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Randomized controlled evaluation of an early intervention to prevent post-rape psychopathology

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Abstract

A randomized between-group design was used to evaluate the efficacy of a video intervention to reduce post-traumatic stress disorder (PTSD) and other mental health problems, implemented prior to the forensic medical examination conducted within 72 h post-sexual assault. Participants were 140 female victims of sexual assault (68 video/72 nonvideo) aged 15 years or older. Assessments were targeted for 6 weeks (Time 1) and 6 months (Time 2) post-assault. At Time 1, the intervention was associated with lower scores on measures of PTSD and depression among women with a prior rape history relative to scores among women with a prior rape history in the standard care condition. At Time 2, depression scores were also lower among those with a prior rape history who were in the video relative to the standard care condition. Small effects indicating higher PTSD and Beck Anxiety Inventory (BAI) scores among women without a prior rape history in the video condition were observed at Time 1. Accelerated longitudinal growth curve analysis indicated a video × prior rape history interaction for PTSD, yielding four patterns of symptom trajectory over time. Women with a prior rape history in the video condition generally maintained the lowest level of symptoms.
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Keywords: Rape; Early intervention; PTSD; Depression; Video

Introduction

Data from nationally representative samples have estimated that 12–15% of women in the US report being raped at some point in their lives (Resnick, Kilpatrick, Dansky, Saunders, & Best, 1993; Tjaden & Thoennes, 1998) and that an estimated 683,000 women experience rape each year (Kilpatrick, Edmunds, & Seymour, 1992). Rape and other sexual assault are also prevalent among adolescents, with contact sexual assault experienced by 7–13% of adolescent girls (Ageton, 1983; Kilpatrick et al., 2000). Compared to nonvictims, women who experience rape are at a significantly increased risk for mental health problems that include

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post-traumatic stress disorder (PTSD), depression, drug, alcohol, and nicotine use and abuse, and other anxiety disorders and health risk behaviors (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995; Kilpatrick, Acierno, Resnick, Saunders, & Best, 1997; Kilpatrick et al., 2003; Resick, 1993; Resnick et al., 1993; Steketee & Foa, 1987).

Rape-related PTSD is prevalent. Rothbaum, Foa, Riggs, Murdock, and Walsh (1992) found that 94% of rape victims who reported to police or other authorities met symptom criteria for PTSD at 2 weeks post-rape and 50% continued to meet symptom criteria 3 months later. Findings from epidemiological studies indicate that rape or completed sexual assault, as compared to other traumatic events, is associated with greatest risk of PTSD (Kessler et al., 1995; Kilpatrick et al., 1989; Norris, 1992; Resnick et al., 1993).

Rape also results in significant levels of depression, particularly during the weeks following victimization (Atkeson, Calhoun, Resick, & Ellis, 1982; Kilpatrick, Resick, & Veronen, 1981; Resick, 1993; Resick & Veronen, 1981; Steketee & Foa, 1987). Frank and Stewart (1984) found that approximately 43% of rape victims met criteria for depression when assessed within 1 month post-rape. Moreover, the co-occurrence of depression and PTSD is common, ranging from one-third to one-half of those with PTSD (Kessler et al., 1995) meeting criteria for major depression. In a longitudinal study of victims of a range of traumatic events, Shalev et al. (1998) found that 30% had PTSD at 1 month post-event and 17.5% met criteria at 4 months. Among those with PTSD, over 40% met criteria for depression at each time point.

The intensity of acute distress, including peri-traumatic panic reactions (Bryant & Panasetis, 2001; Galea et al., 2002), dissociation symptoms (Ozer, Best, Lipsey, & Weiss, 2003), and physiological arousal as measured by heart rate within hours or days of a traumatic event (Bryant, Harvey, Guthrie, & Moulds, 2000; Shalev et al., 1998; for an exception see Blanchard, Hickling, Galovski, & Veazey, 2002), has been found to be a significant predictor of PTSD. These findings are consistent with learning and cognitive models of PTSD (e.g., Foa & Kozak, 1986; Kilpatrick, Resick, & Veronen, 1981) and depression (Kilpatrick, Veronen, & Resick, 1977; Lewinsohn, 1974). Thus, intensity of acute distress could facilitate conditioned anxiety and secondary avoidance, resulting in reduced reinforcement (depression) or pathological fear structure (PTSD).

Meta-analytic studies across a range of different types of traumatic events indicate that other risk factors for PTSD and other psychopathologies observed across studies include prior exposure to traumatic events, prior adjustment (Brewin, Andrews, & Valentine, 2000; Ozer et al., 2003), low socioeconomic status, and low social support (Brewin et al., 2000). Such risk factors may be important to control when evaluating the potential impact of interventions targeting PTSD or other mental health problems following exposure to an extreme stressor such as rape.

Because rape victims may suffer acute physical injury during assaults, they should receive immediate medical care to treat acute injuries and to prevent sexually transmitted diseases (STDs) or possible rape-related pregnancy (Koss & Heslet, 1992). Standardized protocols are available to address medical and forensic needs of rape victims who report the crime to police or other authorities (Ahrens et al., 2000). For example, Resnick et al. (2000) found that 26% of all women who experienced rape as adults received medical care, with the majority receiving treatment within the first few days after assault. Those who received care were more likely to report fear of death or injury during assault and receipt of injury, characteristics that have been associated with increased risk of later psychopathology. Thus, although not all rape victims receive immediate medical care, those who receive care appear to be at an increased risk of mental health difficulties including PTSD.

Although it has not been formally used as such, the routine forensic rape examination presents a clear opportunity to provide intervention for sexual assault victims who are at high risk for PTSD and other mental health difficulties. Given the high number of women and adolescent girls who are affected by sexual assault and rape each year, the associated increased risk of PTSD and depression, and data indicating associations between acute and later distress, effective treatments at this point of care might reduce later problems in functioning. In addition, for some women and girls who do not seek subsequent treatment it may be the only opportunity to provide such services.

The possibility of reducing risk for significant mental health problems via early intervention following rape is an important area of research. Previous studies have predominantly evaluated early interventions administered in the first few weeks post-assault (Foa, Hearst-Ikeda, & Perry, 1995; Kilpatrick & Veronen, 1984) as opposed to hours post-assault (e.g., at the standardized forensic examination room). Considering the