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DEPRESSION AND PTSD IN SURVIVORS OF MALE VIOLENCE: RESEARCH AND TRAINING INITIATIVES TO FACILITATE RECOVERY

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Male violence is an enduring feature of women's lives from childhood through old age. The review covers child sexual abuse, rape, and partner violence with emphasis on the prevalence of violence, its mental health consequences, the course of recovery, and mediators and moderators of traumatic impact. The primary focus is depression and posttraumatic stress disorder, the two major diagnostic entities through which postassault emotions and behaviors have been conceptualized and measured. The effects of psychiatric conceptualizations of victimization and patterns of individual recovery are critically reviewed. The PTSD paradigm as the sole foundation for most victimization research is also debated. Following the review, mental health services for victimized women are examined. The article concludes with public policy recommendations to improve the availability and accessibility of mental health services with emphasis on reaching those survivors who are less likely to consult the formal system.

Violence against women is a pervasive problem that encompasses physical and sexual abuse perpetrated against a woman or female child by persons known or unknown to her, including but not limited to, spouses, partners, boyfriends, fathers, brothers, acquaintances, or strangers (Saltzman, Fanslow, McMahon, & Shelley, 1999). At least one woman in three globally is beaten, coerced into sex, or otherwise abused in her lifetime (Heise, Ellsberg, & Gottemuller, 1999; Watts & Zimmerman, 2002). Because women represent 85% of the victims of the one million incidents of nonfatal intimate assaults that occur each year in the U.S. (Greenfield et al., 1998), violence is a women's health concern, a human rights issue, and a major public health problem.

The present review focuses on depression and posttraumatic stress symptoms, the two predominant psychological responses occurring at elevated rates among adult survivors of childhood sexual abuse and women who have been raped or physically assaulted in adulthood. The first section of this review summarizes state-of-the-art empirical data documenting the extensiveness of victimization, prevalence of diagnosable depression and posttraumatic stress disorder (PTSD) among survivors, their course and co-occurrence, and mediators and moderators of the traumatic response. In the second section, the impact of depression and PTSD paradigms on research and mental health service provision for victimized women is examined. The paper concludes with suggestions for mental health policy initiatives to improve responsiveness to violence-related distress. Due to space constraints, the broad scope of the problem is not entirely addressed. We have omitted sections on physical health consequences and other forms of gender-based abuse, such as emotional abuse; gynecological abuse; malpractice involving inappropriate sexual behaviors; genital mutilation; forced abortion; sex-selective abortion; denying female children equal access to food, education, and medical care; sexual slavery; trafficking in women; forced organ

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donation; violence in war and postconflict settings; and sexual torture.

Defining Terms

According to the Centers for Disease Control and Prevention (Saltzman et al., 1999), intimate partner violence consists of four categories: physical violence, sexual violence, threat of physical or sexual violence, and psychological/emotional abuse. *Physical violence* involves punching, shoving, throwing, grabbing, biting, choking, shaking, poking, hair pulling, slapping, hitting, burning, use of a weapon, restraints, or body size and strength against another person (Tjaden & Thoemes, 2000). *Sexual violence* involves physical force to compel a person to engage in a sexual act against his or her will, whether or not the act is completed or attempted, and includes sexual acts involving persons unable to decline participation (Saltzman et al., 1999). *Child sexual abuse* includes noncontact abuse such as modeling of inappropriate sexual behavior, forced involvement in child pornography, or exhibitionism and contact abuse that ranges from fondling to rape (American Medical Association, 1992).

THE SCOPE OF VIOLENCE AGAINST WOMEN AND ITS IMPACT ON MENTAL HEALTH

Adult Survivors of Childhood Sexual Abuse

Prevalence. Because 54% of women reporting rape on the National Violence Against Women Survey (NVAWS) were victimized before the age of 18, the authors concluded that rape is a crime that is primarily committed against youth (Tjaden & Thoennes, 1998; Kilpatrick, Edmunds, & Seymour, 1992). The national prevalence of childhood sexual abuse, based on retrospective reports, is from about 9% (Saunders, Kilpatrick, Hanson, Resnick, & Walker, 1999; Tjaden & Thoennes, 1998) to virtually 100%, depending on the sample, specific definitions of sexual abuse, and age limit for childhood sexual abuse. Most estimates converge around 20–30% (e.g., Felitti et al., 1998). Existing data suggest that sexual abuse cuts across social boundaries such as socioeconomic status and race/ethnicity, occurring with nearly equal frequency among various social groups (Finkelhor, 1994).

Studies using detailed, behaviorally specific questions and face-to-face interviewing (e.g., Wyatt, 1991) tend to report higher rates of childhood sexual abuse, as do studies that address high-risk groups of incarcerated or homeless women (Goodman, 1991). Drawing conclusions about the national prevalence of childhood sexual abuse based on questions about rape occurring at any age (e.g., Saunders et al., 1999; Tjaden & Thoennes, 1998) is problematic because childhood sexual abuse includes many acts that are not rape, such as exhibitionism, fondling, coerced or forced manual stimulation of the perpetrator, or taking pictures of children nude or simulating sex acts. Restricting the definition of child sexual abuse to rape has the impact of reducing its apparent magnitude. It is incorrect to assume that noncontact abuse is less serious or less likely to produce negative effects. Pretrauma characteristics, such as personality variables, influence perceptions and cognitive appraisals of sexual victimization. Thus, the severity of abuse depends in part on whom it happened to, not just what happened (Barker-Collo, Melnyk, & McDonald-Miszczak, 2000).

Impact. Childhood sexual abuse has been linked to depression and PTSD, with both retrospective (Briere & Runtz, 1993; L. M. Dickinson, personal communication, June 16, 2000; Rodriguez, Ryan, Rowan, & Foy, 1996) and prospective investigations (Silverman, Reinherz, & Giaconia, 1996; Widom, 1999). Among a sample of sexual abuse victims identified by Child Protective Services, Widom (1999) found that 37.5% met DSM-III-R criteria for lifetime PTSD by young adulthood. A 17-year longitudinal study showed that victims of childhood sexual abuse were significantly more likely to meet criteria for both major depression and PTSD at age 21, with 44% meeting criteria for two or more disorders (Silverman et al., 1996). Among women who were raped in childhood, the lifetime rate of PTSD was 32% versus 10% among nonvictimized women. The rate of lifetime depression among survivors was 52% compared to 27% among nonvictimized women (Saunders et al., 1999). The female survivors also experienced elevated risk of current depression and PTSD compared to the nonvictimized women. Similar risks have been reported among samples of medical patients. Women who were severely sexually abused in childhood were 5.3 times as likely to have a lifetime diagnosis of major depression, 3.3 times as likely to experience dysthymia, and 2.8 times as likely to have current depression (Dickinson, deGruy, Dickinson, & Candib, 1999).

An association between suicidality and child sexual abuse also has been documented (Anderson, Tiro, Price, Bender, & Kaslow, 2002; Silverman et al., 1996; Statham et al., 1998). In one study, 22% of sexually abused women reported suicidal ideation in the previous 12-month period compared to 7% of nonabused women (Statham et al., 1998). Twenty-six percent of abused women reported at least one suicide attempt by age 21 years compared to 2.4% of nonvictims. These findings must be interpreted with caution because retrospective studies may overestimate the size of relationships between sexual abuse and its outcomes, particularly in clinical or help-seeking samples. Community samples, however, identify relatively few severe cases and therefore, may not adequately capture the most devastating effects of abuse (Neumann, Houskamp, Pollock, & Briere, 1996).

Quantitative review methods, such as meta-analysis, provide valuable information about the average effect size across multiple studies. Using data from 26 published studies across clinical, community, and student populations, Jumper (1995) found a moderate effect size for both nondepressive symptomatology ($r = .27$) and for depression ($r = .17$) among women. Another meta-analysis of both

clinical and nonclinical samples revealed a slightly larger effect size of sexual abuse on women's general adjustment ($d = .37$; Neumann et al., 1996). In a meta-analysis of the effects of sexual abuse primarily among college students, Rind, Tromovitch, and Bauserman (1998) found that the average effect size of childhood sexual abuse on depression was small ($r = .12$ for men and women combined). Also, the average effect size of sexual abuse on women's general dysfunction was small ($r = .10$). The authors concluded that the negative impact of sexual abuse might be exaggerated. This conclusion is open to criticism. Because less than one-quarter of the adult population attends college, a college sample cannot represent women in general. Severe abuse-related symptoms are more likely to be encountered among women who are homeless, living in prisons, and/or are chronically mentally ill.

Course. Equally disturbing is the evidence that victimization in childhood elevates the risk for repeat victimization (e.g., Gidycz, Coble, Latham, & Layman, 1993; Koss & Dinero, 1989; McCloskey, 1997; Whitbeck, Hoyt, & Ackley, 1997; Wyatt, Guthrie, & Notgrass, 1992). The few longitudinal studies on the course of depression and PTSD suggest that childhood sexual abuse contributes to chronicity (Brown & Moran, 1994) and to increased susceptibility to dissociation among victims with PTSD following sexual revictimization in adulthood (Dancu, Riggs, Hearst-Ikeda, & Shoyer, 1996). There are also reports that the impact of multiple victimization experiences is cumulative, though it has not yet been determined if they are additive or multiplicative (Dickinson et al., 1999).

Mediators and moderators. Investigators have begun to develop and test hypotheses about the mediators and moderators that translate abuse into psychological distress and other health outcomes. A moderator is a variable that affects the relationship between two variables, changing the direction or magnitude of the effects. Studies have shown that moderators of sexual abuse include characteristics of the abuse experience(s), such as penetration, duration of exposure to abuse, the use of force, and the relatedness of the perpetrator (e.g., Banyard, 1999; Banyard & Williams, 1996; Nishith, Mechanic, & Resick, 2000; Rodriguez et al., 1996; Wyatt & Newcomb, 1990), all of which serve to make abuse experiences more damaging to victims. A mediator, or intervening variable, is a link in a causal chain and transmits the effect from independent to dependent variable. Mediating effects of event-related cognitions and appraisals, such as self-blame, have been confirmed (e.g., Andrews, Brewin, Rose, & Kirk, 2000; Dunmore, Clark, & Ehlers, 1999; Wyatt & Newcomb, 1990). For example, sexual abuse leads to negative appraisals of the self, which are then associated with other negative outcomes. Lastly, giving testimony or being involved in civil litigation is associated with increased PTSD (e.g., Epstein, Saunders, & Kilpatrick, 1997; Mackey et al., 1992; Wyatt & Newcomb, 1990).

Sexual Violence in Adulthood

Incidence and prevalence. To date, there are many different approaches to obtaining incidence and prevalence rates of sexual violence. Most national data focus on rape, the most severe form of sexual violence. The incidence of rape is the number of new cases occurring in any given year. Several federal sources provide incidence data. For example, the FBI Uniform Crime report provides data representing those rapes that were reported to U.S. law enforcement. These data only hint at the actual occurrence of rape, because just 16% to 32% of all sexual assaults are ever reported (reviewed in Crowell & Burgess, 1996). The National Crime Victimization Survey, conducted by the Bureau of Justice Statistics, measures incidence of both reported and unreported crime (including rape and sexual assault defined more broadly) from a national sample of households. Critics have asserted that these data underdetect rape because of inherent features of the methodology used to collect them (Koss, 1993). A number of national surveys have been designed to improve the detection of sexual assault including the NVAWS (Tjaden & Thoennes, 1998), the National Women's Study (Kilpatrick, Edmunds, & Seymour, 1992), and the National Survey of Adolescents (NSA; Kilpatrick & Saunders, 1996). In addition to incidence, these surveys also measured prevalence, which is the percentage of the population affected during a defined period. For example, the NVAWS estimated that 14.8% of adult women in the U.S. had been raped sometime during their lives and that another 2.8% had been victims of an attempted rape (Tjaden & Thoennes, 1998). The NSA estimated that 13% of female adolescents had been victims of sexual assault in their lifetime (Kilpatrick & Saunders, 1996). Also of interest are national studies of college students. The most recent of these investigations estimated that between one in four and one in five college women will be raped while a student (Fisher, Cullen, & Turner, 2000).

Two understudied areas are the prevalence of women raped within marital or cohabiting relationships (estimated at between 10% and 14%) and rape rates by ethnicity, socioeconomic status, and other important demographic variables that would permit the delineation of high-risk groups. The sparse data that exist on rape rates by ethnicity suggest that Asian/Pacific Islander women have the lowest rates and Native American/Alaskan Native women the highest (Tjaden & Thoennes, 2000). These data and similar studies are difficult to interpret because culture may not only influence the frequency of sexual assault, but also the likelihood of disclosure to an interviewer. Low prevalence rates do not necessarily indicate that violence is less frequent. They may reflect the effects of cultural variables (e.g., norms relating to gender relations and divulgence of sensitive information, acculturation, and language facility) on disclosure (e.g., Song, 1996). In addition, there is danger in presenting ethnic comparisons that lump all American Indian, Asian,

or Hispanic groups together because such comparisons may mask important intragroup differences. Finally, any analysis that fails to control for income may present findings that reflect the influence of poverty rather than culture (see Russo, Denious, Keita, & Koss, 1997, for an empirical demonstration involving African Americans and partner violence).

Some authors have argued that the sexual victimization of girls and women is a continuous phenomenon (McCloskey, 1997). In other words, the risks for and effects of sexual victimization may be quite similar across the lifespan. Many studies examining the impact of victimization have measured both childhood and adulthood sexual victimization, and presented data that cannot be disaggregated. Thus, some of the studies presented below could equally have been presented in the preceding section describing the impact of child sexual victimization.

Impact. Rape is considered to be one of the most severe among all types of traumas (Breslau, Davis, Andreski, & Peterson, 1991), and its psychological impact has been extensively researched (for reviews see Koss et al., 1994; Crowell & Burgess, 1996; Golding, 1999). Both acute and chronic depressive symptoms have been identified among women who were raped (Atkeson, Calhoun, Resick, & Ellis, 1982; Frank, Turner, & Duffy, 1979; Kilpatrick, Saunders, Veronen, Best, & Von, 1987; Mackey et al., 1992). Frank and Stewart (1984) documented depressive symptoms in 56% of rape survivors one month following the rape, with 43% of the women meeting criteria for major depression. Data from the Los Angeles Epidemiologic Catchment Area Study suggested that, for women and men combined, sexual assault in either childhood or adulthood resulted in a 2.4 times greater likelihood of major depression compared to matched, nonassaulted controls (Burnam et al., 1988). Female medical patients who had been raped were 3 times more likely to meet criteria for lifetime major depression, almost twice as likely to qualify for dysthymia, and 2.5 times more likely to report recent depression compared to nonraped women (Dickinson et al., 1999). Specifically, 22% had a lifetime diagnosis of dysthymia, 38% met criteria for major depression, and 42% of sexually assaulted patients were diagnosed with a depressive disorder (L. M. Dickinson, personal communication, June 16, 2000). Age of first victimization appeared to be important because the rate of depression in women sexually assaulted in childhood was 25% compared to 12% among women raped the first time as adults, and 6% among women who were never raped. Among patients with a lifetime diagnosis of depression or dysthymia, those with childhood or adulthood sexual victimization averaged 3.8 lifetime psychiatric diagnoses compared to 2.8 for nonvictimized women suggesting that victimization is associated with a complex clinical picture.

To date, lifetime prevalence rates of PTSD range from approximately 24% for women exposed to any trauma (Breslau et al., 1991) to 65% for women who have experienced a completed rape (Rothbaum, Foa, Riggs, Murdock, & Walsh, 1992). In one study, 31% of all rape survivors developed PTSD at some point during their lifetimes and they were 6.2 times more likely to suffer from PTSD than women who had never been victims (Kilpatrick et al., 1992). In family practice patients, anxiety disorders, including PTSD, are the class of disorder most strongly associated with victimization. Fifty-six percent of sexually abused and assaulted patients suffered from PTSD compared to 30% of nonvictimized women (Dickinson, deGruy, Dickinson, & Candib, 1998; Dickinson et al., 1999).

Course. Prospective studies have demonstrated that within two weeks of assault, 90% of rape victims meet symptom criteria for PTSD while 50% continue to meet the criteria three months later (Rothbaum et al., 1992). Many of the early reactions to rape lessen in approximately two to three months although not necessarily returning to normal (Neville & Heppner, 1999). Frank and her colleagues (1979) found that at one month postrape, 44% of rape survivors in their sample were moderately to severely depressed. Many differences between victimized and nonvictimized women disappear after 3 months (Atkeson et al., 1982), but reports of fear, anxiety, self-esteem problems, and sexual dysfunction persist for up to 18 months or longer (Resick, 1987). Approximately one-fourth of women who are several years beyond rape continue to experience negative effects (Hanson, 1990; Kilpatrick et al., 1985; Winfield, George, Schwartz, & Blazer, 1990).

Mediators and moderators. Characteristics of the rape attack, such as the use of escalated physical force or weapons, high perceived fear of death, and physical injuries, have all been named as significant moderators that exacerbate psychological distress and disorder (Acierno, Resnick, Kilpatrick, Saunders, & Best, 1999; Darves-Bornoz et al., 1998). Previous victimization history, including various forms of attack in childhood and/or adulthood, is also associated with increased depression and longer recovery (Kilpatrick et al., 1987). In addition, negative social reactions absorb and magnify the effects of rape on PTSD (Ullman & Filipas, 2001). Many researchers and clinicians have recently turned attention to the processes that transform rape into deleterious outcomes and contribute to the persistence of chronic symptoms. When combined in a structural model framework, the most powerful class of mediators in accounting for the physical, social, and psychological consequences of rape were social cognitions including self-blame and core beliefs. Past exposure to violence and the behavioral impact of these experiences also contributed to shaping distress (Koss, Figueredo, & Prince, 2002).

Physical Violence in Adulthood

Incidence and prevalence. Each year about 10–15% of U.S. women, approximately two million persons, are abused by their intimate partners and 4% sustain assaults serious

enough that they could or did produce injury (Tjaden & Thoennes, 1998; Straus & Gelles, 1990). The yearly incidence among women patients is 16–26% compared to a national average of 12% (reviewed in Hamby & Koss, in press). And, lifetime prevalence of intimate assault among women seeking medical care is 6%–30%. The Conflicts Tactics Scale (CTS; Straus, 1979) is the most commonly used assessment tool to measure partner violence among women. This scale has several limitations including lack of attention to context and temporal sequence of violence, insensitivity to high frequencies of ongoing abuse, equation of serious physical with minimal verbal forms of aggression, and absence of a scoring procedure that addresses women's general tendency to endorse a higher number of items than men on psychological assessments. As a result, the CTS creates an artifactual, but robust finding that women are just as violent as men (White, Smith, Koss, & Figueredo, 2001).

Research in the area suggests that both poverty and ethnicity may play a role in intimate violence. For example, Russo et al. (1997) found that partner violence increases as income levels decrease. Findings from the NVAWS documented different rates of partner assault by ethnicity: 21.3% among Whites, 26.3% among African Americans, 27% among persons of "mixed race," 12.8% among Asian Pacific Islanders, and 30.7% among American Indian/Alaska Natives (Tjaden & Thoennes, 2000). As mentioned earlier, these statistics must be interpreted with caution because poverty and race are often confounded. Some cultures may have mores that preclude disclosure of partner violence. Rape and partner violence have been presented here as if they were distinct, primarily because they each have their unique literature. However, recent empirical approaches measure them simultaneously and report significant overlap. For example, Smith, Thornton, DeVellis, Earp, and Coker (2002) reported that about half of women who were physically assaulted were also sexually assaulted.

Impact. Depression is prevalent among women who experience partner violence (Cascardi & O'Leary, 1992; Gleason, 1993; McCauley et al., 1995). It is one of the strongest factors that distinguish abused women from nonabused women (Orava, McLeod, & Sharpe, 1996). Rates of depression among battered women range from 39% (Beach, Jouriles, & O'Leary, 1985) to 83% (Campbell, Sullivan, & Davidson, 1995). In a meta-analysis of 18 studies on depression and intimate violence, the mean prevalence rate of depression among battered women was 48% (Golding, 1999). Prevalence rates vary across studies depending on assessment tools and sample characteristics (e.g., living situation). Women who access services specifically for domestic violence report moderate to severe levels of depressive symptoms (Cascardi & O'Leary, 1992), and experience higher levels of distress compared to women who are maritally distressed (Vivian & Malone, 1997).

The mental health consequences of physical abuse appear to go beyond depression. Several studies have found that battered women suffer from a range of symptoms, such as hyperarousal, nightmares, anxiety, fear, and sleep and eating disorders (Saunders, 1994; Walker & Browne, 1985). They often experience intrusive memories of the abuse and they tend to avoid reminders of the violence. As a result, PTSD has become the main psychiatric diagnosis associated with partner violence. Rates of PTSD in battered women range from 31% (Gleason, 1993) to 84% (Kemp, Rawlings, & Green, 1991). A meta-analysis of 11 studies of PTSD in battered women found a mean prevalence of 64% (Golding, 1999). Measurement, however, is also a primary concern when diagnosing PTSD among battered women. Self-report measures tend to document higher rates of PTSD than structured interviews (Golding, 1999), but structured interviews are more accurate and consistent in diagnosing PTSD (Houskamp & Foy, 1991).

Whereas most studies on battered women's mental health assess *either* PTSD symptoms *or* depression, only a few studies have considered both diagnoses (e.g., Gleason, 1993; West, Fernandez, Hillard, & Schoof, 1990; Cascardi, O'Leary, & Schlee, 1999). Among existing studies, only two examined the co-occurrence of PTSD and depression (West et al., 1990; Cascardi et al., 1999). The findings indicate that PTSD and depression are correlated, but not necessarily co-occurring among physically abused women. Cascardi and colleagues (1999) found that 30% of their sample met the criteria for PTSD, 32% met the criteria for depression, and 17% met the criteria for both. Their results indicate different predictors for experiencing PTSD and depression. Although the authors suggested a distinct difference between PTSD and depression diagnoses, the question remains equivocal (Golding, 1999). The behavioral impacts of partner abuse are similar to rape (Smith et al., 2002) and there is also an increased risk for suicide (Thompson, Kaslow, & Kingree, 2002). Among women who are in violent relationships, depression, drug abuse, hopelessness, and history of childhood abuse or neglect all increase the likelihood of suicide attempts (Thompson et al., 2002). The risk of suicide attempts for women with two, three, and four or five of these risk factors, compared to women with no risk factors, was elevated 10, 25, and 107 times, respectively.

Course. A dose-response relationship exists between battering and mental health symptoms. As the severity and frequency of violence increase, the severity of depression and PTSD also increases (Astin, Lawrence, & Foy, 1993; Cascardi & O'Leary, 1992; Cascardi et al., 1999; Kemp et al., 1991; Orava et al., 1996). Ongoing abuse is particularly potent in maintaining depressive symptom severity (Campbell & Soeken, 1999b). Once a battered woman is away from the abusive environment, her symptoms often decrease (Astin et al., 1993; Campbell et al., 1995). We are unaware of any longitudinal studies of PTSD in battered women.

Mediators and moderators. Whether or not a battered woman develops depression or PTSD may depend on several variables, one of which is the severity of the abuse. In addition, psychological and sexual abuse within a physically violent relationship increase depressive symptoms above and beyond the effects of physical abuse (Campbell & Soeken, 1999a; Orava et al., 1996; Sackett & Saunders, 1999). Women who are exposed to violence for a long duration are more likely to develop symptoms of PTSD than women who experience shorter exposure (Houskamp & Foy, 1991; Kemp, Green, Hovanitz, & Rawlings, 1995). A woman's experiences with childhood abuse also place her at elevated risk for mental health problems if she is battered (Astin, Oglan-Hand, Coleman, & Foy, 1995; Campbell, Kub, Belknap, & Templin, 1997; O'Keefe, 1998). In addition, battered women who have low levels of social support are more likely to develop major depressive disorder or PTSD (Astin et al., 1993; Campbell et al., 1997; O'Keefe, 1998). The provision of social support has been shown to reduce PTSD among battered women (Sullivan & Bybee, 1999). Specifically, battered women who had advocates to help them access services scored significantly lower in PTSD at follow-up compared to a control group who received standard shelter services.

CONCEPTUAL AND METHODOLOGICAL ISSUES IN STUDYING PTSD AND DEPRESSION AMONG VIOLENCE SURVIVORS

A number of methodological limitations and gaps in the literature have been highlighted in this review. Current research concerns include the use of nonstandard definitions, varied wording of screening items for victimization (vague to highly specific), lack of studies on the comorbidity of PTSD and depression, an intercorrelation of multiple forms of violence against women across the lifespan and the challenges of capturing integrated violence histories, and the paucity of longitudinal studies that examine the relationship of mental disorders with the initiation and cessation of violence and revictimization. As a result, it is difficult to compare findings across different studies, identify the contribution of various forms of victimization to negative outcomes, and develop predictions about the long-term impact of gender-based violence.

PTSD Paradigm

In recent years, the PTSD conceptualization has been the ascendant paradigm driving and organizing research on responses to violence against women (e.g., Boudreaux, Kilpatrick, Resnick, Best, & Saunders, 1998; Breslau et al., 1991; Kessler, Sonnega, Bromet, Hughs, & Nelson, 1995). In contrast, the research portfolio of the 1980s focused on depression and anxiety as the primary mental health consequences among survivors of violence. Much has been learned from applying the PTSD paradigm to victimology, but critics raise legitimate questions about the validity of applying a diagnostic entity (PTSD) to violence survivors that was originally formulated on the basis of soldiers' reactions to combat (Saigh & Bremner, 1999). Many components of the complex response to male violence fall outside the PTSD paradigm. These include rumination about causes, changes in core beliefs about the self and the world, and developmental, social, spiritual, sexual, and physical health outcomes.

Depression Paradigm

The existing literature suggests that PTSD and depression are discriminable, separate entities, and may have different onsets and courses within a single survivor. These findings raise questions about the wisdom of privileging one diagnosis over another that is equally applicable as the conceptual foundation for research and for treatment interventions. Research based on a depression conceptual schema might illuminate some of the areas that fall outside the scope of PTSD. For example, depression-based models may generate fruitful hypotheses about the cognitive impacts of victimization on self-blame, guilt, shame, and thought processes that promote maladaptive change in the central beliefs that give meaning to daily experience. Applying conceptual models derived from depression research might encourage closer examination of the phenomenology of rumination versus intrusive remembering (e.g., Nolen-Hoeksema, in press). Furthermore, survivors may prefer to understand the sources of their emotional distress in terms of grief and loss rather than the pathological terms associated with a PTSD diagnosis. Likewise, the field of depression research may benefit from closer attention to victimized women. One vexing question in depression research—the gender gap—might be illuminated by investigations that examine gender differences in vulnerability to intimate violence at every stage of the lifespan as well as other disparate treatment of women and girls compared to men and boys (see Cutler & Nolen-Hoeksema, 1991).

Limitations of Psychiatric Paradigms

However, it is debatable whether survivors are well served by having their responses to crime individualized and pathologized, as the result of research on victim response using psychiatric nosology. On one hand, formal diagnosis has been undeniably useful in forensic situations as a scientifically valid avenue to document the impact of trauma (Boeschen, Sales, & Koss, 1998) and as part of the mandated data to obtain insurance coverage for health care. Yet, applying the diagnosis of depression or PTSD to a woman still enmeshed in an ongoing violent situation lacks common sense. Violence against women might benefit from an approach similar to that taken for responses to the death of loved ones. Although all the symptoms of major depression may be seen during mourning, the DSM-IV permits the use of grief as a factor that rules out applying the diagnosis

of depression. Bereavement is seen as a time during which symptoms of depression are considered normal, becoming pathological only if they persist beyond the typical mourning period. It is interesting that accepted wisdom on how to respond to survivors of catastrophic events is to normalize the survivor's reactions to the experience (Young, 2002). Yet, many of the interventions for female survivors of violence are contrary to this accepted wisdom, providing educational components that describe the symptoms of PTSD. Not only may such a practice be unhelpful, framing the consequences of sexual abuse, rape, and partner violence as women's mental health problems is galling to victims. That conceptualization minimizes the responsibility of perpetrators, particularly given that "rapist" and "batterer" are not current psychiatric diagnoses. Furthermore, individualistic conceptual models detract energy and resources from studying the social causes of violence against women. And, many advocates, especially outside the U.S. and Europe, feel that interventions aimed solely at addressing survivor's symptoms turn their efforts inward rather than directing them toward social change. Finally, as a paradigm guiding research in the area, psychiatric diagnosis narrows the focus of study. Those psychological responses that fall outside, such as adaptive coping, social support resources, and positive growth outcomes, are much less likely to be included in research studies (for exceptions see Frazier & Burnett, 2001; Kennedy, Davis, & Taylor, 1998).

RESPONSES TO THE MENTAL HEALTH NEEDS OF VIOLENCE SURVIVORS

Current Clinical Practice

Female survivors of violence are everywhere—in our families and religious institutions, the criminal justice system, the welfare system, prisons, psychiatric hospitals, medical populations, and the military. Many of these women have recovered from their victimization using their own support systems and personal resources. But as the foregoing review establishes, the mental health toll of violence on female victims is high. It was recognized 10 years ago that radical changes in traditional medical care would be necessary to meet the needs of victimized women. In 1991, Surgeon General Koop challenged health providers to address the issues of violence (cited in Stark, 2001). In the early 1990s, our major health organizations, including the American Medical Association, Joint Commission on Accreditation of Healthcare Organizations, American College of Obstetrics and Gynecology, and the American Academy of Pediatries, all recommended polices and procedures for identifying, treating, and referring victims of abuse (Stark, 2001). Common features of these recommendations were the development of emergency room protocols that outline steps to be taken to provide appropriate care for violence victims and standard screening procedures of all female patients who enter the health care system through its major portals including emergency services, obstetric, pediatric, mental health, and primary-care services.

Despite significant organizational encouragement, change has been disappointing. Formal policies and procedures remain slow to appear in primary-care settings (for a review, see Koss, Ingram, & Pepper, 1997). For example, 80% of hospitals in a Massachusetts survey had no written protocol, and 585 of the hospitals reported that they identified fewer than five domestic violence patients per month (Stark, 2001). And, even when a protocol is in place, the results are not encouraging. One study found that the establishment of a protocol to identify victims of partner violence in an emergency department increased the rates of identification of domestic violence cases five to six times compared to standard practice informal record keeping. However, when the same emergency department was studied 10 years later to determine whether screening continued, identification had fallen to pre-training levels (McLeer & Anwar, 1989). A study to determine the screening rates of child health care professionals, when onsite referral services were available, found that 79% of providers did not increase their screening practices (McKibben, Hauf, Must, & Roberts, 2000). A most discouraging finding was that overall screening rates, averaging 33% without onsite referral, fell to 23% after introduction of highly accessible referral resources. In prenatal care, 22 of 395 providers report that they discussed abuse during the first visit (Durant, Gilbert, Saltzman, Johnson, & the PRAMS Working Group, 2000). Other health care providers, even those with psychiatric training, rarely screen their patients for histories of abuse (Rodriguez, Bauer, McLoughlin, & Grumbach, 1999; Ruddy & McDaniel, 1995).

Barriers to Routine Screening and Ways to Improve Compliance

Barriers to screening include provider characteristics, especially lack of education, fear of offending the patient, and the erroneous belief that there are no effective interventions. There are also barriers attributed to infrastructure factors, including lack of time, and patient factors, such as the decision not to disclose to the provider even if asked directly (Waalan, Goodwin, Spitz, Petersen, & Saltzman, 2000). The most successful approach to increasing screening rates is a system intervention (Salber & McGaw, 2000) that involves training with a simple protocol for screening and responding, an onsite resource for identified cases, medical records audit with quarterly feedback at the department level on their rates of screening, and prompts such as posters and cards, some asking "Did you screen?" As an integrated approach, this method has been shown to double the rates of screening, especially due to the use of posters and onsite specialized responders. An excellent measurement tool of provider attitudes, beliefs, and behaviors is available (Maiuro et al., 2000). Comparisons of providers who were exposed to workshops, journal articles, and other

experiences to a control group of providers showed positive changes following intervention in Perceived Self-Efficacy, Professional Role Resistance/Fear of Offending the Patient, Victim/Provider Safety, and Frequency of Inquiry. However, other investigations have found increases in screening rates following systematic training that while clinically significant, lacked practical significance (i.e., documentation in charts rose from 3.5% to 21%; Thompson et al., 2000). Thus, the authors recommended abandoning attempts to modify the behavior of providers and moving toward written screening.

Patient Preferences in Screening and Reporting

Although health care providers may be hesitant to ask about abuse, research has indicated that the majority of women favor routine inquiry about physical and sexual assault and believe that health care professionals can be helpful (Gielen et al., 2000). When asked their opinions about screening, 86% of women patients agreed that screening would make it easier to get help and 96% said they would be glad if someone showed interest. However, African American women were twice as likely as other women to feel that women who were not being abused would be insulted and feared it might put abused women at risk. Nevertheless, African American women agreed that screening would make it easier to get help. In recent years, 14 states have passed legislation requiring mandatory reporting to criminal justice when domestic abuse is disclosed (Gielen et al., 2000). Surveys of attitudes toward mandatory reporting reveal that more than half (54%) of abused women preferred woman-controlled reporting, two-thirds thought it would make women less likely to disclose and half thought it put them in danger from the abuser. Clearly, these policies demand careful evaluation for unintended negative effects.

Accessibility of Services

Are survivors accessing appropriate mental health services? Patients with depression were found less likely to be screened for violence (16%) than patients with chronic pelvic pain (21%; Thompson et al., 2000). And, the care received by victims of violence is strongly biomedically focused. For example, abused, depressed women were much *less* likely to receive outpatient mental health care than to be treated with biomedically oriented approaches targeting physical problems (Scholle, Rost, & Golding, 1998). Counseling was the one service that victimized women indicated was most difficult to access.

The most visible and accessible source of help for physical and sexual assault in most communities are specialized service providers at centers against sexual assault, family agencies, and domestic violence shelters. These agencies offer a comprehensive menu of services including advocacy, prevention education, group and individual counseling (Sullivan & Gillum, 2001; Campbell & Martin, 2001). In addition to counseling provided by these centers, the routine duties of advocates for survivors involve finding resources and facilitating referrals to the formal mental health system. However, lack of funding for these services severely limits their options. On their own, survivors of male violence are unlikely to contact mental health assistance. Even when mental health care was offered as a covered benefit and provided on the worksite, only 9% of physical and sexual assault survivors utilized it (Koss, Woodruff, & Koss, 1991; also see Kimerling & Calhoun, 1994). A second obstacle to reaching out for help is that survivors of male violence fear their credibility will be questioned or they will be partly blamed for what happened to them. For example, most rape survivors who had contacted legal or medical services had two or more experiences that left them feeling revictimized (Campbell et al., 1999). In contrast, the majority of rape survivors in another sample who utilized the mental health system, rape crisis centers, and their clergy perceived their services as healing and beneficial (Campbell, Wasco, Ahrens, Sefl, & Barnes, 2001). Both shelter services for battered women (Sullivan & Bybee, 1999) and mental health services for rape survivors have been associated with significant decreases in PTSD symptoms (Campbell et al., 2001).

A number of manual-based, empirically validated therapies for treating rape are also available (e.g., Foa, Keane, & Friedman, 2000; Foa et al., 1999; Resick, Nishith, Weaver, Astin, & Feuer, 2002). Solomon and Johnson (2002) recently published a practice-friendly review of outcome research for psychosocial treatment of PTSD. However, a recent analysis of the National Comorbidity Survey (1990–1992) found service-seeking behaviors by sexual assault victims was predicted by demographics (e.g., education, race), psychosocial factors (e.g., social support), and most importantly, the extent of their medical insurance coverage. In addition, survivors in need of mental health care must contend with double stigmas—the stigma of being an intimate violence victim and the stigma of experiencing emotional problems. Finding ways to make services more accessible and reducing stigma would help, but these efforts will fall short unless survivors can identify mental health symptoms and are aware of their treatment options. For example, the highly disseminated Depression Screening Day initiative could make more explicit links between depression and living with current or past experiences of violence. Despite the foregoing comments, it is important to recognize that diverse groups living in the U.S. do not equally value seeking formal psychotherapy (Bletzer & Koss, under review). For example, rape victims in some American Indian tribes prefer to speak to horizontal kin including sisters and cousins. Likewise, relatively unacculturated Mexican American rape victims confide in their mothers. Only Anglos spontaneously spoke with people outside their family about sexual victimization.

IMPLICATIONS FOR PUBLIC POLICY

Numerous policy recommendations have been made to improve response to victimized women (e.g., Heise et al., 1999; Kilpatrick, Resnick, & Acierno, 1997; Koss et al., 1994; Koss et al., 1997). We believe that the weight of findings reviewed earlier support the following implications for service delivery and mental health policy.

1. *Reference victimization in campaigns that attempt to destigmatize mental illness*. Any plan to reduce the stigma of mental illness should address the subject of victimization, one of the major etiologies of psychological distress among women.
2. *Design prevention strategies that reduce violence perpetuated by offenders*. Primary prevention targeted at women and girls can provide skills that might reduce risks of victimization, help support those who have been victimized, or encourage seeking help among unidentified victims in the community. However, prevention of violence against women can really only come from strategies that target potential violence offenders and should include, but not be limited to, general primary prevention, identification of high risk youth for targeted prevention, and secondary prevention aimed at preventing those who have already offended from continuing or escalating their violence.
3. *Develop public education aimed at survivors*. Another fruitful avenue may be media campaigns that model supportive response to those disclosing sexual and physical abuse. Such interventions might eliminate some of the negative social support that victims experience. It is well-known that negative support is much more powerful in predicting distress than positive support. For example, a recent ad campaign in Arizona that focused on influencing the public to "believe her" resulted in a one-third increase in calls to sexual assault services (Machelor, 2002). Suggestions about how to heal depression and when to seek assistance would also help some women.
4. *Incorporate links with violence into the Depression Screening Day initiative*. Such linkage would help women tie their feelings to environmental causes and establish mental health services as an avenue to heal the consequences of victimization.
5. *Increase the accessibility of mental health services*. This recommendation emphasizes the need to make mental health care accessible and affordable. Lack of insurance coverage is an identified barrier for victimized women and initiatives to achieve universal coverage with parity for mental and physical health care are needed to remove them.
6. *Use system approaches to develop screening and treatment protocols, increase training of psychological service providers, and monitor adherence to recommended practices with violence survivors.* Routine screening should be conducted in a wide range of settings including mental health and substance abuse treatment centers and health care delivery sites (Kilpatrick et al., 1997). Written screening rather than provider-administered screening might result in higher compliance rates. Training initiatives embedded in a coordinated system intervention could establish violence as a potential etiology of depression. Such a strategy might increase the likelihood that women will have the opportunity to discuss this vital subject within the medical arena as primary care providers are skilled and experienced in addressing issues of grief and loss and their interrelationships with physical health. In so doing, the potential cadre of experts positioned to respond to violence against women would be enlarged.
7. *Forge links between the formal mental health system and community-based services*. Many survivors are served by specialized sexual assault and battered women community agencies that are available to individuals who are unable to pay. We call upon the mental health system to forge links with these agencies and develop models for providing consultation and training in these settings. Also, we need to continue work to develop services that are culturally competent, recognizing the intersections of culturally-based knowledge, coping strategies, and resources for the woman living with violence.
8. *Initiate research studies to evaluate victimization-specific interventions for seriously mentally ill populations*. Given the prevalence and impact of trauma among individuals with severe mental illness, exposure to violence is a serious public mental health concern for this population. Future directions should include controlled clinical trials under conditions of routine care and widespread implementation of evidence-based interventions (Rosenberg et al., 2001).

Although we have achieved a greater understanding of the prevalence and consequences of violence against women, many issues in this area have not been adequately addressed. As women continue to be victims of physical and sexual abuse in our society, we must challenge ourselves, as researchers, health care professionals, policymakers, and community members, to avoid further revictimization of survivors, highlight the responsibilities of perpetrators, and develop collaborative services that address the diverse needs of female survivors in the United States. This paper has outlined several avenues for such future endeavors.

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