from other ethnic backgrounds. The majority of women identified themselves as Christian (70.2%). The educational background varied, with 40.5% having some college education, 31.3% having a college degree, 15.3% having a graduate degree, and 9.9% having a high school diploma. Most of the women (80.2%) lived with someone. Women most often reported living with a spouse or long-term partner (44.3%), "other person" (13.0%; primarily children), in the barracks with other women (9.2%), with a sexual partner (7.6%), with a roommate (7.6%) or with their parents (2.3%). 74% of women reported being married or in an ongoing serious relationship, with single or divorced women accounting for 22.9%. For those in a relationship with a spouse or a partner the average length of time was 24 months (SD=1.6). Participants reported an average of 9.2 (SD=8.8, mode=5) lifetime vaginal sexual partners. In regards to their military service, the majority were enlisted (79.4%) with an average length in service of 8.0 years (SD=1.1).

Instruments

The purposes of this study were not compatible with a standard survey. Investigators constructed an instrument from current literature, research findings, and theory. There were three sections of the questionnaire. The first section inquired preferences for information about safer sexual practices. DiIorio's Safer Sex Questionnaire (DiIorio et al.) was used as a guide to determine how much information women wanted on each of the aspects of safer sex behaviors. These items were forced choice responses and rated on a scale of 0 no information at all to 5 as much information as possible, with higher scores correlating to a greater desire for information. The second part of the questionnaire contained open-ended free response questions to assess what types of information women had in the past, the quality and usefulness of previously received information, what types of information they would like to receive regarding sexual health, and how they would like to receive that information. The second part also contained one forced- choice response asking from whom they received their sexual health information. Another part of this section concerned perceptions of condoms and condom use. The final section of the questionnaire ascertained demographic information including sexual risk behaviors. Content validity was established for this instrument by a team of four experts in women's health, military medicine, and sexual behaviors.

Procedure

After obtaining approval from the University institutional review board and several military institutional review boards based upon the region of the country, public affairs offices of all Army Forts were contacted in the Northeast region. Upon receiving the Base Commanders' names, their offices were contacted for permission to conduct the

study. Of the 11 commanders' officers, 2 agreed to have women in the fort participate, 5 did not return calls after multiple attempts, and 4 denied access. Three Army nurses assisted with the distribution of questionnaires at their respective sites (Southern region, Western Region, and one Midwest Army Reserve unit. If the commander gave approval for the study, a point of contact (POC) was determined and questionnaire packets were sent to the POC for distribution among the women within the unit. The Army nurses distributed questionnaire packets directly to women either at hospitals or at unit briefings. Women completed the study materials on their own time in a location of their choice. Packets contained a cover letter explaining the purposes and goals of the study, study procedure, the questionnaire itself, and a postage-paid envelope so that the questionnaire could be returned directly to the principal investigator. No identifying information was obtained on the questionnaires. The investigators did not know to whom the questionnaires were distributed and military officials did not know who responded to the questionnaire, nor answers provided. No honorarium was offered to the women as the Military views such tokens as coercive. A total of 1283 surveys were distributed to units with 131 surveys returned for a response rate of 10.2%.

Data Analysis

Data were analyzed two ways. Closed-ended items were summarized as frequencies and percentages and means and standard deviations depending upon the level of measurement. Open-ended items were content analyzed utilizing McLaughlin and Marascuilo's (1990) three-phase technique. The first phase of this technique is to identify phrases of analysis fro each open-ended question. Phrases that directly answered the research question were considered in the analysis. Two researchers working independently identified the phrases in each of the participant's responses. Identified phrases between the two researchers were then compared and an interrater reliability percent agreement was calculated (number of agreements-number of

disagreements/total number of units). The range of these agreements was 89 – 96% with an a-priori level of 80% established as acceptable. In the second phase, one researcher developed categories that described a group of phrases and created definitions for these categories. The categories were mutually exclusive and exhaustive across all of the phrases of analysis. In the third phase another researcher sorted phrases into the categories using the definitions developed by the other researcher. Percent agreement was obtained for each question on assigning terms to categories. The range of these agreements was 91 -98%, again with an a-priori level of 80% established as acceptable. Frequencies and percentages were then established by counting the number of responses for each category. Differences between groups on these nominal level measures were examined by *t*-tests and Chi-square statistics.

Results

Condom Use Practices by Relationship Status

Only condom use for vaginal sex was significantly different between married/on-going relationship and single/divorced women (t (131) = -3.16, p < .01). Women rated their general use of condoms (scale 0 (never) – 4 (all the time) for vaginal sex at 1.8 (*SD* = 1.5) in the married/ongoing relationship group and 2.7 (*SD* = 1.2) in the single/divorced group. During oral sex single/divorced women reported more condom use (*M*=.46, *SD*= .88,) than married/relationship women (*M*=2.8, *SD*=.88) (*t*= -.89). Anal sex condom use was determined in the single/divorced group (*M*=2.3, *SD*=1.9), and in the married/ongoing relationship group (*M*=.71, *SD*=1.4) (*t*=-3.0).

Condom Use and Disuse by Relationship Status

Forty percent of single women and 10.6% of married/ongoing relationship women had multiple sex partners in the last twelve month period. A greater number of women used condoms with the last casual partner (*n*=31, 50.8% married/ongoing relationship and *n*=19, 73.1% single/divorced) than with the last regular partner (*n*=20, 21.5%

married/ongoing relationship; *n*=11, 39.3% single/divorced). Single women were significantly less likely to use condoms during sex with their last sexual partner than married/ongoing relationship women (X^2 (1, N = 71) = 3.7, p = .003).

Reasons for Use and Disuse by Relationship Status

The most often cited reasons for using condoms between the groups was contraception (married/ongoing = 68.0%; single/divorced = 23.1%) and protection from STIs (married/ongoing = 36.0%; single/divorced = 61.5%).

Reasons why married/ongoing relationship women did not use condoms included having the same partner (79.7%), using other forms of birth control (18.6%) and abstinence (5.1%). Reasons why single/divorced women did not use condoms included having the same partner (41.7%), abstinence from sex (33.3%), and another form of birth control (8.3%).

Problems Associated with Condom Use

Married/relationship women identified problems with condom use as breaking (*N*=17, 24.6%), causing irritation (*N*=17, 24.6%), slipping or falling off (*N*=9, 13.0%), and disrupting sexual pleasure (*N*=5, 7.2%). Single/divorced women identified problems with condom use as breaking (*N*=7, 28.0%), disrupting sexual pleasure (*N=6,* 24.0%), slipping or falling off (*N*=5, 20.0%), and causing irritation (*N*=4, 16.0%).

Conclusion

This is the first time reasons why condoms are used or not used among military women were examined. Previous studies have not specifically addressed this particular and vulnerable population. This study has begun to fill the knowledge gap regarding condom use and disuse among military women.

Oncale and King (2001), as well as Tawk, Simpson and Mindel (2004) identified many of the same reasons for use and disuse of condoms as military women, such as

breaking and slipping and decreased comfort and sensation. As with the civilian population, partner familiarity was largely responsible for the disuse of condoms.

This sample of Army women was not exactly composed of the same demographic makeup of the entire Army overall. A higher percentage (52.7%) of this study's population was Caucasian, differing from the Army makeup of 41.7%. The African-American population in this sample was 27.5%, differing from the 38.8% in the Army overall. Therefore, the data may not be entirely representative of the population of Army women as a whole.

The participation rate for this study was 10.2%, which could have limited the amount of representation and the overall accuracy of the data gathered within the study.

Recommendations for Practice and Research

In order to increase condom use and effectiveness, practitioners need to assess levels of condom use, as well as women's reasons for not using condoms. This study illustrated that both single and married women in the military may use condoms only "some of the time" on average. Married women in the military used condoms primarily as a method of contraception. Both single and married women in the military sited the same common problems with using condoms, identifying breaking, irritation, and falling off.

Further research on the military population must be concluded in order to determine predictors of condom use and disuse. This study began an initial analysis of whether relationship status predicts condom use, but larger scale studies are necessary. Other pertinent data that was uncovered during this study relates to the terminology of "casual" and "regular" partners. Although the mode for length of relationship was 3 years, the mean being 7.6 years, 19.4% of committed women stated having more than one sexual partner in the past 12 months. Further research could examine the sociological implications of these findings in military women, as they could lead to a

more in depth understanding of the total sexual health condition. More information is needed to accurately identify the risks and practices of this special population.

Conclusion

The purpose of this study was to both examine the specific types of health information desired by military women, and to determine their condom use practices as they relate to relationship status. The civilian population has copious amounts of research related to their condom use and disuse practices as related to relationship status. Information specific to the military population is severely lacking, if not absent entirely.

This research has shown that military women have specific reasons to use condoms according to relationship status, and complaints regarding their implementation. This study has identified specific issues that must be investigated further. Evidence based education can use these findings to tailor interventions for this target population in order to make condom use more prevalent and more effective.

References

Boyer, C.B., Shafer, M., Pollack, L.M., Canchola, J., Moncada, J., & Schachter, J. (2006). Sociodemographic markers and behavioral correlates of sexually transmitted Infections in a nonclinical sample of adolescent and young adult women. *Journal of Infectious Diseases.* 194(3), 307.

CDC (2006) Women's Health- Facts and Stats. Retrieved May 22, 2007 from www.cdc.gov/women/natstat/std/htm

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(4), 367-70.

Crosby, R., Yarber, W.L., Sanders, S.A., Graham, C.A. (2005). Condom discomfort and associated problems with their use among university students. *Journal of American College Health.* 54(3), 143-7.

Dilorio, C., Parsons, M., Lehr, S., Adame, D., & Carlone, J. (1992). Measurement of safe sex behavior adolescents and young adults. *Nursing Research,* 41(4), 203-208.

Fleisher, J.M., Senie, R.T., Minkoff, H., Jaccard, J. (1994). Condom use relative to knowledge of sexually transmitted disease prevention, method of birth control, and past or present infection. *Journal of Community Health*. 19(6), 395-407.

Grimley, D.M., Annang, L., Houser, S., Chen, H. (2005). Prevalence of condom use errors among STD clinic patients. *American Journal of Health Behavior.* 29(4). 324-30.

Harvey, S.M., Beckman, L.J., Gerend, M.A., Thorburn-Bird, S., Posner, S., Huszti, H.C., Galavotti, C. (2006). A conceptual model of women's condom use intentions: Integrating intrapersonal and relationship factors. *AIDS Care.* 18(7), 698-709.

IOM. (1997). The Hidden Epidemic: Confronting Sexually Transmitted Diseases.

Washington DC: National Academy Press

McKee, K.T., Burns, W.E., Russell, L.K., Jenkins, P.R., Johnson, A.E., Wong, T.L., McLawhorn, K.B. (1998). Early syphilis in anactive duty military population and the surrounding civilian community, 1985-1993. *Military Medicine.* 163(6), 368-76.

Office of Army Demographics. (2004). Army Profile FY04. Retrieved June 6, 2007 from http://www.army.mil/references/FY04ArmyProfile.pdf

Oncale, M., and King, B.M. (2001). Comparison of men's and women's attempts to dissuade sexual partners from the couple using condoms. *Archives of Sexual Behavior.* 30(4), 379-91.

Pilkington, C.J., Richardson, D.R. (1998). Perceptions of risk in intimacy. *Journal of Social and Personal Relationships*. 5, 503-8.

Ryan-Wenger, N.A., & Lowe, N.K. (2000) Military women's perspectives on gynecologic health care during deployment. *Women's Health Issues,* 10, 333-343.

Sena, A.C., Miller, W.C., Hoffman, I.F., Charkraborty, H., Cohen, M.S., Jenkins, P., et al (2000). Trends of gonorrhea and chlamydial infection during 1985-1996 among active duty soldiers at a United States Army intallation. *Clinical Infectious Diseases: An Official Publication Of The Infectious Diseases Society Of America.* 30, 742.

Tawk, H.M., Simpson, J.M., Mindel, A. (2004). Condom use in multi-partnered females. *International Journal of STD & AIDS.* 15, 403-407.

U. S. Census Bureau (2005). Facts for Features: Women's History Month. Retrieved May 20, 2007 from http://www.census.gov/Press-Release/www/releases/archives/facts_for_features_special_editions/003897.html

von Sadovszky, V. & Ryan-Wenger, N. (in press) Army women's information preferences for sexual health information. *JOGNN.*

Wahl, C.K., & Randall, V.F. (1996) Military women as wives and mothers.

Women's Health Issues. 6(6), 315-9.

Yarber, W.L., Graham, C.A., Sanders, S.A., Crosby, R.A. (2004). Correlates of Condom breakage and slippage among university undergraduates. *International Journal of STD and AIDS.* 15, 467-472

Yen, S., Shafer, M.A., Moncada, J., Campbell, C.J., Flinn, S.D., & Boyer, C.B. (2003).Bacterial vaginosis in sexually experienced and non-sexually experienced young women entering the military. Obstetrics and *Gynecology,* 102(5), 927.