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Military-related post-traumatic stress disorder and family relations: Current knowledge and future directions

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ABSTRACT

In spite of the continuous wars and political conflicts throughout the world and the compelling evidence establishing an association between PTSD and close relationship problems, only limited review and discussion of these issues have been done. In this review article, we provide a brief description of PTSD and its manifestation in close relationships, present current concepts and models which explain the association between PTSD and family relations and the empirical literature which supports them, present conjoint/family PTSD treatment efforts, and consider future directions for research in this important area.

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Research conducted after various military conflicts has shown that deployment stressors and exposure to combat result in considerable risk for mental health problems, including post-traumatic stress disorder (PTSD), major depression, substance abuse, impairment in social functioning, work impairments, and the increased use of health care services. Current estimates of the psychological toll of the wars in Iraq and Afghanistan indicate that approximately one in five service members is classified as suffering from PTSD following service in these areas (2007). Longitudinal research suggests that the fastest rising concern among these service members is their interpersonal relationship problems (Milliken, Auchterlonie, & Hoge, 2007).

PTSD is characterized by three main clusters of symptoms: Re-experiencing, Avoidance, and Hyperarousal symptoms. Re-experiencing symptoms are characterized by intrusive memories, nightmares, flashbacks, and psychological and physiological reactivity when encountering trauma cues. Avoidance symptoms consist of avoiding thoughts and activities associated with traumatic experiences, inability to recall aspects of the traumatic event, diminished interest, emotional detachment, restricted affect, and a sense of foreshortened future. Hyperarousal symptoms of PTSD include sleep disturbance, irritability/anger, difficulty concentrating, hypervigilance, and an exaggerated startle response (DSM-IV-TR; American Psychiatric

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Association, 2000). It is important to point out that individuals may experience a range of symptom severity and not be diagnosed with PTSD. Consistent with this understanding, many studies have examined PTSD symptom severity versus diagnosis.

The significance of the PTSD symptomatology is that the veteran does not operate in a vacuum. What he/she does, thinks, and feels directly impacts those around him/her (Galovski & Lyons, 2004). Loved ones cope with veteran hypersensitivity, withdrawal, jealousy, verbal abuse, anger and destructiveness. The person with PTSD might look disconnected from the outer world, not available to his family, and may, at times, be perceived to behave in bizarre ways (e.g., flashbacks). The behavioral avoidance symptoms of PTSD can make routine daily activities, such as going to friends, taking part in school parties or kids' programs, difficult (Solomon, 1993). Emotional numbing, which reflects on the ability of those with PTSD to experience and express a range of feelings, can affect attachment to children and intimate partners. Irritability and anger associated with living in a heightened state of physiological arousal can add tension and stress to close relationships, with surrounding others reporting that they "walk on eggshells" because of fear of upsetting their loved one with PTSD or provoking an angry outburst at partners and children (Maloney, 1988).

The current article seeks to widen the understanding of the association between PTSD and family problems. In order to do so we present several constructs and models that have been put forth to explain the association between PTSD and family relation problems (intimate dyads and parent–child relations) and the empirical literature that supports them. In addition, we describe the various family-oriented PTSD treatment efforts, and consider future directions for research in this important area.

1. Constructs and models explaining the association between PTSD and family relations

There are several constructs and a few models that have been put forth to explain the association between PTSD and family problems. Most of the constructs have presumed a causal pathway from PTSD to family problems. The few models put forth are more systemic in nature, hypothesizing a reciprocally causal association between PTSD symptomatology and family functioning.

1.1. Secondary/vicarious traumatization

Clinical observations and empirical research have shown that the consequences of various traumatic events are not limited to the persons immediately exposed to the event, and that they often affect significant others in their environment such as family, friends and caregivers. Such effects include a variety of post-traumatic manifestations, such as headaches, breathing difficulties, intrusive imagery, heightened sense of vulnerability, difficulty trusting others, and emotional numbing. A variety of terms have been used to describe this phenomenon, for example: "secondary traumatization" (Rosenheck & Nathan, 1985), "secondary traumatic stress (STS)" (Figley, 1995), "co-victimization" (Hartsough & Myers, 1985), "secondary survivor" (Remer & Elliot, 1988), or with relation to therapists "traumatic countertransference" (Herman, 1992), and "vicarious traumatization" (McCann & Pearlman, 1990a,b).

Figley (1989) describes the processes postulated to underlie the effects of PTSD on the mental health of significant others. He proposes that secondary traumatization starts with close others' efforts to emotionally support their troubled loved ones, which leads to attempts to understand their feelings and experiences and, from there, to empathize with them. During this process, significant others can take on the traumatized person's feelings, experiences, and even memories as their own, and, hence, their symptoms. In this conceptualization, those who are close to the trauma survivor can be "infected" with trauma symptoms (Catherall, 1992; Figley, 1995).

Support for this conceptualization comes from studies of wives and children of war veterans with PTSD. Various manifestations of emotional distress have been reported among wives of PTSD casualties, including tension and stress (Jordan et al., 1992; Verbosky & Ryan, 1988), loneliness (Solomon et al., 1992), somatic complaints, and psychiatric symptoms (Dirkzwager, Bramsen, Ader, & van der Ploeg, 2005; Westerink & Giarratano, 1999). Moreover, the level of distress of these wives has been found to be associated with the level of the veterans' impairment (Beckham, Lytle, & Feldman, 1996; Riggs, Byrne, Weathers, & Litz, 1998).

There are fewer studies that have examined the mental health and well-being of children of war veterans with PTSD, and these studies have revealed inconsistent findings. Some have found that children of male veterans with PTSD had more behavior problems (Beckham et al., 1997; Davidson, Smith, & Kudler, 1989), higher anxiety (Ahmadzadeh & Malekian, 2004; Beckham et al., 1997) and greater aggression (Ahmadzadeh & Malekian, 2004). Other studies of children of veterans with PTSD have found no differences in their emotional distress (Davidson & Mellor, 2001; Souzzia & Motta, 2004; Westerink & Giarratano, 1999), social development (Ahmadzadeh & Malekian, 2004) or self-esteem (Davidson & Mellor, 2001; Westerink & Giarratano, 1999) compared with children from various control groups.

Most of this research, however, has been conducted among clinical populations that had received mental health treatment. Thus, we lack information on secondary traumatization among children of war veterans who have not received treatment. In addition, while there is evidence that not all children in the same family are affected in the same manner and with the same severity, only a few studies have addressed a child's characteristics such as the child's age, gender or its place among siblings in the family.

With regard to intimate relationship functioning, several cross-sectional studies have found greater intimate relationship distress among wives of veterans with PTSD, as compared with wives of trauma-exposed veterans without PTSD. Female partners of veterans of the Vietnam (e.g., Jordan et al., 1992) and Lebanon (Mikulincer, Florian, & Solomon, 1995; Solomon, 1995; Solomon et al., 1992) wars reported greater relationship conflict, less intimacy, less cohesion, and less relationship satisfaction than partners of veterans who did not have PTSD (Carroll, Rueger, Foy, & Donahoe, 1985; Frederikson, Chamberlain, & Long, 1996; Jordan et al., 1992; Rosenheck & Thomson, 1986). Moreover, a negative association between PTSD severity and marital adjustment both among male (Byrne & Riggs, 1996) and female veterans (Gold et al., 2007) and sexual satisfaction in particular, has been found (Dekel, Enosh, & Solomon, 2008; Nelson Goff, Crow, Reisbig, & Hamilton, 2007). These findings are supported by two longitudinal studies revealing that PTSD symptoms (Koenen, Stellman, Sommer, & Steelman, 2008), and especially the numbing symptoms of PTSD (Lunney & Schnurr, 2007), are associated with intimate relationship satisfaction.

In sum, there is a solid base of evidence that PTSD symptoms are associated with poorer significant other and family functioning, and these results have been found with respect to different wars, at different times, and in different countries. Moreover, an examination of the literature reveals two primary applications of the concept of secondary traumatization (Dekel & Solomon, 2006). The first relates to symptoms of PTSD and other mental health conditions found at the individual level in wives and children of veterans with PTSD. The second refers to any distress that characterizes the relationship of those with PTSD, including relationship adjustment and parenting satisfaction.

However, the presence of an association between veterans' PTSD symptoms and individual and relationship-level distress is not sufficient to support the construct. Most of the results are based on

cross-sectional studies, which make it difficult to know the directionality of problems. It may be that returning home with PTSD to a relationship with pre-existing problems may set the stage for the onset of secondary trauma (Fals-Stewart & Kelly, 2005). Moreover, the specific mechanism of empathy postulated to account for the connection has not been examined. It looks like this concept has been adopted widely to describe the negative consequences on family members, and currently suggests less empirical support for the mechanism under this phenomenon.

1.2. Ambiguous loss

Ambiguous loss is a loss that remains unclear. Uncertainty or a lack of information about the whereabouts or status of a loved one as absent or present, as dead or alive, is traumatizing for most individuals, couples, and families. Ambiguity freezes the grief process (Boss, 2007) and prevents cognition, thus blocking coping and decision-making processes. Without information to clarify their loss, family members have no choice but to live with the paradox of absence and presence (Boss, 2002). When the husband has PTSD, he is physically part of the family but no longer functions as a family member and is not involved with the family as he used to be (Dekel, Goldblatt, Keidar, Solomon, & Polliack, 2005). As a result of continuous ambiguity as to loss of her known partner, the wife may experience symptoms of depression, anxiety, guilt, and distressing dreams. In addition, lack of clarity over the status of one family member immobilizes other family members: decisions are put on hold, and the boundaries of the relationship are unclear.

In a longitudinal study, Faber, Willerton, Clymer, MacDermid, and Weiss (2008) examined the effects of absence of reservists during deployments and their presence following deployment on boundary ambiguity. After the reservists returned, couples, as well as those who had experienced additional life events or losses, experienced the highest levels of boundary ambiguity. However, such boundary ambiguity dissipated over time as families tended to stabilize once the reservists had returned to work and a routine had been established. In addition, a qualitative study of wives of Israeli veterans with PTSD provides some support for the notion of ambiguous loss in the case of PTSD. Wives' concerns included questions about whether the spouse is a husband or another child, and respectively whether he is an independent adult or a dependent person who needs consistent care. Such ambiguity was associated with psychological distress in the women partners (Dekel, Solomon, & Bleich, 2005).

This model suggests that ambiguity is an important mechanism of producing stress among family members and it has been validated in various populations who suffer ambiguity regarding the loss of their loved ones such as in Alzheimer disease or waiting to learn the fate of a child gone missing (Boss, 2007). However, it is not tailored specifically for PTSD, and thus does not take into account the unique characteristics of this disorder. In addition, no operative measures have been developed to assess this construct, which make quantifying the components of this mechanism vague and comparison between situations more difficult.

1.3. Caregiver burden

Caregiver burden is defined as the extent to which caregivers perceive their emotional or physical health, social life, or financial status to be affected by their caring for an impaired relative (Zarit, Todd, & Zarit, 1986). This construct originally emerged in the literature on caregivers of chronically physically ill and mentally ill individuals (Chakrabarti & Kulhara, 1999; Cuijpers & Stam, 2000; Loukissa, 1995; Piccinato & Rosenbaum, 1997), and has been applied to female partners of combat veterans with PTSD.

Several studies conducted on American and Israeli wives of PTSD veterans found that the greater their sense of caregiver burden, the greater their emotional distress (Beckham et al., 1996; Ben Arzi, Solomon, & Dekel, 2000; Calhoun, Beckham, & Bosworth, 2002; Dekel, Solomon et al., 2005; Manguno-Mire et al., 2007). Calhoun et al. (2002) also found that changes in the wives' sense of burden over time predicted analogous changes in their psychological distress, dysphoria, and state anxiety. The role of caregiver burden in wives' secondary traumatization is further highlighted by findings that this variable completely mediated the associations between veterans' psychiatric symptoms and their wives' symptoms, and between veterans' functioning and wives' marital adjustment (Dekel, Solomon et al., 2005). It is also of note that findings also show that wives' sense of caregiver burden was associated both with the severity of their husband's PTSD (Beckham et al., 1996) and with the degree of impairment in his day to day and occupational functioning (Dekel, Solomon et al., 2005).

This model suggests an important and contributing mechanism of transmission. However, it suggests only one mechanism, and does not take into account the pre-trauma situation or any stress buffers or any effects from the spouse/children on the individual with PTSD. It would also be helpful to understand the possible underlying mechanisms that mediate caregiver burden, such as attributions about the veterans' condition.

The commonality among the models reviewed thus far is that they mainly suggest specific mechanisms for transmission of distress from the person with the PTSD to his/her family members. Two recent models suggest several mechanisms for transmission of distress.

1.4. Couple adaptation to traumatic stress (CATS; Nelson Goff & Smith, 2005)

The CATS model provides a systemic description of how couples are affected by traumatization. The model proposes that adaptation to traumatic stress in the couple is dependent on the systemic interaction of three factors: individual level of functioning of each of the partners, predisposing factors and resources, and couple functioning.

The model assumes that a survivor's level of functioning or trauma symptoms sets in motion a systemic response with the potential to result in secondary traumatic stress symptoms in the partner. However, because the model is bi-directional, partners' symptoms may intensify trauma-related symptoms in the survivor (Bramsen, Van der Ploeg, & Twisk, 2002). Individual and couple functioning are determined by predisposing factors and resources, which refer to individual characteristics or unresolved stress experienced by either partner prior to the trauma (McCubbin & Patterson, 1982). Lastly, in between the individual and predisposition layers, there is the "couple functioning" component, which relates to the level and quality of variables such as, relationship satisfaction, support/nurturance, intimacy, communication, and conflict, which are described as mutually influential components of the dyad system.

This model is the first that takes into account the bi-directional transmission of distress as well as predisposition factors of both partners. However, the model does not elaborate specific mechanisms for the transmission. More specifically, it does not delineate the processes by which "unresolved stress" experienced at the individual level is developed or processed. It also does not take into account the parent–child subsystem.

1.5. Cognitive–behavioral interpersonal model

According to this model, there are overlapping cognitive and behavioral mechanisms that influence both the course of PTSD and relationship adjustment. These mechanisms are both intrapersonal and interpersonal in nature. The primary behavioral mechanisms implicated are avoidance of trauma-related stimuli and emotional experiences that serve to maintain PTSD symptomatology and diminish relationship

satisfaction and communication deficits. Behavioral avoidance is associated with diminished relationship satisfaction due to less engagement in mutually reinforcing activities (e.g., dining out, going to child activities), constriction of affective expression, and limited self-disclosure, including trauma-related disclosure to adult loved ones. Indeed, veterans with PTSD have been found to be less self-disclosing and emotionally expressive with their partners (Carroll et al., 1985) and to have greater anxiety related to intimacy (Riggs et al., 1998), as compared with veterans without PTSD.

The emotional process disturbances that have been associated with PTSD, such as alexithymia and difficulties with identifying and expressing emotions (Price, Monson, Callahan, & Rodriguez, 2006), are suspected to contribute to the veteran's emotional communication deficits and related relationship impairments. They are postulated to be specifically deleterious to emotional intimacy and closeness at the relationship level, which has individual repercussions for significant others.

Limited conflict management and problem-solving skills associated with PTSD are also theorized to contribute to the use of aggressive behavior toward partners and children. Several studies found that male veterans diagnosed with PTSD, compared with those without PTSD, are more likely to perpetrate verbal and physical aggression against their partners and children (Carroll et al., 1985; Glenn et al., 2002; Jordan et al., 1992; Verbosky & Ryan, 1988). Severity of violent behavior has been shown to be positively correlated with PTSD symptom severity (Byrne & Riggs, 1996; Glenn et al., 2002) and specifically the hyperarousal symptom severity (Jordan et al., 1992; Taft et al., 2007).

Effects of observational learning (Bandura, 1989) through witnessing inter-parental violence has been manifested among children of war veterans with PTSD. Harkness (1993), for example, found that family violence predicted greater distress in children than did the PTSD itself. In addition, maternal distress related to physical violence victimization has been found to mediate the association between male-to-female aggression and child problems (Street, King, King, & Riggs, 2003). Moreover, Watkins, Taft, Hebenstreit, King, and King (2008) found that physical and psychological aggression perpetrated by both a female veteran and her male partner were associated with child behavior problems. Thus, effects of violence on children go both directly and through their effects on mothers' stress and the family atmosphere as a whole.

In this model, specific disrupted cognitive processes and content are postulated to lead to the development and maintenance of PTSD and family problems. A hallmark cognitive process implicated in the PTSD-relationship distress connection is an attentional bias towards a threat in the environment. This leads a family member with PTSD to perceive more threatening and negative behavior in their loved ones and to have concerns about the safety and trustworthiness of others toward their family. This can also account for the tendency of a parent or partner with PTSD to act in ostensibly controlling ways with loved ones in order to ward off perceived threats by others. The tendency to have cognitive biases toward threatening behavior is also postulated to account for less intimate relationship and parenting satisfaction in veterans with PTSD and then emotional and behavioral functioning in partners and children.

Others have identified belief systems that can be negatively affected by traumatization (Janoff-Bulman, 1992; McCann & Pearlman, 1990a,b). These beliefs, such as trust, power/control, esteem, and intimacy, can be disrupted as they pertain to self and others (e.g., "I can't trust myself to make good decision, and I can't trust others to act in my best interest."). In the model, these beliefs influence appraisals of interpersonal interactions and consequent behavior in family relations. This model also holds that pre-trauma beliefs held by veterans and their loved ones can harden recovery after traumatization. It takes into account emotional, behavioral, and cognitive difficulties associated specifically with PTSD and thus suggest multiple mechanisms of generating distress in these families. However, it is difficult to differentiate between the specific mechanisms which maintain the PTSD and those that interfere with intimate relationships. In addition, the empirical support for this model is based on several studies in which each of them assessed a specific mechanism. None of the studies has examined the model as a whole, enhancing our understanding about the relative importance of each of the mechanisms.

2. Family-focused interventions for veterans with PTSD

There is a paucity of research assessing efficacy of couple and family therapies for PTSD. Although there is widespread recognition about the association between PTSD and family problems, the first generation of evidence-based psychosocial treatments for PTSD have almost exclusively focused on the individual. These individual treatments generally have a 25% to 30% drop-out rate (Hembree et al., 2003) and about 50% of the intention-to-treat samples do not respond or only partially respond to treatment (Van Etten & Taylor, 1998). In addition, there is minimal to no evidence that these treatments result in improved intimate relationship functioning (Galovski, Sobel, Phipps, & Resick, 2005), while there is evidence that individual therapy results are impacted by the family environment (Tarrier, Sommerfield, & Pilgrim, 1999). For these reasons, clinicians and researchers alike have called for investigation of couple and family interventions for PTSD sufferers and their family members. However, examining these interventions, has revealed that most of them related to the relationship problems while not taking into account the specific effects of PTSD on relational functioning. Except for PTSD-specific cognitive–behavioral conjoint therapy for PTSD for veterans with chronic PTSD and their female partners (Monson, Schnurr, Stevens, & Guthrie, 2004), none of the treatments were disorder specific taking into account any of the explanations described in the first part of this article.

2.1. Couple therapies

There have been only two randomized controlled trials of conjoint therapy for veterans with PTSD. In an early small trial, Sweany (1987) found that veterans in multi-couple group behavioral couple therapy (BCT) experienced significant self-reported improvements in PTSD symptoms, relationship satisfaction, and depression compared with wait list control. A larger controlled study, found that Exposure Therapy followed by Behavioral Family Therapy compared with Exposure Therapy alone, led to greater problem solving and communication in couples wherein one member had PTSD (Glynn et al., 1999).

Four other studies have reported uncontrolled treatment outcome data. Cahoon (1984) found that group BCT focused on communication and problem-solving training for combat veterans and their female partners resulted in partner-reported improvements in marital satisfaction and problem-solving communication. The veterans, however, did not report improvements in problem-solving or emotional communication skills.

Two different treatment programs offered in Australia and Israel have included female intimate partners in the programs (Devilly, 2002; Rabin & Nardi, 1991). Devilly (2002) described the outcomes of an uncontrolled study of combat veterans and their partners who participated in an intensive week-long residential group intervention. Both veterans and their partners reported small, but statistically significant, reductions in anxiety, depression, and stress; veterans reported a significant reduction in PTSD symptoms. Small improvements were also observed for anger and quality of life, but not for relationship satisfaction. Another program for veterans with PTSD and their partners was the K'oach program (Rabin & Nardi, 1991). This cognitive–behavioral program included psychoeducation about PTSD and communication and problem-solving skills training. Minimal

outcome data was reported on this intervention; however, 68% of the men and their wives reported relationship improvements. No decrease in veterans' PTSD symptoms was observed.

Monson et al. (2004) report on results of one PTSD-specific cognitive–behavioral conjoint therapy for PTSD for veterans with chronic PTSD and their female partners. They found statistically significant and large effect size improvements in clinicians' and partners' ratings of the veterans' PTSD symptoms. The veterans reported moderate improvements in PTSD and statistically significant and large effect size improvements in depression, anxiety, and social functioning. Wives reported large effect size improvements in relationship satisfaction, general anxiety, and social functioning.

Several other types of conjoint therapies for trauma survivors (e.g., emotion-focused couple therapy; critical interaction therapy) have been described, although no outcome data has yet been published to support their efficacy (Figley, 1989; Johnson, 2002; Johnson, Feldman, & Lubin, 1995; Leonard, Follette, & Compton, 2006).

2.2. Parent–child treatments

We were unable to find any intervention which directly targeted parent–child interactions or parent training for veteran parents with PTSD. Perhaps this is not surprising, given that we could only locate two publications that described interventions with children of veterans with PTSD. Jacobsen, Sweeney, and Racusin (1993) described a psychotherapy group conducted with latency aged children of Vietnam veterans. Their report focused on the psychopathology which became evident in many of the members, particularly in the areas of modulation of aggressive impulses, ability to relate to peers and siblings, and ability to obtain help from adult caregivers in coping with stress. Using a sample of male adolescents of combat veterans who evidenced aggressive behavior, Barekatain, Taghavi, Salehi, and Hasanzadeh (2006) compared Rational–Emotive–Behavioral Therapy (REBT), Relaxation Therapy, and Wait List control conditions. They found that the intervention conditions were superior to the control group in reducing aggressive behavior. However, because these interventions were not specifically developed for children of combat veterans, these results beg the question of whether a specific treatment for this population is needed, or whether they could be treated with any kids who have similar problems and are not children of combat veterans with PTSD.

3. Future directions

There have been substantial advances in the understanding of the association between PTSD and family relations. Early studies documented those effects, and more recent work has elucidated models and specific mechanisms which can be tested. Moreover, the best of these models have appreciated the multi-directional effects of PTSD symptoms on family relations and vice versa. Forward evolution toward theoretically-driven work would be an important progress for the field. Parallel to the advances in more basic research accounting for the association between PTSD and family relationship, treatment efforts in this area have evolved from the application of generic couple/family interventions to PTSD-specific therapies designed to ameliorate the symptoms of the disorder and improve relationship functioning and the well-being of significant others surrounding those with PTSD.

Only a few studies to date have examined associations between PTSD and family relationship issues with longitudinal data, which enables examination of causal and bi-directional effects. Future longitudinal studies guided by theoretical models accounting for the association between PTSD and intimate relationships over time are sorely needed. It is important for these studies to employ a developmental perspective. For instance, how do family lifecycle issues, such as children at different ages and caring for aging parents, interact with the presence of PTSD in the couple relationship?

PTSD without at least one comorbid condition is the exception versus the rule. The most commonly occurring comorbidities are depression, substance use disorders, and personality disorders (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). The current type of warfare (e.g., improvised explosive devices) and advances in our understanding of traumatic exposure has also brought growing recognition of the possibility of comorbid cognitive impairments related to traumatic brain injury (TBI) during military service (Hoge et al., 2004). We located only a few studies that examined the effects of comorbid conditions on the association between PTSD and intimate relationship problems (Savarese, Suvak, King, & King, 2001 examined comorbid alcohol use; Taft, Vogt, Marshall, Panuzio, & Niles, 2007, examined depression). These studies, which revealed unique contributions of the respective comorbidities, highlight the importance of taking comorbid conditions into consideration in assessing the family lives of veterans who suffer from PTSD.

Understanding the role of PTSD in parenting and intervention in this domain is very limited and suffers from major limitations. Most studies, with a few exceptions (Dansby & Marinelli, 1999; Harkness, 1993; Westerink & Giarratano, 1999), have assessed child outcomes based on their PTSD-diagnosed veteran fathers' reports. These fathers may perceive the behavior of their children as problematic, not because of the behavior itself, but because of reporting biases associated with PTSD (Harkness, 1993). There is limited consideration of child characteristics that may influence outcomes, including age (Parsons, Kehle, & Owen, 1990; Rosenheck & Fontana, 1998) and gender (Dansby & Marinelli, 1999; Parsons et al., 1990). Without taking into account a developmental perspective and other factors that have been shown to be related to child outcomes, it is impossible to evaluate the unique contribution of PTSD on child outcomes. As in the realm of adult intimate relationships, more studies that examine mechanisms through which these effects occur are needed. Moreover, there are several evidence-based parenting interventions (Lundahl, Risser, & Lovejoy, 2006) that might be adapted and applied to military/veteran families to help ameliorate child problems associated with living with a parent with PTSD and enhancing the child–parent relationships.

It is also important to remember that the intimate dyad and parental subsystems are indeed, related (Erel & Burman, 1995). Parenting deficits are not the only way in which PTSD might affect children in the family. Family atmosphere and conflict, dyadic satisfaction and commitment, are only a few of the factors which have been shown to effect child development (e.g., Keller, Cummings, Davies, & Mitchell, 2008). Moreover, we emphasized the relationships between veterans and their loved ones. The nature of family relations surrounding the veteran is suspected to change due to their return with PTSD. When a veteran returns with PTSD, these relationships must continue to evolve and change in light of the mental health problems. More research is needed on this topic.

More attention should be paid to the growing number of female veterans and their families. There have been only few studies that specifically assessed the family relations and parenting of female Vietnam veterans (Berz, Taft, Watkins, & Monson, 2008; Gold et al., 2007; Watkins et al., 2008). Their findings were consistent with what was found among male veterans and their families. The increasing numbers of female veterans, and the accumulative knowledge about the role of mothers in transmitting PTSD among Holocaust survivors (Yehuda, Bell, Bierer, & Schmeidler, 2008) call for research and better understanding of these families.

Although our review highlights the family problems found in the lives of veterans with PTSD, it is imperative to bear in mind that not all veterans exposed to trauma develop PTSD. Even among those with PTSD, there is heterogeneity in their presentation, severity, and chronicity (Beckham, Moore, & Reynolds, 2000; Mazzeo, Beckham,

Witvliet, Feldman, & Shivy, 2002). Thus, it is equally important that we learn from those veterans and their family members who have had success in maintaining and preserving healthy relations in their families. Risk and resilience factors that serve to moderate distress and promote resiliency, should be examined to inform prevention and treatment efforts.

However, untreated, PTSD is most often a chronic disorder with a fluctuating course. We believe that consideration of couple and family functioning should begin at initial assessment and throughout treatment planning. Couple, family, and child-related services should be officially recognized as part of the repertoire of treatment services available for all veterans.

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