FI SEVIER

Contents lists available at ScienceDirect

Children and Youth Services Review

journal homepage: www.elsevier.com/locate/childyouth



Internalizing symptoms and safe sex intentions among adolescents in mental health treatment: Personal factors as mediators



Meredith C. Joppa ^{a,*}, Christie J. Rizzo ^b, Larry K. Brown ^b, Wendy Hadley ^b, Jodi-Ann Dattadeen ^b, Geri Donenberg ^c, Ralph DiClemente ^d, the Project STYLE Study Group ¹

Project STYLE Study Group

Principal Investigators: Larry K. Brown ¹, Ralph DiClemente ²,

Geri Donenberg ³, Site Investigators: Chinmayee Barve ³, Richard Crosby ², Wendy Hadley ¹, Delia Lang ², Celia Lescano ¹, Cami McBride ⁴, Consultants, Nancy Beausoleil ¹, Angela Caliendo ², David Pugatch ¹, Ron Seifer ¹, Project Coordinators: Katelyn Affleck ¹, Catherine Barber ¹, Renee Johnson ¹, Harrison Kell ¹, Erika Litvin ¹, Jonathon Thompson ¹, Gloria Coleman ³, Emily Hasselquist ³, Chisina Kapungu ³, Charu Thakral ³, Cara Averhart ², Wayne Baudy ², Emily Higgins ², Ana Massey ²

- ¹ Rhode Island Hospital, Providence, RI
- ² Emory University, Atlanta, GA
- ³ University of Illinois at Chicago, Chicago, IL
- ⁴ Rosalind Franklin University of Medicine and Science, Chicago, IL
- ^a Department of Psychology, Rowan University, 201 Mullica Hill Road, Glassboro, NJ 08028, United States
- b Bradley Hasbro Children's Research Center/Rhode Island Hospital, and The Warren Alpert Medical School of Brown University, One Hoppin Street, Suite 204, Providence, RI 02903, United States
- ^c Department of Psychiatry, University of Illinois at Chicago, Institute for Juvenile Research, Chicago, IL, United States
- d Rollins School of Public Health, Emory University, Atlanta, GA, United States

ARTICLE INFO

Article history: Received 3 December 2013 Received in revised form 29 July 2014 Accepted 30 July 2014 Available online 8 August 2014

Keywords: Internalizing symptoms Adolescents Sexual risk HIV prevention

ABSTRACT

Little is known about why some adolescents with internalizing symptoms engage in sexual behaviors that increase their risk for HIV. This study tested a mediation model of internalizing symptoms and safe sex intentions among adolescents receiving mental health treatment. Self-efficacy for HIV prevention, HIV knowledge, and worry about HIV were hypothesized to mediate associations between internalizing symptoms and safe sex intentions among sexually active and non-active adolescents receiving mental health treatment (N = 893, M age = 14.9). Significant indirect effects from internalizing symptoms to safe sex intentions varied according to sexual experience: for sexually non-active adolescents, HIV worry and knowledge mediated this link, whereas for sexually active adolescents, HIV self-efficacy was the significant mediator. Increasing both HIV knowledge and self-efficacy for HIV prevention are important targets for HIV prevention with adolescents with internalizing symptoms, and careful attention should be paid towards targeting these interventions to sexually experienced and inexperienced youth.

 $\hbox{@ 2014}$ Elsevier Ltd. All rights reserved.

1. Introduction

Many young people engage in sexual risk behaviors that can result in unintended health outcomes such as human immunodeficiency virus (HIV) infection (CDC, 2011). In fact, youth under age 29 accounted for 39% of new HIV diagnoses in 2009 despite comprising only 21% of the population (CDC, 2011). Previous research supports the importance of identifying psychosocial correlates of risky sexual behavior among youth across individual, relational, family, peer, and societal levels (see DiClemente et al., 2008, for a review). At the individual level, prior work suggests that mental health symptoms play an important role in the development of sexual risk behaviors (Brown, Danovsky, Lourie, DiClemente, & Ponton, 1997; Brown et al., 2010; Donenberg, Emerson, Bryant, Wilson, & Weber-Shifrin, 2001; Lehrer, Shrier,

[☆] This research was supported by grants from the National Institute of Mental Health (R01 MH63008 and T32 MH078788) to Rhode Island Hospital (P.I. Larry K. Brown, M.D.) and the Lifespan/Tufts/Brown Center for AIDS Research.

^{*} Corresponding author. Tel.: +1 401 793 8208; fax: +1 4014 444 4645. E-mail address: Joppa@rowan.edu (M.C. Joppa).

¹ For affiliations, see Project STYLE Group listing.

Gortmaker, & Buka, 2006). This risk extends across diagnostic categories. As shown in previous work with a large sample of adolescents in mental health treatment, youth with a psychiatric disorder were more likely to engage in sexual risk behaviors than those without a diagnosis (Brown et al., 2010), and functional impairment was associated with increased risky sexual behavior (Hadley et al., in press). Findings linking externalizing disorders and sexual risk-taking in adolescents are robust (Brown et al., 2010; Lescano, Brown, Miller, & Puster, 2007). However, prior results are mixed regarding the relationship between internalizing symptoms (i.e., symptoms of depression and anxiety) and sexual risk behavior (e.g., Brown et al., 2006; Donenberg et al., 2001). The goal of this project was to better understand the complicated relationship between depression and anxiety and safe sex intentions. We focused on symptoms of generalized anxiety disorder (GAD) and major depressive disorder (MDD), as the mechanisms linking these disorders to sexual risk behavior are less well documented than those for bipolar disorder (Stewart et al., 2012) and posttraumatic stress disorder (Miller, 1999).

Among youth with mental health problems, depression and anxiety represent the most common form of psychopathology affecting children and adolescents (Costello et al., 1996; Last, Perrin, Hersen, & Kazdin, 1996). Depressive disorders/symptoms have been found to be linked to sexual activity or risk-taking among youth in the community (Brown et al., 2006; Lehrer et al., 2006; Mazzaferro et al., 2006; Ramrakha, Caspi, Dickson, Moffitt, & Paul, 2000; Seth et al., 2011) and in psychiatric care (Abrantes, Strong, Ramsey, Kazura, & Brown, 2006; Brown et al., 2010; Mulatu, Leonard, Godette, & Fulmore, 2008; Starr, Donenberg, & Emerson, 2012; Udell, Donenberg, & Emerson, 2011). Links have also been found among symptoms of anxiety in adolescence and sexual risk-taking (Abrantes et al., 2006; Stiffman, Dore, Earls, & Cunningham, 1992). However, other studies have not found symptoms of either depression or anxiety to contribute to sexual risk behaviors (Donenberg et al., 2001; Hallfors, Waller, Bauer, Ford, & Halpern, 2005). Despite the frequency of depression and anxiety symptoms among youth, little is known about why some adolescents with symptoms of anxiety or depression are at greater sexual risk and others are not. Mixed findings in the literature may reflect, in part, a lack of research on the linkages between depression and anxiety symptoms, personal attitudes related to HIV, and sexual behavior.

A number of health behavior frameworks have been based on social cognitive theory (Bandura, 1986), which emphasizes personal attributes related to sexual behavior that may predispose adolescents to sexual risk. For example, according to the health belief model (HBM; Maiman & Becker, 1974), the likelihood that a young person will choose to use a condom is based on their own perceived susceptibility and severity of the negative consequences of not using a condom (e.g., contracting HIV), as well as the perceived benefits of and barriers to condom use, and their own self-efficacy. We set out to examine three HIV-related personal attributes we believe may be affected by symptoms of anxiety and depression and might mediate the relationship between internalizing symptoms and safe sex intentions: worry about HIV, selfefficacy for HIV prevention, and HIV knowledge. These hypothesized mediators have previously been identified as individual-level predictors of adolescent sexual risk (DiClemente et al., 2008). First, adolescents who are struggling with anxious or depressive symptoms may have an impaired ability to assess risk and feel invulnerable to, or less worried about, HIV (Brown et al., 1997) because they are focused on other stressors. Consequently, their perception of the severity of the consequences of unsafe sex or their own susceptibility to these consequences may be impaired, and thus their intentions to engage in safer sexual behaviors may not be as robust. However, it is also possible that feelings of anxiety or rumination about perceived negative consequences may lead adolescents to feel more worry about contracting HIV and therefore more intentions to have safe sex. In both cases, we hypothesize that depressed/anxious adolescents develop HIV-related personal attributes (worry about HIV) which then impact intentions to practice safe sex.

Next, self-efficacy for HIV prevention refers to how capable an individual feels he or she is to be able to talk to sexual partners about delaying sexual intercourse or using condoms. Self-efficacy is a key component of sexual risk behavior, and of intentions to have safe sex (Jemmott, Jemmott, Spears, Hewitt, & Cruz-Collins, 1992; Lescano et al., 2007s; van Empelen et al., 2003). Furthermore, communication with sexual partners is associated with safer sexual practices among adolescents (Tschann & Adler, 1997; Whitaker, Miller, May, & Levin, 1999). Communicating with partners about difficult topics like condom use is a new and often difficult skill for adolescents (Crosby et al., 2003; Hutchinson & Cooney, 1998; Whitaker et al., 1999), and depressed/anxious adolescents may have particular difficulty communicating assertively with partners (Brown et al., 1997). They may therefore be particularly vulnerable to feeling less efficacious in negotiating safer sexual practices.

Finally, lack of knowledge about HIV is another possible mediator of sexual risk-taking among young people with symptoms of depression and anxiety. Depression and anxiety symptoms often co-occur with disorders that can impede learning, such as attention-deficit/hyperactivity disorder (ADHD) and reading disability (RD), which can impair these youths' ability to acquire new knowledge (Fristad, Topolosky, Weller, & Weller, 1992; Willcutt & Pennington, 2000). If depressed/anxious adolescents are not aware of the health consequences of HIV or how the virus is transmitted, they may be less inclined to take steps to protect themselves in sexual situations. Indeed, lack of knowledge about HIV is associated with sexual risk-taking among young people with symptoms of anxiety and depression (McKinnon, 1996). Conversely, anxiety symptoms may make youth more likely to seek out and retain information about bad things that might happen to them, such as contracting HIV, which in turn fuels their intention not to have sex to avoid this consequence.

To date, no study has examined how theoretically driven mechanisms link depression and anxiety symptoms to safe sex *intentions*. Intentions are indicators of how likely an adolescent is to engage in safer sexual behaviors, and can be measured among both sexually active and abstinent adolescents. Safe sex intentions are associated with engaging in safer sexual behaviors (Fishbein & Middlestadt, 1989), including among youth with mental health symptoms (Auslander et al., 2002; Donenberg et al., 2005). It is important to specifically explore how personal attributes related to HIV may mediate links between internalizing symptoms and safe sex intentions. While it is also possible to conceptualize HIV worry, self-efficacy, and knowledge as moderators of the effects of anxiety and depressive symptoms on safe sex intentions, we believe that there are not simply group differences in terms of these personal attributes: rather, each of these potential mediators represents a theoretically- and empirically-supported pathway by which mental health may affect young people's intentions to take sexual risks.

Moreover, pathways linking internalizing symptoms, psychosocial mediators, and sexual behavior may differ according to participants' history of prior sexual activity. Teens with internalizing symptoms who are not sexually active may report low knowledge and self-efficacy for HIV prevention because they lack experience acquiring relevant skills and information, but report decreased worry about HIV because they are not yet sexually active; whereas teens with symptoms of anxiety and/or depression who are sexually active may report more worry about HIV but more knowledge and self-efficacy given their prior sexual experiences. Safe sex intentions are based on salient prior experiences for sexually active teens, whereas teens who are not yet sexually active lack experience in the context about which they are asked to describe their intentions.

1.1. Hypotheses

The objective of the present study was to test a mediation model of depression and anxiety symptoms and intentions to have safe sex among adolescents receiving mental health treatment. We tested the model separately for sexually active adolescents and for adolescents

Download English Version:

https://daneshyari.com/en/article/6834177

Download Persian Version:

https://daneshyari.com/article/6834177

<u>Daneshyari.com</u>