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Most people over the course of their lives will experience a potentially traumatic event (Copeland, Keeler, Angold, & Costello, 2007; Kilpatrick et al., 2013; McLaughlin et al., 2013). Those exposed to traumatic events have a range of reactions that include changes in emotions, memories, sleep, arousal, and other psychophysiological responses. Most reactions remit spontaneously within weeks (Nugent et al., 2009; Orcutt, Erickson, & Wolfe, 2004; Rothbaum, Foa, Riggs, Murdock, & Walsh, 1992), but for some individuals, these reactions persist and the person goes on to develop posttraumatic stress disorder (PTSD). Several factors contribute to whether a person develops a disorder or has a particularly complex presentation. Although almost 90% of U.S. adults are exposed to traumatic events (Kilpatrick et al., 2013), the lifetime prevalence of PTSD among adults is between 6% and 9%, with rates approximately 2.5 times higher in women than in men (Goldstein et al., 2016; Kilpatrick et al., 2013; National Comorbidity Survey, 2017). Comorbidities and other related symptoms are common and include substance use and abuse, depression, anxiety, dissociation, nonsuicidal self-injury, and suicide. Despite the high prevalence of exposure to traumatic events and subsequent development of PTSD for some of those individuals, far fewer individuals get appropriate care (Institute of Medicine [IOM], 2014; Mental Health America, 2018). People with PTSD need access to high-quality care and services that have strong support for their efficacy.
This casebook introduces each of the interventions recommended for adults with PTSD in the American Psychological Association’s [APA’s] Clinical Practice Guideline for the Treatment of PTSD (APA Clinical Practice Guideline; APA, 2017a). The guideline outlines seven psychotherapies and four medications with good evidence for efficacy (see Table 1.1). The interventions are cognitive behavior therapy (CBT) and specific variants of CBT, including cognitive processing therapy (CPT), cognitive therapy (CT), and prolonged exposure (PE); brief eclectic psychotherapy (BEPP); eye-movement desensitization and reprocessing (EMDR); narrative exposure therapy (NET); and medications (specifically fluoxetine, paroxetine, sertraline, and venlafaxine). The four psychotherapies that received strong recommendations are presented in alphabetical order, followed by the three psychotherapies with conditional recommendations, also in alphabetical order. (A conditional recommendation was given when the evidence supported the efficacy of the intervention, but the guideline development panel determined the overall strength of evidence, balance of benefits vs. harms, patient preferences and applicability did not warrant a strong recommendation.) The final intervention chapter is on medications.

Although other interventions are used in the treatment of PTSD (e.g., psychodynamic psychotherapy), the panel did not have sufficient evidence to make a recommendation for or against these. Absence of evidence is not evidence of lack of efficacy; rather, recommendations regarding efficacy could not be made. Future research will contribute to our knowledge about commonly used and newly emerging interventions over time.

**TABLE 1.1. Summary of Recommendations of the APA Guideline Development Panel for the Treatment of Posttraumatic Stress Disorder (PTSD)**

<table>
<thead>
<tr>
<th>Psychotherapy</th>
<th>Strength of recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>For adult patients with PTSD, the panel strongly recommends that clinicians offer one of the following psychotherapies or interventions (listed alphabetically):</td>
<td>Strong</td>
</tr>
<tr>
<td>• cognitive behavior therapy (CBT)*</td>
<td></td>
</tr>
<tr>
<td>• cognitive processing therapy (CPT)</td>
<td></td>
</tr>
<tr>
<td>• cognitive therapy (CT)</td>
<td></td>
</tr>
<tr>
<td>• prolonged exposure (PE) therapy</td>
<td></td>
</tr>
<tr>
<td>For adult patients with PTSD, the panel suggests that clinicians offer one of the following psychotherapies or interventions (listed alphabetically):</td>
<td>Conditional</td>
</tr>
<tr>
<td>• brief eclectic psychotherapy (BEPP)</td>
<td></td>
</tr>
<tr>
<td>• eye-movement desensitization and reprocessing therapy (EMDR)</td>
<td></td>
</tr>
<tr>
<td>• narrative exposure therapy (NET)</td>
<td></td>
</tr>
<tr>
<td>For adult patients with PTSD, there is insufficient evidence to recommend for or against clinicians offering the following psychotherapies or interventions (listed alphabetically):</td>
<td>Insufficient</td>
</tr>
<tr>
<td>• relaxation (RX)</td>
<td></td>
</tr>
<tr>
<td>• Seeking Safety (SS)</td>
<td></td>
</tr>
</tbody>
</table>
### TABLE 1.1. Summary of Recommendations of the APA Guideline Development Panel for the Treatment of Posttraumatic Stress Disorder (PTSD) (Continued)

<table>
<thead>
<tr>
<th>Pharmacotherapy</th>
<th>Strength of recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>For adult patients with PTSD, the panel suggests that clinicians offer one of the following (listed alphabetically):</td>
<td>Conditional</td>
</tr>
<tr>
<td>• fluoxetine</td>
<td></td>
</tr>
<tr>
<td>• paroxetine</td>
<td></td>
</tr>
<tr>
<td>• sertraline</td>
<td></td>
</tr>
<tr>
<td>• venlafaxine</td>
<td></td>
</tr>
<tr>
<td>There is insufficient evidence to recommend for or against clinicians offering the following medications (listed alphabetically) for treatment of adults with PTSD.</td>
<td>Insufficient</td>
</tr>
<tr>
<td>• risperidone</td>
<td></td>
</tr>
<tr>
<td>• topiramate</td>
<td></td>
</tr>
<tr>
<td>Comparative effectiveness</td>
<td></td>
</tr>
<tr>
<td>For adult patients with PTSD, the panel recommends clinicians offer either PE or PE plus cognitive restructuring when both are being considered.</td>
<td>Strong</td>
</tr>
<tr>
<td>For adult patients with PTSD, the panel recommends clinicians offer either venlafaxine ER or sertraline when both are being considered.</td>
<td>Strong</td>
</tr>
<tr>
<td>For adult patients with PTSD, the panel suggests clinicians offer CBT rather than RX when both CBT and RX are being considered.</td>
<td>Conditional</td>
</tr>
<tr>
<td>For adult patients with PTSD, the panel suggests clinicians offer PE therapy rather than RX when both PE therapy and RX are being considered.</td>
<td>Conditional</td>
</tr>
<tr>
<td>For adult patients with PTSD, the panel concludes that the evidence is insufficient to recommend for or against clinicians offering SS vs. active controls.</td>
<td>Insufficient</td>
</tr>
</tbody>
</table>

**Note.** These recommendations and this clinical practice guideline are not intended to set a standard of care but rather to be a general guide to best practices. A clinical practice guideline can facilitate decision making for both provider and patient. Adapted from “Clinical Practice Guideline for the Treatment of PTSD” (pp. 4–5), by American Psychological Association, 2017a. Copyright 2017 by the American Psychological Association.

*The RTI UNC review refers to this as CBT-mixed therapy. CBT-mixed is a category that includes interventions using aspects of CBT that do not fit neatly into the other CBT categories. In this chapter, this type of therapy is referred to as CBT. The recommendation for the comparison between venlafaxine ER and sertraline is different from the recommendation for SS versus active controls, although there is moderate evidence suggesting no difference between the two treatments for both comparisons (i.e., venlafaxine ER vs. sertraline and SS vs. active controls). The reason the recommendations are different for venlafaxine ER versus sertraline than for SS versus active controls is that the panel made a conditional recommendation for venlafaxine compared with no intervention and a conditional recommendation for sertraline compared with no intervention but did not make any recommendations for SS compared with no intervention or active controls compared with no intervention because there was insufficient or very low evidence. In other words, the panel believed that because there was evidence that both venlafaxine and sertraline had demonstrated efficacy compared with inactive intervention, it was reasonable to recommend either treatment when both are being considered. However, because neither SS nor active controls had demonstrated efficacy compared to no intervention, the panel concluded that evidence was insufficient to recommend for or against either treatment.*
EVIDENCE-BASED PRACTICE IN PSYCHOLOGY

Clinical practice guidelines (CPGs) have been defined as “statements that include recommendations, intended to optimize patient care, that are informed by a systematic review of evidence and an assessment of the benefits and harms of alternative care options” (IOM, 2011a, p. 4). Guidelines are intended to assist clinical decision making, not supplant it. CPGs are tools that synthesize the broad evidence base regarding interventions, thus facilitating delivery of evidence-based practice, which is the “integration of best available research with clinical expertise in the context of patient characteristics, culture and preferences” (APA, 2005). This definition of evidence-based practice is variably presented as three overlapping circles or a three-legged stool, underscoring that each domain informs the other and all are important for decision making (Haynes, Sackett, Gray, Cook, & Guyatt, 1996). Whereas guidelines draw primarily from the best available research domain, guidelines themselves are informed by clinical expertise and patient values and preferences. High-quality guidelines not only systematically include reviewed research but also synthesize those findings with additional information about the harms and burdens of care, applicability of interventions, and patient values and preferences (Bufka & Halfond, 2016). And use of guidelines in the context of decision making is typically a complex interaction of the three components as manifested in shared decision making between the clinician and the patient. The evidence-based practice model underscores the need to synthesize available information and knowledge from research and clinical expertise to provide the best care for each individual (Bufka & Swedish, 2016).

Intervention recommendations contained in CPGs are guides for clinicians but do not replace clinical judgment. A clinician uses evidence about efficacy of interventions from CPGs and other sources to reduce the uncertainty inevitable in decision making, but nothing replaces the critical role of clinical expertise in combination with the patient1 to determine the best course of action. Ideally, guidelines serve to identify and synthesize high-quality research, but the responsibility remains with the clinician to combine that evidence with patient factors and other information to deliver high-quality care. When used appropriately, guidelines can also facilitate information sharing with patients and support shared decision making (SDM; Bufka & Swedish, 2016). Ultimately, a thorough understanding of the evidence-based intervention, along with key personal and contextual factors, allows care to be individualized to meet the unique presenting concerns of each patient.

1To be consistent with other areas of health care, we use the term patient to describe the recipient of psychological services. However, we recognize that in many situations there are important and valid reasons for using such terms as client, consumer, or person in place of patient.
GUIDELINE DEVELOPMENT

The APA Clinical Practice Guideline was developed following the practices outlined by the IOM (2011a) and described by Hollon et al. (2014). Best practices for development of CPGs include transparency, management of conflicts of interest (COI), selection of multidisciplinary and balanced writing panels, use of systematic reviews of the literature as the evidence base, establishment of a system for grading the strength of evidence and the strength of recommendations, articulation of recommendations, use of external review, and development of plans to update guidelines. A brief description of the development process for the APA Clinical Practice Guideline follows; more detail is available in Hollon et al. and the full APA Clinical Practice Guideline (APA, 2017a). See Table 1.2 for a brief description of each practice.

Standards for systematic reviews, which undergird the CPG development process, have been published by the IOM (2011b). Systematic review teams are driven by key questions about populations, interventions, and outcomes to focus the review and identify relevant studies. Those studies are then reviewed for methodological quality (i.e., risk of bias) before inclusion in a systematic review. The entire process has multiple steps intended to foster transparent and fair review, reduce the risk of bias, and adequately address the guiding clinical questions so that users of the review can feel confident in its quality and the conclusions drawn from such a review.

APA appointed a multidisciplinary panel to develop its CPG for the treatment of PTSD in adults. Although the panel was largely composed of psychologists

<table>
<thead>
<tr>
<th>Best Practice</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Transparency</td>
<td>Guideline development processes and sources of funding described and publicly available</td>
</tr>
<tr>
<td>Managing conflicts of interest (COIs)</td>
<td>All involved in guideline development disclose potential financial and intellectual COI and processes to manage such COI are followed</td>
</tr>
<tr>
<td>Multidisciplinary and balanced writing panels</td>
<td>Different disciplines, perspectives, and expertise represented on panel, including researchers, clinicians, and community members</td>
</tr>
<tr>
<td>Systematic reviews as evidence base</td>
<td>Systematic reviews serve as evidence base and where possible, panel has input into review process</td>
</tr>
<tr>
<td>Establishing evidence base and rating strength of recommendations</td>
<td>Both the strength of the evidence and the strength of the recommendation are clearly noted so users can gauge confidence in decision</td>
</tr>
<tr>
<td>Articulation of recommendations</td>
<td>Standardized format of recommendations describes what is to be done under which circumstances</td>
</tr>
<tr>
<td>External review</td>
<td>Public or peer review is conducted prior to finalizing guidelines</td>
</tr>
<tr>
<td>Plans to update</td>
<td>As new evidence emerges, guidelines are evaluated for updating</td>
</tr>
</tbody>
</table>
Bufka and Sonis (both clinicians and researchers), two psychiatrists, a primary care physician, a social worker, and two community members also served on the panel. Careful attention was paid to identifying perceived and actual financial and intellectual conflicts of interest (COIs) and managing such COIs through disclosure, discussion, and recusal. No panel member had COIs that prohibited entire participation in the process. Prior to reviewing the evidence for any intervention, the panel determined that the outcomes critical in deciding whether to recommend an intervention included reduction in PTSD symptoms and serious harms.

The panel used a systematic review that was developed by the RTI-UNC Evidence-based Practice Center, funded by the Agency for Healthcare Research and Quality at the U.S. Department of Health and Human Services. This review (Jonas et al., 2013) was determined to be consistent with the IOM standards: high quality, comprehensive, and transparent. The review was designed to answer specified key questions with clear inclusion and exclusion criteria for studies. For assessment of treatment benefits, the systematic review included only randomized trials, as is standard in systematic reviews of treatments, because they are believed to have lower risk of bias than observational studies, such as cohort studies. Because data on treatment harms are reported less frequently than data on treatment benefits, the systematic review also included large observational studies for its assessment of harms.

In the systematic review, studies were graded for risk of bias using a standard method (Viswanathan et al., 2012). Subgroup analyses were conducted, when possible, to determine whether intervention effectiveness differed by type of trauma; subgroup analyses that had been conducted in the original studies were compiled and summarized. Sensitivity analyses were conducted to determine whether studies that had been excluded because of high risk of bias would have changed substantive summary conclusions if they had been included. The review addressed questions regarding both the efficacy of specific active interventions (compared to inactive interventions) and, when possible, the effectiveness of active interventions compared to other active interventions (i.e., comparative effectiveness; very few comparative effectiveness trials were available for inclusion in the review). The systematic review team searched for studies on both psychotherapeutic and pharmacologic treatment of PTSD, but not all routinely used treatments had sufficient bodies of high-quality evidence to be included in the review and therefore in the final analysis of the panel.

Finally, the review team determined a strength of evidence (SOE) for each body of evidence, that is, the aggregated data for a specific intervention for particular outcomes from relevant studies. The panel made recommendations only for interventions for which there was at least low strength of evidence for either of its two critical outcomes. SOE considers not only risk of bias but also the degree to which the effect is consistent across studies, the degree to which the intervention is linked to that outcome (directness), and the precision of the estimated effect (i.e., the width of the confidence interval around the estimate). For this review, the SOE rating also included consideration of four minor
domains: the evidence that higher doses were associated with larger effects, the magnitude of the effect, plausible potential confounders, and the potential impact of unpublished studies. An SOE rating reflects the degree of confidence that the estimated effect of an intervention is the true effect and that it will hold up in future research (APA, 2017a).

When determining recommendations, the panel evaluated the SOE for efficacy and comparative effectiveness of interventions and included three additional considerations: harms and burdens of treatments, patient values and preferences, and applicability of findings to relevant populations. Harms and burdens were evaluated to determine whether treatment benefits outweighed harms and burdens or vice versa. Given that information on harms and burdens was not consistently reported in randomized trials of PTSD interventions, particularly psychological interventions, the panel utilized not only what was reported in the published literature but also the input of community and clinician members of the panel in making these assessments. In general, for each psychotherapy, the panel noted that the length of treatment could be perceived as a potential burden to patients and that some patients could experience a short-term exacerbation of symptoms on the way to long-term resolution, a situation that could be distressing for individuals (APA, 2017a). For medications, harms were more likely to be reported in the literature; the panel considered published information about side effects and other potential harms (e.g., interactions with other medications) and burdens. For each recommended intervention, the panel determined that the benefits of care outweighed potential harms and burdens; however, clinicians will want to discuss these issues with their patients when determining the course of action for any individual because individuals may differ in how they assess and prioritize harms and burdens.

When formulating its recommendations, the panel also considered information about patient values and preferences regarding treatments. A recent systematic review (Simiola, Neilson, Thompson, & Cook, 2015) served as the primary source of information on this topic, although the panel also sought input from the community members and information found in additional searches of the professional literature. Unfortunately, few studies directly compared patient preferences for the specific interventions evaluated by the guideline panel. Thus, although patient preferences and values were an explicit component in the APA guideline development process, they had little impact, in practice, on recommendations. Accordingly, clinicians will want to carefully discuss values and preferences for care with their individual patients.

Finally, the guideline panel considered the applicability of the evidence to various patient populations and treatment settings, using the PICOTS framework (referring to populations, interventions, comparators, outcomes, time, and settings). Panel members concluded that the samples from the studies included in the systematic review included patients with a wide range of trauma types and were broadly similar to most populations with PTSD in terms of racial, ethnic, and gender distribution. Applicability of the evidence to persons with substance use disorders is problematic. Although substance use
disorders are common among persons with PTSD (Brady, Killeen, Brewerton, & Lucerini, 2000), most of the trials included in the systematic review excluded persons with substance use disorders (Jonas et al., 2013). Some members of the panel concluded that the findings should therefore be applied with caution to persons with substance use disorders; other panel members believed that the findings were likely generalizable to those populations, based on the fact that treatment-effect heterogeneity by substance use disorders has not been demonstrated.

To clinicians, it is important to know not only whether a treatment works, in general, but also whether it works better or worse for specific subgroups of patients. Accordingly, the panel paid special attention to the findings on treatment-effect heterogeneity (i.e., subgroup effects) in the systematic review. The systematic review team concluded that the evidence was insufficient to identify differential treatment effects by subgroups based on factors such as gender, race, ethnicity, and sexual orientation (Jonas et al., 2013). The panel, therefore, did not make recommendations specific to any subgroup. Clinicians need to be aware that cultural competence is critical for appropriate treatment and may have particular relevance for those who have experienced trauma (Brown, 2008).

IMPLEMENTING RECOMMENDATIONS

When implementing any intervention, whether it is a particular treatment approach, a combination of different psychotherapeutic strategies, or an integration of therapy and medication, clinicians are generally trying to individualize care so that it meets the needs of the specific patient. In addition to determining the target of intervention, such as symptoms of PTSD, clinicians also seek to understand the factors that might require modification of treatment, such as patient characteristics (e.g., gender, culture or heritage, other features of their identities). Clinicians consider any other health conditions experienced by the patient as well as external factors such as social support, access to treatment and other logistics, and personal resources. Certainly, system or setting factors can also affect care, such as any constraints regarding duration of treatment or availability of the provider. Such a careful assessment coupled with an understanding of the processes of different interventions can help clinicians develop a conceptualization for the treatment path to be shared with the patient for decision making.

SHARED DECISION MAKING

The APA Clinical Practice Guideline (APA, 2017a) is intended to serve as a starting point for the SDM process between patients and clinicians. In the context of treatment for PTSD, SDM can be defined as a process in which
clinicians and patients collaborate to explore options and make decisions about treatments (including the possibility of no treatment) for PTSD based on the best available research evidence on benefits and risks of treatments, patient preferences and values, patient-specific characteristics, and other health problems (Barry & Edgman-Levitans, 2012; Elwyn et al., 2012; National Learning Consortium, 2013). In SDM, decisions are made through active partnership of the clinician and the patient, each bringing to the encounter unique knowledge and skills necessary for an optimal decision consistent with the patient’s goals and needs rather than either paternalistic decision making by clinicians for patients or informing patients of options but leaving patients to make decisions on their own (Hamann, Leucht, & Kissling, 2003). Fostering SDM can equalize the relative power that clinicians and patients bring to the interaction and can facilitate trust, components that may have been affected by the experience of trauma.

Clinicians use SDM as opposed to paternalistic or informed-choice models of treatment decision making for patients with PTSD for four reasons. First, SDM is the most ethically defensible model of decision making because it balances the core ethical principle of respect for patient autonomy (by incorporating patient preferences) with the core principle of beneficence (by incorporating clinician knowledge about benefits and risks of treatment; Beauchamp & Childress, 2012). The bioethical principle of autonomy is consistent with the principle of respect for people’s rights and dignity from the Ethical Principles of Psychologists and Code of Conduct (APA Ethics Code; APA, 2017b). Second, there is evidence that SDM can lead to better decision-making processes. A recent Cochrane Collaboration systematic review, based on 105 randomized trials and 31,043 research participants with a wide variety of health conditions, showed that patient decision aids, tools that foster SDM, increased patient knowledge, improved accuracy of patient risk perceptions, reduced patient uncertainty about values, and increased congruency between a patient’s values and the health decision (Stacey et al., 2017). A pilot study among veterans with PTSD showed that SDM was associated with choice of an evidence-based treatment and receipt of an adequate course of psychotherapy (Mott, Stanley, Street, Grady, & Teng, 2014). Although it is theorized that SDM can also lead to improved health outcomes (perhaps through greater patient engagement), research findings on the effect of SDM on health outcomes, from a variety of fields, are mixed (Duncan, Best, & Hagen, 2010; Kew, Malik, Aniruddhan, & Normansell, 2017; LeBlanc et al., 2015; Stacey et al., 2017). Third, although a systematic review of PTSD treatment preferences showed that patients generally preferred psychotherapy over medication, a substantial minority preferred medication (Simiola et al., 2015). With any individual patient, therefore, it is necessary to identify specific preferences and incorporate those preferences into collaborative decision making. Fourth, SDM is what patients exposed to traumatic events want. In a study of patients who scored high on a screening test for PTSD, almost all of them (97%) wanted to be involved in treatment decision making, and 67% wanted to “make the final decision about
my treatment after seriously considering my doctor’s opinion” or preferred that “my doctor and I share responsibility for deciding which treatment is best for me” (Harik, Hundt, Bernardy, Norman, & Hamblen, 2016, p. 224).

Although various approaches have been proposed for implementing SDM in routine clinical care (Elwyn et al., 2017; Stacey, Légaré, Pouliot, Kryworuchko, & Dunn, 2010; U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality, 2016), they all share three common elements: (a) building a clinician–patient team; (b) discussion of options, including benefits, harms, availability, and burdens (such as number of visits, costs and homework); and (c) incorporation of patient preferences and values into a decision. Decision aids—tools designed to facilitate the SDM process by providing information about specific treatments and soliciting patient preferences and values—can be introduced at any stage in the SDM process. The recently developed PTSD Treatment Decision Aid, developed by the U.S. Department of Veterans Affairs National Center for PTSD (2017), is an excellent example of a decision aid that fosters SDM.

SDM regarding treatment for PTSD should include nine distinct elements. First, patients should understand that good options are available for treatments for PTSD that fall into two broad categories: psychotherapy and medications. Because the APA and other guidelines have identified effective treatments, clinicians can begin the SDM process with a discussion of recommended treatments. Because some patients have spontaneous remission from PTSD without treatment, one option is to choose no treatment at intake, with close follow-up to assess symptoms and functional status. A recent systematic review reported that, on average, 44% of patients had PTSD remission without treatment after a mean of 40 months of follow-up from baseline (Morina, Wicherts, Lobbrecht, & Priebe, 2014). However, because patients with PTSD of shorter duration are more likely to remit than those with PTSD of greater duration (Morina et al., 2014), choice of no treatment may be more suitable for those with PTSD of recent onset.

Second, the patient’s goals, values, and preferences should be solicited from the outset of the discussion, with the understanding that preferences may change as the patient becomes more knowledgeable about treatments over the course of the SDM process. Indeed, at the start of the discussion, patient preferences may be more likely to be related to symptoms (e.g., “I want the nightmares to stop”) or potential side effects of treatments (e.g., “I don’t want a treatment that makes me groggy during the day”) than about classes of treatments (e.g., medications vs. psychotherapy) or about specific medications or psychotherapies.

Third, discussion of potential benefits of the treatments (i.e., the benefit of treatments compared to no treatment or compared with an inactive treatment) may include the strength of the evidence for benefit and the magnitude of the treatment effect. For all treatments considered, the APA Clinical Practice Guideline includes information on the strength of evidence (rated high, moderate, low, or insufficient/very low strength) and magnitude of benefit (rated large/medium benefit; small benefit; no effect; small harm; medium/large...
harm). It may be useful, depending on patient interest, to incorporate those ratings into the discussion.

Fourth, patients are likely to want to know about recurrence of symptoms after treatment discontinuation. Unfortunately, no systematic reviews of PTSD treatments have reported long-term follow-up data. Patients also may want to know about the effect of treatments for PTSD on outcomes other than PTSD. The additional outcomes for which benefits have been shown for treatments that are recommended by the panel are shown in the Detailed Recommendations for each treatment (APA, 2017a).

Fifth, patients frequently want to know the comparative effectiveness of treatments—which ones “work the best.” Unfortunately, there have been relatively few head-to-head randomized trials comparing recommended PTSD treatments with each other. Based on the head-to-head trials that were available, the panel recommended prolonged exposure rather than relaxation therapy, cognitive behavior therapy rather than relaxation therapy, prolonged exposure or prolonged exposure plus cognitive restructuring equally, and sertraline or venlafaxine equally. The panel did not believe it was appropriate to recommend psychotherapy rather than medications on the basis of the larger effect sizes because those differences may be due to methodological differences between psychotherapy and medication trials, as explained in Chapter 10. Head-to-head trials comparing recommended psychotherapies to recommended medications are urgently needed.

Sixth, discussion of common and rare but serious potential side effects of treatments is crucial for the SDM process because choice of a treatment involves weighing benefits and harms. In addition, patients may have strong preferences for potential side effects that they would like to avoid, such as sexual side effects that are common to selective serotonin reuptake inhibitor (SSRI) and serotonin and norepinephrine reuptake inhibitor (SNRI) medications. Medications have different side effects, and those of the four medications recommended by the APA Clinical Practice Guideline are detailed in Chapter 10. Adverse effects have been commonly reported in medication trials, due to FDA regulations, but they are uncommonly reported in psychotherapy trials (Dimidjian & Hollon, 2010). Thus, harms or so-called side effects of psychotherapy are not well described. While evaluating the anticipated benefits of treatments during SDM, one might discuss potential burdens of psychotherapy, such as the regularity of sessions or anticipated homework, along with the possibility that patients may feel some discomfort during psychotherapy when discussing difficult material.

Seventh, patient preferences for a variety of details about treatments may be important determinants of patient choices for treatments (Harik et al., 2016). Logistical details include treatment availability, cost of treatment and whether the patient's insurance will cover the costs, frequency of visits and total number of visits required, and whether homework is required. Some patients may prefer treatments with a particular theoretical mechanism of action, whether it be a medication influence on neurochemistry or a psychotherapy that proposes that change occurs by targeting thinking patterns. Additionally, whether
to discuss the trauma experience, and how much discussion, are components of treatment that may influence patient choice.

Eighth, is this the best treatment for this patient, given other health conditions and personal characteristics? This type of personalized health care decision making is the holy grail of SDM. However, as the APA Clinical Practice Guideline states, “At this time, there is little research to indicate which efficacious treatments are most effective for which patients under which conditions” (APA, 2017a, p. 84). For recommended medications, discussion of potential side effects and the effect on the patient’s known medical problems may be useful to help choose an appropriate medication. For example, because nausea and vomiting are more common for venlafaxine than for SSRIs, venlafaxine would be less suitable than an SSRI for a patient with peptic ulcer disease, dyspepsia, or gastritis. However, beyond patient preferences, little information exists for choosing different psychotherapy options based on patient health conditions or other factors.

Finally, the clinician should solicit patient preferences for general classes of treatments (e.g., medications vs. psychotherapy) and specific treatments, based on the preceding discussion. The clinician should support the patient to select a treatment (or no treatment) based on the best research evidence and the patient’s unique preferences. Consistent with the model of SDM as teamwork, the clinician should raise concerns if the patient chooses a specific treatment that appears to be inconsistent with one of the patient’s previously articulated preferences. An example of this type of inconsistency would be a patient who chooses prolonged exposure based on the strength of evidence but has also stated clearly that she does not want a psychotherapy that involves talking about the trauma.

A clinician’s use of these principles to work collaboratively with patients is likely to result in treatment choices that are congruent with their preferences and goals. The PTSD Treatment Decision Aid developed by the U.S. Department of Veterans Affairs National Center for PTSD incorporates all these principles of SDM. The effect of the PTSD Treatment Decision Aid on decision making and patient outcomes has not yet been formally evaluated. However, a randomized trial of a previous decision aid for PTSD, also developed at the National Center for PTSD, showed that patients with new diagnoses of PTSD who were randomized to review the decision aid had less conflict about their choice of treatment and greater reductions in PTSD symptoms at 6 months after study entry (Watts et al., 2015).

**INTRODUCTION TO THE CASEBOOK**

This chapter describes how the APA Clinical Practice Guideline was developed and discusses the process for using a guideline to inform decision making with patients. Chapter 2 lays out the foundations of treatment, including information about the treatment relationship, assessment, comorbidity, and termination.
The author identifies many factors potentially unique to the treatment of PTSD, such as questions of safety and trust, avoidance, and vicarious or secondary traumatization. Chapter 2 also addresses core competencies for providers of PTSD and trauma care.

Chapters 3 through 10 provide useful clinical descriptions with helpful case examples of the recommended treatments: cognitive behavior therapy (CBT), cognitive processing therapy (CPT), cognitive therapy (CT), prolonged exposure (PE), brief eclectic psychotherapy (BEPP), eye-movement desensitization and reprocessing (EMDR), narrative exposure therapy (NET), and medications (specifically fluoxetine, paroxetine, sertraline and venlafaxine). These chapters are intended to provide sophisticated clinicians with information about each intervention so that they can determine which are consistent with their approaches to providing mental health services and might warrant additional training and supervision to develop the skills necessary to provide such care competently. Chapter 11 summarizes the themes of this casebook and identifies gaps in our knowledge and critical opportunities for further research to improve patient care.

Authors were asked not only to describe the treatment but also to illustrate delivery of the treatment with case examples. These case examples are typically composites of individuals seen in treatment, but any references to specific individuals are used with permission. Whether chapter authors used the word patient or client (or some other term) depended on the focus and orientation of the intervention. Given that experience of trauma is a universal experience, authors were asked to pay particular attention to diversity and to comment on the research base supporting the application of the intervention, as well as any particular strategies for delivering care successfully across different populations and subgroups. However, there was not sufficient space for authors to detail the complexities of culturally adapting treatment.

CONCLUSION

Although the majority of adults in the United States experience potentially traumatic experiences, most do not go on to develop PTSD. Some individuals who develop PTSD may experience a remission of their symptoms without intervention, but many will require specialized mental health care. General psychological interventions broadly result in some improvement, but specific psychological interventions appear to offer efficacy beyond general approaches. A recent meta-analysis found that across studies, patients who received “comparison” interventions (i.e., a psychological or pill placebo) showed some benefit, but those who received a targeted intervention for PTSD experienced a greater benefit, particularly those involving CBT (Carpenter et al., 2018). That said, it is important to remember that some individuals prefer medications to psychotherapy. In either case, unfortunately, relatively few studies directly
compare treatments, and systematic reviews typically have little evidence suggesting one specific intervention is more efficacious than another intervention (e.g., Jonas et al., 2013). In the end, research indicates that some specific psychological interventions and medications (i.e., those noted in the APA Clinical Practice Guideline) have specific benefit in treating those with PTSD, and clinicians will likely want to offer these treatments first when initiating care. Because the research does not provide sufficient guidance to select among interventions and every clinical presentation is unique, patients and clinicians will want to consider numerous factors and share in decision making regarding best treatment options.

The challenge is ensuring that patients access those efficacious interventions. A first step is ensuring that more providers are familiar with the range of evidence-based options available. Although this casebook is neither a treatment manual nor a training course, it provides useful guidance about each intervention identified in the APA Clinical Practice Guideline with moderate or strong research support for its benefit. Clinicians are encouraged to obtain additional training and supervision to become proficient in one or more of these interventions and to use this guidance to increase the availability of appropriate care options.

REFERENCES
Overview of the Volume


Bufka and Sonis


