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Guidelines for Treatment of PTSD[1]

Introduction

Edna B. Foa, Terence M. Keane, and Matthew J. Friedman

These treatment guidelines were developed under the auspices of the PTSD Treatment Guidelines Task Force established by the Board of Directors of the International Society for Traumatic Stress Studies (ISTSS) in November 1997. Our goal was to develop a set of treatment guidelines based on an extensive review of the clinical and research literature prepared by experts in one field. The book by Foa, Keane, and Friedman consists of two parts. The first comprises the position papers that describe the salient literature; the second, the much briefer treatment guidelines. These guidelines are intended to inform the clinician on what we determined were the best practices in the treatment of individuals with a diagnosis of posttraumatic stress disorder (PTSD). PTSD is a serious psychological condition that occurs as a result of experiencing a traumatic event. The symptoms that characterize PTSD are reliving the traumatic event or frightening elements of it; avoidance of thoughts, memories, people, and places associated with the event; emotional numbing; and symptoms of elevated arousal. Often accompanied by other psychological disorders, PTSD is a complex condition that can be associated with significant morbidity, disability, and impairment of life functions.

In the development of these practice guidelines, the Task Force *acknowledged* that traumatic experiences can lead to the development of several different disorders, including major depression, specific phobias, disorders of extreme stress not otherwise specified (DESNOS), personality disorders such as borderline anxiety disorder, and panic disorder. Yet the focus of these guidelines is specifically on the treatment of PTSD and its symptoms as defined in the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) of the American Psychiatric Association (1994).

[1]Reprinted with permission from *Effective Treatments for PTSD*, Foa, E. B., Keane, T. M., and Friedman, M. J., eds., Guilford Press, 2000.

It is also recognized that the PTSD diagnostic framework is inherently limiting and these limitations may be particularly salient for survivors of early childhood sexual and physical abuse. Sometimes referred to as DESNOS, people with these histories display a wide range of relational and interpersonal problems that contribute to distressed lives and disability. Yet relatively little is known about the successful treatment of patients with these trauma histories. There is a growing clinical consensus, with a degree of empirical support, that some patients with these histories require multimodal interventions applied consistently over a longer time period.

The Task Force also recognized that PTSD is often accompanied by other psychological conditions and that such comorbidity requires clinical sensitivity, attention, and evaluation at the point of diagnosis and throughout the process of treatment. Disorders of particular concern are substance abuse and major depression, the most frequently co-occurring conditions.

These guidelines are intended for adults, adolescents, and children who have developed PTSD. Their objective is to assist the clinician in providing treatment to these individuals. Because clinicians with diverse professional backgrounds provide mental health treatment for PTSD, the guidelines were developed with interdisciplinary input. Psychologists, psychiatrists, social workers, creative arts therapists, marital therapists, and others actively contributed to, and participated in, the developmental process. Accordingly, the guidelines are suitable for the diversity of clinicians who treat PTSD.

The Task Force explicitly excluded from consideration individuals who are currently involved in violent or abusive relationships. These individuals, ranging from children who are living with an abusive caregiver, to women or men who are currently targets of domestic abuse or violence, to those still living in a war zone, may well meet diagnostic criteria for PTSD. Yet their treatment, and the related forensic and ethical issues that arise, differs fundamentally from those individuals whose traumatic events are over. Individuals who are in the midst of a traumatic situation require special considerations from the clinician. Other practice guidelines will need to be developed for these circumstances.

Little is known about the treatment of PTSD in nonindustrialized countries. Research and scholarly treatises on the topic come largely from the Western industrialized nations. The Task Force acknowledges this cultural limitation explicitly. There is growing recognition that PTSD is a universal response to exposure to traumatic events that is observed in many different cultures and societies. Yet there is a need for systematic research to determine the extent to which the treatments, both psychological and psychopharmacological, that have proven efficacy in Western societies are effective in non-Western cultures.

Finally, clinicians following these guidelines should not limit themselves to only these approaches and techniques. Creative integration of new approaches that have been found to be helpful in other conditions and that have a theoretically sound foundation are encouraged in an effort to optimize treatment outcome.

The Process of Developing the Guidelines

The process of developing these guidelines was as follows. The Task Force cochairs assembled the Task Force by identifying experts in the major schools of therapy and treatment modalities that are currently used with patients who suffer from PTSD. The Task Force was expanded as additional relevant treatment approaches were identified. Thus, the Task Force represented experts across approaches, theoretical orientations, schools of therapy, and professional training. The focus of the guidelines and their format was determined by the Task Force in a series of meetings.

The Task Force cochairs commissioned position papers on the major treatment areas or modalities from Task Force members. Each paper was to be written by a designated member with assistance from other members or clinicians of their choosing as deemed necessary by that member. The position papers included literature reviews of research and clinical practice.

The literature reviews on each of the topics involved the use of online literature searches such as Published International Literature on Traumatic Stress (PILOTS), MEDLINE, and PsycLIT. The resulting papers adhered to a standard format and were restricted in length. Authors reviewed the literature in their assigned area, presented the clinical findings, reviewed critically the scientific support for the approach, and presented the papers to the Chairs. Completed papers were then distributed to all Task Force members for comments and active discussion. These reviews resulted in further revisions to the papers and these eventually became the chapters in this book.

On the basis of the position papers and careful attention to the literature review, a draft of the brief practice guidelines for each treatment approach was developed. In these guidelines, each treatment approach or modality was assigned ratings with respect to strength of evidence regarding its efficacy. These ratings were standardized using a coding system adapted from the Agency for Health Care Policy and Research (AHCPR; U.S. Department of Health and Human Services, Public Health Service). This rating system, presented below, represents an effort to formulate recommendations for practitioners based on the available scientific evidence.

The guidelines were reviewed by all members of the Task Force for concurrence and then presented to the Board of Directors of the ISTSS, sent for review to a broad range of professional associations, presented at a public forum at the annual meeting of the ISTSS, and placed on the ISTSS website for comments from the membership. Feedback obtained from this iterative process was incorporated into the guidelines.

There are limitations that exist in the scientific literature on PTSD as well as for other mental disorders. Specifically, most studies use inclusion and exclusion criteria in order to define participants appropriately; accordingly, each study may not fully represent the complete spectrum of patients seeking treatment. It

is customary, for example, in studies of PTSD treatment to exclude patients with active substance dependence, acute suicidal ideation, neuropsychological deficits, retardation, or cardiovascular disease. Generalization of the findings, and the resulting guidelines, to these populations would not be appropriate.

Clinical Issues

Type of Trauma

Most randomized clinical trials (RCTs) with combat (mostly Vietnam) veterans showed less treatment efficacy than RCTs with nonveterans whose PTSD was related to other traumatic experiences (e.g., sexual assaults, accidents, natural disasters). Therefore, some experts believe that combat veterans with PTSD are less responsive to treatment than survivors of other traumas. Such a conclusion is premature. The difference between veterans and other PTSD patients may be related to the greater severity and chronicity of their PTSD rather than to differences inherent to combat traumas. Furthermore, the poor treatment response in veterans may be a sampling artifact, since veterans currently receiving treatment at VA hospitals may constitute a self-selected group of chronic patients with multiple impairments. In short, there is no conclusive evidence at this time that PTSD following certain traumas is especially resistant to treatment.

Single versus Multiple Traumas

No clinical studies have been designed to address the question of whether the number of previous traumas predicts treatment response among PTSD patients. Since most treatment studies have been conducted with either military veterans or female adult survivors of sexual assault, many of whom have a history of multiple assaults, it appears that much of the current knowledge about treatment efficacy applies to people who have been traumatized more than once. It would be of great interest to conduct studies comparing individuals with single versus multiple traumas in order to find out whether, as expected, the former would be more responsive to treatment. Recruitment for such studies could be very difficult, however, since the research design would have to control for PTSD severity and chronicity, as well as for comorbid diagnoses—each of which may be more predictive of treatment response than number of traumas experienced.

Chronicity of PTSD

There is growing interest in clinical approaches that emphasize prevention, identification of risk factors, early detection of PTSD, and acute intervention.

This is because of the idea that, as with many medical and mental disorders, PTSD has a better prognosis if clinical intervention is implemented as early as possible. However, the few studies available to date do not support this view. On the other hand, there is abundant evidence that many people who develop PTSD continue to suffer from the disorder indefinitely. Although it is unclear whether chronic PTSD is inherently (e.g., psychobiologically) different than more acute clinical presentations, it is generally believed that chronic PTSD is more difficult to treat.

Some patients with chronic PTSD develop a persistent incapacitating mental illness marked by severe and intolerable symptoms; marital, social, and vocational disability; as well as extensive use of psychiatric and community services. Such patients may benefit more from case management and psychosocial rehabilitation than from psycho- or pharmacotherapy.

Gender

Although lifetime prevalence rates of PTSD are twice as high for women as for men (10.4% vs. 5%) and women are four times more likely to develop PTSD when exposed to the same trauma, gender differences in response to treatment have not been studied systematically. Therefore, we do not know whether gender is predictive of treatment outcome. It is important to emphasize this point, since, as noted earlier, a superficial review of the treatment literature suggests that women are more responsive to treatment than men. On further inspection, however, several differences between treatment studies with men and women can be noted, making direct comparisons difficult. First, the PTSD of women studied has usually been caused by (childhood or adult) sexual trauma, whereas studies with men have usually involved war veterans. Second, since there are few data on men who are not Vietnam veterans, one cannot generalize the published data regarding veterans to men with other trauma histories. Finally, other factors such as treatment modality, PTSD severity/chronicity, or the presence of comorbid disorders will need to be systematically controlled in future studies before differences in treatment outcome can be attributed to gender. In short, it is impossible to conclude that gender is predictive of treatment response at this time.

Age

Two questions are relevant concerning the effects of age on treatment outcome: (1) Does the age at which the trauma occurred influence response to treatment? and (2) Does the age when treatment began affect treatment outcome?

Neither question has been studied systematically; hence, there are no conclusive data on either question. Adults and children have responded to some treatments and not others. Age of traumatization has not predicted treatment outcome in studies published to date.

Children

Children present so many distinct challenges for assessment and treatment that an entire chapter in this volume has been devoted to treatment of children with PTSD. Developmental level is particularly important, since it may influence both the clinical phenomenology of PTSD in children as well as the choice of treatment. In addition, parental factors must be carefully considered when treating children. Developmental biological factors may also influence choice of drug, if pharmacotherapy is indicated, while developmental cognitive factors may influence both assessment strategies and choice of psychotherapy.

Elder Adults

PTSD may have its onset or reoccurrence at any point in the life cycle. It may persist for decades and even intensify in old age. Developmental factors unique to older adults may influence susceptibility to PTSD among the aged. These include a sense of helplessness produced by illness, diminished functional capacity, or social marginalization. Death of loved ones can trigger intrusive recollections of traumatic losses, thereby precipitating a relapse of PTSD symptoms that may have been in remission for decades. Retirement and the life review process of old age can also increase vulnerability to PTSD exacerbation or relapse. Developmental biological factors may influence both the choice and recommended dosage of any drug selected for pharmacotherapy, while cognitive status may influence the approach to both assessment and psychotherapy for older PTSD patients.

Factors Affecting Treatment Decisions

At present, few empirical data exist to guide us in the question of how to decide the course of treatment for PTSD. However, some clinical considerations are discussed below.

Treatment Goals

All treatments presented in these guidelines have proponents who claim that they are clinically useful for patients with PTSD. The therapeutic goals for each

treatment, however, are not necessarily the same. Some treatments (e.g., cognitive-behavioral therapy, pharmacotherapy and eye movement desensitization and reprocessing) target PTSD symptom reduction as the major clinical outcome by which efficacy should be judged. Other treatments (e.g., hypnosis, art therapy, and, possibly, psychoanalysis) emphasize the capacity to enrich the assessment or therapeutic process rather than the ability to improve PTSD symptoms. Still other treatments (e.g., psychosocial rehabilitation) emphasize functional improvement with or without reduction of PTSD symptoms. Finally, some interventions (e.g., hospitalization, substance abuse treatment) focus primarily on severe disruptive behaviors or comorbid disorders that must be addressed before PTSD treatment per se can be initiated.

Treatment of PTSD

Treatment of PTSD is the major criterion by which all clinical practice is evaluated in these guidelines. Some treatments appear to reduce all clusters of PTSD symptoms, while others seem to be effective in attenuating one symptom cluster (e.g., intrusion [B], avoidant/numbing [C], or arousal [D] symptoms) but not others. Some experts have challenged the focus on specific symptoms when evaluating various therapeutic approaches, arguing that the best gauge of clinical efficacy is the capacity of a given treatment to produce global improvement in PTSD rather than specific symptom reduction. In these guidelines, however, the major criterion for treatment efficacy is reduction of PTSD symptoms, although clinical global improvement is indicated when available.

Comorbidity

As with other mental disorders, patients with PTSD usually have at least one other psychiatric disorder. Indeed, U.S. epidemiological findings indicate that 80% of patients with lifetime PTSD suffer from lifetime depression, another anxiety disorder, or chemical abuse/dependency. Good clinical practice dictates that the best treatment is one that might be expected to ameliorate both PTSD and comorbid symptoms. Therefore, the presence of a specific comorbid disorder may prompt a clinician to choose one particular treatment rather than another. Again, it must be emphasized, however, that treatment of PTSD is the major criterion by which all the clinical practices have been evaluated.

Suicidality

Self-destructive and impulsive behaviors, while not part of the core PTSD symptom complex, are recognized as associated features of this disorder that may

profoundly affect clinical management. Therefore, the routine assessment of all patients presenting with PTSD should include a careful evaluation of current suicidal ideation and past history of suicidal attempts. Risk factors for suicide should also be assessed, such as current depression and substance abuse. If significant suicidality is present, it must be addressed before any other treatment is initiated. If the patient cannot be safely managed as an outpatient, hospitalization should be the immediate clinical focus. If suicidality is secondary to depression and/or substance abuse, clinical attention must focus on either or both conditions before initiating treatment for PTSD.

Chemical Abuse/Dependence

Lifetime prevalence rates of alcohol abuse/dependence among men and women with PTSD are approximately 52% and 28%, respectively, while current prevalence rates for drug abuse/dependence are 35% and 27%, respectively. Such comorbid disorders not only complicate treatment but in some cases might also exacerbate PTSD itself. In addition, a number of legal substances such as nicotine, caffeine, and sympathomimetics (e.g., nasal decongestants) may interfere with treatment and, therefore, should be carefully assessed with all PTSD patients. In many cases, if significant chemical abuse/dependency is present, it should be addressed before PTSD treatment is initiated.

Concurrent General Medical Conditions

There is mounting evidence that traumatized individuals appear to be at greater risk of developing medical illnesses. Compared to nontraumatized individuals, trauma survivors report more medical symptoms, use more medical services, have more medical illnesses detected during a physical examination, and display higher mortality. A few studies suggest that such adverse medical consequences may be mediated by PTSD. This has generated recent interest in screening primary and specialty medical patients for both a trauma history and for PTSD symptoms. This work is in its infancy, however, and there are no data on treatment of PTSD among patients seeking medical or surgical care.

Disability and Functional Impairment

PTSD sufferers differ greatly from one another with respect to symptom severity, chronicity, complexity, comorbidity, associated symptoms, and functional impairment. These differences may affect both the choice of treatment and

the clinical goals. For some patients with chronic PTSD, functional improvement may be much more important than reduction of PTSD symptoms. In others (especially those who have been subjected to protracted child sexual abuse or torture), clinical interventions often need to focus primarily on symptoms of dissociation, impulsivity, affect liability, somatization, interpersonal difficulties, or pathological changes in identity. Therefore, although the major emphasis in these guidelines is on reduction of core PTSD symptoms, clinicians may find that functional improvement is the most important or appropriate clinical priority for some patients.

Indications for Hospitalization

Inpatient treatment should be considered when the individual is in imminent danger of harming self or others, has destabilized or relapsed significantly in the ability to function, is in the throes of major psychosocial stressors, and/or is in need of specialized observation/evaluation in a secure environment. The general recommendation is that such a hospitalization must occur in collaboration with outpatient providers and be integrated into the overall long-term treatment plan that has been developed. Our basic philosophy is that a focus on the past trauma is only in the interest of the future. The goal of treatment is to facilitate efforts to create a life that can move beyond the current immobilization and preoccupation produced by the trauma.

What Treatments Are Included in the Guidelines?

The treatment for trauma-related disturbances has been discussed extensively in the literature for over 100 years. This rich literature has provided us with much clinical wisdom. In the last two decades, several treatments for PTSD have been studied using experimental and statistical methods. Thus, at the present time, we have both clinical and scientific knowledge about what treatment modalities help patients with posttrauma problems. Accordingly, the guidelines contain a variety of psychotherapies and pharmacotherapies that have been practiced with trauma victims who suffer trauma-related symptoms.

The scientific and clinical evidence for the efficacy of these therapies in reducing PTSD and related symptoms vary greatly from one another. However, the study of treatment efficacy for PTSD is still in its initial stage relative to other mental disorders; consequently, the Task Force decided to include in the guidelines both therapies that have been found effective by well-controlled studies and therapies that have long history of practice with traumatized individuals but have not yet been subjected to empirical testing.

Clinical Research Issues

What Are Well-Controlled Studies?

Many studies have been conducted to ascertain the efficacy of various treatments in reducing PTSD, only relatively few studies to date have employed rigorous methods. Well-controlled studies should have the following features:

1. *Clearly defined target symptoms*. Merely experiencing a trauma is not an indication for treatment in and of itself. Significant trauma-related symptoms, such as the presence of PTSD or depression, should be present to justify treatment. Whatever the target symptom or syndrome, it should be defined clearly so that appropriate measures can be employed to assess improvement. In addition to ascertaining diagnostic status, it is also important to specify a threshold of symptom severity as an inclusion criterion for entering treatment.

A related issue to target symptoms is the importance of delineating inclusion and exclusion criteria. Delineation of inclusion–exclusion criteria can be of assistance both in examining predictors of outcome and in evaluating the efficacy of the treatment and its generalizability beyond the studied sample. If a treatment is effective regardless of sample differences, it proves more robust and therefore a more useful treatment.

2. *Reliable and valid measures*. Once target symptoms have been identified and the population defined, measures with good psychometric properties should be employed (see earlier discussion on measures). For studies targeting a particular diagnosis, assessment should include instruments designed to yield diagnoses as well as instruments that assess symptom severity.

3. *Use of blind evaluators*. Early studies of treatment of traumatized individuals relied primarily on therapist and patient reports to evaluate treatment efficacy and introduced expectancy and demand biases into the evaluation. The use of blind evaluators is a current requirement for a credible treatment outcome study. Two procedures are involved in keeping an evaluator blind. First, the evaluator should not be the same person conducting the treatment. Second, patients should be trained not to reveal their treatment condition during the evaluation so as not to bias the blind evaluator's ratings.

4. *Assessor training*. The reliability and validity of an assessment depends largely on the skill of the evaluator; thus, training of assessors is critical and a minimum criterion should be specified. This includes demonstrating interrater reliability and calibrating assessment procedures over the course of the study to prevent evaluator drift.

5. *Manualized, replicable, specific treatment programs*. It is also important that the treatment chosen is designed to address the target problem defined by inclusion criteria. Thus, if PTSD is the disorder targeted for treatment, employing a treatment specifically developed for PTSD would be most appropriate. Detailed

treatment manuals are of utmost importance in evaluating treatment efficacy because they help to ensure consistent treatment delivery across patient and across therapists, and afford replicability of the treatment to determine generalizability.

6. *Unbiased assignment to treatment.* To eliminate one potential source of bias, neither patients nor therapists should be allowed to choose the patient's treatment condition. Instead, patients should be assigned randomly to treatment condition, or assigned via a stratified sampling approach. This helps to ensure that observed differences or similarities among treatments are due to the techniques employed rather than to extraneous factors. To separate the effects of treatment from therapists, each treatment should be delivered by at least two therapists, and patients should be randomly assigned to therapists within each condition.

7. *Treatment adherence*. The final component of a well-controlled study is the use of treatment adherence ratings. These ratings inform as to whether the treatment were carried out as planned, and whether components of one treatment condition drifted into another.

Limitations of Well-Controlled Studies

While controlled studies are essential for evaluating the efficacy of a given treatment approach, the data emerging from such studies are by no means without problems. The stringent requirements of such studies can render unrepresentative samples; therefore, the generalizablity of the results may be limited. For example, the requirement of random assignments to studies that include placebo may be acceptable to some patients but not to others and the factors that lead someone to enroll in such studies may be germane to how well he or she responds to treatment. Differential rates of dropout also need to be considered when evaluating the studies that have been completed. Some treatments by their very nature are powerful and/or may not be consistent with the patient's expectations of treatment, leading to dropouts. This can and should influence conclusions.

Another source of bias in knowledge derived from controlled studies is that certain treatment approaches are more amenable for some studies than others. For example, short-term and structured treatments such as cognitive-behavioral therapy and medication are more suitable for controlled trials than longer, less structured treatments. As a result, knowledge about the efficacy of the former is more available than that of the latter.

What Is Effect Size?

There are many ways to calculate the effectiveness of a given treatment in ameliorating the target disorder. One way is to examine how many treated people lose their diagnosis. Another way is to calculate reduction in symptom severity from pre- to posttreatment or to follow-up. Effect size is a statistical method that

was developed to evaluate in a standardized manner how much, on the average, a given treatment program reduced the severity of the target symptoms severity. Using an effect size method enables us to compare efficacy of different types of treatments across studies. This method was applied to all empirical studies discussed in this volume.

To enhance comparability among the position papers, procedures for calculating and presenting effect sizes were standardized in two ways. First, a single effect size statistic was adopted: a member of Cohen's *d* family of effect size estimators known as Hedges's unbiased *g*. Like Cohen's *d*, Hedges's unbiased *g* is easy to conceptualize. It is based on the standardized difference between two means, typically the mean of a treatment sample minus the mean of a comparison sample divided by pooled standard deviations of the two samples. Therefore, each whole number represents one standard deviation away from the comparison sample mean. For example, if $g = 0.5$, the mean of the treatment sample would be estimated to be one-half standard deviation above the comparison sample. Unlike Cohen's *d*, which systematically overestimates when used with small samples, Hedges's unbiased *g* includes a mathematical adjustment for small sample bias. To further ease comparability, the signs of all effect sizes were then adjusted such that positive effect sizes always represent better outcome than the comparison group.

Second, a hierarchical procedure was adopted for selecting the studies to be included in each position paper. This was done because studies that utilize different kinds of comparison groups produce effect sizes that are not directly comparable, even when utilizing the same effect size statistic. If enough studies that utilized comparison groups such as a waiting list or a nonspecific control treatment were available for inclusion in a position paper, studies utilizing other comparison group types were not included. If the number of "no treatment" comparison studies was inadequate for drawing conclusions, studies utilizing "placebo" comparison groups were included with the caution that the effect sizes calculated from these studies would tend to be smaller in comparison, even if the treatments were equally effective. Only if enough studies of either type were not available would purely within-subjects design in which there was no comparison group be included. In these designs, the only way to calculate a standardized difference effect size is to estimate a comparison group's scores by using the pretreatment scores of the treatment group. Because these estimated scores are not independent, effect sizes resulting from these calculations are inflated compared to effect sizes from the other two comparison group types and should not be compared directly with them.

The State of Current Knowledge About Treatment of PTSD

Research on treatment efficacy for PTSD began in the early 1980s, with the introduction of the disorder into DSM-III. Since then, many case reports and studies have been published. These studies vary with respect to their methodological rigor;

therefore, the strength of conclusions that can be drawn from them is different for different treatments. In general, psychotherapy, specifically, cognitive-behavioral therapy, and medication, specifically, selective serotonin reuptake inhibitors, have both been shown to be effective treatments for PTSD. However, the absence of evidence for a technique or approach does not imply that it does not work, only that it has not yet been subjected to rigorous scientific scrutiny.

There is some research evidence that psychodynamic psychotherapy, hypnotherapy, and eye movement desensitization and reprocessing are also effective, but the studies are either less numerous or less well controlled. Controlled research on other approaches to treating PTSD is needed and many ongoing projects exist internationally at the time of publication of these guidelines. Most conclusions on the treatment of PTSD are based upon efficacy trials and should be viewed cautiously as a result. The field awaits the completion of effectiveness trials to determine the extent to which findings in controlled treatment trials generalize to other clinical environments. As with all disorders, periodic updates of these guidelines are needed to track progress in the field.

Combined Treatments

There are no studies that systematically examined the value of combining psychotherapy with medication, or combinations of medications. Research on other disorders (e.g., depression) has shown benefits from combination approaches. Only a couple of studies examine whether programs that include a wide variety of cognitive-behavioral therapy techniques yield better outcome over programs that include fewer techniques. On the whole, these studies do not support the administration of more complex programs. Despite the scarcity of knowledge, clinical wisdom dictates the use of combined treatments for some patients. Many patients with PTSD also suffer from depression. If the depression is moderate to severe, a combination of psychotherapy and medication is often desired.

The Coding System

To help the clinician in evaluating the treatment approaches presented in the guidelines, the following coding system was devised to denote the strength of the evidence for each approach.

Each recommendation is identified as falling into one of six categories of endorsements, each indicated by a letter. The six categories represent varying levels of evidence for the use of a specific treatment procedure, or for a specific recommendation. This system was adopted from the Agency of Health Care Policy and Research classification of Level of Evidence.

Level A: Evidence is based upon randomized, well-controlled clinical trials for individuals with PTSD.

Level B: Evidence is based upon well-designed clinical studies, without randomization or placebo comparison for individuals with PTSD.
Level C: Evidence is based on service and naturalistic clinical studies, combined with clinical observations that are sufficiently compelling to warrant use of the treatment technique or follow the specific recommendation.
Level D: Evidence is based on long-standing and widespread clinical practice that has not been subjected to empirical tests in PTSD.
Level E: Evidence is based on long-standing practice by circumscribed groups of clinicians that has not been subjected to empirical tests in PTSD.
Level F: Evidence is based on recently developed treatment that has not been subjected to clinical or empirical tests in PTSD.

Treatment Considerations

Therapist Training

To utilize most appropriately the information contained in these guidelines, individuals should be professionally trained and licensed in their state or country. Typical training would include a graduate-level degree, a clinical internship or its equivalent, and past supervision in the specific technique or approach employed.

Choice of Treatment Setting

Most treatments for PTSD take place in an outpatient setting, such as psychiatric or psychological clinics and counseling centers. However, an inpatient setting may be required when the patient manifests a significant tendency for suicidality or severe comorbid disorders (e.g., psychotic episode, severe borderline personality). The treatment setting should be determined during the initial diagnostic evaluation. Careful monitoring of the patient's mental status throughout treatment may indicate the appropriateness of changes in the treatment setting.

Treatment Management

A comprehensive diagnostic evaluation should precede treatment to determine the presence of PTSD and whether PTSD symptoms constitute the predominant problem of the patient. Once the diagnosis is ascertained, irrespective of the treatment chosen, the clinician should establish a professional milieu. First, the clinician must form and maintain a therapeutic alliance. Special attention should be given to trust and safety issues. Many individuals with PTSD have difficulties trusting others, especially if the trauma had interpersonal aspects (e.g., assault, rape). Other patients have related problems in recognizing and respecting personal

boundaries when they enter a therapeutic relationship. Therefore, during the first stage of therapy, attention should be directed to these sensitive issues, providing reassurance that the patient's welfare is the priority in the therapeutic relationship. Second, the therapist should demonstrate concern with the patient's physical safety when planning the treatment, such as appraising the safety of places selected for exposure exercises, or monitoring the safety of the woman who has just left an abusive relationship. Third, the clinician should provide education and reassurance with regard to the PTSD symptoms and related problems. Fourth, the patient's PTSD symptoms and general functioning should be monitored over time. Fifth, comorbid conditions should be identified and addressed. When necessary, it is important to work with other health professionals and with the patient's family members and significant others. Many patients with PTSD require dependable and steady therapeutic relationships because their symptoms do not remit completely and can exacerbate with anniversary reactions and trauma reminders. For these reasons, it is important to assure the patient of the continued availability of his or her therapist. Finally, many patients with PTSD have ongoing crises in their lives and may need to rely intermittently upon a supportive therapist. Crises that arise during the course of therapy have clear implications for the sequencing of treatments for that patient. For some patients, starts and pauses in treatment may characterize the only way that they can engage the process of change. Acknowledging this and accounting for this in designing a treatment plan may avert problems during the intensive therapeutic phase.

Treatment Resistance

Despite the progress that has been achieved in the treatment of PTSD, many patients do not benefit from the first line of treatment. The phenomenon of treatment resistance has been particularly noted among Vietnam War veterans receiving VA treatment in the United States, but other trauma populations have their share of treatment failures. It seems that patients with pervasive dysfunction and/or high comorbidity are especially resistant to first-line therapy. These patients may be especially good candidates for programs that include multiple treatment modalities such as meditation, psychotherapy, family therapy, and rehabilitation therapy.

Readiness for Treatment

Several factors deter many traumatized individuals with acute PTSD from seeking treatment for the disorder: They assume that the symptoms will dissipate with time; they feel that nothing can help them, or that there is an element of shame surrounding their traumatic experiences. Accordingly, attempts to offer treatment in this initial stage often fail. Even when PTSD becomes chronic, many

sufferers do not seek treatment or present to treatment with related symptoms such as depression. Therefore, after diagnosing the disorder, a crucial first step in preparing the patient for treatment of PTSD is educating him or her about the disorder and its high rates among trauma survivors. Many sufferers are reluctant to enter treatment because they view their PTSD symptoms as a personal failure. For many patients, normalization of their symptoms results in immediate relief and reduces their reluctance to enter treatment.

Some patients are reluctant to enter treatment because it often entails discussing the traumatic event either during the assessment or in therapy. The clinician should encourage patients to express their misgivings and be sensitive to the distress they experience when discussing or recounting their traumatic experiences, so that their concerns can be addressed in the first stage of therapy.

Validity of Memories of Traumatic Events

To receive the diagnosis of PTSD, one must first be exposed to a traumatic event. Treatment of PTSD typically involves the processing of this event, its meaning, and its consequences. All the methods in the guidelines presuppose the existence of a verifiable and valid traumatic event. The guidelines do not address the use of any of these approaches in an effort to recover unconscious memories of past traumatic events.

The Task Force does acknowledge that memories for traumatic events are sometimes not reported, or are forgotten by individuals who seek mental health treatment. Yet because of lack of scientific evidence, the Task Force does *not* support the position that the presence of some of the symptoms of PTSD (e.g., emotional numbing, concentration problems, etc.) is clear evidence that the patient experienced a traumatic event. Therefore, the Task Force does not support the use of these guidelines to assist in the recovery of forgotten traumatic memories.

How to Use the Guidelines

These guidelines summarize the state of the art in the treatment of PTSD to inform mental health professionals of the care of patients with PTSD. They begin at the point where the patient has been diagnosed as having PTSD, according to the criteria in DSM-IV. The guidelines also assume that the patient has been evaluated for comorbid disorders. The guidelines include treatments with various degrees of evidence for their efficacy, indicated by the coding system described earlier and the conclusions section for each treatment approach.

The clinician is encouraged to adopt treatments that have been proven effective. However, it is important to remember that several treatments with proven efficacy (e.g., medication, cognitive-behavioral therapy) are available. Also, many

treatments that have not been evaluated in well-controlled studies have been practiced extensively and, thus, have accumulated clinical evidence for their efficacy. The distinction between clinical wisdom and scientific knowledge is emphasized here. Not all of the art of psychotherapy has been examined in randomized, controlled clinical trials. Experienced and sensitive clinicians are often in the best position to determine the nature and the timing of specific psychological and psychopharmacological interventions.

We recognize that not all treatments are universally effective. Even the best treatments we have to offer fail in certain circumstances. Clinicians are encouraged to assess systematically patients who are not responding to interventions to determine the presence of undisclosed or undetected conditions that might be responsible for a nonresponse. Detection of factors related to a lack of full participation in a treatment plan may also assist the clinician in understanding a poor outcome. Given that several treatments for PTSD have empirical support, the clinician can sequentially apply these to optimize treatment success.

Finally, the choice of treatment approach should be decided by the clinical circumstances presented by the specific patient (e.g., the presence of comorbid disorders and the patient's preferences) as well as by the efficacy of the treatment modality. Much has been learned about the treatment of PTSD in the past 20 years, and much more still needs to be learned. Clinicians are encouraged to incorporate into their clinical practice the approaches that have proven efficacy. In this way, the public health of society will be enhanced. This is the goal of the ISTSS and its production of these treatment guidelines.

Psychological Debriefing

Jonathan I. Bisson, Alexander McFarlane, and Suzanna Rose

Description

Psychological debriefing (PD) has been widely advocated for routine use following major traumatic events. Several methods of PD have been described, although most researchers consider a PD to be a single-session semistructured crisis intervention designed to reduce and prevent unwanted psychological sequelae following traumatic events by promoting emotional processing through the ventilation and normalization of reactions and preparation for possible future experiences. PD was initially described as a group intervention, one part of a comprehensive, systematic, multicomponent approach to the management of traumatic stress, but it has also been used with individuals and as a stand-alone intervention. Its purpose is to review the impressions and reactions of clients shortly after a traumatic incident. The focus of a PD is on the present reactions of those involved.

Psychiatric "labeling" is avoided, and emphasis is placed on normalization. Participants are assured that they are normal people who have experienced an abnormal event.

General Strength of the Evidence

Identified studies vary greatly in their quality, but, overall, the quality of the studies, including the randomized controlled trials, is poor. The studies provide little evidence that early PD prevents psychopathology following trauma but confirm that it is well received overall by participants. Some negative outcomes following individual PD were found, but, overall, the impact of early PD was neutral when all the identified studies were considered collectively. The only positive randomized, controlled trial involved a combination of group PD and education conducted 6 to 9 months after a hurricane.

Course of Treatment

PD has generally been described as a group intervention lasting up to a few hours shortly after (often within a few days) a traumatic event, and as one component of a critical-incident stress management program. It has also been described as a one-time intervention for individuals and as one component of a treatment package for chronic PTSD.

Recommendations

Indications

Given the current state of knowledge neither one-time group or individual PD can be advocated as being able to prevent the subsequent development of PTSD following a traumatic event (Level B). However, there may be benefits to aspects of PD, particularly when it is employed as part of a comprehensive management program (Level C). There appears to be good evidence that it is a well-received intervention for most people (Level A), and even though it may not prevent later psychological sequelae, it may still be useful for screening, education, and support. It may be that appeals for "flexibility" in the therapeutic approach to immediate trauma survivors, such as those published following the Kings Cross Fire (Turner, Thompson, & Rosser, 1989), are important. The possibility that group PD, in combination with an educational session several months after a traumatic event, may be effective has been raised by one positive study but clearly needs replicating.

Contraindications

Some studies of individual PD have raised the possibility that the intense reexposure involved in the PD can retraumatize some individuals without allowing adequate time for habituation, resulting in a negative outcome (individual; Level B). Therefore, if PD or any similar intervention is to be employed, it is essential that it is provided by experienced, well-trained practitioners, that it not be mandatory, and that potential participants be properly clinically assessed. If employed, the intervention should be accompanied by clear and objective evaluation procedures to ensure that it is meeting set objectives.

Summary

The absence of rigorous research in this area is disappointing. It is essential that efforts be made to determine what, if anything, should be offered to individuals following traumatic events. The results of randomized, controlled trials, and other trials, indicate that one-time PD for individuals following traumatic events does not prevent the development of later psychological sequelae, but it is a well-received intervention for most people. It would be premature to conclude that PD should be discontinued as a possible intervention following trauma, but there is an urgent need for randomized, controlled trials, especially with group PD as part of a comprehensive traumatic-stress management program, and with alternative early interventions. Given the current state of knowledge, it would seem most appropriate to focus on detecting individuals who develop PTSD (perhaps through detecting acute stress disorder) or other disorders following traumatic events and offering them treatments that have been shown to work. The role of education is unclear and needs further evaluation, but basic education about trauma psychology, potential symptoms, and how to seek help without considering the traumatic event in detail may represent an appropriate way of detecting individuals who require more complex intervention.

Reference

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Cognitive-Behavioral Therapy

Barbara Olasov Rothbaum, Elizabeth A. Meadows, Patricia Resick, and David W. Foy

Description

This review focuses on the published literature on cognitive-behavioral treatments (CBT) for posttraumatic stress disorder (PTSD). Due to the strength of the literature base in this area, only empirical studies were included. Eight different cognitive-behavioral treatments for PTSD were reviewed, along with several additional studies of treatment programs that combined one or more of these eight treatments. These included exposure therapy (EX; flooding/imaginal/*in vivo*/prolonged/directed), systematic desensitization (SD), stress inoculation training (SIT), cognitive processing therapy (CPT), cognitive therapy (CT), assertiveness training (AT), biofeedback (BIO), relaxation training (Relax), combined SIT/EX, combined EX/Relax/CT, and combined CT/EX.

General Strength of the Evidence

The chapter by Rothbaum, Meadows, Resick, and Foy (2000) contains many of the important details to determine the methodological rigor and thus the strength of the conclusions to be drawn from each study, including the gold standards ratings and Agency for Health Care Policy and Research (AHCPR) ratings. The reader is referred to Foa and Meadows (1997) for a critical review of treatments of PTSD, evaluating studies in terms of the gold standards for clinical studies. These gold standards include (1) clearly defined target symptoms; (2) reliable and valid measures; (3) blind evaluators; (4) assessor training; (5) manualized, replicable, specific treatment programs; (6) unbiased (random) assignment to treatment; and (7) treatment adherence. Many of these CBT studies fare particularly well on this classification according to methodological rigor. The studies are discussed here by treatment technique.

Exposure Therapy

EX has been tested in 12 studies, all finding positive results for this treatment with PTSD. These are also generally methodologically controlled studies, eight of

which received the AHCPR Level A rating, with several meeting many of the gold standards for clinical outcome studies (Foa & Meadows, 1997); thus, the strength of evidence for exposure is very conclusive.

Five of six studies of exposure with *Vietnam veterans* found positive effects for EX, and four of these were well-controlled. Two very well-controlled studies examined EX with female *sexual assault survivors*. Both of these received AHCPR Level A ratings and met all seven of the gold standards for clinical outcome studies; thus, firm conclusions can be drawn from the results that EX was efficacious with female sexual assault survivors. Four studies examined the efficacy of EX for a *mixed variety* of traumas. Two were very well controlled and two were moderately well-controlled; all found EX helpful for these trauma survivors.

In summary, the evidence is very compelling from many well-controlled trials with a mixed variety of trauma survivors that EX is effective. In fact, no other treatment modality has such strong evidence for its efficacy. Overall, EX receives an AHCPR Level A rating.

Systematic Desensitization

Six studies have examined SD for posttrauma reactions, although most of these studies suffer from methodological problems. The only well-controlled study of SD found no difference between SD and the other treatments. In this study, however, not all of the traumas would necessarily meet DSM criteria, as many were due to loss of a loved one. Four of the remaining five studies examined SD with Vietnam veterans, although none were well controlled, and several used a large number of sessions over a long period of time. The only study of SD with female assault survivors is confounded by the fact that many were recent survivors, so their symptoms would be expected to decrease naturally with time; no PTSD measures were used; and it is not clear that all subjects participated in the same study at the same site.

In summary, although several studies have found that SD was effective in reducing posttrauma symptoms, the studies are not well controlled, and in some cases, we have reasons to doubt the validity of the findings. Thus, SD has not received strong support from well-controlled studies and has been largely abandoned in favor of exposure without relaxation and receives a Level B− or Level C+ rating.

Stress Inoculation Training

Four studies found SIT effective, but only two were well-controlled, and all were with female sexual assault survivors, leaving open the question of SIT's efficacy with other trauma populations. The strength of the two controlled studies earns SIT a Level A rating with female sexual assault survivors.

Cognitive Processing Therapy

The only published study investigating CPT received a Level B rating. CPT was effective in reducing PTSD and related symptoms in 19 female sexual assault survivors as compared to a naturally occurring wait-list control group. CPT is designed specifically for female sexual assault survivors; thus, it would have to be modified if applied to other trauma populations.

Cognitive Therapy

CT has been effective in reducing posttrauma symptoms and receives support from two controlled studies, which were rated Level A.

Assertiveness Training

Only one less well-controlled study, rated a Level B, has tested AT for PTSD, finding that it was not significantly different from comparison treatments for female sexual assault survivors. Thus, AT has not received strong support in the treatment of PTSD.

Biofeedback and Relaxation Training

Only one study has examined BIO in a controlled design. BIO was not supported, as the comparison treatment was more effective. Relax is generally included as a control treatment and has been found less effective than comparison treatments in four studies. Thus, BIO and Relax have not received support as effective treatments for PTSD and are not rated.

Combination Approaches

Combination treatments have not resulted in significantly more improvements on PTSD and related symptoms when compared to the single treatments in two well-controlled studies. They have been shown to be effective in a well-controlled study compared to an assessment control for female sexual assault survivors soon after the assault, who did not yet meet PTSD criteria, and in another study when compared to Relax. In uncontrolled investigations, combination approaches were effective for sexually abused girls and for survivors of motor vehicle accidents. In summary, combination approaches have received support as effective treatments for PTSD in studies rated Level A, but do not appear to be more effective than their single components.

Course of Treatment

CBT techniques are generally very short-term, averaging approximately 8–12 sessions, meeting once or twice weekly.

Recommendations

Comparing the numbers and types of studies supporting each type of treatment, EX has the most studies and the greatest number of well-controlled studies to support its use. EX has been tested in 12 studies, all finding positive results for this treatment with PTSD. These are also generally methodologically controlled studies, eight of which received the AHCPR Level A rating, with many meeting many of the gold standards for clinical outcome studies (Foa & Meadows, 1997); thus, the strength of evidence for EX is very conclusive. In one study, EX was superior to SIT and SIT/PE. Additionally, EX has been tested in a wider range of trauma populations and more studies than any of the other treatments. Thus, we strongly recommend the use of some form of EX in the treatment of PTSD unless otherwise indicated. In conclusion, the evidence is very compelling from many well-controlled trials with a mixed variety of trauma survivors that EX is effective. In fact, no other treatment modality has such strong evidence for its efficacy.

Four studies have examined the efficacy of SIT. All four studies found SIT effective, but only two were well-controlled, and all were with female sexual assault survivors, leaving open the question of SIT's efficacy with other trauma populations. The use of SIT for non-assault-related PTSD has not yet been studied, although there is no reason it should not be effective with these populations as well. CPT was found effective in one published study, but due to its focus on rape-related issues, it would be inappropriate with other trauma-related populations unless modified for use with them. CT has been effective in reducing posttrauma symptoms and receives support from two controlled studies. AT has not received strong support in the treatment of PTSD. SD, which has generally been replaced by EX, would not be recommended. BIO and Relax may be useful as anxiety management components within a more comprehensive program but have not received support as effective treatments for PTSD and are therefore not recommended.

Each of the treatments reviewed has its limitations. These include the following:

1. *Exposure*. Some trauma survivors are reluctant to confront trauma reminders and to tolerate the high anxiety and temporarily increased symptoms that sometimes accompany exposure. Thus, not everyone may be a candidate for EX. There is some preliminary evidence that EX is not effective for patients who were perpetrators of harm, especially when guilt is the primary emotion. There is also evidence that individuals whose primary emotional response is anger may not profit as much from EX as individuals whose primary emotional response is anxiety.

However, EX has received the strongest evidence for PTSD; thus, it should be considered the first line of treatment unless reasons exist for ruling it out.

2. *Systematic desensitization*. Due to findings that longer exposures tend to outperform shorter ones and that the use of relaxation during EX does not enhance treatment effectiveness, SD has largely fallen out of favor relative to EX.

3. *Stress inoculation training*. To date, SIT has only been examined in female assault survivors; thus, its efficacy with regard to PTSD caused by other traumas is not known. Some SIT elements may be inappropriate for some clients (i.e., relaxation training may lead to relaxation-induced anxiety in some). Also, with its many components, therapists require a great deal of training.

4. *Cognitive processing therapy*. CPT was specifically designed as a treatment for rape victims; thus, it may be inappropriate for other trauma victims.

5. *Cognitive therapy*. CT received support from two controlled studies. This initial evidence offers some support for the use of CT for treating PTSD. However, many PTSD clinicians and researchers feel strongly that an exposure component is recommended.

6. *Assertiveness training*. At most, AT should be considered a component of treatment rather than a comprehensive treatment for PTSD.

7. *Biofeedback*. BIO has not been demonstrated to be as effective as other treatments and is not recommended as a treatment for PTSD.

8. *Relaxation*. Relax may lead to relaxation-induced anxiety in some clients and has been found to be less effective than the other therapies. Relax is not recommended as a treatment for PTSD.

9. *Combined programs*. These generally have not been shown to be better or worse than the individual treatments comprising the combination program. This may be due to the decrease in time spent on each component, but this has yet to be tested. Combined programs also are generally more complicated to deliver.

Summary

The evidence is very compelling from many well-controlled trials with a mixed variety of trauma survivors that EX is effective. In fact, no other treatment modality has such strong evidence for its efficacy. SIT, CPT, CT, and combination approaches have some evidence for their efficacy, but all have some drawbacks in study populations (all female assault survivors), methodological rigor, or efficacy relative to comparison treatments.

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Suggested Readings

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Pharmacotherapy

Matthew J. Friedman, Jonathan R. T. Davidson, Thomas A. Mellman, and Steven M. Southwick

Description

There are many compelling findings to suggest that a number of key psychobiological systems are dysregulated in PTSD patients. The strongest evidence shows alteration of adrenergic and hypothalamic–pituitary–adrenocorticol (HPA) mechanisms, heightened physiological reactivity, and sleep disturbances. PTSD-related abnormalities have also been detected or inferred about the serotonin, opioid, dopamine, thyroid, corticotropin releasing factor (CRF) and glutamatergic systems. Finally, the very frequent comorbidity with pharmacologically responsive disorders (e.g., major depression, panic) makes pharmacotherapy an important treatment option to be considered in most cases of PTSD.

Despite these scientific findings, pharmacotherapy for PTSD has primarily been guided by empirical evidence that a specific drug has efficacy against a specific symptom. Indeed, at present, very few data in all psychiatric disorders, including PTSD, link psychobiological abnormalities to specific drug effects. In research (and in clinical practice), almost every class of psychotropic agent has been prescribed for PTSD patients. Most studies involve antidepressants: selective serotonin reuptake inhibitors (SSRIs), monoamine oxidase inhibitors (MAOIs), tricyclic antidepressants (TCAs), and other serotonergic agents (trazodone and nefazodone). Antiadrenergic drugs tested include alpha-2 receptor agonists (clonidine and guanfacine) and the beta-receptor antagonist (propranolol). Tests of mood-stabilizing anticonvulsants (carbamazepine and valproate) were initially based on a rationale related to their antikindling properties. Other drugs tested include benzodiazepine, anxiolytics, and antipsychotic agents.

General Strength of the Evidence

The strength of the evidence is best for the different classes of antidepressant agents that have been tested in most of the randomized clinical trials on pharmacotherapy. Clinical trials without randomization or controls have been carried out on antidepressants, antiadrenergic agents, anticonvulsants, and benzodiazepines. The only evidence for other drugs is based mostly on anecdotal observations and case reports.

Course of Treatment

Earlier research findings suggest that controlled drug trials in PTSD should last at least 8–12 weeks, because shorter trials, generally, had been ineffective. More recent and much larger scale studies (with SSRIs) have raised questions about this belief, since clinically significant PTSD symptom reduction has been observed within 2–5 weeks. This clearly is a question requiring further research.

Recommendations

The strength of evidence for each recommendation is indicated in parentheses (i.e., AHCPR Levels A–F).

1. *SSRIs (sertraline—Level A, fluoxetine—Level A/B; paroxetine, fluvoxamine—Level B).* SSRIs can be recommended as a first-line treatment for PTSD in nonveterans. They not only reduce DSM-IV PTSD symptoms and produce global improvement but also are effective against comorbid disorders and associated symptoms. Evidence from large, positive, double-blind trials has led to recent FDA approval for sertraline as an indicated treatment for PTSD. Therefore, it is given a full AHCPR Level A rating. Since there has only been one small, randomized clinical trial with fluoxetine published in a peer-reviewed journal, the level of evidence for fluoxetine can only be considered an AHCPR Level A/B at this time. SSRIs have fewer side effects and greater safety than other antidepressants but may produce insomnia, agitation, gastrointestinal symptoms, and sexual dysfunction. Results with veterans are difficult to interpret because of the severity and chronicity of PTSD in the veteran cohorts that have been tested thus far.

2. *MAOIs (phenelzine—Level A/B; moclobemide—Level B).* MAOIs have been shown to be effective for B symptoms and global improvement, with some efficacy against C symptoms; however, they have not been tested extensively. They are also effective antidepressants and antipanic agents. Of the two published, randomized clinical trials with phenelzine, one has serious methodological flaws. Therefore, the level of evidence supporting efficacy of this drug can only

be Level A/B pending further studies. Compliance with dietary restrictions is an important limitation of MAOI treatment. Furthermore, they are contraindicated in patients likely to use alcohol, illicit drugs, or certain drugs prescribed for other clinical conditions. Cardiovascular, hepatotoxic, and other side effects also must be monitored with MAOIs. If the reversible MAO-A inhibitor moclobemide proves safe and efficacious in future trials, it certainly will advance the argument that MAOIs should be considered first-line drugs for PTSD in the future.

3. *TCAs (imipramine/amitriptyline/desipramine—Level A).* TCAs have a similar spectrum of action (e.g., reduction of B symptoms and global improvement) as MAOIs but are less effective. Although they have fewer serious side effects than MAOIs, they may produce hypotension, cardiac arrhythmias, anticholinergic side effects, sedation, and arousal.

4. *Antiadrenergic agents (clonidine/guanfacine/propranolol—Level C).* Antiadrenergic agents appear to reduce arousal, reexperiencing, and possibly dissociative symptoms but have not been tested adequately in clinical trials. They are generally safe, although blood pressure and pulse rate must be monitored routinely. Special caution must be observed when prescribing these agents for patients with low blood pressure or those who receive antihypertensive medications. A few case reports suggest that tolerance is less likely to occur with guanfacine than with clonidine. Propranolol may sometimes produce depressive symptoms or psychomotor slowing.

5. *Anticonvulsants (carbamazepine/valproate—Level B).* These drugs have shown efficacy in reducing D symptoms (both drugs), B symptoms (carbamazepine only) and C symptoms (valproate only). They have been tested in several open clinical trials but not in any randomized clinical trials. Both drugs have proven efficacy in bipolar affective disorders, and both may cause significant side effects, especially carbamazepine.

6. *Benzodiazepines (alprazolam—Level B; clonazepam—Level C).* These are both effective anxiolytics and antipanic agents. Among PTSD patients, they produce their typical antiarousal effects without reducing either B or C symptoms. Discretion and caution should be exercised when considering their use for patients with past or present alcohol/drug abuse/dependency. They also may produce psychomotor slowing and exacerbate depressive symptoms. They do not appear to have any advantage over other classes of drugs and, therefore, cannot be recommended for use as monotherapy in PTSD at this time. They may be beneficial as adjunctive treatment in time-limited treatment of disrupted sleep or for quick relief of global anxiety.

7. *Other serotonergic agents (nefazodone—Level B; trazodone—Level C; cyproheptadine/buspirone—Level F).* Open label trials with nefazodone indicate that it may improve sleep and reduce anger. Trazodone appears useful as an adjunct to SSRI treatment because it reverses SSRI-induced insomnia through a pharmacological mechanism of action that is synergistic with that of SSRIs. Since reports

on the beneficial effects of both cyproheptadine and buspirone are anecdotal, there is no basis for recommending either drug at this time.

8. *Antipsychotics (thioridazine/clozapine/risperidone—Level F)*. These drugs cannot be recommended for routine use in PTSD because only a few clinical anecdotes indicating their effectiveness have been published. They may ultimately prove to have a unique role for patients who are refractory to first- and second-line drugs—especially when these patients exhibit extreme hypervigilance, paranoid symptoms, agitation, or psychosis. They have many side effects, some of which are serious.

Summary

The best evidence supports the use of SSRIs as first-line drugs for PTSD. There is also good evidence suggesting that MAOIs are moderately, and TCAs mildly effective agents, although both may produce adverse side effects. Evidence supporting the use of antiadrenergic and anticonvulsants agents is weak, not because of negative findings, but because there have been no randomized trials with either class of drugs. There is evidence to suggest that benzodiazepines are not useful for treating PTSD B or C symptoms. Finally, antipsychotic agents cannot be recommended for routine use, because only a few case reports have appeared in the literature.

Treatment of Children and Adolescents

Judith A. Cohen, Lucy Berliner, and John S. March

Description

Both psychosocial and medication management have been recommended, alone and in combination, for children and adolescents suffering from posttraumatic stress disorder (PTSD). Empirical evidence favors cognitive-behavioral psychotherapy over other forms of psychotherapy; support for medication management is weak at best. All recommended treatment approaches incorporate psychoeducation, including parents, usually at the beginning of treatment. While empirical evidence does not support a preference for individual, family, or group therapy, in most cases, treatment likely will be administered as individual therapy. For abused children, interventions may initially be delivered as individual therapy and subsequently be reinforced by rehearsal and practice with parents. Group therapy in the school setting may be optimal for children who have experienced a common trauma, for example, a hurricane or school shooting.

General Strength of the Evidence

As of this writing, cognitive-behavioral treatment (CBT) approaches have the strongest empirical evidence for efficacy in resolving PTSD symptoms in children. CBT may, therefore, be considered the first-line approach, either alone or in combination with other forms of treatment. Most CBT interventions for children have included exposure, cognitive-restructuring, anxiety-reduction, and psychoeducational components, but it is unclear from the existing research which of these components are the "active ingredients." For example, it is not yet established how much and how explicit the exposure component needs to be or how many repetitions are necessary to obtain therapeutic effect, nor even if exposure per se is necessary for symptomatic improvement. Similarly, the relative importance of including cognitive-restructuring or anxiety-management components in CBT interventions has not been adequately empirically evaluated in children. Eye movement desensitization and reprocessing (EMDR) may hold promise, depending on further comparisons, especially those with CBT. Other psychosocial treatments, such as psychodynamic psychotherapy, art therapy, or group psychotherapy, are supported by anecdotal evidence but cannot on this basis be recommended as first-line treatments for pediatric PTSD. Similarly, due to the lack of adequate empirical data, clinicians must rely on expert judgment to determine the appropriateness and type of psychopharmacological interventions.

Course of Treatment

There currently is no empirical evidence regarding the optimal length of treatment with psychotherapy or medication. As with most cognitive-behavioral interventions for pediatric mental disorders, the majority of empirically evaluated interventions have been between 8 and 16 sessions. However, some children, especially those who have experienced prolonged victimization, poor premorbid adjustment, comorbid conditions, or exhibit chronic PTSD with predominantly dissociative features, may require much longer interventions. Given that PTSD may be a chronic waxing and waning condition in children, judgment based on clinical improvement of symptoms and success in achieving appropriate developmental expectations should determine treatment length.

Recommendations

Children and adolescents with PTSD would likely benefit from treatment focused on PTSD symptomatology. Of the available treatments, CBT has the most empirical support and is therefore the initial treatment of choice. The particular

format of CBT should be dictated by the nature of the trauma, with specific protocols focused on either abuse or sudden trauma. Because of their favorable side-effect profile and evidence supporting effectiveness in treating both depressive and anxiety disorders, SSRIs often are the first psychotropic medication chosen for treating pediatric PTSD, especially when dictated by SSRI-responsive comorbidity. Clonidine may be helpful for some children and adolescents with prominent hyperarousal symptoms, especially elevated startle responses.

Recommendation ratings are as follows:

Psychotherapy	
CBT	A
EMDR	B–C
Dynamic psychotherapy	D
Debriefing	E
Family psychotherapy	E
Group psychotherapy	E
Art therapy	E
Medication	
Propranolol	B
Clonidine	C
SSRI	D
TCA	D
Buspirone	D
Atypical antidepressants	E

Contraindications are those common to each treatment class and/or unique to each treatment.

Suggested Readings

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Eye Movement Desensitization and Reprocessing

Claude M. Chemtob, David F. Tolin, Bessel A. van der Kolk, and Roger K. Pitman

Description

Eye movement desensitization and reprocessing (EMDR) is an integrative treatment for posttraumatic stress disorder (PTSD) during which the patient is asked to hold in mind a disturbing image, an associated negative cognition, and bodily sensations associated with a traumatic memory, while tracking the clinician's moving finger in front of his or her visual field. Variations of the procedure are repeated until distressing aspects of the traumatic memory are reduced and more adaptive cognitions emerge regarding the trauma. Similar procedures are used to install alternate positive cognitions, coping strategies, and adaptive behaviors.

General Strength of the Evidence

EMDR was found to be an efficacious treatment for PTSD. It is assigned a Level A/B rating. The "A" component of the rating means that based upon a review of seven published, randomized, controlled studies with overall large effect sizes, one of which included children, EMDR was found to be more efficacious for PTSD than wait-list, routine-care, and active-treatment controls. The "B" component means that additional studies that employ more extensive controls addressing the limitations of studies to date, and that compare EMDR to other focused PTSD treatments, are needed to establish the highest level of confidence in EMDR's efficacy. As might be expected for any treatment, the evidence is stronger for the beneficial effect of EMDR on persons with single-event civilian trauma than on multiply traumatized, treatment-refractory, chronically ill war veterans.

Support for EMDR's therapeutic efficacy does not necessarily imply support for the postulated role of eye movements. Randomized dismantling studies provide little support for the hypothesis that eye movements are critical to the effects of EMDR. However, methodological limitations of these studies preclude a final conclusion regarding this issue.

Recommendations

Clinical

It is important to distinguish the treatment of a single traumatic memory from the treatment of PTSD. In some early studies, this distinction was not preserved,

leading to unrealistic expectations. Accordingly, the number of EMDR sessions administered should be consistent with the complexity of the trauma and the number of traumatic memories. Studies demonstrating EMDR's efficacy have generally followed the structured procedure articulated by Shapiro (1995). Clinical deviations from this procedure may not produce comparable results.

Because inadequate data are available to identify which patients will respond more or less favorably to EMDR compared to other treatments, choice of treatment modality needs to be based upon such considerations as the skills and training of the therapist, and the desires of the patient. Few data are available regarding any contraindications to EMDR. Patients with comorbid psychopathology (e.g., substance abuse) or acute problems (e.g., suicide potential) should undergo comprehensive clinical assessment and treatment planning, with careful consideration of all options. Skill in EMDR supplements but does not replace general skill in the treatment of psychopathology.

Research

Additional, properly designed dismantling studies need to be conducted in order to identify what components of EMDR are beneficial. Comparisons of EMDR with other PTSD treatments in larger samples are indicated. These should not be restricted to efficacy, but should also examine other important issues such as treatment efficiency, and patient tolerance and comfort, which may be advantages of this therapy. EMDR's apparent efficacy in the treatment of childhood PTSD needs to be further explored. EMDR has resulted in the training of an extraordinarily large number of practitioners in a highly standardized treatment modality. These therapists represent a potentially valuable resource for mounting large, field-based effectiveness trials of PTSD treatment.

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Group Therapy

David W. Foy, Shirley M. Glynn, Paula P. Schnurr, Mary K. Jankowski, Melissa S. Wattenberg, Daniel S. Weiss, Charles R. Marmar, and Fred D. Gusman

Description

Group therapy for posttraumatic stress disorder (PTSD) offers cohesion, encouragement, and support from other members in either "covering" or "uncovering" formats, referring to whether or not traumatic experiences are addressed directly. Representative of the "covering" strategy is *supportive group therapy*, designed to maintain interpersonal comfort and to provide a context that orients members toward current coping. There are two "uncovering" types. *Psychodynamic groups* aim to give each member new understanding about what it means to have been exposed to trauma and to have reacted the way he or she did, and about the continuing issues presented by the experience. *Cognitive-behavioral group therapy* emphasizes systematic, prolonged exposure and cognitive restructuring applied to members' traumatic experiences.

General Strength of the Evidence

Group treatment for PTSD is recommended as potentially effective based upon consistent positive evidence from 14 recent studies. The Levels of Evidence range from 2 studies using randomized control designs (AHCPR Level A), and 5 studies using nonrandomized control designs (AHCPR Level B), to 7 studies using single-group designs in which pre–post differences were examined (AHCPR Level C). Evidence does not presently favor one type over the others.

Course of Treatment

"Uncovering" groups are more likely to be conducted as "closed" or cohort groups, while supportive groups are amenable to an "open" format in which members can be added after the group begins. Groups are typically planned for a duration of 10–52 weeks, are composed of six to eight members and two therapists, last 90 minutes per session, and meet on a weekly basis.

Recommendations

The Level of Evidence for the specific indications and contraindications that follow is anecdotal (Level D), taken from experienced clinicians' judgment and rationally derived criteria used in the 14 published studies on group therapy. Indications for group therapy include flexible personal schedule, in order to meet group

at appointed times; ability to establish interpersonal trust with other group members and leaders; prior group experience, including 12-step groups; completion of a preparatory course of individual therapy; not actively suicidal or homicidal; shares similar traumatic experiences with other group members; compatible for gender, ethnicity, and sexual orientation with other members; willingness to abide by rules of group confidentiality; not severely paranoid or sociopathic; stable living arrangements.

Contraindications for group therapy include active psychosis; severe organicity or limited cognitive capacity; pending litigation or compensation-seeking.

For assignment to "uncovering" groups, the following indications apply: Individual can tolerate high anxiety arousal or other strong affects; no active suicidality or homicidality; substance abuse or other comorbidities are under control; individual accepts rationale for trauma uncovering work; willingness to self-disclose personal traumatic experiences; no current life crises.

Summary

Since the inception of PTSD as a diagnostic entity almost 20 years ago, less than 20 published studies have evaluated group therapy techniques for treating the disorder. Despite methodological limitations of these studies, positive treatment outcomes were reported, lending general support for the use of group therapy with trauma survivors. While three distinct types of group therapy are represented in the literature, treatment outcome findings do not presently favor a particular type.

Suggested Readings

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Psychodynamic Therapy

Harold S. Kudler, Arthur S. Blank Jr., and Janice L. Krupnick

Description

Psychodynamic treatment seeks to reengage normal mechanisms of adaptation by addressing what is unconscious and, in tolerable doses, making it conscious. This is accomplished by exploring the psychological meaning of a traumatic event.

It may include sifting and sorting through wishes, fantasies, fears, and defenses stirred up by the event. Psychodynamic treatment requires insight and courage, and is best approached in the context of a therapeutic relationship that emphasizes safety and honesty. Transference and countertransference are universal phenomena that should be recognized by therapists but may or may not be explicitly addressed in the therapy depending on treatment modality and therapist judgment. The therapist–patient relationship, in itself, is a crucial factor in the patient's response.

General Strength of the Evidence

Only a few empirical investigations with randomized designs, controlled variables, and validated outcome measures have been reported. Case reports and tightly reasoned scholarly works comprise the bulk of the psychodynamic literature. These can neither provide ultimate tests for psychodynamic hypotheses nor can they define the limits of psychopathology, theory, or technique, yet they are an essential part of the scientific effort to understand the human impact of psychological trauma.

Course of Treatment

Formal psychoanalysis involves four to five 45- to 50-minute sessions each week over the course of 2 to 7 (or more) years. Psychodynamic psychotherapy most commonly involves one to two meetings per week and can be relatively short-term (a few months) or open-ended (lasting years). Brief psychodynamic psychotherapy involves meetings once or twice a week for an average of 12 to 20 sessions. Supportive psychotherapy can be brief (12–20 sessions) and focal or long-term and open-ended. Supportive psychotherapy typically involves one session per week, but more- or less-frequent sessions may be necessary depending on the patient's needs and tolerance.

Recommendations

The decision to undertake psychodynamic psychotherapy, and the choice of modality, depends on the patient's attributes, the presence of maladaptive psychological defenses, the focalization of the problem, and the patient's goals for treatment. The indications for more expressive treatment include strong motivation, significant suffering, ability to regress in the service of the ego, tolerance for strong affect and frustration, psychological mindedness, intact reality testing, ability to form meaningful and enduring relationships, reasonably good impulse control, and ability to sustain a job (AHCPR Level C/D). Patients who are significantly lacking in one or more of these attributes are more likely to benefit from more supportive, less insight-oriented treatment (AHCPR Level D). All psychodynamic psychotherapies combine expressive and supportive elements. Formal psychoanalysis is primarily an expressive psychotherapy that aims at decreasing

symptoms, increasing self-understanding, improving ego strength, and bringing about fundamental change in the patient's intrapsychic balance (by focusing on long-standing conflicts, relationship problems, and developmental issues in the context of analysis of the transference). Psychodynamic psychotherapy, primarily expressive technique, differs from formal psychoanalysis in that it does not aim at fundamental changes in intrapsychic structure and does not necessarily center upon interpretation of the transference. Brief psychodynamic psychotherapy (either expressive or supportive) may be indicated when the situation is relatively acute and the patient's issues are focal (AHCPR Level B/C). Contraindications to expressive therapies include long-standing ego weakness, acute life crisis, poor tolerance for anxiety and/or frustration, poor capacity for insight, poor reality testing, severely impaired object relations, limited impulse control, low intelligence or organic cognitive dysfunction, difficulty with self-observation, and tenuous ability to form a therapeutic alliance. These attributes do not preclude psychodynamic psychotherapy, but modifications of technique are indicated in order to help the patient take part in treatment (AHCPR Level D).

Suggested Readings

Briere, J. (1996). *Therapy for adults molested as children: Beyond survival* (2nd ed.). New York: Springer.

Gabbard, G. O. (1994). *Psychodynamic psychiatry in clinical practice: The DSM-IV edition*. Washington, DC: American Psychiatric Press.

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Inpatient Treatment

Christine A. Courtois and Sandra L. Bloom

Description

Inpatient treatment for posttraumatic stress disorder (PTSD) is available on general psychiatric units and in specialty units and treatment tracks. Specialty programs are distinguished by a treatment philosophy that incorporates attention to the traumatization as it relates to the individual's symptoms and functioning, and by selective admissions criteria, an organized and sequenced course of treatment within a therapeutic community, and a staff with specialized training. To date,

specialty programs have been organized for two primary populations: combat veterans and adult survivors of childhood trauma. These individuals are likely to have had multiple traumatic episodes and to suffer from prolonged chronic forms of PTSD, with associated psychiatric and medical conditions. Inpatient treatment for PTSD is multimodal in that it incorporates many different interventions; it can thus be considered a "metatherapy" rather than one specific treatment. It is generally reserved for the stabilization of severe crises involving imminent harm to self and others and/or decompensation and the inability to function (especially when of short-term duration—several days to a 2-week length of stay). Longer lengths of stay (2–12 weeks) often involve planned rather than crisis admissions for conditions involving severe symptomatology and/or serious destabilization. Inpatient treatment is one component in the continuum of care that is available on a short- or moderate-term basis and episodically, as needed.

General Strength of the Evidence

A limited amount of research (none of it randomized with control groups) has been conducted to assess the efficacy of specialized inpatient PTSD treatment. Most of the research has been conducted within the VA on the treatment of combat veterans; little is available on the treatment of adult abuse survivors. Research efforts are complicated by the fact that the treatment is a metatherapy with numerous therapeutic interventions and components to evaluate. Available research involves a pre–post design that assesses PTSD and other symptoms at admission and discharge and, in some studies, at various follow-up points postdischarge. To date, only three studies have utilized control or comparison groups.

Research evidence suggests that inpatient treatment is effective in reducing PTSD and other psychiatric symptoms for a period of time but that gains are not permanent in many cases. Yet treatment success should not be measured as symptom reduction only. Attention needs to be directed to improvements in the individual's overall quality of life and object relations. Treatment focus and length of stay have emerged as important variables. Treatment that is oriented to present-day functioning, with general attention to the impact of traumatization, is preferable to treatment that is exclusively trauma-focused. A moderate-term length of stay (in the range of 2 to 12 weeks) is preferable to an overly short stay or one that is extended and leads to regression. Additional research is needed. To quoting Fontana and Rosencheck (1997, p. 763), "The chronicity of the disorders poses its own hindrances to successful treatment beyond those posed by the disorders themselves. An important ongoing task for clinicians and researchers is to continue to devise and test specific interventions and programs that will result in improvements that go beyond this chronic level." Additionally, assessment of the impact of the overall milieu and the treatment philosophy are as important as assessing specific techniques.

Course of Treatment

A multidisciplinary assessment is conducted upon admission to determine reasons for hospitalization and treatment goals, and to review the patient's psychosocial history, including significant stressors, personal strengths and deficits, and pre- and posttrauma risk factors. Because inpatient treatment is often due to imminent danger to self or others and/or severe decompensation, treatment begins with attention to safety, stabilization, and ability to function. The patient is incorporated into the therapeutic milieu and actively engaged in the treatment process as soon as possible. A variety of treatment modalities (adjunctive assessments and consultations; individual and group treatment; education, cognitive-behavioral interventions, including skills-building for self-management of emotions and symptoms; expressive therapy; couple and family education and therapy; psychopharmacology; collaboration and consultation with outpatient providers; active safety and discharge planning) are utilized and based upon a posttrauma philosophical orientation. Inpatient treatment follows the sequenced model of posttrauma treatment. The focus on safety, stabilization, symptom management, personal functioning, and reconnection to others is the primary focus of impatient treatement. Directed attention to the traumatic events or memories occurs only as needed and after the patient is sufficiently stabilized and has developed functional coping skills.

Recommendations

Recommendations are based on the limited research data on inpatient treatment and on the evolving consensus model of posttrauma treatment (primarily in outpatient settings but applicable to inpatient treatment as well).

A "second generation" posttrauma treatment approach of carefully sequenced multimodal milieu treatment of moderate length (2 to 12 weeks) in a context of personal and social safety, with a present and future orientation, as well as a trauma-responsive approach, is recommended as the inpatient model of choice. Findings of available studies and authoritative writing on posttrauma treatment suggest the need for careful assessment and treatment planning, with differential goals and treatment strategies determined by the individual's object relations, ego strength and self-capacity, severity of symptoms, degree of social connection, and level of functioning and disability.

Indications

Inpatient treatment should be considered when the individual is in imminent danger of harming self or others, has destabilized or relapsed significantly

in the ability to function, is in the throes of major psychosocial stressors, suffers from debilitating symptoms of PTSD and comorbid conditions, and/or is in need of specialized observation/evaluation in a secure environment (AHCPR Level C, D, E).

Moderate-term length of stay (ranging from 2 to 12 weeks) (Level B, C, D, E)
Present-day focus, but trauma responsive (Level B, C, D, E)
Sequenced, with safety and stabilization as preliminary foci (Level C, D, E)
Interventions individually tailored and not all aimed at symptom reduction (B, C, D, E)
Multidisciplinary and multimodal (Level C, D, E)

Contraindications

Inpatient treatment on a specialty unit is contraindicated for individuals who are unwilling or unable to participate in milieu treatment based on a posttrauma treatment model, for those who are better off not focusing on the trauma, for those who are actively psychotic and/or characterologically impaired to such a degree that they are unable or unwilling to maintain safety within the therapeutic context, and for those who have conditions (e.g., substance abuse, eating disorders) that are life threatening and must be stabilized first (Level C, D, E).

Summary

A short- or moderate-length model of inpatient PTSD treatment, with attention to personal and social safety, stabilization, life skills, and social connection, has several significant advantages. It assists in and complies with utilization review and cost-containment efforts, and makes efficient use of mental health resources. It empowers patients to be partners in treatment and encourages them to move to a less restrictive (and less regressive) level of care once their crises and symptoms are stabilized. It operates in collaboration with the patient's residential and outpatient provider(s), and functions as one component (albeit a very crucial one in times of destabilization) of the continuum of treatment options for chronic trauma survivors. It responds to the long-term treatment needs of patients with prolonged PTSD and associated psychiatric and medical conditions, and anticipates the need for episodic, intensive treatment in a secure environment. Within the environment, it provides a philosophy and treatment model, tailored to the traumatized patient, that is not usually available on more general units. This orientation ensures that the traumatic origin of the patient's difficulties and pathology is not ignored yet has a whole-person focus that extends beyond the traumatization. A focus on the past trauma is only in the interest of the future, to a life less encumbered by the trauma, or what Shalev (1997) labeled "healing forward."

References

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Psychosocial Rehabilitation

Walter Penk and Raymond B. Flannery, Jr.

Description

Psychosocial rehabilitation techniques are recommended for the treatment of posttraumatic stress disorder (PTSD) among traumatized adults. A class of seven such techniques is reviewed here: (1) health education and psychoeducational techniques, (2) self-care/independent-living skills training, (3) supported housing, (4) family skills training, (5) social skills training, (6) vocational rehabilitation, and (7) case management.

Currently, these psychosocial rehabilitation techniques are suggested only as an adjunct to accompany other forms of treating PTSD, since psychosocial rehabilitation traditionally is not trauma-focused. However, as noted in this review, manualized approaches are being developed in which such techniques are being adapted to address PTSD symptoms. If empirically validated, such rehabilitation may evolve from an adjunctive to an independent form of treatment for PTSD. Considering that the context of these techniques consists of the everyday environments of social interactions, psychosocial rehabilitation techniques contain considerable promise for generalizing skills learned in the clinic for coping with PTSD to the everyday world of adjusting in the home, at work, and in the community.

General Strength of the Evidence

Such techniques are effective: However, none of the seven classes of psychosocial rehabilitation techniques listed here have been tested at either of the

higher Level A or B categories for Level of Evidence of the Agency for Health Care Policy and Research (AHCPR). No studies have been completed among persons with PTSD using randomized, controlled clinical trials or with placebo-like comparisons. However, all such techniques have been supported by surveys and studies meeting the Level C criteria; that is, naturalistic studies and clinical observations show that psychosocial rehabilitation techniques are beneficial in treating PTSD.

Course of Treatment

Course of treatment varies and is operationally defined as no longer needed when problems addressed by a particular class of psychosocial rehabilitation have been fully resolved. For example, if the person with PTSD identifies homelessness as a problem and plans on eliminating homelessness as a personal goal, then supported housing techniques should continue until homelessness is resolved. A checklist is presented for occasions when clients have identified specific kinds of problems for which psychosocial rehabilitation techniques may be initiated, continued, discontinued, and resumed. When to initiate such techniques should be decided by the client and individually tailored to each person's stage in recovery, which may be constantly changing (see Wang, Wilson, & Mason, 1996, for a stage-by-stage analysis in recovery).

Recommendations

Psychosocial rehabilitation techniques are recommended when clients and clinicians identify the following kinds of problems associated with diagnosis of PTSD: persistent high-risk behaviors (e.g., substance abuse); lack of self-care and independent living skills; homelessness; interaction with a family that does not understand PTSD; socially inactive; unemployed; and encounters with barriers to various forms of treatment and rehabilitation services. Psychosocial rehabilitation techniques designed to resolve such problems should occur concurrently or shortly after a course of treatment for PTSD. Clients and clinicians should routinely determine whether such problems are associated with core symptoms of PTSD and, if so, then ensure that rehabilitation techniques are used as a contextual vehicle for alleviating PTSD symptoms. Generalizing skills for coping with PTSD from clinic to home is the fundamental goal of psychosocial rehabilitation techniques, provided that such interventions are client-centered and client-focused.

Much of the rehabilitation literature has focused on persons with serious mental disorders, such as schizophrenia. With regard to PTSD, our basic recommendation for deciding if psychosocial rehabilitation services are to be implemented is, first, to determine whether the client has identified that a particular problem exists, and, if so, then for client and clinician to adapt appropriate rehabilitation services for PTSD and for ever-evolving stages in recovery (Wang, Wilson, & Mason, 1996).

Psychosocial rehabilitation techniques are indicated when persons identify their problems, then set personal goals to address high-risk behaviors such as substance abuse; to improve self-care and independent living skills; to eliminate homelessness; to become employed; to improve social skills and relationships with family and friends; and to improve access to available, appropriate psychosocial rehabilitation services. Psychosocial rehabilitation techniques are contraindicated when client and clinician conclude that such problems are resolved.

Summary

While psychosocial rehabilitation techniques hold considerable promise for improving treatment of PTSD, effectiveness needs to be empirically validated with and without trauma-specific adaptations. Clients and clinicians collaboratively should adapt proven psychosocial rehabilitation services to address consumer-identified problems and undertake systematic comparisons of their relative effectiveness for PTSD.

Reference

Wang, S., Wilson, J. P., & Mason, J. W. (1996). Stages of decompensation in combat-related PTSD. *Integrative Physiological and Behavioral Science, 31,* 237–253.

Suggested Readings

Anthony, W. A., & Spagniol, L. (1994). *Readings in psychiatric rehabilitation*. Boston: Center for Psychiatric Rehabilitation.

Cook, J. A. (1998). *The Employment Intervention Demonstration Program (EIDP)*. Chicago: EIDP Coordinating Center, University of Illinois at Chicago.

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Hypnosis

Etzel Cardeña, Jose Maldonado, Onno Van der Hart, and David Spiegel

Description

Hypnosis is a procedure generally established by an induction, during which suggestions for alterations in behavior and mental processes including sensations, perceptions, emotions, and thoughts are provided. An induction procedure

typically entails instructions to disregard extraneous concerns and to focus on the experiences and behaviors that the therapist suggests or that may arise spontaneously. Although many inductions use some type of relaxation instructions, others, instead, emphasize mental alertness and physical activity. Hypnosis can bring about a narrow focus of attention, enhanced suggestibility, and alterations in consciousness (e.g., in time perception, in body image). Individuals differ in their level of responsiveness to hypnotic suggestions, and it is generally believed that hypnotic techniques are especially useful for individuals with at least moderate levels of hypnotizability. Hypnosis is not a therapy per se, but an adjunct to psychodynamic, cognitive-behavioral, or other therapies, and has been shown to enhance significantly their efficacy for a variety of clinical conditions (Kirsch, Capafons, Cardeña, & Amigó, 1998; Spiegel & Spiegel, 1987). The use of hypnosis in clinical practice requires appropriate professional training and credentialing. Healthcare professionals should only use its techniques within their own areas of professional expertise.

General Strength of the Evidence

The literature contains only one randomized, controlled clinical trial of hypnosis with patients with various types of posttraumatic symptomatology (Brom, Kleber, & Defares, 1989). This study showed that hypnosis significantly decreased intrusion and avoidance symptoms. However, the considerable literature supporting the efficacy of hypnosis for posttraumatic conditions is mostly based on service and case studies, some going back to the 19th century (AHCPR Level C).

Course of Treatment

Hypnotic techniques can be easily integrated with diverse approaches to the treatment of traumatic stress syndromes. In a three-stage model of treatment, hypnotic techniques can be used in the following ways:

1. In the initial stage, hypnosis can be used to stabilize the patient by providing techniques to enhance relaxation and establish cues to induce a calm state outside of the therapeutic context. Specific suggestions may also be used to enhance ego strength and a sense of safety, to contain traumatic memories, and to reduce, or at least better control symptoms such as anxiety and nightmares. Finally, hypnosis is widely believed to intensify the therapist–client relationship, which can then be used for therapeutic purposes.
2. In the second stage, working through and resolving traumatic memories, various hypnotic techniques can be used to help pace and control the investigation, integration, and resolution of traumatic memories. In this context, the patient may learn to modulate the emotional and cognitive distance from the traumatic material

and better integrate traumatic memories. Projective and restructuring techniques such as an imaginary split-screen to represent different aspects of the traumatic experience may be especially advantageous in this stage.

3. Finally, the goals of the third stage include achieving a more adaptive integration of the traumatic experience into the patient's life, maintaining more adaptive coping responses, and furthering personal development. Hypnotic techniques can be helpful in providing strategies to focus intentionally and shift attention as necessary; they can also be helpful in self integration through, for instance, rehearsals in fantasy of a more adaptive self-image, new activities, and so on.

Throughout these three basic stages, hypnosis can be used to facilitate eight important tasks for PTSD patients: (1) confronting the traumatic material, (2) facilitating the conscious experience of aspects of the trauma that might have been dissociated, (3) confessing painful or embarrassing deeds or emotions, (4) providing appropriate consolation and sympathy for painful experiences, (5) condensing various aspects of trauma into representative and more manageable images, (6) enhancing concentration and mental control instead of falling prey to unbidden and distressing mental episodes, and (7) facilitating an adaptive congruence in various areas of the patient's personal and social life. In the case of clients without a history of chronic pathology, who have undergone a recent traumatic event, our observation has been that hypnotic techniques can facilitate recovery in a matter of a few sessions. Chronic and more complicated clinical pictures typically require lengthier treatment.

Recommendations

Indications

There are a number of indications for the use hypnosis in the treatment of PTSD:

1. Hypnotic techniques may be especially useful for symptoms often associated with PTSD, such as dissociation and nightmares, for which hypnotic techniques have been successfully used (AHCPR Level C).
2. PTSD patients who manifest at least moderate hypnotizability may benefit from the addition of hypnotic techniques to their treatment (AHCPR Level D).
3. Hypnotic techniques can be easily integrated into diverse approaches, including psychodynamic or cognitive-behavioral therapies and pharmacotherapy. Although clinical observations suggest such integration for PTSD, we need data that directly evaluate whether its addition enhances the efficacy of those treatments.

4. Because confronting traumatic memories may be very difficult for some PTSD patients, hypnotic techniques may provide them with a means to modulate the emotional and cognitive distance from such memories as they are worked-through therapeutically (AHCPR Level D).
5. For PTSD patients who may have experienced dissociative phenomena at the time of a traumatic event, a similar state induced in hypnosis may potentially enhance a fuller recall of those events, especially if no other strong cues to the event exist (AHCPR Level F).

Contraindications

1. In the rare cases of individuals who are refractory or minimally responsive to hypnotic suggestions, hypnotic techniques may not be beneficial. There is some evidence that hypnotizability is related to treatment outcome.
2. Some PTSD patients may resist the use of hypnosis because of mistaken preconceptions or other reasons. If this resistance is not softened after dispelling mistaken assumptions about hypnosis, other suggestive techniques that do not involve the term "hypnosis" or an induction procedures, such as emotional self-regulation therapy (ESRT), may be employed (AHCPR Level F).
3. For patients with low blood pressure or proneness to fall asleep, a hypnotic procedure that emphasizes alertness rather than relaxation may be employed (AHCPR Level F).

Potential complications of using hypnosis for PTSD include exaggerated confidence in the veracity of memories produced during hypnosis and the possible creation of pseudomemories, or "false memories," especially among highly suggestible individuals given misleading information. A number of studies have shown that hypnosis facilitates improved recall of both true and confabulated material, with no change in overall accuracy. Providing accurate information about the nature of hypnosis and memory, and warning patients about the potentially unwarranted confidence in memories obtained through hypnosis or other techniques, may minimize this concern. Clinicians should be especially careful with patients who may want to use hypnotic techniques to access "unremembered" episodes of previous abuse.

There may also be legal ramifications in the use of hypnosis for accessing memories of traumatic events, for instance, in the case of witnesses to crime. The ability of victims to testify in court may be challenged if they have been hypnotized. In these situations, it is wise to discuss such issues in advance with the attorneys and police officials involved in the case, and to electronically record all contacts with the patient.

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Marital and Family Therapy

David S. Riggs

Description

Marital and family therapy has been recommended for the treatment of traumatized adults. Typically, these treatments are suggested as an adjunct to other forms of treatment that are designed to address the symptoms of posttraumatic stress disorder (PTSD) more directly. Marital and family treatments for trauma survivors fall into one of two general categories: systemic approaches designed to treat marital or family disruption, and supportive approaches designed to help family members offer support for an individual being treated for PTSD. Of the two approaches, the systemic treatments have received more attention in the literature, and the descriptions of these interventions are more detailed than are those of supportive approaches.

General Strength of the Evidence

Only a couple of empirical investigations of marital or family therapy were found in the literature (only one that included a randomized, controlled trial). In general, information regarding the efficacy of marital and family approaches for treating trauma survivors encompasses clinical descriptions based on the experience of a single clinician or clinic. Few of these descriptions include any systematic

assessment of the efficacy of the approach (e.g., standardized measurement), and none have been replicated across clinics.

Course of Treatment

Marital and family treatments of trauma survivors are typically seen as time-limited, problem-focused interventions. These specific courses of treatment vary depending on the format and philosophy of the treatment. The goals of these treatments are typically to foster communication and mutual support around posttrauma reactions and symptoms.

Recommendations

At the present time, then, it is recommended that marital and family therapy be used as adjuncts to treatments that are focused on the alleviation of PTSD symptoms and not be seen as treatments for PTSD themselves. However, as marital and family disruption is frequently a problem among trauma survivors, it is also recommended that clinicians evaluate the need for marital and family therapy when treating trauma survivors. When such a need is identified, it is recommended that marital and family therapy occur concurrently or following treatment of the survivor's PTSD symptoms. Finally, it is recommended that marital and family therapy focus on improving communication and reducing conflict among family members. This may entail communication about current problems or issues related to the trauma and its aftermath.

Indications	*Strength of evidence*
Marital or family distress	E
Intact system prior to trauma	E
Traumatized individual(s) also in treatment for individual symptoms	E
Traumatized client in agreement with intervention involving others	E
Marital/family treatment will help individual recovery	E
Contraindications	
Family violence	D
Lack of commitment to family/marriage	E

Suggested Readings

Figley, C. R. (1989). *Helping traumatized families.* San Francisco: Jossey-Bass.

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Creative Therapies

David Read Johnson

Description

The creative arts therapies are the intentional use by a trained therapist of art, music, dance/movement, drama, and poetry in psychotherapy, counseling, special education, or rehabilitation.

Practitioners in the field emphasize the special role of the nonverbal form of intervention, which specifically involves the invocation of kinesthetic cues to memories or images, as well as the benefits of creativity and spontaneity in ameliorating feelings of hopelessness or worthlessness. First, the symbolic media of the arts may provide more complete access to implicit (as opposed to explicit) memory systems, as well as visual–kinesthetic schemas that are usually processed by the nondominant hemisphere of the brain. It seems possible that traumatic experience and associated distorted schemas may be stored in these nonlexical forms. By more completely accessing the traumatic schema, the creative arts therapies may increase the impact of therapeutic processes such as desensitization, cognitive reframing, and habituation.

Second, the utilization of creative and socially valued artistic methods may have therapeutic effects in the psychosocial domain. Creative arts therapies may improve PTSD clients' self-esteem, hope, and prosocial behavior, and reduce feelings of shame and guilt, through the association of traumatic material to adaptive and aesthetic modes of expression.

Though, presumably, these nonverbal and creative components serve as the unique elements in this form of treatment, the creative arts therapies clearly utilize more generic therapeutic processes that overlap with many more established trauma treatments, such as relaxation, exposure, desensitization, cognitive interventions, narrative techniques, and distraction.

General Strength of the Evidence

Most empirical work has been done on assessment, particularly in the discipline of art therapy. Presence of the following indicators in children's drawings warrants further investigation: genitalia, hands omitted, fingers omitted, and head only.

We found few empirical studies of the creative arts therapies in the treatment of trauma. Most of the evidence of efficacy derives from clinical reports and case studies. Significant reductions in PTSD symptoms and other functional measures are commonly reported. The creative arts therapies have been cited as helpful in the reduction of alexithymia, increase in emotional control, improvement in

interpersonal relationships, decrease in dissociation and anxiety, decreased nightmares, improved body image, and reduction of depression.

Recommendations

Three populations are often identified that may benefit uniquely from the creative arts therapies: (1) For children who are often unable to focus or attend to an abstract verbal discussion regarding their personal experiences, engagement in play often is the only or best way to access these experiences; (2) for traumatized clients who have difficulty expressing their feelings verbally, the use of nonverbal modes of expression may allow them to access and then process traumatic memories more fully; and (3) for highly intellectualized clients whose use of language obstructs their processing of traumatic material, the arts media may aid in circumventing their avoidant defenses. Despite relatively wide use and application, the efficacy of the creative arts therapies has not been established through empirical research. The creative arts therapies may be helpful as an adjunct to treatment under the following conditions: (1) The arts therapy is conducted by a practitioner trained in that approach; (2) the therapy is conducted with the permission of the client; and (3) the therapy is conducted in conjunction with other ongoing treatments and therapists. The exact source of therapeutic benefits of the creative arts therapies in the treatment of PTSD has not been identified and is likely to be a combination of generic psychological processes (such as exposure, relaxation, and cognitive processing) and specific nonverbal and creative elements.

There is currently insufficient evidence to differentiate the impact of the creative arts therapies on PTSD, comorbid disorders, or associated disruptive symptoms. Similarly, there is insufficient evidence to make statements regarding their cost-effectiveness.

1. The recognition, justification, and further development of the creative arts therapies in the treatment of psychological trauma will be most fully encouraged by more sophisticated empirical inquiries using control groups and randomized assignment.
2. Creative arts therapy treatments designed to be specific for PTSD would presumably have heightened therapeutic effects over nonspecific creative arts therapy approaches. The design of such treatments is recommended.
3. Greater attention to the possible contraindications (e.g., types of clients, types of symptoms, stages of treatment) is needed.

Suggested Readings

Cohen, B., & Cox, C. (1995). *Telling without talking: Art as a window into the world of multiple personality*. New York: Norton.

Dayton, T. (1997). *Heartwounds: The impact of unresolved trauma and grief on relationships*. Deerfield Beach, FL: Health Communication.

Feldman, S., Johnson, D., & Ollayos, M. (1994). The use of writing in the treatment of PTSD. In J. Sommer & M. Williams (Eds.), *The handbook of post-traumatic therapy* (pp. 366–385). Westport, CT: Greenwood Press.

Johnson, D. (1987). The role of the creative arts therapies in the diagnosis and treatment of psychological trauma. *Arts in Psychotherapy, 14*, 7–14.

Kaufman, B., & Wohl, A. (1992). *Casualties of childhood: A developmental perspective on sexual abuse using projective drawings*. New York: Brunner/Mazel.

Malchiodi, C. (1990). *Breaking the silence: Art therapy with children from violent homes*. New York: Brunner/Mazel.