

Aggression and Violent Behavior 9 (2004) 477-501

AGGRESSION AND VIOLENT BEHAVIOR

Psychological sequelae of combat violence: A review of the impact of PTSD on the veteran's family and possible interventions

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Received 14 November 2002; received in revised form 13 March 2003; accepted 2 June 2003

Abstract

This review of the literature reveals that veterans' posttraumatic stress disorder (PTSD) following exposure to combat violence affects veterans' familial relationships and the psychological adjustment of family members. Previous study within other trauma populations has conceptualized the negative impact of an individual's traumatic stress on his/her family members as "secondary traumatization." This review examines the processes by which secondary traumatization occurs within combat veterans' families. Research has identified PTSD as mediating the effect of veterans' combat experience on the family. Veterans' numbing/arousal symptoms are especially predictive of family distress; while, to a lesser extent, veterans' anger is also associated with troubled family relationships and secondary traumatization among family members. Empirical modeling of additional factors involved in secondary traumatization is needed. Marital/family interventions have largely focused on improving relationships and reducing veterans' symptoms, rather than targeting improvements in the psychological well-being of the spouse and children. Interventions directly addressing the needs of

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^{*} This paper is the result of work supported with resources and the use of facilities at the G.V. ("Sonny") Montgomery VA Medical Center, Jackson, MS, with additional support from VA South Central (VISN 16) Mental Illness Research, Education and Clinical Center (MIRECC). The views expressed here represent those of the authors and do not necessarily represent the views of the Department of Veterans Affairs or the University of Mississippi Medical Center.

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significant others, especially spouses, are advocated. The potential for increased effectiveness of PTSD interventions and possible cost-savings attained by improving relationships and reducing caregiver burden are also discussed.

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Keywords: Family relations; Family caregivers; Posttraumatic stress disorders; Combat disorders; Secondary traumatization

1. Introduction

Recent research (Kessler, 2000) estimates that 12% of the American population develops posttraumatic stress disorder (PTSD) at some point in their life. Within this diagnostic group, multiple episodes of PTSD (each averaging several years in duration) appear to be the norm. PTSD severely impacts functioning across major domains, increasing the odds of unemployment by 150% and marital instability by 60%. The risk of suicide associated with PTSD exceeds that of any other anxiety disorder.

While the direct impact of experiencing psychological trauma has been studied extensively over the past century, the secondary impact of living with an individual suffering from PTSD is a far less developed field of inquiry. Early investigations focused on families of survivors of the Holocaust (Bergmann & Jucovy, 1982; Epstein, 1979) as well as studies of veterans' families. Figley (1983) coined the phrase "secondary traumatization" to describe the finding that individuals living in close proximity to victims of violent trauma can themselves become indirect victims of that trauma. An examination of the literature reveals two applications of the phrase secondary traumatization. First, some authors have equated secondary traumatization with vicarious traumatization. In this application, an individual who has *not* been directly exposed to a trauma develops trauma symptoms (nightmares, intrusive thoughts, flashbacks) after learning of an event *indirectly* through someone who actually experienced the event. Second, the phrase has been used more broadly to refer to *any* transmission of distress from someone who experienced a trauma to those around the traumatized individual. In this broader sense, the phrase includes a wide range of manifestations of distress, not merely those that mimic PTSD.

In this paper, we use the phrase secondary traumatization in the latter, more inclusive definition. We review the literature that has developed regarding how the veteran's combat exposure and PTSD impact the family. There is a relative paucity of literature available on the impact of traumatization within female veterans' families. The literature is primarily focused on male veterans and their female partners, with some studies addressing effects on children. In particular, the sequelae of the veteran's anger/violence and avoidance/numbing are highlighted. We also provide an overview of the available treatment literature for these families and summarize the need for continued development in this area.

To adequately review the available literature, a search was conducted on the following terms: combat exposure, PTSD and veterans, intergenerational transmission, familial PTSD,

vicarious traumatization, combat veterans and PTSD, and combat disorders. From this search and from additional related terms, 141 relevant articles were reviewed. Approximately 100 papers were included in the review from this original pool. The vast majority of papers reviewed were published in peer-reviewed journals.

2. Impact of combat trauma and PTSD on the couple

The President's Commission on Mental Health Report (1978) indicated that 38% of the marriages of Vietnam veterans dissolved within 6 months of the return of the veteran from Southeast Asia. Several studies have explored factors contributing to these break-ups, and tried to tease out the relative contributions of combat, PTSD, and other background variables.

In one of the earliest efforts to identify variables contributing to postwar marital distress (studying the trauma of capture rather than of combat), McCubin, Dahl, Lester, and Ross (1975) investigated family reintegration within a sample of 48 Navy families of prisoners of war (POWs). The wives were assessed prior to the news of their husbands' imminent return, upon the release of the husband from internment, and 12 months after the husband had returned home. The investigators initially analyzed 41 background variables, including the veteran's psychological status (emotional stability upon repatriation, psychiatric status, affect, and interpersonal functioning), and captivity variables (overall time; time in solitary; perception of physical abuse, psychological coercion, threats, and promises). Thirty-four variables (including all of the abovementioned) showed little if any relation to the criterion variable and so were eliminated from the regression. Emotional dysfunction in wives during the separation was significantly correlated with the quality of marriage during the separation period, the quality of the wife's relationship to her own parents, the presence of adjustment problems (such as legal or financial problems) during the separation. Thus, it appeared that support from the husband during the separation (letters home, etc.), an established support network outside of the home, and the relative paucity of circumstantial stressors were protective factors against poor emotional health. A combination of three variables (the wife's assessment of the quality of marriage prior to captivity, the wife's level of dysfunction during the separation period, and the length of marriage prior to separation) contributed significantly greater variance to the success of reintegration than any variable taken independently. Taken individually, the variable most highly correlated with the quality of the family reintegration was length of the marriage prior to the separation, suggesting that a solid marital foundation prior to separation predicts the most positive outcome following reunion. It is interesting to note that this particular study (conducted within a year of husbands' internment) did not identify the severity of trauma or the presence of psychiatric symptoms in the veteran as predictive of wives' emotional dysfunction.

Riggs, Byrne, Weathers, and Litz (1998) compared relationship distress between 50 couples (all couples were described as intimate and either married or cohabitating for at least 1 year) in which the veteran was diagnosed with PTSD and couples in which the veteran did not have PTSD. Results indicated that 70% of the PTSD couples reported relationship distress as compared to 30% of the non-PTSD couples, and that the severity

of relationship distress correlated with the severity of PTSD symptoms. Future research in this area should strive to control for the quality of marital relations prior to combat exposure.

2.1. Impact of combat trauma and PTSD on the veteran's spouse/partner

Research in Israel has examined the familial impact of veterans' combat stress reaction (CSR), an acute mental disorder resulting from exposure to combat trauma that manifests itself immediately on the battlefield. CSR can be a precursor to PTSD. Symptoms of CSR vary widely and include acute anxiety, somatization, withdrawal, "running amok," and somatic symptoms such as vomiting and diarrhea (Waysman, Mikulincer, Solomon & Weisenberg, 1993). Mikulincer, Florian, and Solomon (1995) compared 49 wives of Israeli combat veterans diagnosed with CSR to 31 wives of non-CSR veterans, assessing the wives' emotional reactions to their husbands' return from war 6 years prior. CSR veterans' wives retrospectively reported feeling more anxiety, loneliness, hostility, severe psychopathology and somatization, and less optimism immediately after their husbands' return from war. Perceived marital intimacy at the time of the husband's return was related to more optimism, less anxiety and less hostility immediately after the war as well as less psychopathology and somatization 6 years postwar. These authors suggest that the process of secondary traumatization of these wives begins immediately upon exposure to the husbands' traumatic stress symptoms.

In their review of the literature, Solomon et al. (1992) and Solomon, Kotler, and Mikulincer (1988) describe the living situation of the PTSD veterans' wives as plagued with episodes of battering, emotional detachment on the part of the husband, full responsibility for the welfare of the children, responsibility for the maintenance of the husband's psychological well-being, responsibility for meeting financial needs of the family, and lack of sexual intimacy. Solomon et al. (1992) attempted to tease apart the relative contributions of CSR and PTSD in a study of 205 wives of combat veterans of the Lebanon War. The diagnoses of CSR and PTSD made independent contributions to the wives' overall global severity index on the Symptom Checklist-90—Revised (SCL-90-R) and to the subscales of depression, obsessive-compulsive problems, and anxiety. CSR-only was related to somatization while PTSD-only contributed to paranoia, interpersonal sensitivity and hostility. PTSD-only was predictive of poor social relationships as measured by the Family Environment Scale, the Dyadic Adjustment Scale, and the UCLA Loneliness Scale. Such social dysfunction included loneliness, poor marital and family satisfaction, and impaired larger social networks. Those women (n=50)whose husbands had been diagnosed with both PTSD and CSR indicated the greatest overall distress (somatization, depression, obsessive-compulsive problems, anxiety, paranoia, interpersonal sensitivity, and hostility). Wives of Israeli veterans with PTSD experienced more enduring emotional distress as compared to the distress reported by wives of non-PTSD combat veterans. The results indicated that CSR and PTSD both independently and together are associated with a variety of poor outcomes for wives.

Waysman et al. (1993) compared 127 wives of Israeli combat veterans of the Lebanon War who were diagnosed with CSR to 85 non-CSR combat veterans' wives. The authors

used the wives as informants in order to ascertain the veterans' current symptomatology and arrive at the veterans' diagnosis of PTSD. Thus, the CSR status reflects the presence or absence of a battlefield diagnosis of war-induced psychic trauma (as per military records), while the PTSD diagnostic status reflects the veteran's current symptomatology (as per wife's report). The wives were then grouped according to their husbands' CSR and PTSD status. The no-CSR (control group) consisted of wives whose husbands had not been diagnosed with CSR during the war. The CSR & PTSD (disordered group) included wives whose husbands had suffered a CSR and were considered to be currently suffering from PTSD. The CSR and no-PTSD group (recovered group) consisted of wives whose husbands had suffered a CSR, but had recovered and currently did not meet diagnostic criteria for PTSD. Wives of the disordered and recovered veterans displayed more psychiatric impairment than controls on measures of depression, obsessive-compulsive disorder, and anxiety. Wives of the disordered veterans indicated more psychopathology than either of the other two groups on measures of somatization, interpersonal sensitivity, and hostility. Waysman et al. postulated that the initial breakdown of the veteran (as indicated by the CSR diagnosis) was independently associated with increased levels of psychopathology among the wives. However, the veterans' current combat-related symptomatology (as indicated by the current diagnosis of PTSD) contributed to the overall extent (breadth and scope) of the wives' psychopathology.

In a similar American study, Jordan et al. (1992) used a community sample to compare the level of psychological distress in wives of Vietnam veterans with and without PTSD. Using a full battery of assessments (Structured Clinical Interview for DSM, Minnesota Multiphasic Personality Inventory, Impact of Events Scale, Stress Response Rating Scale, Global Assessment Scale, Marital Problems Index, Parental Problems Index, Family Adjustment Index, Level of Life Functioning Index, and family violence measures), these authors found that wives of PTSD veterans reported significantly more marital problems, more violence on the part of the veteran, more violence themselves, lower levels of happiness and life satisfaction, and more demoralization as compared to wives of non-PTSD veterans.

Overall, findings from both Israeli and American studies suggest that the veterans' PTSD contributes to the wives' distress and poor psychological well-being over and above other predisposing variables. Within the constellation of PTSD symptoms, the research consistently identifies two components as particularly problematic for families: angry outbursts on the part of the veteran and the veteran's emotional numbing/interpersonal withdrawal.

2.1.1. Anger and violence

Qualitative discussions of the impact of veterans' anger are among some of the earliest works published on families of traumatized veterans. Williams (1980) found reports of wifebattering in 50% of treatment-seeking veteran couples. Williams noted that abuse within veterans' households follows a distinctive pattern. Unlike the chronic cycle of ongoing abuse often reported in the general domestic violence literature, the veteran may commit only one or two extremely violent and frightening abusive episodes that quickly precipitate treatment seeking.

Others described a more chronic atmosphere of violence in the home. Frederikson, Chamberlain, and Long (1996) extensively interviewed five New Zealand wives of Vietnam veterans diagnosed with PTSD. These women's accounts suggested that anger and violence were a profound part of everyday life. These wives described living day by day in fear with the implicit threat of physical violence. They reported that the veterans' anger included a variety of targets and was not necessarily directed at the wives and children in each instance.

Rosenheck and Thomson (1986) also reported a chronic pattern of violence. They describe an ongoing cycle precipitated with an episode of violence by the veteran, followed by rejection and lack of communication, that, in turn, led to more violence. Over time, the family begins to regard the veteran as the source of all aggression and dysfunction within the family. This cycle usually culminated with some sort of crisis, such as a suicide attempt or marital separation. Rosenheck and Thomson presented this pattern as categorically different from patterns observed in other dysfunctional families, such that all chaos is seen as stemming from one member of the family's war experiences.

Clinicians have examined combat-related violent impulses from the perspective of the veteran. Aggression, taken in the context of war, may have been adaptive and appropriate. It becomes difficult to reconcile these aggressive impulses (perhaps substantially heightened by wartime experiences) into everyday life during peacetime. Guerrilla warfare in which individuals of all ages and genders pose a realistic threat can make it difficult for veterans to resume trust in others, including women and children (Solomon, 1988). Horowitz and Solomon (1978) have suggested that the veteran may consider violence a viable solution to conflict and some may derive pleasure from their violent acts, even while experiencing substantial guilt following an angry outburst. Fear and guilt over violent impulses acted on during combat situations (Haley, 1974) and in the home (Horowitz & Solomon, 1978), and current attempts to control these impulses, may cause avoidance of certain roles and activities and affect veterans' ability to perform familial duties.

Empirical studies have examined the relative influence of combat exposure versus PTSD in predicting domestic violence. Petrik, Rosenberg, and Watson (1983) explored the hypothesis that it is the military combat experience itself that makes men more prone to general violent behavior. They investigated violent abuse toward 100 female partners of male psychiatric inpatients (not necessarily PTSD) with and without combat experience. Fifty percent of the combat veterans and 57% of the noncombat veterans reported using violence against women. Results suggest that combat experience alone was not a strong influence on reported use of violence. Carroll, Rueger, Foy, and Donahoe (1985) in their comparison of 60 treatment-seeking Vietnam veterans (21 PTSD; 18 non-PTSD, combat; and 21 minimal combat exposure veterans) found that hostility and physical aggression discriminated between the PTSD and non-PTSD group in the expected direction. There was no significant difference in level of reported hostility and aggression between the PTSD and minimal combat groups. No significant differences in verbal aggression emerged between any of the groups. Finally, Jordan et al. (1992) compared 122 wives of PTSD veterans to 252 wives of non-PTSD veterans and found that wives of PTSD-veterans reported more violence on the part of the veteran and admitted to committing more violence themselves. These data suggest

that it is the presence of PTSD, rather than combat exposure, that is associated with elevated levels of hostility and physical violence.

Miller and Veltkamp (1993) point to the family stress created by veterans' reexperiencing symptoms and violent acts. Such stress can destabilize the family dynamic and may lead to maladaptive coping skills of crisis proportions (Lewis, 1986; Figley, 1989).

2.1.2. Numbing and avoidance.

Clinicians and researchers have repeatedly identified the emotional numbing component of PTSD as a major, often the primary, factor interfering with quality relationship functioning after combat trauma (Haley, 1974, 1978; MacDonald, Chamberlain, Long & Flett, 1999; Riggs et al., 1998; Rosenheck & Thomson, 1986; Solomon, 1988; Wilson & Kurtz, 1997). The crucial role that emotional expression plays in developing and maintaining close and intimate relationships has been emphasized across reports. This is consistent with the larger literature on marital and couples' functioning that identifies the ability of the dyad to engage in communication as integral to overall couple satisfaction (Gottman, 1991; Greenberg & Johnson, 1988). Without the key ingredient of communication, ambiguity as to role expectations emerges. The result is an escalating and recurring pattern of detachment, isolation, conflict, and withdrawal. Constricted intimacy and expressiveness, limited affective expression of emotion, and lack of self-disclosure further add to marital discord and preclude full integration into the family structure (Carroll et al., 1991; Matsakis, 1996; Riggs et al., 1998). Haley (1974, 1978) observed that veterans suffering from survivor guilt find it particularly difficult to reestablish close, intimate relationships with family upon their return home.

Rosenheck and Thomson (1986) have described the interplay of emotional numbing and avoidance symptoms in the veterans' family life. The veterans' isolation creates an emotional emptiness and a serious functional loss of the father and husband from everyday life. The veterans' pressing need to avoid irritating stimuli is confusing and draining for the family. Often these periods of avoidance and withdrawal follow episodes of dramatic reexperiencing of trauma cues or angry outbursts. Such withdrawal precludes communication about the incident. This, in turn, prevents any resolution of the event, and leaves the family dreading the next tirade, flashback, or nightmare. Normal developmental tensions and strains within the family are experienced by the veteran as intolerable, driving the veteran further into isolation and thus worsening the situation. As the veteran becomes more and more isolated, he also becomes more distressed by his failure in fulfilling traditional familial role obligations.

In their qualitative study of five veterans' wives (described above), Frederikson et al. (1996) also examined the impact of the numbing and avoidance symptoms. Each veteran reportedly maintained an authoritarian and dominant control over the household. His emotional and behavioral withdrawal prohibited the development of real communication, affection, and trust between the veteran and other family members. The wives and children in this sample came to believe that the veterans did not care for them at all. Emotional withdrawal, more than any other symptom, led the wives to seek divorce or separation.

A separate literature on family stress associated with military deployment is emerging (e.g., Knox & Price, 1995; Peebles-Kleiger & Kleiger, 1994; Ursano & Norwood, 1996). One

element of wartime separation observed to relate directly to the interpersonal withdrawal and numbing involves the renegotiation of familial roles. Solomon (1988) concluded that couples often find it impossible to reestablish prewartime service relationship patterns. The wife typically gains more independence in the husband's absence and grows more assertive as sole head of the household. Oftentimes this change, initially borne out of necessity, is so profound that she has no desire to return to her prior level of functioning, or simply could not, even if she so desired. At the same time, there is an undeniable pressure on the veteran to resume many of his old responsibilities and roles, including financial, sexual, parenting, etc. During this period of reintegration stress, the veteran is still attempting to acclimate to civilian living and does not necessarily feel as if his family has any concept of the change that he has undergone. Such dynamics further reinforce any PTSD-related interpersonal withdrawal already underway.

2.2. The process of wives' secondary traumatization

Family systems theory predicts that a family might respond to increased stress in one of four ways (Kerr & Bowen, 1988). First, the family may distance from one another. Second, an individual member may sacrifice his/her own level of functioning for the sake of family functioning. Third, the family can become conflicted. Fourth, the family can bond together in an adaptive way and move forward. These predictions overlap with four key assumptions that Wilson and Kurtz (1997) identified as underlying the general family stress literature as put forth by Hobfoll and Spielberger (1992). The four assumptions include: (1) normalcy of stressors and crises in every family's lives, (2) existence of resultant demands placed on the family secondary to those stressors/crises, (3) ability of the family (normally) to accommodate those additional demands fairly well, and (4) experience of additional distress if the demands are not accommodated. Thus, if poor coping skills are adopted and the family fails to manage the stress, that failure can lead to additional negative stress.

Solomon et al. (1992) entertained several possible explanations for the manifestation of psychological distress among wives of traumatized veterans. One explanation, echoed elsewhere in the literature (Jordan et al., 1992; Merikangas, 1982; Merikangas, Prusoff & Weissman, 1988), is the concept of assortative mating (i.e., the idea that couples with similar characteristics tend to bond and mate). Thus, the wives' problems may have predated the husbands' trauma and subsequent symptoms. Data collected by Solomon et al. refute this explanation as the subjects in their study were married prior to the husbands' development of PTSD. Furthermore, the veterans included in their sample were selected to be in the armed forces based on stringent criteria involving both a physical and mental examination. The researchers conclude that the poor mental health seen in their veterans' wives sample is a consequence and not an antecedent of the husbands' psychopathology. Jordan et al. (1992) also refute the assortative mating theory as no significant differences in sociodemographic and other background characteristics emerged between her population of wives of PTSD veterans and wives of non-PTSD veterans. Second, and perhaps most obviously, Solomon et al. suggest that wives of PTSD veterans are faced with a significant chronic stressor by just

living in close proximity with an individual who has been exposed to trauma and suffers subsequent psychopathology. This argument is supported in various parallel literatures on caregiving (discussed below). A third explanation offered by Solomon et al. involves the secondary traumatization through identification with the veteran. Maloney (1988) also suggests that wives may identify so strongly with their husbands that they become exposed, albeit secondarily, to the trauma. Consequently, wives may become attuned to trauma cues in their environment and, through normal learning processes, may come to mimic their husbands' reactions upon exposure to these cues. Alternatively, as Rosenheck and Nathan (1985) suggest, the experience of living with a traumatized, symptomatic individual (withdrawn, volatile, etc.) sets the stage for loved ones to develop a unique pattern of symptoms of their own (loneliness, somatization, isolation, etc.) that do not necessarily mimic those symptoms displayed in PTSD.

In the same study described earlier, Waysman et al. (1993) investigated the role that the family environment might play in moderating the impact of the husband's posttraumatic status (CSR and/or PTSD) on the wife. Using responses on the Family Environment Scale, a cluster analysis indicated six family types among the subjects collapsing across CSR status. Wives from "expressive families" (described as close, warm, and cohesive) were the least impaired on measures of psychopathology and social dysfunction. Contrarily, wives from the most dysfunctional family type, the "conflict-oriented family" (characterized by high conflict, low cohesion, lack of organization and personal growth, and high expression of anger) reported the highest levels of psychiatric impairment as measured by the SCL-R-90 and the UCLA Loneliness Scale. Waysman et al. suggest that these findings indicate a significant and consistent relationship of family type and wives' symptomatology across symptoms and measures. It appears that the expressive families are better equipped to serve as buffer against the wives' development of their own symptomatology. The family environment did not, however, yield any differential effects on wives according to their husbands' diagnostic status. Instead, family types were related to the wives' distress in the manner described above, irrespective of diagnostic group. The authors therefore conclude that family environment is not a moderator of the process of secondary traumatization but rather exerts its own independent influence.

3. Parenting and children

3.1. Impact of combat exposure and PTSD on parenting

In a clinical report, Haley (1984) described the experience of child-rearing as a delayed stressor for combat veterans. She theorized that the veterans may have some difficulty identifying the age-appropriate aggressiveness of a toddler as separate from their own violent behavior during wartime. Lack of differentiation can result in an unwillingness to interact with the child (avoidance) or an overreaction and overprotectiveness. Harkness (1993) similarly reported veterans' parenting to be characterized by controlling, overprotective, and demanding relationships with their children. Development of such close, enmeshed

relationships between veterans and their children has been cited in several studies (Jurich, 1983; Harkness, 1991; Rosenheck, 1986).

An uncontrolled and retrospective study by Rosenheck (1986) pointed out the variability in individual family situations, child/father relationships, and resultant symptomatology. Rosenheck interviewed a sample of 12 adult children of five WWII, PTSD veterans. None of the children had any idea that their fathers were suffering from sequelae of the war until adolescence. However, they estimated that four of the five veterans' daily family lives centered around the veterans' irritability, aggressiveness, depression, and withdrawal. Overall, the families considered the veterans to be temperamental and angry, but not abusive. Adult children recalled their fathers' nightmares, emotional outbursts, crying spells, and displays of erratic behavior. These symptoms were largely unexplained and contributed to a family atmosphere of fear, caution, and guilt. The families reported a constant effort to maintain the status quo and felt as if they were walking a tightrope. The degree to which the veteran wished to keep his combat experience secretive, the degree to which the mother shared information, and the cognitive developmental age of the child appeared to be most strongly related to the child's understanding or knowledge of the father's difficulties. Specific child/father relationships were variable. The descriptions of relationships ranged from embroiled and highly emotional to aloof and removed.

In a recent Australian study, Davidson and Mellor (2001) examined the impact of PTSD on 50 Vietnam veterans' family functioning. Fifty children of 50 male veterans were subgrouped according to the presence or absence of their father's PTSD diagnosis (30 PTSD veterans and 20 non-PTSD veterans). These subgroups were compared to 33 civilian male adult controls and their children (n=33). To assess family functioning, all participants completed the Family Assessment Device (FAD) which includes subscales such as problem solving, communication, roles, behavior control, affective responsiveness, affective involvement, and global functioning. Results indicated that PTSD veterans perceive their families to be less effective at problem solving and less able to respond to problems with appropriate affect than did the non-PTSD veterans or the civilian controls. Similarly, the PTSD veterans rated their families as significantly more indirect, vague, and less healthy in their communication style and as less interested and involved in other family members' lives than did the non-PTSD veterans or the civilian controls. Overall, veterans rated their families as significantly less healthy on all the FAD subscales, with the exception of behavior control. Researchers surmise that the veterans would not find maintaining control and conformity to rules in the family problematic. The children's responses to the FAD also indicated a higher level of familial dysfunction within the families of PTSD veterans, specifically on the affective responsiveness and problem solving. In terms of global functioning, the children of PTSD veterans rated their families at a clinical level of dysfunction, the children of non-PTSD veterans rated their families at a borderline clinical level of dysfunction and the civilian children rated their families as functional. These results suggest that it is the symptoms of PTSD that is related to family dysfunction and may be interrupting the fathers' ability to parent.

The interpersonal impairment observed in a course of PTSD secondary to combat exposure may directly impact the ability of the veteran to parent his child and interrupt the development

of a positive parent—child relationship. Ruscio, Weathers, King, and King (2002) hypothe-sized that avoidance and numbing symptoms of PTSD would be most correlated with impaired parent—child relationships. Degree of combat exposure, financial instability of veteran in childhood, psychopathology in family of origin, childhood relationships, premilitary trauma, and the presence of current major depression and/or substance abuse were included as covariates in their examination of 66 male Vietnam veterans' posttrauamtic stress and parent—child relationships. Results supported the main hypothesis in that the strongest relationship emerged between emotional numbing and all the parent—child relationship variables, even after the inclusion of the covariates. The authors suggest that the emotional numbing, detachment, and avoidance may directly impact the veteran's ability to parent by diminishing the father's ability to engage the child in the level of normal interactions required to develop a meaningful relationship.

3.2. Impact of parental combat exposure and PTSD on child development

In an analysis of spouses/partners' of Vietnam veterans interviews, Kulka et al. (1988) describe a myriad of familial difficulties related to the veteran's PTSD status. In comparison to children of non-PTSD veterans, the children of PTSD male veterans exhibited more overall and more severe behavioral problems. The specific problems were not reported.

Davidson, Smith, and Kudler (1989) studied family histories of psychiatric illness across Vietnam, Korea, and WWII veterans diagnosed with PTSD (n = 108), depression (n = 24), and alcoholism (n = 15) as well as a control sample (n = 21). They found that children of PTSD veterans (23%) received more psychiatric treatment than did children of controls (0%). These children particularly manifested symptoms of anorexia and attention deficit hyperactivity disorder and had severe academic and behavioral difficulties. In his study of adult children (n = 12) of WWII veterans (described above), Rosenheck (1986) noted that some of the adult children appeared to have mimicked their father's behavior while others seemed to be constantly attempting to maintain stability and avoid rocking the boat. Several of the children developed nightmares about combat. Rosenheck and Nathan (1985) in reporting their clinical experiences with PTSD Vietnam veterans' children, described the children as depressed, distressed, and exhibiting feelings of self-doubt. These children often acted out and demonstrated impulsive rage characteristics. They engaged in play reminiscent of war or combat-related scenes.

Jacobsen, Sweeney, and Racusin (1993) observed clinically that children of PTSD veterans manifested symptoms of psychopathology during group therapy (n=7). The children displayed aggressive behaviors, were unable to relate to peers in social situations in an age-appropriate manner, were unable to obtain assistance from caregivers in modulating stress, and evidenced severe regression when confronted with psychosocial stressors.

Harkness (1991) found that combat veterans' children often manifested difficulties in academic performance, peer relations, and affective regulation. However, Harkness reported that the violence in the PTSD veteran's family may account for more of the children's observed depression, anxiety, hyperactivity, delinquency, poor socialization, and academic difficulties than the actual PTSD itself.

Ancharoff et al. (1998) recently reviewed the literature concerning the relationship between the Vietnam veterans and their children. They concluded that Vietnam veterans' children typically display difficulties in one or more areas of functioning but acknowledged that there is no diagnostic category designed to identify these secondarily traumatized children. They often present differently in clinical settings than primarily traumatized children, if, in fact, they present clinically at all.

Rosenheck and Nathan (1985) likened the functioning of veterans' children to that seen in the children of Holocaust survivors. The two literatures indeed reveal many overlapping features. In general, children of Holocaust survivors tend to indicate a heightened level of dread or foreboding, hypervigilance, daydreaming (Ancharoff et al., 1998), self-criticism (Felsen & Erlich, 1990), guilt (Nadler, Kav-Venaki, & Gleitman, 1985), and anger management difficulties/delinquent behavior (de Graaf, 1975; Nadler et al., 1985). In spite of this, survivors' offspring also did not seem to show increased levels of formal psychopathology as compared to nonsurvivors' children (Aleksandrowicz, 1973; Keinan, Mikulincer, & Rybnicki, 1988) although more recent literature suggests trends toward increased psychopathology may emerge across the lifespan (Schwartz, Dohrenwend, & Levav, 1994).

Further clarification of the impact of combat on the veteran's children requires assessment of a broad array of variables including knowledge of the initial trauma, risk and protective factors that may be present, biological variables, general environment, and quality of relationships with both the primary trauma victim and other important caregivers. Determining the pattern and timing of possible deficits requires assessment of all domains of school, home, and social functioning, with recognition that effects may manifest in many different ways, including somatization, aggression, academic dysfunction, depression, and PTSD-like symptoms.

The apparent similarities with Holocaust families highlight the question of whether it is parental exposure to a specific trauma (in this case, combat) or parental PTSD that accounts for problems in child-rearing and child development within these families. Caselli and Motta (1995) found that PTSD and combat experience accounted for 34% of the variance in child behavior problems. However, when taken alone, PTSD accounted for 31% of the variance. Caselli and Motta found that PTSD (considered by itself) reliably predicted both externalizing and internalizing behaviors of the child, although the presence of PTSD was able to account for more of the total variance in externalizing behaviors than in internalizing behaviors. Harkness (1993), however, found no significant relationship between degree of severity of father's PTSD and child's behavior.

In a study examining 257 children of male veterans, Rosenheck and Fontana (1998a) found that the experience of participating in war atrocities in Vietnam was related to later behavioral disturbances in the Vietnam veterans' children even after statistical adjustments for PTSD symptoms, combat exposure, and postmilitary relationships (including domestic violence). Using a hierarchical multiple regression analysis, the researchers showed that after adjusting for combat exposure, the statistically significant relationship between veterans' participation in war atrocities and their children's behavioral disturbances remained unchanged. Thus, it appears that the experience of combat exposure alone did not impact the children's behavioral disturbances independently from participation in war atrocities. In a

third step of this analysis, the researchers controlled for the impact of the veterans' PTSD symptoms. A slight reduction in the relationship between the participation in war atrocities and children's behavioral disturbances was observed suggesting that veterans' PTSD symptomatology may be a mediating factor in this relationship. These researchers postulate that participation in war atrocities may impair the veteran's later ability to parent resulting in behavioral disturbances in the children.

3.3. The process of children's secondary traumatization

Rosenheck and Fontana (1998b) concluded from their review of the literature that clear and consistent evidence for an intergenerational transmission of trauma exists in war veterans' children. They suggest that the traumatic experiences of the parent can be transmitted to the child in one of three ways. First, the child can be directly traumatized by the parent's behavior (such as through violence). Second, the transmission may occur as the child identifies with the parent. And, third, the impact of the parental trauma on the child may occur indirectly as a result of the nonspecific dysfunction within the family.

Ancharoff, Munroe, and Fisher (1998) offered four possible mechanisms of transmission through which the parental trauma becomes the child's trauma. First, they suggested that silence can promote the process of transmission. The child senses the parents' fragility and keeps silent so as to avoid providing any stimuli that the parent may find upsetting. The silence becomes a barrier between the parent and the child and the child feels unable to seek out help or comfort from the parent. Second, they identified overdisclosure as a mechanism of transmission of trauma. This process occurs primarily when a parent attempts to explain the trauma to the child in raw detail. Often, the detail is overwhelming and the child becomes terrified rather than knowledgeable. The third mechanism of transmission is termed identification and occurs when the child is constantly exposed to the parents' posttraumatic symptoms. Processes of modeling and identification may cause the child to adopt or mimic the parent's symptoms. Finally, it was suggested that reenactment is a mechanism of transmission. This process involves the engagement or inducement of the child to participate in trauma reenactment. The child may then feel traumatized or feel as if he/she was the perpetrator. Ancharoff et al. note that multiple factors may influence whether a child manifests problems: the severity of the parental trauma, parental symptomatology or recovery, the presence of environmental cues that are reminiscent of the trauma, and the degree to which the child's worldview and perception of personal safety and integrity has been altered.

3.4. PTSD begets PTSD

Some research suggests that the experience of living with someone suffering from PTSD may render an individual more susceptible to developing PTSD secondary to an unrelated trauma. Solomon et al. (1988) studied 44 soldiers diagnosed with combat stress reaction in the Lebanon War whose parents had survived the Holocaust (second-generation trauma survivors). They compared them to 52 soldiers also diagnosed with CSR whose parents were

not Holocaust survivors (nonsecond generation). The authors hypothesized that the experience of living with a parent who had been traumatized may predispose their soldier-sons to developing PTSD after exposure to a non-Holocaust (or unrelated) trauma. The soldiers were assessed 1, 2, and 3 years postwar. The results indicated a higher rate of PTSD among the second-generation trauma survivors than nonsecond generation survivors. For those soldiers who did develop PTSD, the recovery gradient was steeper and symptoms less severe in the nonsecond generation sample than the second generation sample. Thus, it appeared that the soldiers whose parents had survived the Holocaust were more likely to develop PTSD and less likely to recover quickly and completely than the soldiers whose parents were not Holocaust survivors.

Similarly, Rosenheck (1985) concluded that combat veterans who are sons of combat veterans of previous wars have special problems in coping with the trauma of war. Entering war with idealized expectations set these sons of veterans up for a particularly devastating combat experience given that the nature of war had changed so dramatically from their fathers' experience. Rosenheck and Fontana (1998b) later conducted several studies examining the intergenerational effects of trauma within father—son dyads of veterans. They compared Vietnam veterans whose fathers had been exposed to combat trauma to those whose fathers did not have combat experience. The groups were compared on a number of variables including demographics, premilitary family environment, premilitary personal adjustment, military experience and age at entry, current symptomatology, and postwar social adjustment. After controlling for potential explanatory variables such as participants' age and combat experience, it was found that veterans whose fathers had engaged in combat exhibited more severe and pervasive psychological symptoms.

The idea that parental PTSD is linked to offspring's PTSD requires much more research. In its current state, the research is limited and methodologically flawed. Future endeavors in this area should attempt to partial out the effects of comorbid psychopathology to assess a unique contribution of PTSD to the poor outcomes seen in the veterans' children. Additional covariates, such as combat exposure, genetic contribution, maternal psychopathology, domestic violence, etc., should also be taken into account in a systematic fashion.

4. Treatment

Riggs (2000) reviewed PTSD-related family and marital treatments for the International Society for Traumatic Stress Studies' practice guidelines. There is a large literature on the treatment of childhood PTSD, focused on children who have directly experienced school shootings, war-zone violence, sexual abuse, or other trauma. However, neither Riggs' literature search nor our own identified any empirical studies specifically focused on treatment of children of *traumatized parents* or systematic intervention with the parent—child dyad. There has been a greater focus on marital therapy and broader family therapy, particularly in the form of program descriptions. Most published reports focus on such care as an adjunct to the veteran's PTSD treatment. Recently, a few empirical studies address the family's own needs as caregivers. Family needs independent of care of the veteran also deserve attention.

4.1. Family care as an adjunct to veteran's PTSD treatment

Riggs (2000) noted that the literature varies as to the purpose of family/marital treatment. In the studies he reviewed, treatment was designed as an adjunct to the PTSD patient's care. The goal was either to reduce relationship distress or to enlist family aid to enhance treatment of the trauma survivor's PTSD. Based on this distinction, Riggs identified two distinct approaches to care: systemic and supportive.

Systemic treatments are those using traditional marital/family therapy models to reduce relationship distress caused by the trauma and PTSD. Developing a family consensus about the traumatic event and about how the family plans to deal with its aftermath is central to many systemic interventions. This process often involves enhancing overall communication skills regarding the trauma, symptoms, and other topics. However, Riggs' (2000) review found no published systematic case studies or controlled studies of interventions for families as a whole. Two unpublished dissertations report improvements in dyadic relationship functioning when marital therapy aimed at improving communication and problem-solving is included as an adjunct to PTSD treatment for the veteran (Cahoon, 1984; Sweany, 1988).

The second treatment approach Riggs (2000) identified, *support treatments*, aims to reduce the patient's PTSD symptoms by increasing social support for the patient. Some support treatments offer family members psychoeducational information about the nature and treatment of PTSD. Some provide skills training to facilitate coping with the patient's PTSD. Although the rationale for such interventions is strong, Riggs found that their outcome had not been studied empirically.

Across the categories of systemic versus support treatments, many family treatments are organized in phases. Jurich's (1983) support treatments include a sequence of intake, ventilation about the current situation, helping family members identify commonalities, skills training, then integration of homework assignments to increase generalization outside of therapy sessions. The Israeli Ko'ach program (Rabin & Nardi, 1991) offers a similar sequence of support treatments: recruitment/intake; psychoeducational groups teaching partners about PTSD and coping skills; a family day session; conjoint couples groups focused on problem-solving, communication, and relationship building; all culminating in establishment of self-help groups. A sequence described by Figley (1988) is more focused on retelling the trauma history and is consistent with the category of systemic treatments: developing commitment to the treatment objectives; framing initial view of the problem; reframing the problem by incorporating positive collaborative appraisals; developing a "healing theory," i.e., a family consensus of why individuals reacted to the trauma and its aftermath as they did; identification of more positive response options for future challenges; then preparation for termination of therapy. Johnson, Feldman, and Lubin (1995) offer case examples of systemic ways to facilitate positive communication during the veteran's disclosure of past trauma. They advocate such disclosure as necessary to reduce the potential of past secrets negatively impacting present relationships. Many of the elements designed for veterans' families are very similar to those developed for populations such as partners of sexual assault survivors (e.g., Cohen, 1988). Some of the elements unique to military stressors are now also incorporated in interventions used to promote family (re)adjustment during military separation and following reunion, independent of exposure to combat trauma (Black, 1993; Ford et al., 1993, 1998).

Riggs (2000) concluded that family and marital interventions deserve more study as an adjunctive treatment for PTSD. He emphasized that such treatment is appropriate primarily in cases where there is apparent family distress, where family intervention has been requested, or where family members are seen to be impeding the trauma survivor's treatment. Riggs cautioned that alternatives other than marital/family therapy should be considered during an ongoing threat of violence or if one of the parties demonstrates little commitment to the relationship.

Since Riggs (2000) collected data for his review, Glynn et al. (1999) published their study of behavioral family therapy adjunctive to 18 sessions of exposure therapy. Riggs would categorize this study as support treatment, given the emphasis on coping skills training with the primary outcome of interest being reduction in PTSD symptoms. The family therapy package included three sessions of orientation and evaluation, two educational sessions about PTSD and mental health treatments, then 11–13 sessions focused on skills training (communication and anger control, with a major emphasis on problem solving). The 11 veterans who received both exposure and family therapy achieved approximately double the reduction in positive PTSD symptoms that the 12 veterans who only received exposure therapy attained. However, this difference was not statistically significant. Glynn et al. (1995) provide a more detailed description of interventions evaluated in the 1999 empirical report, including case examples. The 1995 publication also provides recommendations for dealing with avoidance behaviors, physical aggression, substance use, alexithymia, and disclosure of combat experiences during behavioral family therapy.

The work of Glynn et al. (1999) documented a problem that is common in family intervention research across clinical populations, i.e., low participation rates. Family members are often the ones who help the veteran identify available options for care, initiate clinic contact, and provide transportation (Rhoades, Leaveck, & Hudson, 1995). However, when it comes to participating in care individually or conjointly with the veteran, family engagement tends to be low (Glynn et al., 1999; Lyons & Root, 2001). Glynn et al. found that approximately one third of families declined the offer of behavioral family therapy. Statistically, the families most likely to refuse were those families in which the veterans had the most PTSD-related avoidance behavior and most emotional numbing. However, emotional and behavioral detachment of the veteran from the family was not the reason family members gave for not participating. The primary reasons for nonattendance cited by family members were conflicting work schedules, transportation difficulties, and lack of childcare. Family focus groups within other VA PTSD clinics (Lyons & Root, 2001) also found travel/distance and scheduling conflicts were most frequently cited as barriers to treatment engagement. Families cited travel problems more often at the rural site than the urban site. Scheduling conflicts were more prominent at the site that did not offer weekend hours. Difficulty engaging family members in care is not unique to PTSD, and participation rates in this population parallel those cited in the schizophrenia literature (Barrowclough et al., 1999).

Disinterest in the content and goals of available adjunctive support and systemic interventions may be an unstated factor contributing to low participation rates. A survey of

attendees at VA PTSD family programs (Lyons & Root, 2001) found that veterans' spouses are the most involved in the veteran's care and are already well informed about PTSD and available services, so have limited interest in informational programs. Other family members express interest in interventions to teach them about the veteran's symptoms with the goal of reducing the veteran's PTSD (i.e., support interventions per classification of Riggs, 2000), but such interest is primarily expressed by those family members who rate their own engagement in the veteran's care as minimal. Both spouses and other family members do express interest in services to address systemic needs through interventions to enhance the relationship or reduce mutual stressors. However, the types of services that are most often requested by spouses are generally focused directly on their own individual needs, rather than on relationship enhancement or PTSD symptoms and thus differ from the adjunctive systemic or support treatments commonly offered.

Another barrier families may be reluctant to mention is the fact that veterans are not always eager to involve their families in treatment. Clinically, we have observed that many veterans are particularly defensive about the possibility that their own psychological problems may be harming their children, and may resist care for their children as a result. They may also question the need for other family services. When asked to rate the various components of a 4-month inpatient treatment program, Vietnam veterans rated family interventions (family therapy, family day, family issues group) as one of two treatment components they viewed as significantly less effective than all other elements of the treatment program (Johnson & Lubin, 1997). Ironically, the veterans identified family relationships as the problem area that showed the greatest improvement following completion of this same treatment program (Johnson et al., 1996).

4.2. Interventions in which benefit to family is the primary outcome of interest

There is a paucity of literature on treatments in which the improved welfare of the family member is the primary target outcome. Deane, McDonald, Chamberlain, Long, and Davin (1998) acknowledge that this is due in large part to the congressionally mandated mission of the Department of Veterans Affairs (VA) and resultant policies according to which VA care of families is justified only if it facilitates the veteran's care. However, even from this narrow perspective, it should be apparent that the welfare of the family has serious implications for health care delivery to the veteran. It has long been known that social support and family adjustment predict vulnerability to PTSD (Card, 1987; Fontana & Rosenheck, 1998; King, King, Fairbanks, Keane & Adams, 1998). Among Vietnam veterans, it has been documented that domestic disputes precipitate most calls to crisis lines and require more staff time per incident than most other crises (Bryant, 1998). Furthermore, British research (regarding PTSD that was not specifically combat related) reveals that negative family relationships impede the effectiveness of PTSD treatment, accounting for nearly 20% of PTSD outcome variance (Tarrier, Sommerfield, & Pilgrim, 1999). As veterans age, both the veteran and the VA system are likely to rely even more heavily on spouses and other family members for provision of care. Recognizing this, and in response to veterans' focus group data (Pollner, 1994), Veterans Health Administration recently named family participation in the veteran's

care as one of its seven priorities for services (VHA Directive, 2001). As expectations for family engagement in care increase, however, the risk of overloading family caregivers also increases. In addition to family care as an adjunct to veteran's care, we assert that a more direct focus on family needs is also important.

4.2.1. Interventions for caregivers

The preceding sections have clearly detailed signs of dysfunction and symptom reports from many partners and children of traumatized veterans. The descriptions of family strain already discussed have alluded to the more general concept of "burden." The literature on psychological trauma is only beginning to look at such strains within the context of the broader literature on family caregiver burden. This construct has been widely studied within populations of physically ill individuals and people with other chronic mental illnesses (Chakrabarti & Kulhara, 1999; Cuijpers & Stam, 2000; Loukissa, 1995; Piccinato & Rosenbaum, 1997). Across studies, chronic caregiver burden has generally been associated with poorer physical and psychological outcome for the caregiver (Schulz et al., 1997; Vitaliano, Schulz, Kiecolt-Glaser, & Grant, 1997).

This risk is particularly high among spouses, as they are the main providers of nonprofessional care for the veteran (Lyons & Root, 2001). In spite of a high rate of divorce and marital separation, 49% of veterans seeking care through VA PTSD clinics were married and living with a spouse during 1999 (Fontana, Rosenheck, Spencer, Gray, & DiLella, 2000). Eighty percent of spouses play a large or very large role in helping veterans manage their PTSD symptoms. In contrast, 81% of other friends and family members report a small or medium role in the veteran's care (Lyons & Root, 2001).

Beckham, Lytle, and Feldman (1996) investigated perceptions of caregiver burden among 58 partners of Vietnam veterans diagnosed with PTSD. The majority of wives reported high levels of nonspecific distress. Approximately 50% felt as if they were on the verge of a nervous breakdown. Burden ratings correlated with severity of the veterans' PTSD symptoms. Furthermore, burden ratings increased across the duration of the study. Beckham et al. predicted that caregiver burden and subsequent caregiver distress will continue to cycle upward as the veterans develop increased medical problems with age. This prediction is consistent with others' predictions of increased medical burden as the American veteran population ages (Ashton et al., 1994). Additionally, recent data show that many spouses have the responsibility of raising grandchildren or caring for aged parents while also providing care for the veteran (Lyons & Root, 2001).

It is important to recognize that caregiving can take many forms, with the potential for conflicting agendas, as highlighted by Nolan, Keady, and Grant's (1995) typology of family care. For example, *protective care* strives to protect the patient's self-esteem of the patient even if that means denying there is a problem. (*Re*)constructive care aims to help the patient let go of old roles and replace them with new roles more appropriate to their limitations. It is important to take such individual variables into account when offering services. Tools such as the Cardinal Needs Schedule (Barrowclough, Marshall, Lockwood, Quinn, & Sellwood, 1998) can be used to assess potential areas of need (such as information about the illness or about relapse prevention, help coping with various categories of symptoms, various areas of

role functioning, emotional reactions to the illness, etc.) and whether the family desires help in that domain. However, research in the field of schizophrenia shows that even when such customization is applied, participation by the patient, caregiver and regular treatment staff often remains limited (Barrowclough et al., 1999).

4.2.2. Treatment aimed at family member well-being, independent of their caregiver role

Treatment needs and desired outcomes that family members reported when surveyed may
help to explain the general low level of engagement in family services (Lyons & Root, 2001).

As noted above, spouses' most frequent request was for services to address their own needs.
They particularly asked for help with general stress reduction and for social activities to
engage in with other families so that the veteran's withdrawal did not force them to remain
isolated also. Spouses' desired outcome from such services was a reduction in their own
stress and loneliness.

Support groups described by Williams (1980) and Williams and Williams (1985) include some of the elements spouses requested, embedded within a broader emphasis on the PTSD. Self-help resources published by Mason (1990) and Matsakis (1996, 1998) also include a focus on the needs of the family member as an individual, independent of the PTSD caregiver role. However, such an emphasis on reduction of spousal distress is not a treatment outcome emphasized in the empirical PTSD literature to date, and would add a new category to the support and systemic categories of family treatment identified by Riggs (2000).

Currently, individual therapy and involvement in community organizations offer avenues of engagement for some family members. However, lack of sensitivity to the unique difficulties associated with PTSD can limit the degree to which such general resources are helpful. The greatest gap in services for families remains social and skills building activities tailored for the PTSD family, but with benefit to the family member (rather than the veteran or the relationship) as the targeted goal. Some VA medical centers, Vet Centers, and many veterans' organizations sponsor occasional family outings or holiday gatherings, but in many locales these are infrequent and families only have access through the participation of the veteran.

5. Discussion

The literature clearly demonstrates that when the violence of combat leads to PTSD in the veteran, it can dramatically impact the veteran's loved ones in a broad range of ways. PTSD-related emotional numbing and emotional/behavioral withdrawal are identified as particularly damaging to relationships. Anger outbursts are also cited as problematic, especially in early studies (when the average age of veterans was younger and when the combat exposure was more recent). Controlling for comorbid psychopathology such as depression and substance abuse in future studies would further clarify the source and relative impact of discreet symptom clusters.

There has been much speculation about the means by which the veterans' PTSD exerts its influence on the family. However, the only piece of the puzzle that has been sufficiently

tested empirically is whether it is combat per se or specifically the PTSD engendered by that combat that predicts family distress. On this one point, the literature consistently spotlights PTSD as the critical element. Better understanding of the processes involved in transmission of distress to the family now calls for expanded theoretical modeling and multivariate evaluation of the relative roles of other variables identified in the current literature.

Efforts to relieve tensions and burdens within the families of traumatized veterans may promote effective and efficient care for the veteran as well as reducing the distress of family members. However, research is sorely needed to test the efficacy and effectiveness of intervention paradigms for families. Research is also needed to identify ways to increase engagement in marital/family therapies. Given the level of distress among veterans' family members indicated in a number of studies, research must expand to address interventions aimed at reducing the impact on family members rather than solely viewing interventions as ancillary to the veterans' care and veterans' treatment goals. Collaboration among VA, community groups, and family members is needed to generate creative options and increase the range of clinical services and social activities available to families.

Research on male Vietnam and Israeli veterans comprises most of the literature on combat trauma's impact on the family. In recent years, the American military is becoming more diversified and drawing more heavily on reserve personnel. Increasingly, we see older, part-time military personnel with established families being activated for duty in combat zones, irrespective of gender. We can expect more complex patterns of combat-related family stressors as a function of such diversification (Knox & Price, 1995; Peebles-Kleiger & Kleiger, 1994; Ursano & Norwood, 1996). Investigation of the impact of traumatization within the families of female veterans is particularly encouraged.

Combat is only one subset of the many types of trauma that can occur. No comparative studies of the family impact of various types of trauma were located. However, it seems very plausible that different forms of trauma may affect families in somewhat different ways. Sexual trauma, for example, might have a differential impact on intimacy issues. Disasters that displace whole families and communities may be disruptive in other ways. Further study is needed to identify the degree to which family impact generalizes across types of trauma.

Advances in the scientific study of secondary traumatization will require prioritization of time and resources, but may yield clinical benefits and cost savings in the long run. Appreciation of the difficulties these families face can facilitate collaboration among veterans, family members, clinicians, agencies, and other organizations in identifying and pursuing common goals. When a member of the armed forces is killed in combat, family members receive condolences from "a grateful nation." When that combat veteran survives to struggle with PTSD symptoms for decades, we still need to extend a compassionate hand to that family to help them overcome the isolation in which they all too often find themselves.

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