## SECONDARY TRAUMATISATION AND SYSTEMIC TRAUMATIC STRESS

#### Miro Klarić<sup>1</sup>, Ante Kvesić<sup>2</sup>, Vjekoslav Mandić<sup>3</sup>, Božo Petrov<sup>1</sup> & Tanja Frančišković<sup>4</sup>

<sup>1</sup>Department of Psychiatry, School of Medicine, University of Mostar, Mostar, Bosnia and Herzegovina <sup>2</sup>Department of Pediatric Surgery, School of Medicine, University of Mostar, Bosnia and Herzegovina <sup>3</sup>Department of Obstetrics and Gynecology, School of Medicine, University of Mostar, Bosnia and Herzegovina <sup>4</sup>Department of Psychiatry, School of Medicine, University of Rijeka, Croatia

#### **SUMMARY**

Traditionally, research has been focused on the development of symptoms in direct trauma survivors. However, during the last two decades researchers and clinicians have started exploring the way individual traumatic stress exposure affects trauma victims' spouses, children and professional caregivers. Studying trauma within the family is a part of what is called systemic traumatology, a study of groups, institutions and other human systems that show stress reactions directly caused by a traumatic event or series of events. The effect of an individual's traumatic stress on family members and on persons in direct contact is conceptualized as secondary traumatisation. In its narrow sense, secondary traumatisation involves a transfer of nightmares, intrusive thoughts, flashbacks and other Posttraumatic Stress Disorder symptoms, which are typically experienced by individuals suffering from PTSD, onto their immediate surroundings. In its broader sense, the term refers to any kind of distress transfer from a trauma victim to their immediate surroundings, and includes a broad spectrum of distress manifestation along with that resembling Posttraumatic Stress Disorder. Beyond that, a family member's PTSD is potentially transferable to subsequent generations, interfering with the psychological development of children.

Key words: secondary traumatization – PTSD – family - systemic traumatic stress

\* \* \* \* \*

#### Introduction

The need for systematic study and treatment of trauma and its consequences has been conditioned by many factors including the growing public and professional awareness of long-term consequences of traumatic events. Many regard the publication of the third edition of Diagnostic and Statistical Manual of Psychiatry-DSM-III, 1980 a milestone in the progress of research within this area of medicine. This edition gives credibility to different theories and research findings on psychological trauma founded on research of long-term effects of war, hostage situations, rapes, family violence, natural disasters, accidents and deaths of beloved ones. Namely, DSM-III formally included the diagnosis of Posttraumatic Stress Disorder (PTSP) and since then, for the first time, the common symptoms experienced by a broad spectrum of traumatised persons have been regarded as a valid psychiatric disorder that can be diagnosed and treated. This has contributed to an increase in the number of experts working with traumatised persons as well as the amount of empirical research that has tried to illuminate and validate this disorder. However, while the direct effects of psychological trauma have been extensively studied, the secondary effects of living with a PTSD sufferer remains a less studied field of research. During the last three decades research has however recognized the effects of PTSD on family members as well as the fact that the families of PTSD veterans were essentially different from those not having a PTSD member (Figley

1998, Galovski & Lyons, 2004). Since one of the main protective factors in posttraumatic recovery is the family itself, the destruction and functional damaging of this protective factor, and above all the partnership, enables further pathology to develop from posttraumatic distress in both partners (Goff & Smith 2005, Klarić et al. 2008, 2011, 2012).

#### **Family and PTSD**

PTSD is a chronic, disabling disorder marked by a spectrum of long-term symptoms often resistant to treatment. Many of them have direct effects on the behaviour of the sufferer, and the symptoms that interfere with the social relations of the sufferer have a most relevant nature (McFarlane 2009, Harkness & Zador 2001). Avoidance, psychic numbing, withdrawal, distancing, withheld affect and loss of interest for activities which were once enjoyed are the symptoms that endanger the ability to retain the intimacy of family life (Riggs et al. 1998). Symptoms of hyper-vigilance including increased irritability and hostility can result in significant problems with aggression control, which in turn leads to anger outbursts, rage, hostility and even domestic violence or physical abuse. In addition, many PTSD sufferers experience diminished sexual drive and problems in sexual functioning (Kotler et al. 2000, Letourneau et al. 1997). Many of them have difficulties in functioning outside their homes, socially and professionally, which results in high unemployment rates (Kulka et al. 1990, Solomon 1993).

# **Development of the Concept of Secondary Traumatic Stress**

Although the criteria for a traumatic event (Criterium A) in the DSM-III and DSM-III-R (Diagnostic and Statistical Manual of Psychiatry-DSM-III, 1980; 1987), and particularly in DSM-IV and ICD-10 (Diagnostic and statistic manual of mental disorders, 1996), clearly suggest that people can be traumatised directly and indirectly, a small number of experts explicitly recognize this conceptual point. In their trauma-related article review report, quoted in Psychological summaries, Blake et al. (Blake et al. 1992) have corroborated the viewpoint that since PTSD concept development, trauma-related literature has significantly increased. However, Blake's report, as well as most other contemporary reports, suggested the fact that even after more than a decade of use, the diagnosis of PTSD has been mainly used for people exposed to one of many types of traumatic events, excluding those who were vicariously or indirectly traumatised. Among the first ones to emphasize that the number of "victims" of violent crimes, accidents and other traumatic events was grotesquely underestimated, because the victims' families and friends were excluded, was Charles R. Figley (Figley, 1995). However, it took more than a decade of PTSD concept usage and two DSM revisions to create such a framework and to bring into consideration the least studied and understood aspect of traumatic stress, the Secondary Traumatic Stress (STS). Nowadays, the term secondary traumatisation in its narrow sense refers to the transfer of nightmares, intrusive thoughts, flashbacks and other symptoms of posttraumatic stress disorder that are typically experienced by traumatised individuals suffering from PTSD onto their immediate surroundings. In its broad sense, the term secondary traumatisation refers to any kind of distress transfer from someone who experienced trauma to those in their surroundings, and includes a broad spectrum of distress manifestation along with that resembling Posttraumatic Stress Disorder (Dekel & Solomon 2006).

#### Social Aspect of the Development of Secondary Traumatic Stress Disorder (STSD)

Different sources have confirmed that social support is one of the strongest resources for dealing with stress and trauma, and that it plays a major role in the healing process (Lincoln et al. 2005, Neria et al. 2008, Bisson et al. 2007, Klarić et al. 2008). Social support implies natural support coming from the family, friends, and acquaintances that care for the primary trauma victim (Figley 1998, Compton et al. 2005, Walsh 2007, MacGeorge 2007). In the middle of the seventies Mileti et al. noted that disasters not only affect the individual but also other levels of human systems (family, narrow and broad community) (Mileti et al. 1975), while Figley was among the first ones to examine the family system in a situation of single member traumatisation (Figley 1986). Figley analysed the social support factors (emotional caring, comfort, love, encouragement, counselling, company and specific help) and concluded that they work as an "antidote" to stress disorders. He also noted that the family members and other helpers become vulnerable through their empathy and that they could develope Secondary Traumatic Stress Disorder (STSD).

## Forms/Models of Secondary Traumatisation

In order to describe the negative effects of secondary traumatisation on individuals close to primary trauma victims, this phenomenon was referred to differently in the last quarter-century. These terms are often related to the "cost of caring" for others in emotional pain (Figley 1995). Among dozens of works in this general field this phenomenon is called secondary traumatisation (Figley 1983, 1989), co-victimisation (Hartsough & Myers 1985), indirect victimisation (McCann & Pearlman 1989), traumatic counter-transfer (Herman 1992), and contact victimisation (Courtois 1988). In an attempt to describe the effects that traumatic work could have on psychotherapists, McCann and Pearlman coined a term "vicarious traumatisation" (McCann & Pearlman 1989). Other concepts that appear to overlap with Secondary Traumatic Stress (STS) or Secondary Traumatic Stress Disorder (STSD), and are related to persons close to the traumatised individual, include: war veterans' closeness effect on their partners (Verbosky & Ryan 1988), family crisis related to rape (White & Rollins 1981), "rescuer syndrome" (NiCathy et al. 1984) and trans-generational trauma transfer (Danieli 1985). Although these terms weren't able to capture all aspects of the problems of close relationship with the traumatic events victims, they do acknowledge some of the specific effects of secondary traumatisation (McCann & Pearlman 1989, 1991). Four terms have become conventional and popular: burnout, secondary traumatisation, fatigue, and vicarious traumatisation.

## Burnout

Based on the search of PsycINFO, it seems that burnout is the oldest of these concepts that was introduced into scientific literature by Herbert J. Freudenberger in 1974 in his classical study of staff burnout ("Staff Burnout") (Freudenberger 1974). Shortly after that, Christina Maslach, a sociopsychologist, published the first in a series of studies aiming to divide and refine the meaning and measuring the concept of burnout (Maslach 1976). Burnout was most commonly related to the accumulation of stressors destroying an individual's high ideals, motivation and dedication to a certain area, profession, or career. According to Pines and Aronson, burnout is a state of physical, emotional and mental exhaustion caused by long-term engagement in emotionally demanding situations (Pines & Aronson 1988). Burnout is more of a process than an unchangeable state, which gradually begins and progressively deteriorates. In a vast review of empirical research on burnout symptoms, Kahill (Kahill 1998) identified five symptom categories:

- Physical symptoms (fatigue and physical exhausttion, sleeping problems, certain somatic problems such as headaches, gastric-bowel disorders, immunity decrease);
- Emotional symptoms (irritability, anxiety, depresssion, guilt, helplessness);
- Behavioural symptoms (aggression, cold-heartedness, pessimism, defensiveness, cynism, substance abuse);
- Work-related symptoms (poor work performance, often sick leave, constant tiredness, break-time abuse at work, quitting jobs);
- Relational symptoms (superficial communication with..., inability to concentrate and focus on..., withdrawal from...., and then dehumanizing, intellectualizing etc.).

## **Secondary Traumatisation**

Secondary traumatisation emerges as a result of close emotional connection with and caring for someone showing PTSD symptoms, or as a result of knowing about or witnessing a traumatic event suffered by a significant other (Figley 1995). Secondary Traumatic Stress (STS) is defined as natural consequence of behaviour and emotions that result from knowing about a traumatizing event experienced by a significant other, or the stress resulting from helping or wanting to help a traumatized or suffering person (Figley 1993, 1995, 1998). In contrast to burnout which emerges gradually and is a result of emotional exhaustion, STS can emerge suddenly and without warning. Accumulating STS that leads to emotional exhaustion and emotional burnout represents Secondary Traumatic Stress Disorder (STSD) which was summarized by Figley with the term «cost of caring» (Figley 1995). STSD is manifested by symptoms similar to PTSD, including re-experiencing, constant vigilance, memory avoidance, as well as numbing in emotions and actions. It is a moment in which family members withdraw emotionally or physically (or both) for a period of time. The most dramatic burnout effect on families is the disruption of the family relationship due to abandonment, separation or divorce, which results in poor or nonexistent mutual contact (Figley 1995, 1998).

#### **Compassion Fatigue**

Although STS and STSD are the latest and most exact descriptions of what has been observed over hundreds of years with the sufferers' helpers, according to Figley, the most friendly term for this phenomenon is compassion fatigue (Figley 1995). This term was first used by Joinson in 1992 discussing burnout among nurses, not excluding other persons who experience STS and STSD in their profession (Joinson 1992). The Croatian Encyclopaedic Dictionary defines compassion as feeling sorry for the person struck by suffering or misfortune, and sharing his sorrow and grief (Anić et al. 2002). Antonyms of this term are and "mercilessness" and "indifference".

At the crux of the theory and concept of fatigue occurrence is empathy and exposure to the suffering of others. If there is no empathy towards others, or if we do not expose ourselves to traumatised people, we do not have reason to worry about compassion fatigue occurrence. Groups at particular risk for developing compassion fatigue are caregivers and professionals working with traumatised people on a daily basis (Figley 1995; 1998, Matsakis 2009). This particular vulnerability can be attributed to many reasons, most of which are related to the fact that caregivers and therapists are always surrounded by extremely intensive factors causing trauma. As a result, regardless of how much they try to avoid it, the helpers are being drawn into that intensity.

## Vicarious Traumatisation (VT)

Vicarious traumatisation (VT) characterises the cumulative effect of working with trauma survivors, including the victims of rape, incest or domestic violence (McCann & Pearlman 1991). VT is a framework for emotional, physical and spiritual transformations experienced by people (therapists, researchers, social workers, lawyers) working with traumatised persons. Related terms include loss of compassion and Secondary Traumatic Stress (STS) (Campbell 2002, Figley 2002).

Working with traumatised clients can affect workers in many obvious and subtle ways. Persistent feelings of fear and vulnerability, difficulties in trusting others, violent and intrusive thoughts, inability to make change in their clients' lives, as well as cynical worldview are the examples of this transformative process (McCann & Pearlman 1991, Pearlman & Saakvitne 1995). Workers and victims often experience parallel emotional reactions (Figley 1995, 1998).

## **Understanding Secondary Traumatic Stress of Spouses**

The couple is a corner stone of the family and represent a basic unit of reproduction, intimacy and love

(Blumstein & Schwartz 1983). Due to the especially close, often emotionally intense nature of spousal relationships, spouses are usually at a high risk of STS effects. The interactive nature of spousal relationship, cultural norms, expectations, and feelings of obligation all contribute to the susceptibility of the spouse to the stress of the other. In contrast to direct experience of traumatic stress, STS results from the spouse's need to make sense of and "emotionally connect" with the primary trauma victim" (Matsakis 2009, Figley 1995, 1998).

Research findings that describe how supporting a person who suffered a traumatic experience can have strong and stressful effects on the supporter are convincing (Dekel & Solomon 2006, Matsakis 2009, Frančišković et al. 2007, Klarić et al. 2010a, 2012, Kira 2004, Dirkzwager et al. 2005). Spousal contact during manifestation of PTSD symptoms can take its toll and decrease the abilities of the other spouse (Calhoun et al. 2002, Goff et al. 2006, Klarić et al. 2010b, 2012). The partner who experienced the traumatic event might be unwilling to talk about it with the spouse, and act moody and unpredictable. Also, the supporder may experience PTSD symptoms without understanding their cause. The outcome may be that the PTSD disrupts the relationship with the supporting spouse, leaving the supporting spouse ultimately burned out, psychologically weakened and dissatisfied (Matsakis 2009).

In a national study of Vietnamese veterans and their partners, Kulka et al. noted that partners of Vietnamese veterans with PTSD have more problems than partners of Vietnamese veterans without PTSD (Kulka et al. 1990). They stated that they were not very happy and satisfied, had more general distress, even feelings of an imminent nervous breakdown. They also stated more social isolation and higher domestic violence. In Maloney's qualitative study of partners of Vietnamese veterans, six women stated that their panic episodes had similar triggers to those of their spouses, such as the sound of a helicopter, sudden noises, shooting, the smell and sound of spring rain, view of the fog, meeting oriental persons, and the smell of strong moisture (Maloney 1988).

Patience Mason used her own experience as well as the experience of other Vietnamese veterans' spouses in describing the accompanying long-term symptoms of the spouses of Vietnamese veterans with PTSD (Mason 1990). The most common symptoms were: anger towards the spouse or the army; somatic ailments such as back pain or headache; mistrust; hyper-vigilance, particularly in relation to something that could disturb their husbands; depression and suicidal thoughts; feeling overwhelmed, i.e. unable to perform; emotional numbing and guilt. She also noted that those women had difficulty falling asleep, and when they did, they had nightmares about being in Vietnam or witnessing horrible things happening to their family members, especially children. Matsakis also identified women in her support groups having PTSD symptoms such as insomnia, and fearfulness and dreaming about being in Vietnam (Matsakis 2009). These women felt isolated, helpless and overly cautious near their violent husbands, especially in the context of protecting their children. Coughlan and Parkin noted that spouses of Vietnamese veterans with PTSD imitate their partners' symptoms (Coughlan & Parkin 1987). These symptoms emphasised other problems and prevented women from resolving their own stress reactions and supporting their husbands. Solomon also noted that Israeli soldiers had problems with family reintegration upon returning from the battlefield, which resulted in additional spousal stress and decreased the ability to provide support (Solomon 1988; 1993). Similar results were found in spouses of WWII veterans (Bramsen et al. 2002, Dekel & Solomon 2006,), as well as in spouses of B&H and Croatian Homeland war veterans (Klarić et al. 2010, 2011, 2012, Zalihić et al. 2008, Frančišković et al. 2007).

# Effect of Combat Exposure and PTSD on Parenthood

PTSD sufferers can have significant difficulties in relationships with their children due to their own emotional difficulties and behavioural patterns (McFarlane 2009, Galovski & Lyons, 2004, Klarić et al. 2008). Although PTSD veterans often report that their children are their only link to and source of meaning in their lives, they lack either the patience or the will to deal with them in a proper manner. Veterans can have difficulties recognising the degree of child agression that is appropriate to the child's age or in coping with such behaviour. This can result in avoiding interactions with children, overreacting or overprotecting. Harkness determined that veterans' parenting is characterised by controlling, overprotective and demanding relationships with their children (Harkness 1993). The development of such close, enmeshed relationships between veterans and their children has been cited in several studies (Rosenheck & Thomson 1986, Harkness 1993). An uncontrolled and retrospective study by Rosenheck (1986) pointed out the variability in individual family situations, child/father relationships, and resultant symptomatology (Rosenheck & Thomson 1986). In that study 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 centred around the veterans' irritability, aggressiveness, depression, and withdrawal. Adult children recalled their fathers' nightmares, emotional outbursts, crying spells, and displays of erratic behaviour. These symptoms were largely unintelligible

in their childhood and contributed to a family atmosphere of fear, caution, and guilt. The family members felt as if they were walking on edge. The descriptions of their emotional relationship with their fathers ranged from embroiled and highly emotional to aloof and distanced. In a study by Davidson and Mellor (Davidson & Mellor 2001) it was shown that the PTSD veterans' children assessed their families to be at a clinical level of dysfunction, which was not the case in veterans without PTSD. In a study of Vietnamese PTSD veterans Ruscio et al. (Ruscio et al. 2002) suggested that avoidance, detachment and numbing symptoms impair veterans' ability to engage in normal interactions with their children, which is necessary for the development of a meaningful relationship. The results confirm that PTSD symptoms directly affect veterans' ability to parent which definitely impacts the development process of their children. (McFarlane 2009, Galovski & Lyons, 2004).

## Veterans PTSD Effect on Psychosocial Development of Children

For a variety of reasons in the traumatized family system, children represent an especially vulnerable population (McFarlane 2009, Cash 2006). Many studies have established that in comparison with children of combat veterans without PTSD, the children of combat veterans with PTSD have more frequent and more serious developmental, behavioural, and emotional problems (Galovski & Lyons, 2004, Kulka et al. 1988, Jacobsen 1993, Beckham et al. 1997, Klarić et al. 2008, Ancharoff et al. 1998, Caselli & Motta 1995, Harkness 1991). Some of them also have specific psychiatric problems (Davidson 1989).

Interviews with spouses and partners of combat veterans revealed that children of veterans with PTSD have more behavioural problems (Kulka et al. 1988) and more frequent problems with authority, depression, anger, hyperactivity, and personal relationships (Jacobsen 1993, Ancharoff et al. 1998, Caselli & Motta 1995) than children of veterans without PTSD. They are also more aggressive, use opiate drugs more often (Beckham et al. 1997), and have learning difficulties and problems with dyadic relations and emotional regulation (Harkness 1991). However, Harkness (Harkness 1991, 1993) did not find a significant association between the intensity of PTSD symptoms in veteran fathers and the behaviour of their children. On the other hand, it seems that the children of Vietnam War veterans did have behavioural problems, with veterans' PTSD being a possible indirect factor in this association (Rosenheck & Fontana 1998a). It is assumed that direct war experience may disrupt the capacity of veterans to function as parents, leading to difficulties in the development and behaviour of their children (Harkness 1993, Rosenheck & Fontana 1998a).

## **Transgenerational Trauma Transfer**

Research on people surviving mass traumatisation such as the Holocaust and theVietnamese war, and the phenomenon of the so called "selected trauma", has spurred thoughts on if and how a traumatic experience can be transferred to next generations (Dekel & Goldblatt 2008, Volkan 2006, 1999). It is certain that growing up in a traumatic environment, which often kept a family secret, leaves a mark even if the trauma did not cause psychopathology in parents (Volkan 1999, Steinberg 1998). The mark is imprinted in childrearing models used by parents but also in the fantasies developed by a child about the causes of "something important and unsaid" inside the family. Research has shown that parental PTSD affects childrearing processes making them more vulnerable to traumatic events later in their lives (McFarlane 2009, Caselli & Motta 1995, Rosenheck & Fontana 1998).

Modified by the disorder, the attachment that children of PTSD parents receive and develop, certainly leaves an imprint in the emotional memory of the children (Hartsough & Myers1985, Dekel & Goldblatt 2008). By revealing epigenetic effects of traumatic experience on gene expression patterns, and the ways in which childrearing can be modified by trauma, neuroscientific research today is paving the way for a better understanding of trauma transmission through generations (McLeod et al. 2001, Connor 1997, 2003). The phenomenon of mirror neurons shows that parental trauma cannot go undetected (Connor 2003) and that the children "recognise" it without words. Indeed, when something that is important "cannot" be said and explained to children, it can have an even more significant developmental impact (Galovski & Lyons, 2004, McFarlane 2009).

## Conclusion

Due to the extensive health, social, and economic consequences, trauma and PTSD are an increasing global public health concern. Even though research has traditionally focused on the development of symptoms in direct trauma victims, more recently an increasing amount of research points to the interpersonal effect of an individual's trauma on members of the family. Studying trauma within the family is a part of what is called systemic traumatology. Empirical research findings clearly indicate that living in a family with a PTSD member can have a deep impact on other members of the family, the family dynamics, and the family system in its entirety. Traumatised families cope with the manifesttation of the family member's posttraumatic symptoms within the family dynamic, with Secondary Traumatic Stress, burnout, or compassion fatigue as a consequence. In addition, the PTSD of a family member has the potential to be transferred to subsequent generations, thus interfering with the psychological development of the children.

#### Acknowledgements: None.

Conflict of interest : None to declare.

#### References

- 1. American Psychiatric Association . Diagnostic and Statistical Manual of Mental Disorders. Third Revised Edition (DSM-III-R). Washington DC: APA; 1987.
- 2. American Psychiatric Association. Diagnostic and Statistical Manual of Psychiatry (DSM-III). Washington DC: APA; 1980.
- 3. Ancharoff MR, Munroe JF, Fisher LM. The legacy of combat trauma: Clinical implications of intergenerational transmission. In: Danieli Y, editor. International handbook of multigenerational legacies of trauma. New York (NY): Plenum; 1998. p. 257-76.
- 4. Anić V, Brozović-Rončević D, Cikota LJ, Goldstein I, Goldstein S, Jojić LJ, Pranjković I, Matasović R. Hrvatski enciklopedijski rječnik. Zagreb: Novi Liber; 2002. str. 1256.
- 5. Beckham JC, Braxton LE, Kudler HS, Feldman ME, Lytle BL, Palmer S. Minnesota Multiphasic Personality Inventory profiles of Vietnam combat veterans with posttraumatic stress disorder and their children. J Clin Psychol. 1997; 53:847-52.
- 6. Bisson JI, Ehlers A, Matthews R, Pilling S, Richards D, Turner S. Psychological treatments for chronic posttraumatic stress disorder. Systematic review and metaanalysis. Br J Psychiatry. 2007; 190:97-104.
- 7. Blake DD, Albano AM, Keane TM. Twenty years of trauma: Psychological abstracts 1970 through 1989. J Trauma Stress. 1992; 5:477-84.
- 8. Blumstein P, Schwartz P. American couples. New York: William Morrow and Co; 1983.
- 9. Bramsen I, Van der Ploeg HM, Twisk JWR. Secondary traumatization in Dutch couples of World War II survivors. J Consult Clin Psychol. 2002; 70:241–245.
- 10. Calhoun PS, Beckham JC, Bosworth HB. Caregiver burden and psychological distress in partners of veterans with chronic posttraumatic stress disorder. J Trauma Stress. 2002; 15:205-12.
- 11. Campbell R. Emotionally involved: The impact of researching rape. New York: Routledge; 2002.
- 12. Caselli LT, Motta RW. The effect of PTSD and combat level on Vietnam veterans' perceptions of child behavior and marital adjustment. J Clin Psychol. 1995; 51:4-12.
- 13. Cash A. Posttraumatic Stress Disorders. New Jersey: Wiley; 2006. p. 295-313.
- 14. Compton MT, Thompson NJ, Kaslow NJ. Social environment factors associated with suicide attempt among low-income African Americans: the protective role of family relationships and social support. Soc Psychiatry Psychiatr Epidemiol. 2005; 40:175-85.
- 15. Connor KM, Butterfield MI. Posttraumatic Stress Disorder. Focus. 2003; 1:247-62.
- 16. Connor KM, Davidson JR: Familial risk factors in posttraumatic stress disorder. Ann N Y Acad Sci 1997; 821:35–51.
- 17. Coughlan K, Parkin C. Women partners of Vietnam vets. J Psychosoc Nurs Ment Health Serv 1987; 25:25-27.

- 18. Courtois C. Healing the incest wound: Adult survivors in therapy. New York: Norton; 1988.
- 19. Danieli Y. The treatment and prevention of long-term effects and intergenerational transmission of victimization: A lesson from holocaust survivors and their children. In: Figley CR, editor. Trauma and its wake: Study and treatment of PTSD. New York: Brunner /Mazel; 1985, p. 295-313.
- 20. Davidson AC, Mellor DJ. The adjustment of children of Australian Vietnam veterans: Is there evidence for the transgenerational transmission of war-related trauma? Aust N Z J Psychiatry. 2001; 35:345-51.
- Davidson J, Smith R, Kudler H. Familial psychiatric illness in chronic posttraumatic stress disorder. Compr Psychiatry. 1989; 30:339-45.
- 22. Dekel & Solomon. Secondary Traumatization Among Wives of War Veterans with PTSD. In: Charles R. Figley, William P. Nash, editors. Combat Stress Injury: Theory, Research, and Management. New York: Routledge; 2006, p 137-157.
- 23. Dekel R, Goldblatt H, Keidar M, Solomon Z, Polliack M. Being a Wife of a Veteran with Posttraumatic Stress Disorder\* Family Relations. 2005; 54:24–36.
- 24. Dekel R, Goldblatt H. Is There Intergenerational Transmission of Trauma? The Case of Combat Veterans' Children. Am J Orthopsychiatry. 2008; 78:281–89.
- 25. Dijagnostički i statistički priručnik za duševne poremećaje (DSM-IV). Međunarodna verzija s MKB-10 šiframa. Jastrebarsko: Naklada Slap; 1996.
- 26. Dirkzwager AJ, Bramsen I, Adèr H, van der Ploeg HM. Secondary traumatization in partners and parents of Dutch peacekeeping soldiers. J Fam Psychol. 2005; 19:217-26.
- 27. Figley CR, editor. Compassion Fatigue: Coping with Secondary Traumatic Stress Disorder in Those Who Treat the Traumatized. New York (NY): Brunner /Mazel; 1995.
- 28. Figley CR. Burnout as systemic traumatic stress: A model for helping traumatized family members. In. Figley CR, editor. Burnout in Families: The Systematic Costs of Caring. New York (NY): CRC Press; 1998, p. 15-28.
- 29. Figley CR. Compassion stress and the family therapistr. Family Therapy News. 1993, p.1-8.
- 30. Figley CR. The family as victim: Mental health implications. In: Bemer P, editor. Proceedings of the VIIth World Congress of Psychiatry. London: Plenum; 1983, p. 377-83.
- 31. Figley CR. Toward a field of traumatic stress. J Trauma Stress 1988; 1:3-16.
- 32. Figley CR. Traumatic stress: The role of the family and social support system. In: Figley CR, editor. Trauma and its wake: Traumatic stress theory, research, and intervention. New York (NY): Brunner/Mazel; 1986.
- 33. Figley CR. Treating compassion fatigue. New York: Routledge; 2002.
- 34. Figley CR. Treating stress in families. New York: Brunner /Mazel; 1989.
- 35. Franciskovic T, Stevanovic A, Jelusic I, Roganovic B, Klaric M, Grkovic J. Secondary traumatization of wives of war veterans with posttraumatic stress disorder. Croat Med J 2007; 48:177-84.
- 36. Freudenberger HJ. Staff burnout. Journal of Social Issues 1974; 30:159-65.
- 37. Galovski T, Lyons JA. Psychological sequelae of combat violence: a review of the impact of PTSD on the veteran's

family and possible interventions. Aggression and Violent Behavior. 2004; 9:477-501.

- 38. Gilbert K. Understanding the Secondary Traumatic Stress of Spouses. In: Figley CR, editor. Burnout in Families: The Systematic Costs of Caring. New York (NY): CRC Press; 1998. p. 47-75.
- 39. Goff BS, Reisbig AM, Bole A, Scheer T, Hayes E, Archuleta KL, Henry SB, Hoheisel CB, Nye B, Osby J, Sanders-Hahs E, Schwerdtfeger KL, Smith DB. The effects of trauma on intimate relationships: a qualitative study with clinical couples. Am J Orthopsychiatry. 2006; 76:451-60.
- 40. Goff BS, Smith DB. Systemic traumatic stress: the couple adaptation to traumatic stress model. J Marital Fam Ther. 2005; 31:145-57.
- Harkness L, Zador N. Treatment of PTSD in families and couples. In: Wilson JP, Friedman MJ, Lindy JD, editors. Treating psychological trauma and PTSD. New York: Guilford; 2001. p. 335-53.
- 42. Harkness LL. The effect of combat-related PTSD on children. National Center for PTSD Clinical Newsletter. 1991; 2:12-13.
- 43. Harkness LL. Transgenerational transmission of warrelated trauma. In: Wilson JP, Raphael B, editors. International handbook of traumatic stress syndromes. New York: Plenum; 1993. p. 635-43.
- 44. Hartsough D, Myers D. Disaster work and mental health: Prevention and control of stress among workers. Washington DC: NIMH, Center for Mental Health Studies of Emergencies; 1985.
- 45. Hartsough DM, Myers DG. Disaster Work and Mental Health: Prevention and Control of Stress Among Workers. Rockville, MD: National Institute of Mental Health; 1985.
- 46. Herman JL. Trauma and recovery. New York: Basic Books; 1992.
- 47. Jacobsen LK, Sweeney CG, Racusin GR. Group psychotherapy for children of fathers with PTSD: Evidence of psychopathology emerging in the group process. Journal of Child and Adolescent Group Therapy. 1993; 3:103-20.
- 48. Janoff-Bulman R. Shattered assumptions: Toward a new psychology of trauma. New York: The Free Press; 1992.
- 49. Joinson C. Coping with compassion fatigue. Nursing 1992; 22:116-22.
- 50. Kahill S. Interventions for bumout in the helping professions. Canadian Journal of Counselling Review. 1998; 22:310-42.
- 51. Kira I. Secondary trauma in treating refugee survivors of torture: Systemic traumatic stress: the couple adaptation to traumatic stress model. Torture 2004; 14:38-45.
- 52. Klarić M, Franciskovic T, Stevanovic A, Petrov B, Jonovska J, Nemcic Moro I. Marital quality and relationship satisfaction in war veterans and their wives in Bosnia and Herzegovina. Eur J Psychotraumatol 2011; 2. doi: 10.3402/ejpt.v2i0.8077.
- 53. Klarić M, Frančišković T, Černi Obrdalj E, Petrić D, Britvić D, Zovko N. Psychiatric and health impact of primary and secondary traumatization in wives of veterans with posttraumatic stress disorder. Psychiatria Danubina; 2012; 24:694-699.
- 54. Klarić M, Frančišković T, Klarić B, Krešić M, Grković J, Diminić Lisica I, Stevanović A. Social support and PTSD symptoms in war-traumatized Women in Bosnia and Herzegovina. Psychiatr Danub 2008; 20:466-73.

- 55. Klarić M, Frančišković T, Klarić B, Kvesić A, Kaštelan A, Graovac M, Diminić-Lisica I. Psychological Problems in Children of War Veterans with Posttraumatic Stress Disorder in Bosnia and Herzegovina: Cross-Sectional Study. Croat Med J 2008; 49:491-8.
- 56. Klarić M, Frančišković T, Pernar M, Nemčić Moro I, Milićević R, Černi Obrdalj E, Salčin Satriano A. Caregiver Burden and Burnout in Partners of War Veterans with Post-traumatic Stress Disorder. Coll. Antropol. 2010b; 34 Suppl.1:15–21.
- 57. Klarić M, Frančišković T, Salčin Satriano A. Obitelj i psihotrauma (pregledni članak). Medicina fluminensis; 2010a; 46:309-317.
- 58. Klarić M. Suvremeni koncepti prevencije i liječenja profesionalnog izgaranja i posredne traumatizacije. U: Jakovljević M, ur. Nove ideje i koncepti u suvremenoj psihijatriji. 4 «Mostarska psihijatrijska subota». Pro Mente d.o.o. Zagreb; 2008, str. 154-163.
- 59. Kotler M, Cohen H, Aizenberg D, Matar M, Loewenthal U, Kaplan Z et al. Sexual dysfunction in male posttraumatic stress disorder patients. Psychother Psychosom 2000; 69:309–15.
- 60. Kulka RA, Schlenger WE, Fairbank JA, Hough RL, Jordan BK, Marmar CR, Weiss DA. Contracted reports of findings from the National Vietnam Veterans Readjustment Study. Research Triangle Park (NC): Research Triangle Institute; 1988.
- 61. Kulka RA, Schlenger WE, Fairbank JA, i sur. Trauma and the Vietnam War generation: Report of findings from the national Vietnam veterans readjustment study. New York: Brunner/Mazel; 1990.
- 62. Letourneau EJ, Schewe PA, Frueh CB. Preliminary evaluation of sexual problems in combat veterans with PTSD. J Trauma Stress 1997; 10:125–32.
- 63. Lincoln KD, Chatters LM, Taylor RJ. Social Support, Traumatic Events, and Depressive Symptoms Among African Americans. J Marriage Fam 2005; 67:754-66.
- 64. MacGeorge EL, Samter W, Feng B, Gillihan SJ, Graves AR. After 9/11: goal disruption, emotional support, and psychological health in a lower exposure sample. Health Commun 2007; 21:11-22.
- 65. Maloney LJ. Post traumatic stresses of women partners of Vietnam veterans. Smtth College Studies in Social Work. 1988; 58:122-43.
- 66. Maslach C. Burn-out. Hum Behav. 1976; 5:16-22.
- 67. Mason PHC. Recovering from the war: A woman's guide to helping your Vietnam veteran, your family, and yourself. New York: Viking Penguin; 1990.
- 68. Matsakis A. Živjeti s veteranom. Zagreb: Medicinska naklada; 2009.
- 69. McCann IL, Pearlman LA. Vicarious traumatization: The emotional costs of working with survivors. Treating Abuse Today 1991; 3:28-31.
- McCann L, Pearlman LA. Vicarious traumatization: A framework for understanding the psychological effects of working with victims. J Trauma Stress 1989; 3:131-49.
- 71. McFarlane AC. Military deployment: the impact on children and family adjustment and the need for care. Curr Opin Psychiatry. 2009; 22:369-73.
- 72. McLeod DS, Koenen KC, Meyer JM, Lyons MJ, Eisen S, True W, Goldberg J. Genetic and environmental influences on the relationship among combat exposure, posttraumatic stress disorder symptoms, and alcohol use. J Trauma Stress 2001; 14:259–75.

- 73. Mileti D, Drabek TE, Haas JE. Human systems in extreme environments. Boulder: University of Colorado, Institute of Behavioral Science; 1975.
- 74. Mio JS, Foster JD. The effects of rape upon victims and families: Implications for a comprehensive family therapy. Am J Fam Ther. 1991; 19:147-59.
- 75. Neria Y, Nandi A, Galea S. Post-traumatic stress disorder following disasters: a systematic review. Psychol Med. 2008; 38:467-80.
- 76. NiCathy G, Merriam K, Coffman S. Talking it out: A guide to groups for abused women. Seattle: Seal Press; 1984.
- 77. Pearlman LA, Saakvitne KW. Trauma and the therapist: Countertransference and vicarious traumatization in psychotherapy with incest survivors. New York: WW; 1995.
- 78. Pines AM, Aronson E. Career burnot: Causes and cures. New York: Free Press; 1988.
- 79. Riggs DS, Byrne CA, Weathers FW, Litz BT. The quality of the intimate relationships of male Vietnam veterans: Problems associated with posttraumatic stress disorder. J Trauma Stress 1998; 11:87–101.
- 80. Rosenheck R, Fontana A. Transgenerational effects of abusive violence on the children of Vietnam combat veterans. J Trauma Stress 1998; 11:731–41.
- 81. Rosenheck R, Fontana A. Warrior fathers and warrior sons: Intergenerational aspects of trauma. In: Danieli Y, editor. International handbook of multigenerational legacies of trauma New York (NY): Plenum; 1998a. p. 225-42.
- 82. Rosenheck R, Nathan P. Secondary traumatization in children of Vietnam veterans. Hospital and Community Psychiatry 1985; 36:538-39.
- 83. Rosenheck R, Thomson J. "Detoxification" of Vietnam

War trauma: A combined family-individual approach. Fam Process 1986; 25:559-70.

- 84. Rothschild B, Rand ML. Help for the Helper. Self-Care Strategies for Managing and Stress. New York (NY): Norton; 2006. p. 1-9.
- 85. Ruscio AM, Weathers FW, King LA, King DW. Male warzone veterans' perceived relationships with their children: The importance of emotional numbing. J Trauma Stress 2002; 15:351-57.
- 86. Solomon Z. The effect of combat-related posttraumatic stress disorder on the family. Psychiatry 1988; 51:323-29.
- 87. Solomon, Z. Combat Stress Reaction: The Enduring Toll of War. New York: Plenum Press; 1993.
- 88. Steinberg A. Understanding the secondary traumatic stress of children. In: Figley CR (ed.) Burnout in Families: The Systematic Costs of Caring. New York (NY): CRC Press; 1998; 29-46.
- 89. Verbosky SJ, Ryan DA. Female partners of Vietnam veterans: Stress by proximity. Issues Ment Health Nurs 1988; 9:95-104.
- 90. Volkan VD. Individual and large-group identity: parallels in development and characteristics in stability and crisis. Croat Med J 1999; 40:458-65.
- Volkan VD. Killing in the Name of Identity: A Study of Bloody Conflicts. Oregon: Pitchstone Publishing; 2006.
- 92. Walsh F. Traumatic loss and major disasters: strengthening family and community resilience. Fam Process. 2007; 46:207-27.
- 93. White PN, Rollins JC. Rape: A family crisis. Family Relations 1981; 30:103-09.
- 94. Zalihić A, Zalihić D, Pivić G. Influence of posttraumatic stress disorder of the fathers on other family members. Bosn J Basic Med Sci 2008; 8:20-6.

Correspondence: Miro Klarić, MD, PhD Department of Psychiatry, School of Medicine, University of Mostar 88000 Mostar, Bosnia and Herzegovina E-mail: klaricmiro@gmail.com