The terrorist attacks on the United States on September 11, 2001, turned a public spotlight on reactions to traumatic events, which are quite common. According to epidemiological studies, approximately 60% to 90% of individuals in the United States have experienced at least one traumatic event in their lifetimes. Although the majority of traumatized individuals recover, a significant minority develops chronic, debilitating psychological symptoms, with estimates of lifetime posttraumatic stress disorder (PTSD) ranging between 8% to 14% of the general population, rendering this disorder a major public health concern.

Once established, PTSD is unlikely to remit without treatment. Fortunately, the past 15 years have seen significant advances in our knowledge about how to treat PTSD and this knowledge has informed the Treatment Guidelines of the International Society for Traumatic Stress Studies and Expert Consensus Guidelines for PTSD. Both guidelines concluded that selective serotonin reuptake inhibitors and psychotherapeutic interventions had efficacy in treating PTSD. The two largest studies on the efficacy of selective serotonin reuptake inhibitors involved paroxetine and sertraline and both medications received FDA indication for PTSD. Most psychosocial intervention studies for PTSD involved cognitive behavioral therapy programs, with exposure therapy being the most well-supported and studied cognitive behavioral therapy procedure across trauma populations.

We welcome you to this issue of Psychiatric Annals devoted to PTSD and trauma. It includes five articles by leaders in the field that summarize the state of our knowledge on the influence of early life experiences, the neurobiology of PTSD, interventions delivered shortly after trauma to prevent chronic reactions, and pharmacotherapy and psychotherapy for chronic PTSD. Although limited space prevented the articles from being all-inclusive, they summarize current thinking in the field.

In “Neurobiology of Early-Life Stress,” Christine Heim, Gunther Meinschmidt, and Charlie Nemeroff discuss the potential influence of early-life stress. Findings from laboratory animal studies demonstrate that early-life stress induces persistent sensitization of neuroendocrine, autonomic and behavioral responses to subsequent stress. This increased stress reactivity is associated with multiple neurochemical alterations in brain circuits that are involved in the mediation or control of the stress responses, including those that use corticotropin-releasing factor, norepinephrine, serotonin, Y-aminobutyric acid, neuropeptide Y, and oxytocin as neurotransmitters. The
introduction

authors suggest that changes at various levels of the stress response system as a consequence of early-life stress may converge into biological “priming” for the development of PTSD related to subsequent trauma. They further propose that early-life stress may directly induce PTSD or may increase individual risk for the development of PTSD in response to later traumas.

In her article entitled, “Adult Neuroendocrine Aspects of PTSD,” Rachel Yehuda presents a summary of current biological findings in adults with PTSD. In this review, the majority of studies demonstrate alterations consistent with hyperactivity of the hypothalamic-pituitary-adrenal axis.

In the article entitled, “Early Interventions Following Traumatic Events,” Jonathan Bisson reviews the evidence for the effectiveness of all forms of early intervention administered during the first month following the traumatic event. There has been considerable debate regarding which, if any, early interventions are effective. Dr. Bisson concludes his article with proposed evidence-based guidelines.

In the article entitled “Augmenting Exposure Therapy With Other CBT Procedures,” Edna Foa, Barbara Rothbaum, and Jami Furr review well-controlled studies that compared the efficacy of exposure therapy to programs that used exposure in combination with other cognitive behavioral therapy techniques, such as stress inoculation training and cognitive therapy. Exposure therapy for anxiety disorders comprises a set of techniques designed to help patients confront their feared objects, situations, memories, and images in a therapeutic manner. With PTSD, commonly the core components of exposure programs are imaginal exposure, i.e., repeated recounting of the traumatic memory, and in vivo exposure, i.e., repeated confrontation with trauma-related situations and objects that evoke excessive anxiety. (See Foa and Rothbaum for a comprehensive discussion of exposure therapy for PTSD.) Foa, Rothbaum, and Furr conclude that programs that include both imaginal and in vivo exposure are highly effective in ameliorating PTSD and related symptoms, resulting in 60% to 80% reduction in PTSD symptom severity, and that more complex cognitive behavioral therapy programs did not augment the efficacy of exposure therapy alone.

Finally, Matthew Friedman, Craig Donnelly, and Thomas Mellman review the pharmacotherapy literature on PTSD in “Pharmacotherapy for PTSD,” with an eye toward practitioners. Rather than a dry review of the literature, they have focused on the major concerns of prescribing psychiatrists and provide a synthesis of the research literature in a form that directly facilitates common clinical decisions. It has been a pleasure working with prominent leaders in the field of PTSD.

REFERENCES


