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A Brief Report on the Association between Dissociation During Sex and Condom Use Self-Efficacy Among Women Residing in Domestic Violence Shelters

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Abstract

Objective: Female survivors of intimate partner violence have greater risk for contracting HIV/STI's and experiencing dissociation. However, no studies have examined the association between dissociation and condom use self-efficacy in this population. This study explored whether dissociation during sex was negatively associated with condom use self-efficacy.

Methods: Thirty-five women (88% African American) who were residing in domestic violence shelters in the United States completed questionnaires.

Results: There was a negative correlation between dissociative experiences during sex and condom use self-efficacy, $r = -.62$, $n = 35$, $p < .01$.

Conclusions: Findings suggest that dissociation during sex interferes with abused women's condom use self-efficacy.

Keywords

Dissociation; condom use self-efficacy; intimate partner violence; HIV prevention; women

Introduction

Condom use self-efficacy is an important part of women's sexual health promotion. More than 9 million women are diagnosed with a sexually transmitted infection each year (Centers for Disease Control and Prevention, 2013). Infertility, pelvic inflammatory disease, and pregnancy complications are all serious health consequences of untreated sexually transmitted infections among women (Centers for Disease Control and Prevention, 2018). Black/African American women are disproportionately affected by sexually transmitted infections including HIV (CDC, 2018), which remains a leading cause of death among Black women in the United States (CDC, 2019). Since condom use self-efficacy is associated with women's condom use (Fisher & Fisher, 1992; Nehl, Elifson, DePadilla, & Sterk, 2016; Nesoff, Dunkle, & Lang, 2016; Posner, Pulley, Artz, Cabral, & Macaluso, 2001), it is an important behavioral skill that many HIV/STI prevention interventions have

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focused on improving (Cavanaugh, Campbell, Whitt, & Wingood, 2020; Peragallo Montano et al., 2019; Wingood et al., 2011).

Condom use self-efficacy may be affected by numerous factors including demographic characteristics (e.g., age), attitudes about the importance of both safer-sex practices and sexual relationships (Beckmeyer & Jamison, 2015), and gendered beliefs (Curtin, Ward, Merriwether, & Caruthers, 2011). Furthermore, condom use self-efficacy, which includes efficacy for communicating about condoms, may mediate the association between condom intentions and condom use (Matera, 2014). While multiple theoretical models have suggested that dissociation is negatively associated with condom use (Malow, Devieux, & Lucenko, 2006; Miller, 1999; Zurbriggen & Freyd, 2004) and condom use is affected by condom use self-efficacy, we are unaware of any studies examining the associations between dissociation and condom use self-efficacy. However, a few empirical studies have tested associations between dissociation and risky sexual behaviors (Gonzalez-Blanks & Yates, 2016; Stappenbeck et al., 2016). In one study, young adult female drinkers were asked to read a hypothetical sexual scenario and then to answer survey questionnaires about both dissociative experiences and unprotected sex refusal self-efficacy. The latter construct was assessed with three questions including one that asked about how confident participants were that they could insist on using a condom (Stappenbeck et al., 2016). Dissociation was negatively associated with unprotected sex refusal self-efficacy in a bivariate analysis, but not associated with unprotected sex refusal self-efficacy in the path analysis with six other variables (Stappenbeck et al., 2016). Another study found dissociative symptoms were positively associated with risky sexual behavior among female foster youth (Gonzalez-Blanks & Yates, 2016).

There is a paucity of studies that specifically examine women's dissociation during sex (Bird, Seehuus, Clifton, & Rellini, 2014; Castellini, Lo Sauro, Ricca, & Rellini, 2017; Hansen, Brown, Tsatkin, Zeligowski, & Nightingale, 2012; Rosenthal & Freyd, 2017) rather than dissociative experiences in general. Dissociation likely impacts sexual functioning more than general dissociation because it occurs specifically during sex. There have been calls for research that specifically examines dissociation during sexual activity (Rosenthal & Freyd, 2017).

Studies examining associations between dissociation during sex and condom use self-efficacy are particularly needed among women who experience intimate partner violence (IPV). Women who experience IPV have greater risk for contracting HIV and other sexually transmitted infections (Li et al., 2014). Dissociative symptoms are common in this population of women (Pill, Day, & Mildred, 2017; Zerubavel, Messman-Moore, DiLillo, & Gratz, 2018), particularly during sexual activity (Sutherland, Fantasia, & Adkison, 2014). Also, intimate partner violence has been associated with poorer condom use self-efficacy (Beadnell, Baker, Morrison, & Knox, 2000; Swan & O'Connell, 2012). This exploratory study examined whether dissociative symptoms during sex were associated with condom use self-efficacy among women residing in three domestic violence shelters located in the Mid-Atlantic region of the United States. We hypothesized that greater dissociative symptoms during sex would be negatively associated with condom use self-efficacy.

Method

Participants and Procedures

This study was part of a NIH-funded pilot grant that involved adapting an HIV prevention intervention for women in domestic violence shelters (Cavanaugh, Campbell, Braxton, Harvey, & Wingood, 2016) and testing the adapted intervention among a small number of shelter participants (Cavanaugh et al., 2020). Due to limited resources, only a small number of participants were recruited to participate in the adapted intervention. The study was approved by the institutional review board of Rutgers University.

Participants were 35 women who were residing in domestic violence shelters and participated in an HIV prevention intervention. In the spring of 2016, flyers about the HIV prevention intervention were posted in three domestic violence shelters in cities in two Mid-Atlantic States. Participants were eligible to participate in the study if they were at least 18 years of age, referred by a case manager, had vaginal sex with a male partner in the previous 6 months, signed a written informed consent form, and completed baseline measures that included survey questionnaires about condom use self-efficacy and dissociative experiences during sex. These questionnaires were administered to participants by the first author of this study and primary investigator of the supporting research grant. Thirty-nine women attended the baseline assessment where they were provided with a written informed consent form that was approved by the Institutional Review Board of Rutgers University. Thirty-six participants provided written consent to participate in the study and completed the baseline surveys. One participant had missing data on the condom use self-efficacy survey. Thus, the final analytic sample was 35 women. The participants were between 19–56 years of age ($M=31.17$; $SD=8.46$) and the majority identified as African American (87.9%).¹

Measures

Condom Use Self-Efficacy.—The Condom Use Self-Efficacy Scale (CUSES) (Brafford & Beck, 1991) was used to assess participants' condom use self-efficacy. That scale consists of 28 statements about respondents' feelings about using condoms in specific situations. Responses were rated on a 5-point Likert scale ranging from 0=strongly disagree to 4=strongly agree. Thus, the possible range for this measure is 0–112. Some items are reverse scored and then the items are summed with higher scores indicating greater condom use self-efficacy ($\alpha=0.76$).

Dissociation During Sex.—The Dissociative Experiences During Sexual Behavior Scale was used to assess dissociative symptoms during sex. The scale consists of fifteen items ($\alpha=0.93$) (Hansen et al., 2012) rated on a Likert scale ranging from 0 (never) to 4 (very often). Items are summed to yield a total symptom response score. The total possible range of scores on this measure is 0–60. Higher scores indicate greater dissociative symptoms during sex. Due to a formatting error on the survey questionnaire used in this study, 13 of the 32 participants were missing data for item 1 of this questionnaire. Thus, total

¹Table showing descriptive and analytic results described in text may be obtained by emailing the first author at cocavana@camden.rutgers.edu

scores for those participants were calculated from the remaining items answered and yield an underestimation of scores ($\alpha=0.94$ items 2–15).

Data Analysis

Descriptive statistics were used to describe the sample in terms of their age and race/ethnicity. A correlation was run to examine the association between dissociative experiences during sex and condom use self-efficacy.

Results

Scores on the dissociative experiences during sex scale ranged from 0–46 ($M=16.32$; $SD=14.32$). The scores on the condom use self-efficacy scale ranged from 23–112 ($M=91.46$; $SD=18.46$). There was a significant negative correlation between higher dissociative symptoms during sex and condom use self-efficacy, $r = -.62$, $n=35$, $p < .01$.

Conclusion

To our knowledge, this is the first study to examine associations between dissociative experiences during sex and condom use self-efficacy. Findings suggest that dissociative symptoms during sex may interfere with abused women's condom use self-efficacy. Thus, HIV/STI prevention interventions that reduce dissociation during sex may improve condom use self-efficacy. There are only a few interventions that aim to reduce sexual risk among women who experience IPV (Cavanaugh et al., 2020; Johnson, Johnson, Beckwith, Palmieri, & Zlotnick, 2017; Mittal et al., 2016; Rountree, Bagwell, Theall, McElhaney, & Brown, 2014) and there is an absence of HIV sexual risk reduction interventions that also seek to reduce mental health problems such as dissociation (Sabri & Gielen, 2017). Studies are needed to continue to explore the efficacy of sexual risk reduction programs for survivors of IPV and determine which intervention components (e.g. activities focused on safe sex communication, condom use self-efficacy, or pleasure into safe sexual practices) are critical for reducing women's sexual risk. For example, others have suggested that the incorporation of pleasure into sexual practices may be particularly needed for survivors of IPV (Hogben, Ford, Becasen, & Brown, 2015; Tambling, Neustifter, Muska, Reckert, & Rua, 2012) and a positive focus on sexuality may help survivors with sexual communication and self-efficacy. Thus, future studies are needed that examine whether a positive focus on sexuality improves sexual communication and self-efficacy among survivors of IPV. Furthermore, findings from this study suggest that condom use self-efficacy may mediate the associations between dissociative symptoms and HIV risk behavior (e.g., condom use) among abused women. Studies are needed to test this possible mediating pathway.

It is noteworthy that the mean number of dissociative symptoms during sex in this study of women residing in domestic violence shelters was nearly double the mean reported among a sample of adults who were living with HIV and had a history of childhood sexual abuse (Hansen et al., 2012). In contrast, the mean score for condom use self-efficacy in this study sample was higher than other studies consisting of college women ($M=78.09$) (Brafford & Beck, 1991) and ($M=76.71$) (Yarber et al., 2018). This suggests higher condom use self-efficacy among women in this study sample than samples of college women.

There are limitations of the current study. This study was cross-sectional, which makes it unclear as to whether dissociation during sex precedes, follows, or co-occurs with women's condom use self-efficacy. Thus, longitudinal studies are needed that examine the influence of dissociative symptoms during sex on abused women's sexual risk behaviors, particularly studies that distinguish between forced versus consensual risky sexual behaviors. Other study limitations include the small sample size of 35 women, lack of control of confounding variables, and potential for recall bias. Thus, the findings may not generalize to larger samples of women residing in domestic violence shelters or women who are not residing in domestic violence shelters. Finally, the small sample size prevented us from using a regression analysis, which may have been more precise. Future research on this topic with larger samples could run regressions that would give a more accurate result on the association between dissociation during sex and condom use self-efficacy.

Despite the study limitations, there are numerous reasons that this study's findings are valuable. First, this study is among a handful of studies that specifically examine dissociation during sex rather than dissociation in general and it responds to calls for research that specifically examines dissociation during sex (Rosenthal & Freyd, 2017). Second, it is the only study to our knowledge that examines the association between dissociation during sex and condom use self-efficacy. Third, findings from this study suggest that women residing in domestic violence shelters may have particularly high rates of dissociation during sex and that these symptoms may impair their condom use self-efficacy. Thus, interventions that aim to reduce dissociation during sex may help improve women's condom use self-efficacy and in turn, sexual health. Fourth, this study suggests that dissociation during sex may mediate the pathway between dissociation during sex and condom use. Fifth, this study provides preliminary data to encourage larger studies on the topic studied. For example, a follow-up study could examine the associations between dissociation during sex, condom use self-efficacy, and both consensual and non-consensual sexual behavior among women who experience intimate partner violence while controlling for confounding variables such as alcohol intoxication (Bird et al., 2017).

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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