Trauma-Informed Care in Behavioral Health Services

Treatment Improvement Protocol (TIP) Series

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Part 3: A Review of the Literature

Contents:

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Section 1—A Review of the Literature

Introduction to Trauma and Traumatic Stress Reactions

Providing a comprehensive literature review on trauma, traumatic stress, trauma-informed care (TIC), and trauma-related interventions is a daunting task when considering the quantity and prolific production of research in this area in the past 20 years. To manage the volume of information, this literature review mainly focuses on reviews and meta-analyses rather than seminal work to address many of the most relevant topics.

What Is Trauma?

In this text, "trauma" refers to experiences that cause intense physical and psychological stress reactions. "Trauma results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual's functioning and physical, social, emotional, or spiritual well-being" (Substance Abuse and Mental Health Services Administration [SAMHSA], Trauma and Justice Strategic Initiative, 2012, p. 2). Although many individuals report a single specific traumatic event, others, especially those seeking mental health or substance abuse services, have been exposed to multiple or chronic traumatic events. According to the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5), trauma is defined as when an individual person is exposed "to actual or threatened death, serious injury, or sexual violence" (American Psychiatric Association [APA], 2013, p. 271).

The definition of psychological trauma is not limited to diagnostic criteria, however. In fact, some clinicians have moved away from considering trauma-related symptoms as indicators of a mental disorder and instead view them as part of the normal human survival instinct or as "adaptive mental processes involved in the assimilation and integration of new information with intense survival emphasis which exposure to the trauma has provided" (Turnbull, 1998, p. 88). These normal adaptive processes only become pathological if they are inhibited in some way (Turnbull, 1998), or if they are left unacknowledged and therefore untreated (Scott, 1990).

Trauma has been characterized more broadly by others. For example, Horowitz (1989) defined it as a sudden and forceful event that overwhelms a person's ability to respond to it, recognizing that a trauma need not involve actual physical harm to oneself; an event can be traumatic if it contradicts one's worldview and overpowers one's ability to cope.

How Common Is Trauma?

Trauma exposure is common in the United States. However, trauma exposure varies considerably according to different demographic characteristics and is especially high among clients receiving behavioral health services (see the discussions under the headings "Extent and Effects of Trauma and Traumatic Stress Reactions in Specific Populations" and "Other Disorders That May Be Related to Trauma " for more information on relevant rates). Although the large surveys discussed here provide data on trauma exposure for the general population, published

literature often provides more specific data as well, which is one reason why differences in exposure according to gender and race/ethnicity are highlighted here.

At one time, trauma was considered an abnormal experience. Contrary to this myth, the first National Comorbidity Study (NCS), a large national survey designed to study the prevalence and effects of mental disorders in the United States, established how prevalent traumas are in the lives of the general U.S. population (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). Presented with a list of 11 types of traumatic experiences and a 12th "other" category, 60.7 percent of men and 51.2 percent of women reported experiencing at least one trauma in their lifetime (Kessler, 2000; Kessler et al. 1995; 1999):

- The most common trauma was witnessing someone being badly injured or killed (cited by 35.6 percent of men and 14.5 percent of women).
- The second most common trauma was being involved in a fire, flood, or other natural disaster (cited by 18.9 percent of men and 15.2 percent of women).
- The third most common trauma was a life-threatening accident/assault, such as from an automobile accident, a gunshot, or a fall (cited by 25 percent of men and 13.8 percent of women.

The NCS also found that it was not uncommon for individuals to have experienced multiple traumatic events (Kessler, 2000). Among men in the total sample, 14.5 percent reported two traumatic events, 9.5 percent reported three, 10.2 percent reported four or more, and 26.5 percent reported only one such event. Among women, 13.5 percent of the total sample reported two traumatic events, 5 percent reported three, 6.4 percent reported four or more, and 26.3 percent reported only one.

The National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) is another large national survey of behavioral health, but it only assessed posttraumatic stress disorder (PTSD) and trauma exposure in its second wave of interviews, in which 34,653 of the original 43,093 respondents were reinterviewed (Pietrzak, Goldstein, Southwick, & Grant, 2011a). In the Wave 2 interview, respondents were asked about 27 different types of potentially traumatic events; the most commonly reported traumatic events were serious illness or injury to someone close (affecting 48.4 percent of those who did not have PTSD symptoms and 66.6 percent of those with PTSD), unexpected death of someone close (affecting 42.2 percent of those without PTSD and 65.9 percent of those with PTSD), and seeing someone badly injured or killed (affecting 24 percent of those without PTSD and 43.1 percent of those with PTSD; Pietrzak, Goldstein, Southwick, & Grant, 2011a). According to the same data, 71.6 percent of the sample witnessed trauma, 30.7 percent experienced a trauma that resulted in injury, and 17.3 percent experienced a trauma that was purely psychological in nature (e.g., being threatened with a weapon; El-Gabalawy, 2011).

NESARC also found that exposure to specific traumatic events varied considerably according to race, ethnicity, or cultural group. The survey found that 83.7 percent of non-Latino White Americans reported a traumatic event, compared with 76.4 percent of African Americans, 68.2 percent of Latinos, and 66.4 of percent of Asian Americans, Native Hawaiians, or Pacific Islanders (Roberts, Gilman, Breslau, Breslau, & Koenen, 2011). Exposure to specific traumas also varied considerably. White Americans were more likely to report an unexpected death of

someone they knew (44.7 percent did) than were African Americans (39.9 percent), Latinos (29.6 percent), and Asian Americans, Native Hawaiians, or Pacific Islanders (25.8 percent) as well as being more likely to report having a close friend/relative who experienced a life-threatening injury. On the other hand, African Americans were the most likely to report being the victim of assaultive violence (29.7 percent), followed by White Americans (26.1 percent), Latinos (25.6 percent), and Asian Americans, Native Hawaiians, or Pacific Islanders (16.3 percent). In terms of combat trauma, White Americans and African Americans were about as likely to have been combatants (10 percent of each group reported combat trauma), and more likely than Asian Americans, Native Hawaiians, or Pacific Islanders (5.4 percent) or Latinos (4.4 percent). However, Asian Americans, Native Hawaiians, or Pacific Islanders were the most likely to have been unarmed civilians in a war zone (7.5 percent), followed by Latinos (3.8 percent), White Americans (2 percent), and African Americans (1.9 percent).

Across the world, according to data from the World Health Organization (WHO) surveys, which includes the NCS and NCS replication (NCS-R) and surveys from 20 other countries, the most commonly reported traumas are the death of a loved one (30.5 percent), witnessing violence to others (21.8 percent), and experiencing interpersonal violence (18.8 percent; Stein et al., 2010). As Kessler (2000) noted, trauma from assaultive violence in the United States is likely to be more common than in most other developed countries in general. However, trauma related to other traumatic events (e.g., automobile accidents, natural disasters) appear to be quite similar throughout developed countries.

A longitudinal survey from New Zealand also provides useful data on trauma exposure. In this survey, a cohort of subjects from a single town was interviewed at age 26 and again at age 32 in order to evaluate what constituted the worst trauma those individuals had experienced (Koenen, Moffitt et al., 2008). The types of worst experiences reported before age 26 were:

- Sudden unexpected death by trauma of a close family member or friend (38 percent).
- Personal assault or victimization (32 percent).
- Serious accidents (14 percent).
- Hearing about or witnessing a close friend or relative experiencing an assault, serious accident, or serious injury (12 percent).
- Personal illness (3 percent).
- Natural disaster (1 percent)

How Common Are Traumatic Stress Reactions?

As with trauma rates, PTSD rates vary considerably across different demographic groups. The reader should consult the section titled “Extent and Effects of Trauma and Traumatic Stress Reactions in Specific Populations” for more specific information on PTSD rates. More general information from major surveys is included in this section.

The DSM-5 (APA, 2013) estimates that the prevalence rate of PTSD in the U.S. adult population is about 8 percent, but studies of populations at high risk for PTSD (e.g., combat veterans, survivors of natural disasters) have found PTSD rates ranging from 3 to 58 percent. The NCS (which evaluated behavioral health disorders, including PTSD) found that, for Americans ages 15 to 54, the lifetime prevalence of PTSD (based on DSM Third Edition, text revision [DSM-III-

R; APA, 1987] criteria) was 7.8 percent, with women more than twice as likely as men to have the disorder during their lives (10.4 percent of women and 5 percent of men; Kessler et al., 1995). In the NCS-R, which interviewed 9,282 individuals ages 18 and older between February 2001 and April 2003, the lifetime prevalence of PTSD was 6.8 percent, again with a much higher rate for women (9.7 percent) than for men (3.6 percent; Kessler, Berglund et al., 2005; NCS, 2005). The past-year prevalence rate for PTSD was 3.5 percent, with 5.2 percent of women and 1.8 percent of men having PTSD in the 12 months prior to their interviews (Kessler, Chiu et al., 2005).

Kessler, Berglund et al. (2005) examined the issue of lifetime prevalence in the NCS-R to determine whether the prevalence statistics of the NCS were still valid in light of changes to the diagnostic criteria that occurred with the publication of the DSM Fourth Edition, text revision (DSM-IV-TR; APA, 2000). The study was divided into two parts. Part I included face-to-face diagnostic interviews of 9,282 participants who were 18 years of age or older. Part II included factors related to diagnosis (e.g., risk factors) and was completed only with participants from Part I who had a "lifetime disorder" and a probability sample from other Part I participants (n=5,692). Data analysis in this study estimated a lifetime PTSD prevalence of 6.8 percent, but the authors also analyzed the data to determine projected lifetime risk and found that at age 75, the lifetime risk for PTSD was 28 percent higher than the lifetime prevalence estimate. However, the authors suggested that because of certain study limitations (e.g., related to sample parameters, reluctance to participate or to disclose diagnoses), these results should be considered a conservative estimate.

As noted earlier, Wave 1 of NESARC did not evaluate PTSD, but Wave 2 found that 6.4 percent of the population (8.6 percent of women and 4.1 percent of men) had PTSD at some point during their lives (Pietrzak et al., 2011a). NESARC researchers also evaluated lifetime prevalence of partial PTSD (defined as including at least one symptom under Criteria B, C, and D, with symptom duration of at least 1 month) and found that 6.6 percent of the total population (8.6 percent of women and 4.5 percent of men) met criteria for partial but not full PTSD at some point during their lives. It should be noted, however, that most large behavioral health surveys, such as the NCS and NESARC, rely on retrospective evaluation of symptoms, and some research indicates that they underestimate behavioral health disorders compared with prospective longitudinal studies (Moffitt et al., 2009). Differences in prevalence estimates may also be related both to changes in PTSD diagnostic criteria and to a variety of methodological differences in the research (e.g., different diagnostic instruments, procedures) on which these estimates were based (Kessler, 2000; Kessler, Chiu et al., 2005; Kessler et al., 1995; Narrow, Rae, Robins, & Regier, 2002).

It is also worth noting that delayed PTSD may account for a considerable percentage of PTSD cases. A meta-analytic review that included studies in which individuals were assessed 1 to 6 months after trauma exposure and again at least 6 months later found that 24.8 percent of PTSD cases involved delayed trauma (Smid, Mooren, van der Mast, Gersons, & Kleber, 2009). Studies included in the review found between 3.8 and 83.3 percent of their samples had delayed PTSD. Factors that were associated with significantly greater odds of having delayed rather than nondelayed PTSD included a Western (as opposed to non-Western) cultural background and military combat exposure.