

Trauma Aftermath - Who is Really at Risk?

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Many seasoned police officers, firefighters, emergency medical personnel, and mental health professionals see themselves as (and probably are) hardier than most. Does prior experience with critical incidents tend to diminish or enhance one's ability to withstand the effects of exposure to traumatic events? What life experiences and human traits put certain people we treat or teach at greater risk for a stress disorder after a traumatic event or personal loss? As psychologists, what do we need to be mindful of to determine when we ourselves are at risk? What factors tend to reduce such vulnerability?

A New Zealand study of 527 working police officers, described by researchers Christine Stephens, Nigel Long, and Ross Flett, "showed that the number of different traumatic events was positively correlated with the intensity of Posttraumatic Stress Disorder (PTSD) symptoms and that repeated experience of the same type of event predicted higher PTSD scores." Police officers with military combat experience exhibited more PTSD symptoms (Stephens & Miller, 1998; Stephens et al., 1999).

When police officers, other first responders, and mental health workers accumulate "incidents attended and more years of service," a "stair-step" phenomena has been observed in which unresolved previous trauma builds on itself (Stephens et al., 1999; Moran & Britton, 1994; and Williams, 1993, in J.M. Violanti & D. Paton, eds., *Police Trauma*, 1999). Risk factors multiply especially for police officers, since comparisons with other community groups indicate that male recruits were two to three times more likely to have been assaulted previously and female recruits were two to three times more likely to have been sexually assaulted. "Police work may attract those with unresolved traumatic stress" (Stephens et al., 1999).

The psychological risks for professionals who are on the scene at traumatic events can exceed those of the actual victims. Remarkably, in the aftermath of the 1995 Oklahoma City bombing, the rate of PTSD among helping professionals was three times that of survivors (Becker, 2002). Vicarious traumatization (VT) can strike the therapists who repeatedly hear anguished victims' stories. What predisposes therapists to the normal response of VT are the same factors that predispose many other psychologically stable individuals to PTSD. In addition, "newness to the profession, under-utilization of case supervision/consultation, and little or no experience with one's own personal psychotherapy" increase risk (Neumann, 2002).

Prior traumatic experience, particularly violent experience, abuse or catastrophe when young or separating or divorcing parents prior to age 10, increases adult vulnerability to stress disorders (Breslau, Chilcoat, Kessler & Davis, 1999; Bremner, Southwick, Johnson & Charney, 1993). Suffering a life-threatening illness such as cancer in childhood or adolescence may render one similarly vulnerable (Hudson, 2003). As psychologist Terence Keane, of Boston University School of Medicine, explains, "It is the combination of adult and childhood trauma that is a difficult one for most resilient people." Other key factors he lists include absence of social support, current life stressors, low socioeconomic status and low educational levels of parents, adverse childhood events in general, and gender imbalance; where men are more likely to be exposed, twice as many women meet the criteria for PTSD, but men tend more toward anti-social behavior and substance abuse (Keane, 2002).

Illuminating studies "indicate that child maltreatment alters biological systems" (Putnam and Trickett, 1998). Particularly during "windows of vulnerability," when even "small or transient environmental insults may have disproportionate effects on the subsequent function of biological systems," neglect starting early and spanning a considerable portion of childhood can have a profound and enduring impact. Sexual abuse - depending on variables such as severity, duration, frequency, use of force, relationship to the perpetrator, and age at onset—may contribute to "decreases in immune competence," changes in "levels of stress-related hormones and neurotransmitters," and other biological changes (Putnam and Trickett, 1998). "Adults whose primary care givers turned against them as children are likely to have sustained the most damaging results" (Keane, 2002).

Poverty also - particularly when it begins early and lasts long - can have devastating effects on mental and physical health, including stress disorders in the face of later trauma (Comer, 2002; Children's Defense Fund, 2003). Growing up with daily burdens, in dangerous neighborhoods with few social supports available, significantly affects a person across his or her lifespan (Duncan, Brooks-Gunn & Klebanov, 1994; Berk, 2004).

In the aftermath of the September 11 attacks, Hispanics who lived near the World Trade Center had higher rates of PTSD and depression than people from other ethnic groups (Gales, Ahern and Resnick, et al., 2002). The influence of cultural factors is seen also in higher rates of PTSD among Hispanic Vietnam war veterans (Ortega, 2000). Other predictors of both PTSD and depression after the terrorist attacks in Manhattan were “two or more prior stressors [and] a panic attack during or shortly after the events.” Loss of possessions because of the attacks also increased vulnerability to PTSD while “low level social support, the death of a friend or relative during the events, and loss of a job due to the attacks” were additional predictors of depression. Among the 1008 adults interviewed for this study –five to eight weeks after September 11th - 7.5 percent met the criteria for PTSD and 9.7 percent described symptoms consistent with a current depression. The rate of PTSD among those residing south of Canal Street (near the twin towers) was 20.0 percent (Gales, et al., 2002).

As tens of thousands of American soldiers return from battle in Afghanistan and Iraq, their increased psychological vulnerability is worth remembering (Long, Chamberlain & Vincent, 1992). Of the 1.5 million Vietnam combat veterans, one-fourth were arrested within two years of returning home! They were twice as likely to divorce as the general population and 25 percent more likely to commit suicide (Williams, 1983). In a general population survey of 2,493 U.S. citizens, PTSD symptoms were three times more prevalent in civilians who had been physically attacked and Vietnam veterans who were not wounded. Wounded Vietnam veterans had PTSD symptoms twenty times higher than the general population. Behavioral problems before the age of 15 increased the risk of PTSD in the aftermath of trauma (Helzer, Lee, Robins, and McEvoy, 1987). Duration and harshness of the traumatic experience and/or witnessing injury or death also increased the likelihood of developing a stress disorder (Putnam, 1996; Kessler, Sonnega, Bromet, Hughes & Nelson, 1995).

The DSM-IV-TR reports an 8 percent lifetime prevalence of PTSD in the adult U.S. population (2002). According to Rachel Yehuda (1999), the most prevalent precipitating events in women are rape and physical assault (one-third of reported cases) and for men seeing someone seriously hurt or killed and being physically assaulted (one-fourth and one-fifth of reported events).

Since traumatic events trigger physical changes in the brain and body, not surprisingly, genes interact dynamically with environmental influences. A study of genetic risk factors for PTSD looked at 4,000 pairs of twins who had served in Vietnam and found that if one identical twin developed stress symptoms following combat, the other identical twin was almost twice as likely as a fraternal twin to show the same symptoms (True & Lyons, 1999; True, Rice, Eisen, et al., 1993).

In addition to “evidence of a heritable component to the transmission of Posttraumatic Stress Disorder,” the DSM-IV-TR notes that “a history of depression in first-degree relatives” increases vulnerability (American Psychiatric Association, 2000). Because many traumatized people show depressive symptoms within one week and the accompanying redundant rumination makes a person more likely to develop PTSD, just debriefing is not enough. Treatment for depression is also necessary to reduce vulnerability.

If we are mindful of the accumulated risk factors that render people susceptible to stress disorders or depression in the aftermath of trauma, we can better serve them. Perhaps not often enough, however, do we take inventory of our own vulnerability. Whether deciding to volunteer following a critical incident, working as a therapist with trauma victims, or dealing with a loss or traumatic event in our own lives— such mindfulness can put us in a position better to help others and ourselves.

References Available on Request. ψ