



WITNESS STATEMENT OF PROFESSOR DAVID FORBES

I, David Forbes, clinical psychologist, of Level 3, Alan Gilbert Building, 161 Barry Street, Carlton, say as follows:

- 1 I make this statement on the basis of my own knowledge, save where otherwise stated. Where I make statements based on information provided by others, I believe such information to be true.

Background and experience

- 2 I am a clinical psychologist and Director of the Phoenix Australia Centre for Posttraumatic Mental Health (**Phoenix**). I have been an employee of Phoenix since 1999. I was appointed as Deputy Director in 1999 and as Director in 2011.
- 3 I am a Professor with the Department of Psychiatry at the University of Melbourne. I have a strong background in research, having authored over 160 publications.
- 4 I am Vice-Chair of the International PTSD Guidelines Committee of the International Society for Traumatic Stress Studies and the inaugurator of the Australian Guidelines for the Treatment of Acute Stress Disorder and Posttraumatic Stress Disorder. Attached and marked "DF-1" is a copy of the current Australian Guidelines.
- 5 Attached to this statement and marked "DF-2" is a copy of my curriculum vitae.
- 6 My expertise is in psychological trauma, focusing from a clinical perspective on both assessment and treatment across a broad range of groups and with a particular speciality in veteran and military personnel and first responders. I also have expertise in working with more broad trauma-affected groups including those affected by assaults, natural disasters, domestic violence and community-related trauma.

Phoenix

- 7 Phoenix is a not-for-profit organisation affiliated with the University of Melbourne. Its mission is to improve outcomes for individuals, organisations and communities affected by trauma.
- 8 Phoenix's work is largely funded on a project by project basis. We receive core funding from the Department of Veteran's Affairs (**DVA**) (approximately \$1.5 million annually, with the remainder of our funding (approximately \$7.5 million annually) received from DVA and other sources as commissioned and tendered.

- 9 Phoenix is overseen by an independent board of directors.
- 10 The work of Phoenix is divided into three arms:
 - (a) The Research and Evaluation arm, which undertakes research and generates new knowledge in understanding trauma, as well as new interventions.
 - (b) The Policy and Service Development arm, which prepares the national PTSD guidelines as a benchmark for care – from prevention through to treatment. It also works with organisations and agencies around best practice policy and practice around trauma.
 - (c) The Training and Workforce Development arm aims to provide skills development for the delivery of evidence based practice. It trains managers and supervisors in best practice care and also trains service providers to deliver treatment.
- 11 Phoenix serves a broad range of clients on a request for services basis. Clients include Commonwealth agencies, state government departments, first responder agencies and some smaller government funded service agencies.

What is psychological trauma?

- 12 In lay person's terms, the term 'trauma' refers to emotional and psychological harm to a person caused by an event.
- 13 However, within the mental health field, to have experienced psychological trauma means a person must have been through an event that either threatened their life, or threatened their physical or psychological integrity.
- 14 Trauma can be direct, or can be where a person has been involved in an event by other means. An example of indirect trauma is if a person works at an emergency call centre - these workers become involved in the trauma by virtue of their work. Watching an upsetting event on the news does not qualify as trauma because the viewer is not a participant.

What causes psychological trauma?

- 15 A broad array of events can be traumatic. These include combat, domestic violence, severe accidents, natural and man-made disasters or physical and sexual abuse, assault and witnessing horrific death or injury to others. These events are known as 'traumatic stressors'.
- 16 Stressors are split up into 'primary' and 'secondary' stressors. Secondary stressors can be described as the series of consequential stressors that result from the primary

stressor and increase the risk of a mental health disorder developing. Secondary stressors increase this risk significantly.

- 17 A good example to show the difference in types of stressors is a natural disaster. The disaster itself is the primary and potentially traumatic stressor. The consequences that follow – the requirement to rebuild houses, deal with insurance, and the consequential financial impacts and family conflict – are secondary stressors.
- 18 Absence of support after a traumatic event – including judgments, blame, accusations and punishment - can also be secondary stressors, as can being required to interact with the legal or criminal justice systems following the event.
- 19 Traumatic events can be isolated and relatively brief, but they can also be repetitive, prolonged and accumulative. When traumatic events are repetitive, prolonged and accumulative, they can also be associated with neglect and escape can be extremely difficult. These situations are referred to as complex trauma. When they affect children at vulnerable times the term 'developmental trauma' is often used.

How does trauma affect mental health?

- 20 Psychological trauma is a determinant of mental illness. Other determinants of mental illness can be biological, genetic, environmental and social.
- 21 Mental illnesses caused by trauma commonly include PTSD, depression, anxiety, substance use disorder, panic disorder and agoraphobia. Trauma can also be a risk factor for schizophrenia and other serious mental illnesses such as borderline personality disorder.
- 22 Developmental trauma in children can be associated with developmental delay, physical health problems, interpersonal difficulties, emotional instability, low self-esteem and disordered personality development.
- 23 From a mental health perspective, complex trauma is a risk factor in adults for serious mental illness (e.g. schizophrenia, borderline personality disorder), high prevalence disorders such as depression, anxiety, eating disorders and substance abuse, recently defined complex PTSD (ICD-11), learning problems, social disruption, interpersonal crises, socio-economic drift, criminal behaviour, and chronic physical health problems.
- 24 About 70% of Australians are affected by an event that meets the criteria for a traumatic event, but they do not all go on to develop disorders.^{1,2} Where an event meets the

¹ McEvoy, P. M., Grove, R., & Slade, T. (2011). Epidemiology of anxiety disorders in the Australian general population: findings of the 2007 Australian National Survey of Mental Health and Wellbeing. *Australian and New Zealand Journal of Psychiatry*, 45(11), 957-967.

criteria for a traumatic event, but it is not yet known if the person will develop a mental health problem, the event is referred to as a 'potentially traumatic event' (PTE).

25 There are a number of factors that impact whether someone who has experienced a PTE will develop a trauma-related disorder. The three main types of factors are as follows:

- (a) Pre-event risk factors may be biological or genetic. If a person has a history of mental health problems and prior trauma, there may also be increased risk of developing a disorder.
- (b) Event-specific risk factors. The greater degree to which a person was personally targeted and his or her life or bodily integrity were threatened; the degree of horror the person was exposed to, the duration of or repetition of the event, and the predictability of the event and the person's level of control over it are all factors that influence the likelihood of developing a disorder.³ Risk is also higher where the trauma was interpersonal (such as assault) as opposed to non-interpersonal trauma (such as a natural disaster), and where a person experiences hyper-arousal (a high level of physiological response) or shutdown (dissociation or numbing).^{3,4,5}
- (c) Post-event risk factors. These factors are about what happens after the event and also have a significant impact on risk of developing a disorder. Early intervention matters - a lot can be done at this point in terms of support and stressor mitigation. Levels of social connection and support are also significant factors.

26 The potential development of a trauma-related disorder is dependent on what the loading is in each of these three risk factor domains. In some cases, the loading is so great in each of the three domains that just about anyone would develop a disorder.

² Mills, K. L., McFarlane, A. C., Slade, T., Creamer, M., Silove, D., Teesson, M., & Bryant, R. (2011). Assessing the prevalence of trauma exposure in epidemiological surveys. *Australian and New Zealand Journal of Psychiatry*, 45(5), 407-415.

³ Ozer, E. J., Best, S. R., Lipsey, T. L., & Weiss, D. S. (2003). Predictors of posttraumatic stress disorder and symptoms in adults: a meta-analysis. *Psychological bulletin*, 129(1), 52

⁴ Peleg, T., & Shalev, A. Y. (2006). Longitudinal studies of PTSD: overview of findings and methods. *CNS Spectrums*, 11, 589-602.

⁵ Bovin, M. J., & Marx, B. P. (2011). The importance of the peritraumatic experience in defining traumatic stress. *Psychological bulletin*, 137(1), 47.

- 27 Research is currently being conducted^{6,7} into whether factors such as individual resilience impact on the risk of developing a disorder. There is no conclusive evidence on this at the moment.

What supports help reduce the risk of developing a trauma-related disorder?

- 28 Early intervention is important. With trauma, there can be an accrual of problems. If a person cannot access services there may be a cascade of problems. PTSD can develop, which is often followed by depression or other disorders and problems. Ultimately this can result in suicide.⁸
- 29 When a person has been exposed to a PTE, the post-event risk factors can be mitigated by providing support. This support does not have to come from a professional - informal structures can be empathic, caring and provide the contact and support the person needs.
- 30 Initially, 'psychological first aid' can be offered. This is simply checking on the person, providing general care and practical support immediately. Psychological first aid also includes strategies to reduce hyper-arousal. Although sometimes hyper-arousal can be a normal response to trauma as the body's 'alarm' that something is highly threatening. If the alarm is too 'loud' and does not stop, a strategy can be employed to bring the person's arousal back down.
- 31 After this, it is important to engage with the person involved in the PTE and see how they are reacting. This is known as 'watchful waiting'. It involves watching to see if the person is settling in the next days and over the next week or two weeks, and if not, intervening with early disorder focused evidence-based practice.
- 32 Going forward, at a family or social level, the person can be encouraged to do basic things to look after themselves – listened to if they want to talk about it or support them in promoting sleep, eating healthy meals, avoiding substance use and engaging in activities they would otherwise usually enjoy.
- 33 At an organisational level (for example, where the trauma has happened at work), a nominated peer may be able to provide these support responses. Again, this does not need to be a professional.

⁶ Adler AB, Bliese PD, McGurk D, Hoge CW, Castro CA. (2011). Battlemind debriefing and battlemind training as early interventions with soldiers returning from Iraq: Randomization by platoon. *Sport, Exercise and Performance Psychology*, 1, 66-83.

⁷ O'Donnell, M., Lau, W., Alkemade, N., Lewis, V., Crane, M., Phelps, A., ... Forbes, D. (2015). The Longitudinal Australian Defence Force Study Evaluating Resilience – Detailed Report 1: Prior Trauma Exposure and Mental Health. Report prepared for the Australian Government Department of Defence. Phoenix Australia.

⁸ Panagioti, M., Gooding, P. A., & Tarrier, N. (2012). A meta-analysis of the association between posttraumatic stress disorder and suicidality: the role of comorbid depression. *Comprehensive psychiatry*, 53(7), 915-930.

- 34 In any circumstance, it is important to identify what the person needs, and provide practical support to return a sense of control. This involves providing basic necessities, giving the person information about how to get other things they need, and where relevant giving the person information about the event that they were not aware of if they request it.
- 35 The person can be given an opportunity to talk about the event. It is important those affected are given an opportunity to talk about the event if they wish to. However, it is important that the person is reassured that he or she does not have to talk about it. Historically, it was thought that 'psychological debriefing' (encouraging or requiring a person to talk about the event soon after it) reduced the risk of developing a trauma-related disorder in everyone affected by trauma. There is no data to say that this works and, in fact, there is data to say it is damaging to some people who may be more vulnerable to having this process imposed on them. Support via psychological first aid with the opportunity to discuss the event if the person wishes to with whomever they feel most comfortable and appropriate would be considered best practice.
- 36 Another way of supporting people who have experienced a PTE is via trauma-informed care. Trauma-informed care is not treatment of a trauma disorder. Rather, people trained in trauma-informed care are aware of what trauma responses are, and how to engage with trauma-affected people in a manner to minimise the likelihood of worsening the effects of the trauma on that person. Trauma-informed care looks to maximise the value and effectiveness of the interaction for whatever service they are seeking to deliver to that trauma affected individual – whether it be delivery of financial, legal, health or community services.
- 37 To reduce complex and developmental trauma social, economic and political interventions are required. Poverty, poor housing, unemployment, and social isolation are examples of risk factors for this type of trauma that require community-wide interventions and solutions.

What is best practice when it comes to early intervention into trauma-related mental illness?

- 38 Acute stress disorder (ASD) is diagnosed if the symptoms (these can include re-experiencing intrusive memories of the event, distress at reminders, desire to avoid reminder by staying away or pushing away thoughts and feelings, hyperarousal through sleep and concentration problems, anger and irritability, startle and hypervigilance, emotional withdrawal or flattening) persists two days to four weeks after the PTE. If these symptoms persist for 4 weeks after the traumatic event PTSD can be diagnosed.

39 There are four treatments that are recognised globally as best practice when it comes to treating ASD and PTSD. They are:

- (a) Prolonged Exposure therapy (PE): The primary focus of PE is to help the PTSD sufferer to confront their traumatic memories using a verbal narrative technique that involves detailed recounting of the traumatic experience that is then recorded and listened to on a repeated basis with the goal of habituation. In addition, real-life repeated exposure to avoided and fear-evoking situations, that are now safe but associated with the trauma, is undertaken, again with the aim of habituation.
- (b) Cognitive Processing Therapy (CPT): The main focus of CPT is on the evaluation and modification of problematic thoughts that have developed following the traumatic experience(s). For example, using cognitive techniques to challenge typical thoughts of PTSD, that the individual is to blame for their trauma or that the world is now unsafe. An optional component of CPT is the development of a detailed written narrative account of the trauma.
- (c) Eye Movement Desensitisation and Reprocessing (EMDR): EMDR is a standardised, eight-phase, trauma-focused therapy, involving the use of bilateral physical stimulation (eye movements, taps or tones). Targeted traumatic memories are considered in terms of an image, the associated cognition, the associated affect and body sensation. These four components are then focused on as bilateral physical stimulation occurs. It is hypothesised that EMDR stimulates the individual's own information processing in order to help integrate the targeted memory as an adaptive contextualised memory. Processing targets involve past events, present triggers and adaptive future functioning. EMDR at times uses restricted questioning related to cognitive processes paired with bilateral stimulation to unblock processing.
- (d) Trauma focused Cognitive Therapy (TF-CT): Cognitive Therapy for PTSD (CT-PTSD): CT-PTSD focuses on the identification and modification of negative appraisals and behaviours that lead the PTSD sufferer to overestimate current threat (fear). It also involves modification of beliefs related to other aspects of the experience and how the individual interprets their behaviour during the trauma (e.g. issues concerning guilt and shame).

40 The clinical effects of these four treatments (together, the **Treatments**) are substantial. Evidence for the effectiveness of these treatments can be seen in the Phoenix Australia

guidelines for the treatment of PTSD⁹ and the International ISTSS prevention and treatment of PTSD Guidelines.¹⁰

- 41 Pharmacological treatment can also be employed, and can often form an important part of stabilisation and treatment but evidence of effectiveness in promoting recovery and improvements is not as strong as the evidence of recovery and improvement following the Treatments. This evidence again is reflected in the Phoenix Australia and International PTSD treatment guidelines cited above.

What more can be done to prevent and treat trauma-related disorders?

- 42 Many individuals with mental health problems do not access mental health services and much can be done to improve access to the mental health services. However if a trauma affected person does have access to mental health services, for example a private mental health practitioner in the community, the likelihood of having the service provided by someone trained in one of the treatments is about 30% to 40%.^{11,12}
- 43 Currently, one third of people being treated recover fully, and another third show meaningful improvements. However, another third struggle to show any improvement at all. In the trauma space, we call this 'the rule of thirds'. We need to improve this ratio and improve access to and the effectiveness of the treatments for those who currently do not respond as well.^{13,14}
- 44 A key issue however is that public mental health tends not to provide services for trauma related mental health problems. Community mental health services and public psychiatric hospitals focus more on conditions referred to as serious mental illness such as schizophrenia, bipolar disorder and a range of other psychoses, severe borderline personality disorder or severe depression with suicidal intent. Therefore they do not offer a community treatment option for those with serious high prevalence trauma related disorders such as PTSD.
- 45 The trauma affected people who can obtain access to funded and potentially trauma-related services and treatment tend to fall into a group identified under an industry with

⁹ <https://www.phoenixaustralia.org/wp-content/uploads/2015/03/Phoenix-ASD-PTSD-Guidelines.pdf>.

¹⁰ http://www.istss.org/getattachment/Treating-Trauma/New-ISTSS-Prevention-and-Treatment-Guidelines/ISTSS_PreventionTreatmentGuidelines_FNL-March-19-2019.pdf.aspx.

¹¹ Forbes D, Van Hooff M, Lawrence-Wood E, Sadler N, Hodson S, Benassi H, Hansen C, Avery J, Varker T, O'Donnell M, Phelps A, Frederickson J, Sharp M, Searle A, McFarlane A, 2018, *Pathways to Care, Mental Health and Wellbeing Transition Study*, the Department of Defence and the Department of Veterans' Affairs, Canberra

¹² Rosen, C. S., Greenbaum, M. A., Fitt, J. E., Laffaye, C., Norris, V. A., & Kimerling, R. (2011). Stigma, help-seeking attitudes, and use of psychotherapy in veterans with diagnoses of posttraumatic stress disorder. *The Journal of nervous and mental disease*, 199(11), 879-885.

¹³ Bradley, R., Greene, J., Russ, E., Dutra, L., & Westen, D. (2005). A multidimensional meta-analysis of psychotherapy for PTSD. *American journal of Psychiatry*, 162(2), 214-227.

¹⁴ Steenkamp, M. M., Litz, B. T., Hoge, C. W., & Marmar, C. R. (2015). Psychotherapy for military-related PTSD: a review of randomized clinical trials. *JAMA*, 314(5), 489-500.

funded support such as TAC, veterans through Veterans Affairs, survivors of sexual assault through the Centres Against Sexual Assault and workers' compensation programs. Anyone who falls outside a defined group with a specific PTSD treatment or funding agency cannot easily receive treatment. This includes people such as adult survivors of physical abuse or neglect, disaster survivors, and people suffering from substance abuse disorders (70% of whom are trauma-affected).

- 46 For those who fall out of these designated groups, their options are limited to six initial sessions with a possibility for a further four per year under Medicare. Australian and International Guidelines for PTSD treatment show that in the best possible circumstances the minimum required is ten to twelve weekly sessions. Funding of services need to be provided to allow people to access the best practice treatments for PTSD with the amount of sessions needed for a minimal effective dose.
- 47 Staff working in community health mental health services and hospitals would benefit from training on how to recognise someone presenting after a PTE, how to ask questions around current or previous exposures, and on referral pathways. That is the delivery of trauma informed care, even if they are not delivering the trauma focused treatment. This needs to be built into the system, including in hospital emergency departments for early intervention purposes.
- 48 People who work in industries where they are likely to deal with people who have been affected by trauma should also have psychological first aid and trauma-informed care training available to them. In particular, drug and alcohol service providers should be trained in trauma-informed care, checks, supports and guidance.
- 49 Finally, the system needs to be more adaptable to change. The evidence base is moving a lot as research provides more evidence and understanding of what works when it comes to trauma. The system needs to be able to keep up with these changes, particularly in terms of prevention and early intervention, which in three to four years will be a completely different space to what we know now.

sign here ►



print name Professor David Forbes

date 27 June 2019

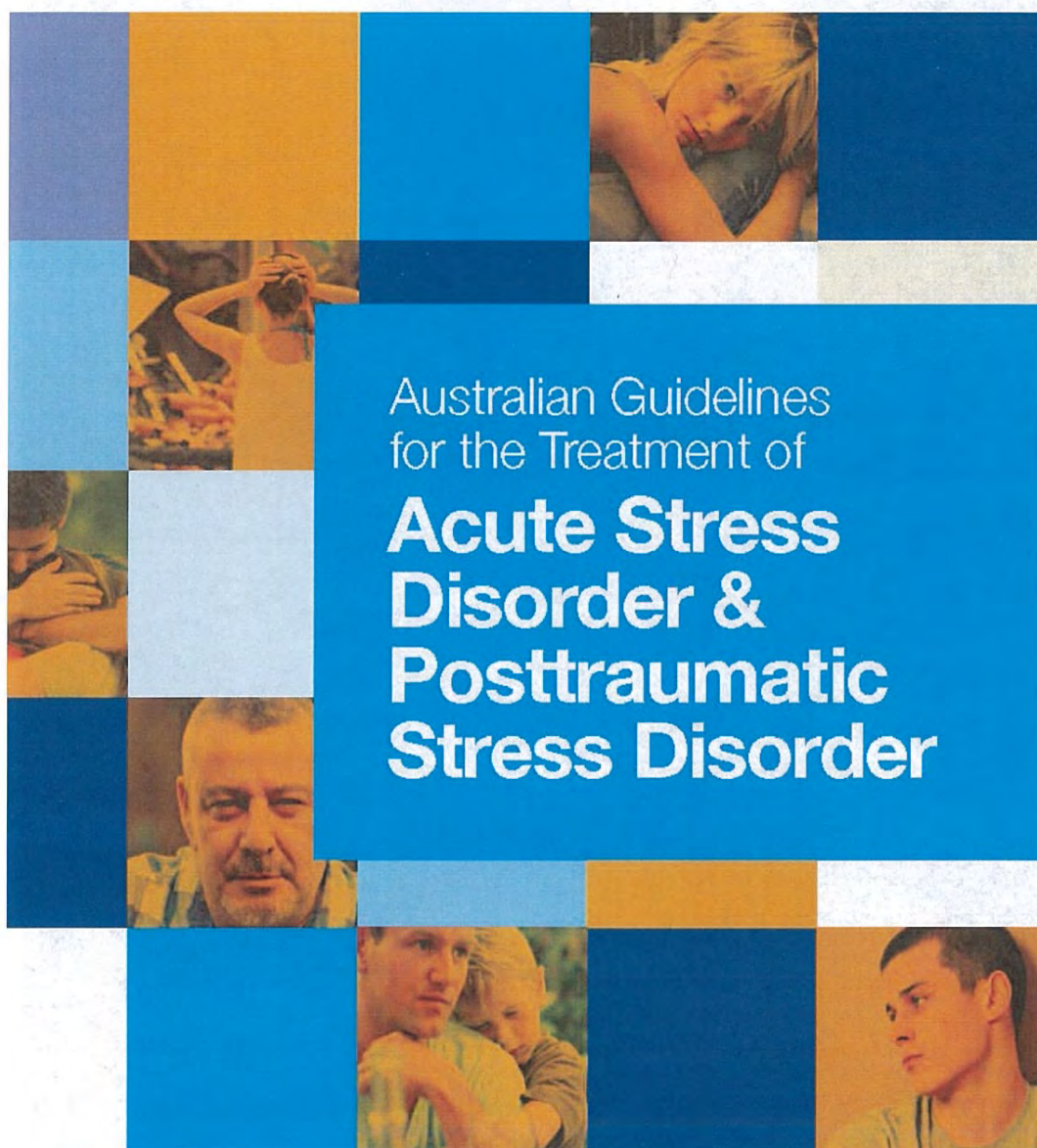


Royal Commission into
Victoria's Mental Health System



ATTACHMENT DF-1

This is the attachment marked 'DF-1' referred to in the witness statement of Professor David Forbes dated 27 June 2019.





© Phoenix Australia – Centre for Posttraumatic Mental Health, 2013
ISBN Print: 978-0-9752245-0-1 ISBN Online: 978-0-9752245-1-8

This work is copyright. Apart from any use as permitted under the Copyright Act 1968, no part may be reproduced by any process without prior written permission from Phoenix Australia – Centre for Posttraumatic Mental Health. Requests and inquiries concerning reproduction and rights should be addressed to Phoenix Australia – Centre for Posttraumatic Mental Health (phoenixinfo@qumailb.edu.au).

Copies of the full guidelines, and brief guides for practitioners and the public, are available online:

www.phoenixaustralia.org
www.clinicalguidelines.gov.au

The suggested citation for this document is:

Phoenix Australia – Centre for Posttraumatic Mental Health.
*Australian Guidelines for the Treatment of Acute Stress Disorder
and Posttraumatic Stress Disorder*.
Phoenix Australia, Melbourne, Victoria.

Legal disclaimer

This document is a general guide to appropriate practice, to be followed only subject to the practitioner's judgement in each individual case.

The guidelines are designed to provide information to assist decision making and are based on the best information available at the date of publication. In recognition of the pace of advances in the field, it is recommended that the guidelines be reviewed and updated in five years' time.

Publication Approval



Australian Government
National Health and Medical Research Council

These guidelines were approved by the Chief Executive Officer of the National Health and Medical Research Council (NHMRC) on 4 July 2013, under Section 14A of the *National Health and Medical Research Council Act 1992*. In approving these guidelines the NHMRC considers that they meet the NHMRC standard for clinical practice guidelines. This approval is valid for a period of 5 years.

NHMRC is satisfied that they are based on the systematic identification and synthesis of the best available scientific evidence and make clear recommendations for health professionals practising in an Australian health care setting. The NHMRC expects that all guidelines will be reviewed no less than once every five years.

This publication reflects the views of the authors and not necessarily the views of the Australian Government.



Australian Guidelines for the Treatment of **Acute Stress Disorder & Posttraumatic Stress Disorder**

Endorsed by
The Australian Psychological Society
The Royal Australian College of General Practitioners
The Royal Australian and New Zealand College of Psychiatrists



RACGP





Acknowledgments

Funding bodies

We gratefully acknowledge the financial contribution of the Department of Veterans' Affairs, the Department of Defence and *beyondblue* in the development of these Guidelines.

Steering group

Professor Beverley Raphael, Psychiatrist
(Population Mental Health and Disasters,
Disaster Response and Resilience Research Group,
University of Western Sydney)

Professor David Forbes, Clinical Psychologist
(Director, Phoenix Australia - Centre for
Posttraumatic Mental Health, University of Melbourne)

Working party

Professor Beverley Raphael, Psychiatrist
Chair
(Population Mental Health and Disasters,
Disaster Response and Resilience Research Group,
University of Western Sydney)

Professor Justin Kenardy, Clinical Psychologist
(Acting Director, Centre of National Research
on Disability and Rehabilitation Medicine,
University of Queensland)

Professor Richard Bryant, Clinical Psychologist
(School of Psychology, University of New South Wales)

Associate Professor Brett McDermott, Psychiatrist
(Executive Director, Mater Child and Youth Mental
Health Service)

Professor Mark Creamer, Clinical Psychologist
(Department of Psychiatry, University of Melbourne)

Professor Alexander McFarlane, Psychiatrist
(Director, Centre for Traumatic Stress Studies,
University of Adelaide)

Associate Professor Grant Devilly, Clinical Psychologist
(School of Applied Psychology, Griffith University)

Dr Lynda Matthews, Rehabilitation Psychologist
(Senior Lecturer, Faculty of Health Sciences,
University of Sydney)

Professor David Forbes, Clinical Psychologist
(Director, Phoenix Australia - Centre for Posttraumatic
Mental Health, University of Melbourne)

Multidisciplinary panel

Professor Beverley Raphael, Psychiatrist
Chair
(Population Mental Health and Disasters, Disaster
Response and Resilience Research Group,
University of Western Sydney)

Professor Brian Draper, Old Age Psychiatrist
(Conjoint Professor, School Of Psychiatry, University
of NSW and Acting Director, Academic Department
for Old Age Psychiatry, Prince of Wales Hospital)

Dr Rob Gordon, Clinical Psychologist
(Clinical and Consulting Psychologist)

Trauma specialists

Associate Professor David Crompton, Psychiatrist
(Executive Director, Addiction and Mental Health,
Metro South Hospital and Health Service, and
Disaster Advisor, Centre for Disaster, Trauma,
Resilience and Recovery)

Dr Chris Lee, Clinical Psychologist
(Senior Lecturer, School of Psychology and
Exercise Science, Murdoch University)

Ms Cait McMahon, Psychologist
(Managing Director, Dart Centre for Journalism
and Trauma – Asia Pacific)



Professor Helen Milroy, Psychiatrist
(Director, Centre for Aboriginal Medical and Dental Health, University of Western Australia)

Associate Professor Shirley Morrissey, Clinical and Health Psychologist
(School of Applied Psychology, Griffith University)

Professor Louise Newman, Psychiatrist
(Director, Centre for Developmental Psychiatry and Psychology, Monash University)

Associate Professor Reginald D. V. Nixon, Clinical Psychologist
(Director, Clinical Psychology Program, Flinders University)

Dr Rebecca Reay, Senior Research Coordinator
(Academic Unit of Psychological Medicine, Australian National University)

Professor Kevin Ronan, Clinical Psychologist
(Foundation Professor in Psychology and Chair, Clinical Psychology, CQUUniversity)

Professor Derrick Silove, Psychiatrist
(Director, Psychiatry Research and Teaching Unit, University of New South Wales)

Dr Kevin Vaughan, Psychiatrist
(Clinical Senior Lecturer, Sydney Medical School, University of Sydney)

Mr Richard Weston, Chief Executive Officer
(Healing Foundation)

Ms Carolyn Worth, Manager
(South Eastern Centre Against Sexual Assault)

Ms Ruth Wraith, OAM
(Child Psychotherapist)

Professional colleges/associations

Australian and New Zealand College of Psychiatrists
Professor Malcolm Hopwood (President Elect)

Australian Association of Social Workers
Ms Elizabeth Sommerville (Mental Health Professional Officer)

Australian Child and Adolescent Trauma, Loss and Grief Network
Ms Michelle Roberts (Psychologist)

Australian College of Mental Health Nurses
Professor Brenda Happell (Fellow)

Australian Guidance and Counselling Association
Ms Roslyn Isles (President)

Australian Guidance and Counselling Association
Ms Lesley Fraser (Secretary)

Australian Psychological Society
Mr David Stokes (Executive Manager, Professional Practice)

Australian College of Rural and Remote Medicine
Dr Gerald Goodhand

Occupational Therapy Australia
Ms Ann Drew

Royal Australian College of General Practitioners
Dr Caroline Johnson (Fellow)

Consumer representatives nominated by the Mental Health Council of Australia

Ms Cassandra Bertram

Ms Karene Eggleton

Ms Larisa Trotter

Industry representatives

Australian Red Cross
Mr Andrew Coghlan (National Manager, Emergency Services)

beyondblue
Ms Suzanne Pope (Director, Research and Planning)

Australian Defence Force Centre for Mental Health
Dr Duncan Wallace (Psychiatrist)





Special population and trauma types area experts

Aboriginal and Torres Strait Islander peoples

Professor Helen Milroy, Psychiatrist
(Director, Centre for Aboriginal Medical and Dental Health, University of Western Australia)

Mr Tom Brideson, State-wide Coordinator
(NSW Aboriginal Mental Health Workforce Program)

Dr Ann Harrison, Psychiatrist
(Winnunga Aboriginal Community Controlled Health Organisation)

Professor Ernest Hunter, Psychiatrist
(Adjunct Professor, James Cook University)

Ms Joyleen Koolmatie, Psychologist
(Aboriginal Psychological Counselling and Consultancy)

Professor Beverley Raphael, Psychiatrist
(Population Mental Health and Disasters, Disaster Response and Resilience Research Group, University of Western Sydney)

Mr Richard Weston, Chief Executive Officer
(Healing Foundation)

Refugees and asylum seekers

Professor Derrick Silove, Psychiatrist
(Director, Psychiatry Research & Teaching Unit, University of New South Wales)

Mr Mariano Coello, Research Coordinator
(Service for the Treatment and Rehabilitation of Torture and Trauma Survivors)

Dr Ida Kaplan, Clinical Psychologist
(Direct Services Manager, Victorian Foundation for Survivors of Torture)

Associate Professor Harry Minas, Psychiatrist
(Director, Victorian Transcultural Psychiatry Unit)

Older people

Dr Richard Bonwick, Psychiatrist
(Deputy Editor, International Psychogeriatric Association)

Professor Brian Draper, Old Age Psychiatrist
(Conjoint Professor, School Of Psychiatry, University of NSW and Acting Director, Academic Department for Old Age Psychiatry, Prince of Wales Hospital)

Military and veterans

Professor Mark Creamer, Clinical Psychologist
(Department of Psychiatry, University of Melbourne)

Professor Alexander McFarlane, Psychiatrist
(Director, Centre for Traumatic Stress Studies, University of Adelaide)

Dr Duncan Wallace, Psychiatrist
(Australian Defence Force Centre for Mental Health)

Emergency services

Mr Andrew Coghlan, National Manager
(Emergency Services, Australian Red Cross)

Professor Alexander McFarlane, Psychiatrist
(Director, Centre for Traumatic Stress Studies, University of Adelaide)

Disasters

Mr Andrew Coghlan, National Manager
(Emergency Services, Red Cross)

Sexual assault

Ms Carolyn Worth, Manager
(South Eastern Centre Against Sexual Assault)

Victims of crime

Associate Professor Grant Devilly, Clinical Psychologist
(School of Applied Psychology, Griffith University)

Motor vehicle accidents

Professor Richard Bryant, Clinical Psychologist
(School of Psychology, University of New South Wales)

Terrorism

Professor Mark Creamer, Clinical Psychologist
(Department of Psychiatry, University of Melbourne)



Phoenix Australia project team

Project Leader	Dr Andrea Phelps
Project Managers	Dr Lisa Dell Dr Bronwyn Wolfgang
Writers	Dr Vanessa Cobham Ms Susan Fletcher Ms Alexandra Howard
Special Populations Contributors	Professor David Forbes Dr Andrea Phelps Ms Anne Laure Couineau Ms Dzenana Kartal Associate Professor Meaghan O'Donnell

Consultant methodologist

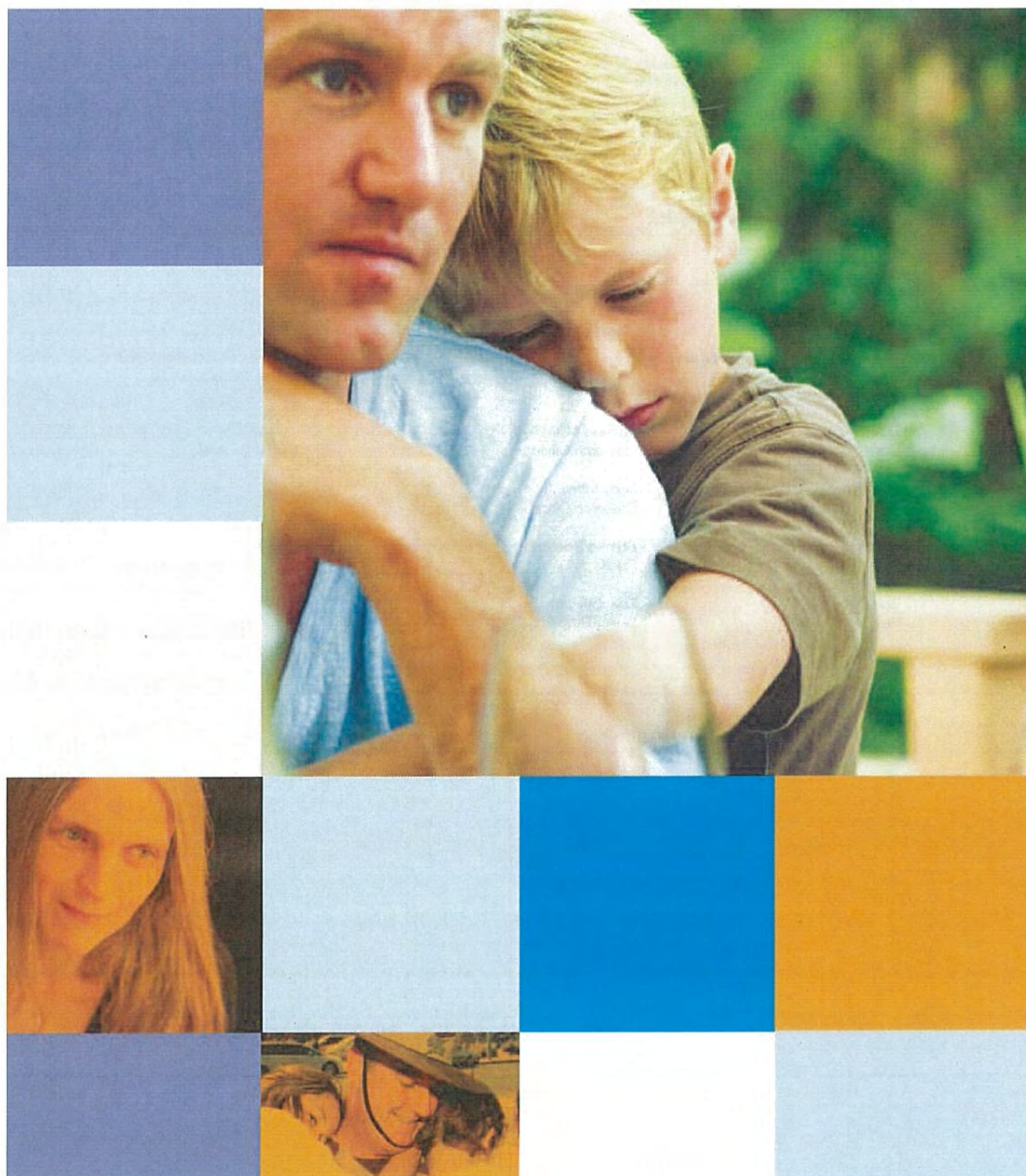
Dr Adele Weston
(Executive Vice President, Optum AsiaPacific)

Systematic review team

Adelaide Health Technology Assessment

Tracy Merlin Managing Director	Joanne Milverton Research Officer
Skye Newton Senior Research Officer	Judy Morona Research Officer
Jacqueline Parsons Senior Research Officer	Stynke Docter Research Officer
Ben Ellery Research Officer	Zhaohui Liufu Senior Research Officer

V





Contents

	Acknowledgements	ii
	List of abbreviations	xiv
	Plain language statement	1
	Executive summary	2
	Complete list of Guideline recommendations	6
1	Introduction	16
	Comparison with the 2007 Guidelines	16
	Guideline aims	16
	Scope of the Guidelines	17
	Development of the Guidelines	18
	Additional notes	19
	Implementation of the Guidelines	20
	Disclaimer	20
	References	20
2	Trauma and trauma reactions	22
	Trauma, traumatic event and potentially traumatic event	22
	Potentially traumatic events	22
	Common responses to potentially traumatic events	22
	Traumatic stress syndromes	23
	Acute stress disorder	23
	Posttraumatic stress disorder	25
	Re-experiencing symptoms	25
	Avoidance and numbing symptoms	25
	Arousal symptoms	25
	Features commonly associated with PTSD	27
	Prevalence and incidence of PTSD	27
	Comorbid conditions	28
	The course of PTSD	28
	Resilience in the face of potentially traumatic events	28



Posttraumatic mental health disorders:	29
Key differences between ASD and PTSD	29
Screening, assessment and diagnosis	29
Comprehensive assessment of PTSD	30
Diagnosis	32
Differential diagnosis	32
'Recovered memories'	33
Symptom exaggeration and malingering	33
Assessment instruments	33
Structured clinical interviews	34
Self-report measures	34
Intervention planning	37
Factors influencing treatment outcome	37
Chronicity and delay in treatment	37
Comorbidity	37
Compensation	39
Therapeutic alliance and treatment expectations	39
Motivation for change	39
Demographics	39
Treatment setting	40
Potential mechanisms of change	40
Treatment goals	41
Cultural and linguistic diversity (CALD)	42
The impact of PTSD on family	42
General professional issues	43
Self-care	44
References	45

3

General considerations when working with children and adolescents	52
Trauma and trauma reactions	53
Trauma, traumatic event and potentially traumatic event	53
Clinical presentations in children and adolescents following potentially traumatic events	53
Traumatic stress syndromes	54
Acute stress disorder	54
Posttraumatic stress disorder	54
Moving to DSM-5	55
Prevalence	55
Comorbid conditions	55
The course and prognosis of PTSD in children and adolescents	56
Risk factors	56
Relational PTSD patterns: The importance of parents	57
Assessment	57
Who to talk to? The low rate of agreement between parents and children	58
When to assess for trauma exposure and symptoms	58
How to assess for trauma exposure and symptoms	58



4

Intervention planning	61
Access to psychological care	61
What's different about working with children and adolescents?	62
The role of parents/caregivers in treatment	62
Does it matter where treatment occurs?	63
References	64
 Interventions	 68
Pre-incident preparedness	68
Pre-incident preparedness training	68
Post-incident interventions for all	68
Psychological debriefing	68
Psychological first aid	69
Stepped care	69
Psychological interventions for ASD and PTSD	69
Brief psychodynamic psychotherapy	69
Eye movement desensitisation and reprocessing	69
Group therapy	70
Hypnosis	70
Imagery rehearsal	70
Interapy	70
Interpersonal therapy	70
Mindfulness-based therapies	70
Narrative exposure therapy	71
Stress management	71
Supportive counselling and present centred therapy	71
Trauma-focussed cognitive behavioural therapy	71
Exposure therapy	71
Cognitive therapy	72
Cognitive processing therapy	72
Alternative approaches	72
Pharmacological interventions for PTSD	72
Antidepressants	72
Atypical antipsychotics	73
Hypnotosedative agents	73
Other medications	73
Psychosocial rehabilitation interventions for PTSD	73
Social emotional rehabilitation	74
Vocational rehabilitation	74
Physical therapies for PTSD	74
Acupuncture	74
Repeated transcranial magnetic stimulation	74
Interventions for children and adolescents	74
Cognitive behavioural intervention for trauma in schools	74
Psychodynamic trauma-focussed psychotherapies	74
Trauma-focussed cognitive behavioural therapy	75
Summary	75
References	76



5

Evidence review and treatment recommendations 78

Approach to the systematic review	78
Research questions	78
Overview of methodology	80
Inclusion criteria	80
Literature sources	80
Search strategies	81
Validity assessment	81
Data extraction and analysis	82
Assessing the body of evidence and generating recommendations	83
Limitations of the review	84
Research questions, evidence summaries and treatment recommendations	84
Early psychological interventions for adults exposed to a potentially traumatic event	84
Pre-incident preparedness training	85
Early psychological interventions for all	86
Psychological treatment for adults with ASD or acute PTSD	88
Psychological interventions for adults with PTSD	89
Early pharmacological interventions for adults exposed to a potentially traumatic event	95
Early pharmacological interventions for all	95
Pharmacological treatment for adults with ASD or acute PTSD	96
Pharmacological interventions for adults with PTSD	97
Psychosocial rehabilitation interventions	101
Exercise and physical therapies	102
Single vs multiple interventions	104
Psychological interventions for adults with PTSD	104
Pharmacological interventions for adults with PTSD	105
Psychosocial rehabilitation interventions for adults with PTSD	106
Pharmacological and psychological interventions for adults with PTSD	106
Psychological vs pharmacological vs psychosocial interventions	107
Sequencing comorbidities	108
Early psychological interventions for children and adolescents exposed to a potentially traumatic event	109
Early psychological interventions for all	109
Early psychological interventions for children and adolescents with ASD or acute PTSD	111
Psychological interventions for children and adolescents with PTSD	112
Early pharmacological interventions for children and adolescents exposed to a potentially traumatic event	115
Early pharmacological interventions for all	115
Pharmacological treatment for those with ASD or acute PTSD	115
Pharmacological interventions for children and adolescents with PTSD	116
School-based interventions	117
In those exposed to trauma or with ASD/acute PTSD	117
Interventions that include parents	118
References	119



6

Economic considerations 128

Summary of literature collected	128
The cost burden of PTSD	128
The effect of treatment	129
Summary	129
Commentary on economic burden	130
Current funding of ASD and PTSD treatment	130
Potential implications	130
References	131

7

Specific populations and trauma types: Issues for consideration in the application of the guidelines 134

Aboriginal and Torres Strait Islander peoples	135
Background issues	135
Presentation	136
Assessment	136
Treatment	137
Working with children	137
Recommended reading	138
Refugees and asylum seekers	139
Background issues	139
Use of interpreters	140
Presentation	140
Assessment	141
Treatment	143
Additional issues specific to asylum seekers subject to mandatory detention and temporary protection	144
Working with children	145
Recommended reading	145
Military and ex-military personnel	146
Background issues	146
Presentation	146
Assessment	147
Treatment	148
Recommended reading	148
Emergency services personnel	149
Background issues	149
Presentation	149
Assessment	150
Treatment	150
PTSD in older people	152
Background issues	152
Presentation	152
Assessment	153
Treatment	153
Directions for future research	154



Motor vehicle accident and other traumatic injury survivors	155
Background issues	155
Presentation	155
Assessment	155
Treatment	156
Working with children	156
Victims of crime	157
Background issues	157
Presentation	157
Assessment	158
Treatment	158
Working with children	158
Sexual assault	159
Background issues	159
Presentation	159
Assessment	160
Treatment	161
Working with children	161
Directions for future research	162
Recommended reading	162
Natural disasters	163
Background issues	163
Issues for service planners	163
Issues for service providers	164
Presentation	164
Assessment	164
Treatment	165
Working with children	165
Recommended reading	165
Terrorism	167
Background	167
Issues for service planners	167
Preparing for the threat of terrorism	167
Responding to an attack	167
Issues for service providers	169
Presentation	169
Assessment	169
Treatment	169
Working with children	169
Recommended reading	169
References	170
Glossary of terms	175



Appendices

Appendix 1	Adelaide Health Technology Assessment (AHTA) reviewers
Appendix 2	Terms of reference
Appendix 3	AHTA systematic review of the evidence
Appendix 4	Public consultation
Appendix 5	DSM-5 criteria for PTSD

Appendices are available to download from www.phoenixaustralia.org



List of Abbreviations

A, B, C, D	Grades of evidence forming the basis for a guideline statement for NICE guidelines: A: The body of evidence can be trusted to guide practice B: The body of evidence can be trusted to guide practice in most situations C: The body of evidence provides some support for recommendation(s) but care should be taken in its application D: The body of evidence is weak and recommendation(s) must be applied with caution
AACAP	American Academy of Child and Adolescent Psychiatry
ACT	Acceptance and commitment therapy
ADF	Australian Defence Force
ADHD	Attention deficit hyperactivity disorder
ADIS-IV-C/P	Anxiety Disorders Interview Schedule for Children – Child and Parent Versions
AHTA	Adelaide Health Technology Assessment
ASD	Acute stress disorder
BPTSD-6	Brief DSMPTSD-IV scale (six item version)
CALD	Cultural and linguistic diversity
CAPS	Clinician Administered PTSD Scale
CAPS-CA	Clinician Administered PTSD Scale for Children and Adolescents
CBCL	Child Behaviour Checklist
CBITS	Cognitive behavioural intervention for trauma in schools
CBT	Cognitive behavioural therapy
CD-RISC	Connor-Davidson Resilience Scale
CI	Confidence interval
CINAHL	Cumulative Index to Nursing and Allied Health Literature
CISD	Critical incident stress debriefing
CISM	Critical incident stress management
CNS	Central nervous system
CP	Consensus point
CPP	Child-parent psychotherapy
CPSS	Child PTSD Symptom Scale
CPT	Cognitive processing therapy
CPTSDI	Children's PTSD Inventory
CPTSD-RI	Child PTSD Reaction Index
CSA	Childhood sexual abuse
CT	Cognitive therapy
CTSQ	Child Trauma Screening Questionnaire
DALY	Disability-adjusted life year
DAPS	Detailed Assessment of Posttraumatic Stress
DESNOS	Disorders of Extreme Stress Not Otherwise Specified



DIPA	Diagnostic Infant Preschool Assessment
DRPST	Disaster-Related Psychological Screening Test
DSM	Diagnostic and Statistical Manual
DSM-5	Diagnostic and Statistical Manual of Mental Disorders – Fifth edition
DSM-III-R	Diagnostic and Statistical Manual of Mental Disorders – Third edition – Revised
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders – Fourth edition
DSM-IV-TR	Diagnostic and Statistical Manual of Mental Disorders – Fourth edition – Text revision
DTS	Davidson Trauma Scale
ECT	Electroconvulsive therapy
EFT	Emotion freedom techniques
EMBASE	Excerpta Medica Database
EMDR	Eye movement desensitisation and reprocessing
GAD	Generalised anxiety disorder
GPCOG	General Practitioner Assessment of Cognition
GPP	Good practice point
HTQ	Harvard Trauma Questionnaire
ICU	Intensive care unit
IES-R	Impact of Event Scale – Revised
IPT	Interpersonal therapy
IRT	Imagery rehearsal therapy
ITT	Intent to treat
K-SADS-PL	Kiddie Schedule for Affective Disorders and Schizophrenia for School-Aged Children – Parent and Lifetime Version
LOS	Length of stay
MAOI	Monoamine oxidase inhibitor
MBCT	Mindfulness-based cognitive behavioural therapy
MDD	Major depressive disorder
MDMA	Methylenedioxymethamphetamine
MMSE	Mini Mental State Examination
mTBI	Mild traumatic brain injury
MVA	Motor vehicle accident
NaSSA	Noradrenergic and specific serotonergic antidepressants
NDRI	Noradrenaline-dopamine reuptake inhibitors
NET	Narrative exposure therapy
NHMRC	National Health and Medical Research Council
NICE	National Institute for Clinical Excellence
NRI	Selective noradrenaline reuptake inhibitors
OCD	Obsessive compulsive disorder
ODD	Oppositional defiant disorder
PAP	Preschool Age Psychiatric Assessment
PCL	PTSD Checklist
PC-PTSD	Primary Care PTSD Screen



PDS	Posttraumatic Diagnostic Scale
PE	Prolonged exposure
PFA	Psychological first aid
PICO	Specifies the studies to be included in the systematic review by: Population, Intervention, Comparator, Outcome
PILOTS	Published International Literature on Traumatic Stress
PRACTICE	Trauma-focussed intervention for parents and children comprising eight components: psychoeducation, relaxation, affective modulation skills, cognitive coping and processing, trauma narrative development and processing, <i>in vivo</i> exposure, conjoint parent/child sessions, and enhancing safety/future development
PSS-I	PTSD Symptom Scale – Interview
PSS-SR	PTSD Symptom Scale – Self Report
PTE	Potentially traumatic event
PTSD	Posttraumatic stress disorder
PTSD-AA	PTSD – alternative algorithm
QALY	Quality-adjusted life year
RCT	Randomised controlled trial
RIMA	Reversible inhibitor of monoamine oxidase
RR	Research recommendation
rTMS	Repeated transcranial magnetic stimulation
RUDAS	Rowland Universal Dementia Assessment Scale
SAD	Separation anxiety disorder
SER	Social emotional rehabilitation
SIP	Structured Interview for PTSD
SMART	Specific, measurable, attainable, relevant, and time-bound (goals)
SMARTER	Specific, measurable, attainable, relevant, time-bound, evaluate, and re-evaluate (goals)
SMD	Standardised mean difference
SNRI	Serotonin-noradrenaline reuptake inhibitors
SPAN	Brief PTSD screening measure named for its four items: Startle, Physiological arousal, Anger, and Numbness
SSRI	Selective serotonin reuptake inhibitor
SSSP	Short Screening Scale for DSM-IV PTSD
TAU	Treatment as usual
TBI	Traumatic brain injury
TCA	Tricyclic antidepressant
TESI-PRR	Trauma Exposure Symptom Inventory – Parent Report Revised
TF-CBT	Trauma-focussed cognitive behavioural therapy
TFT	Thought field therapy
TIR	Traumatic incident reduction
TSCC	Trauma Symptom Checklist for Children
TSCYC	Trauma Symptom Checklist for Young Children
TSI	Trauma Symptom Inventory
TSI-PR	The Trauma Exposure Symptom Inventory – Parent Report



UCLA PTSD-RI	University of California at Los Angeles Posttraumatic Stress Disorder Reaction Index
UPID	UCLA PTSD Index for DSM-IV
VA	Veterans Affairs (US)
VA/DoD	Veterans Affairs/Department of Defense
VKD	Visual-kinaesthetic dissociation
WHOQOL	World Health Organisation Quality of Life instrument
WLC	Waitlist control
YLD	Years of life lost due to disability



Plain Language Statement

These Guidelines provide recommendations on the best interventions for children, adolescents and adults who have been exposed to potentially traumatic events as well as those who have developed acute stress disorder (ASD) or posttraumatic stress disorder (PTSD). The Guidelines have been designed to be used by: a) the range of general and mental health practitioners planning and providing treatment across clinical settings; b) people affected by trauma making decisions about their treatment; and c) funding bodies making service purchasing decisions. The intended outcome of the Guidelines is increased recognition of ASD and PTSD, increased uptake of evidence-based care, and ultimately, better outcomes for people affected by trauma. Importantly, the Guidelines are intended to guide practice rather than be used prescriptively. Each person's unique circumstances and their overall mental healthcare needs must be considered.

The Guidelines were developed by a team of Australia's leading trauma experts, in collaboration with representatives of the professional associations for psychiatrists, psychologists, general practitioners, social workers, occupational therapists, mental health nurses, school counsellors, and service users. Recommendations were based on best practice evidence found through a systematic review of the Australian and international trauma literature.

Some of the key recommendations are that:

- Following a potentially traumatic event, routine psychological debriefing is no longer recommended. The best approach to helping people following a potentially traumatic experience is to offer practical and emotional support and encourage the use of helpful coping strategies and social supports.
- For adults who develop PTSD, the best approach to treatment is trauma-focussed cognitive behavioural therapy (TF-CBT) or eye movement desensitisation reprocessing (EMDR). These psychological treatments involve confronting the memory of the traumatic event and coming to terms with the experience.
- Medication should not be used in preference to trauma-focussed therapy but may be considered when the person is not ready or willing to engage in, or has no access to, trauma-focussed therapy, they have additional mental health problems such as depression, or they have not benefited from trauma-focussed therapy. When medication is considered, the first choice would be selective serotonin reuptake inhibitors (SSRIs).
- For school age children and adolescents, the best approach to treatment is trauma-focussed cognitive behavioural therapy. However this should be appropriately tailored to the developmental stage of the individual child or adolescent.
- Engaging parents and/or caregivers is very important when working with children and adolescents as they typically bring them for assessment and treatment. Furthermore, children are part of a system (typically a family) so assessment and treatment needs to take the whole system into consideration.

The final chapter provides advice to health practitioners about issues to consider in applying the Guidelines to particular groups or types of trauma. The groups include Aboriginal and Torres Strait Islander peoples, refugees and asylum seekers, military and ex-military personnel, emergency service personnel and older people and the types of traumatic events include motor vehicle accidents, crime, sexual assault, natural disasters and terrorism.



Executive Summary

In 2007, the National Health and Medical Research Council (NHMRC) approved the first Australian Guidelines for the Treatment of Adults with Acute Stress Disorder and Posttraumatic Stress Disorder. The current Australian Guidelines for the Treatment of Acute Stress Disorder and Posttraumatic Stress Disorder represent an update, revision and expansion of the original Guidelines. The most significant change has been an expansion of the Guidelines to cover treatment recommendations for children and adolescents, as well as adults.

Chapter 1 Introduction provides an overview of the Guideline development process and details their objectives and scope. The Guideline Development Group was made up of a core working party comprising clinical and research experts in the field of traumatic stress and a broad multidisciplinary panel, comprising mental health practitioners, representatives of professional associations, and people affected by trauma. The work of the Guideline Development Group was overseen by a steering committee and supported by an independent methodologist, an independent systematic review of the literature and a project team from Phoenix Australia - Centre for Posttraumatic Mental Health.

Guideline recommendations arising from the systematic review are graded according to the NHMRC grading system (NHMRC, 2005):

- **Grade A:** Body of evidence can be trusted to guide practice
- **Grade B:** Body of evidence can be trusted to guide practice in most situations
- **Grade C:** Body of evidence provides some support for recommendation(s) but care should be taken in its application
- **Grade D:** Body of evidence is weak and recommendation(s) must be applied with caution

In situations where there is no research evidence available, practitioners are guided by **Consensus Points** (CP; consensus opinion of the working party, used when a research question was asked of the data, but no evidence was forthcoming) and **Good Practice Points** (GPP; used when the research question was not asked because the working party was confident that no evidence existed). Areas identified as in need of further research are noted as **Research Recommendations** (RR).

Importantly, the Guideline recommendations are not intended to be prescriptive. Practitioners should use their experience and expertise in applying Guideline recommendations in routine clinical practice and all clinical interventions should be provided with compassion and sensitivity.

Chapter 2 Trauma and Trauma Reactions provides background information on trauma and trauma reactions. While the focus of the Guidelines is acute stress disorder (ASD) and posttraumatic stress disorder (PTSD), the range of possible reactions is noted including resilience as the usual outcome following traumatic exposure.

ASD and PTSD are characterised by four types of symptoms: re-experiencing symptoms such as intrusive memories or dreams; avoidance symptoms such as avoiding thoughts, feelings, and places associated with the traumatic event; numbing symptoms such as feeling detached from others; and increased arousal symptoms such as poor sleep, irritability and hypervigilance. There are two key differences between ASD and PTSD. First, unlike PTSD, ASD places a heavy emphasis on dissociation, requiring symptoms such as feeling detached or dazed, depersonalisation, and derealisation. The second difference is the duration of symptoms; ASD is diagnosed between two days and one month following the traumatic event while PTSD is diagnosed at least one month following the traumatic event.

Estimates of lifetime prevalence of PTSD range from 5–10%. The likelihood of developing PTSD varies according to the nature of the event. In general terms, the highest incidence of PTSD is associated with rape and other sexual assault; the lowest rate is associated with natural disasters and witnessing harm to others. Naturally, this varies depending on the nature of the particular incident that the individual is exposed to. In chronic cases of PTSD (more than three months), about 85% have comorbid mental health disorders.



Information about screening, assessment (including individual strengths), diagnosis and treatment planning is presented in Chapter 2 with a number of GPPs to guide clinical practice. Amongst the key GPPs:

- For people presenting to primary care services with repeated non-specific physical health problems, it is recommended that the primary care practitioner consider screening for psychological causes, including asking whether the person has experienced a traumatic event and describing some examples of such events.
- A thorough assessment is required, covering relevant history (including trauma history), PTSD and related diagnoses, general psychiatric status (noting extent of comorbidity), physical health, substance use, marital and family situation, social and occupational functional capacity, and quality of life.
- The development of a robust therapeutic alliance should be regarded as the necessary basis for undertaking specific psychological interventions and may require extra time for people who have experienced prolonged and/or repeated traumatic exposure.
- Appropriate goals of treatment should be tailored to the unique circumstances and overall mental healthcare needs of the individual and established in collaboration with the person.

Chapter 3 General Considerations when Working with Children and Adolescents outlines key issues for younger people with PTSD including that: children and adolescents are typically dependent upon an adult to bring them for treatment, highlighting the importance of engagement with the relevant adult; children are part of a system (typically a family) so that assessment and treatment needs to take the whole system into consideration; and there is a need to be constantly mindful of psychosocial development, and the impact of trauma and appropriateness of treatment, in that context.

Typical clinical presentations in children and adolescents, as well as issues of screening, assessment and treatment in this group are detailed in Chapter 3. Amongst the key GPPs:

- Questions about exposure to commonly experienced potentially traumatic events should be included as standard during any psychiatric assessment of children and adolescents. If such exposure is endorsed, the child should be screened for the presence of PTSD symptoms.
- For children and adolescents, a structured clinical interview is regarded as a better assessment measure than a questionnaire for making a diagnosis.
- Parent/caregiver involvement in assessment and treatment is desirable for children and adolescents with ASD or PTSD.
- For children and adolescents, treatment needs to be tailored to meet the developmental needs of the individual. Protocols that have been designed specifically for children and adolescents should be used in preference to attempting to modify an adult treatment protocol.

Chapter 4 Interventions presents descriptions of all of the interventions that are referenced in the systematic review of the literature, including those that are supported by the evidence as well as those that are not. The chapter includes descriptions of pre-incident psychological preparedness training, post-incident interventions for all, psychological interventions for ASD and PTSD, pharmacological interventions for PTSD, psychosocial rehabilitation interventions for PTSD, physical therapies for ASD and PTSD and psychological interventions for children and adolescents.

Chapter 5 Evidence Review and Treatment Recommendations provides a summary of the evidence derived from the systematic review of the Australian and international literature and the recommendations arising. The key Guideline recommendations are:

Psychological interventions for adults

- | | |
|----------------|---|
| Grade B | For adults exposed to a potentially traumatic event, a one-session, structured, psychological intervention in the acute phase, such as psychological debriefing, should not be offered on a routine basis for the prevention of PTSD. |
| Grade C | For adults displaying symptoms consistent with ASD or PTSD in the initial four weeks after a potentially traumatic event, individual trauma-focussed cognitive behavioural therapy, including exposure and/or cognitive therapy, should be considered if indicated by a thorough clinical assessment. |
| Grade A | Adults with PTSD should be offered trauma-focussed cognitive behavioural interventions or eye movement desensitisation and reprocessing. |



Pharmacological interventions for adults

Grade D For adults exposed to a potentially traumatic event, drug treatments should not be used for all those exposed as a preventive intervention.

Grade C The routine use of pharmacotherapy to treat ASD or early PTSD (i.e., within four weeks of symptom onset) in adults is not recommended.

Grade B Drug treatments for PTSD should not be preferentially used as a routine first treatment for adults, over trauma-focussed cognitive behavioural therapy or eye movement desensitisation and reprocessing.

Grade C Where medication is considered for the treatment of PTSD in adults, selective serotonin reuptake inhibitor antidepressants should be considered the first choice.

GPP Selective serotonin reuptake inhibitor antidepressant medication should be considered for the treatment of PTSD in adults when:

- a) the person is unwilling or not in a position to engage in or access trauma-focussed psychological treatment
- b) the person has a comorbid condition or associated symptoms (e.g., severe depression and high levels of dissociation) where selective serotonin reuptake inhibitors are indicated
- c) the person's circumstances are not sufficiently stable to commence trauma-focussed psychological treatment (as a result, for example, of severe ongoing life stress such as domestic violence)
- d) the person has not gained significant benefit from trauma-focussed psychological treatment.

Psychological interventions for children and adolescents

Grade B For children exposed to a potentially traumatic event, psychological debriefing should not be offered.

Grade C For children of school age and above with PTSD, developmentally appropriate trauma-focussed cognitive behavioural therapy should be considered.

Grade C For children exposed to trauma with symptoms of PTSD, where they were exposed to the same event, a school-based trauma-focussed cognitive-behavioural intervention aimed at reducing symptoms of PTSD should be considered.

Pharmacological interventions for children and adolescents

Grade D For children exposed to a potentially traumatic event, pharmacotherapy should not be used as a preventive intervention for all those exposed.

Grade D For children and adolescents with PTSD, pharmacotherapy should not be used as a routine first treatment over trauma-focussed cognitive behavioural therapy.

Grade D For children and adolescents with PTSD, pharmacotherapy should not be used routinely as an adjunct to trauma-focussed cognitive behavioural therapy.

The complete list of Guideline recommendations is provided at the end of this executive summary.

Chapter 6 Economic Considerations highlights the economic impact of PTSD. PTSD has been found to be associated with greater individual disability than other mental or physical disorders, and have higher healthcare costs than depression and anxiety. A comprehensive economic evaluation of the implications of key Guideline recommendations has been undertaken and is available in a separate companion document to the main Guidelines. The economic evaluation found that a shift from current practice to recommended psychological and pharmacological treatment for PTSD would be cost effective.



Chapter 7 Specific Populations and Trauma Types: Issues for Consideration in the Application of the Guidelines provides guidance on issues to be considered when applying the Guidelines to particular populations who develop PTSD following trauma, and to particular trauma types. An experience common to many of these trauma populations is exposure to sustained and/or repeated traumatic experience and, in some cases, ongoing threat of further exposure. In addition to the core symptoms of PTSD, associated difficulties with impulsivity, problems with emotional regulation, identity disturbance, dissociative symptoms, self-destructive behaviour, abnormalities in sexual expression, and somatic symptoms are more likely.

The special populations covered in this chapter are:

- Aboriginal and Torres Strait Islander peoples
- Refugees and asylum seekers
- Military and ex-military personnel
- Emergency service personnel
- Older people.

The categories of traumatic event covered in the chapter are:

- Motor vehicle accidents
- Crime
- Sexual assault
- Natural disasters
- Terrorism.

These Guidelines are valid for a period of five years and will require updating in 2017.



Complete List of Guideline Recommendations

The research evidence and/or expert opinion underpinning these recommendations is presented in the full text of the document. The relevant sections of the document are cited for each recommendation. The grading system for each recommendation is fully explained later in the document (see Chapter 5).

As a quick guide to the process, the first step was to rate the strength of the research evidence (based, for example, on amount of evidence, consistency, generalisability, and so on). The working party then generated the recommendations and gave each a grade to indicate the strength of the recommendation in order to assist users in making clinical judgments. The grade is based on, but not necessarily a direct translation of, the strength of evidence. The recommendations (R) are graded from A to D, with A being the highest. Grade A recommendations indicate that the body of evidence can be trusted to guide practice. Grade B indicates that the body of evidence can be trusted to guide practice in most situations. Grade C indicates that the body of evidence provides some support for the recommendation but care should be taken in its application. Grade D indicates that the body of evidence is weak and the recommendation must be applied with caution. In areas for which there was insufficient research evidence to generate a recommendation, expert clinical consensus is indicated by the designation Consensus Point (CP; used when a research question was asked, but no evidence found) or Good Practice Point (GPP; used where a research question was not asked). Areas identified as in need of further research are noted as Research Recommendations (RR). Please note the use of abbreviated forms of posttraumatic stress disorder (PTSD) and acute stress disorder (ASD) in this summary.

As explained in Chapter 1, the recommendations are not intended to be used prescriptively, but as a guide to appropriate interventions in the context of each person's unique circumstances and their overall mental healthcare needs. Practitioners should use their experience and expertise in applying these Guidelines in routine clinical practice and all clinical interventions should be provided with compassion and sensitivity.

Trauma and trauma reactions

Screening, assessment and diagnosis

- GPP1** For people presenting to primary care services with repeated non-specific physical health problems, it is recommended that the primary care practitioner consider screening for psychological causes, including asking whether the person has experienced a traumatic event and describe some examples of such events. (p.30)
- GPP2** Service planning should consider the application of screening (case finding) of individuals at high risk for PTSD after major disasters or incidents, as well as those in high risk occupations. (p.30)
- GPP3** The choice of screening tool should be determined by the best available evidence, with a view to selecting the best performing screen for the population of interest. Application of an inappropriate screening tool may result in over- or under-identification of problems. (p.30)
- GPP4** Different populations may require different screening procedures. Programs responsible for the management of refugees should consider the application of culturally appropriate screening for refugees and asylum seekers at high risk of developing PTSD. Similarly, screening of children will require the use of developmentally sensitive tools designed for the purpose. (p.30)
- GPP5** Screening should be undertaken in the context of a service system that includes adequate provision of services for those who require care. (p.30)
- GPP6** Any individual who screens positive should receive a thorough diagnostic assessment. (p.30)





Comprehensive assessment of PTSD

- GPP7** A thorough assessment is required, covering relevant history (including trauma history), PTSD and related diagnoses, general psychiatric status (noting extent of comorbidity), physical health, substance use, marital and family situation, social and occupational functional capacity, and quality of life. (p.31)
- GPP8** Assessment should include assessment of strengths and resilience, as well as responses to previous treatment. (p.31)
- GPP9** Assessment and intervention must be considered in the context of the time that has elapsed since the traumatic event occurred. Assessment needs to recognise that whereas the majority of people will display distress in the initial weeks after trauma exposure, most of these reactions will remit within the following three months. (p.31)
- GPP10** As part of good clinical practice, assessment needs to occur at multiple time points following trauma exposure, particularly if the person displays signs of ongoing difficulties or psychological deterioration. (p.31)
- GPP11** Assessment and monitoring should be undertaken throughout treatment. When adequate progress in treatment is not being made, the practitioner should revisit the case formulation, reassess potential treatment obstacles, and implement appropriate strategies, or refer to another practitioner. Effective inter-professional collaboration and communication is essential at such times. (p.31)

Diagnosis

- GPP12** Assessment should cover the broad range of potential posttraumatic mental health problems beyond PTSD, including other anxiety disorders, depression and substance abuse. (p.32)

Assessment instruments

- GPP13** It is recommended that practitioners be guided in their assessment of PTSD, comorbidity and quality of life, by the available validated self-report and structured clinical interview measures. (p.34)
- GPP14** It is recommended that practitioners also use validated, user-friendly self-report measures to support their assessments of treatment outcomes over time. (p.34)

Intervention planning

- GPP15** Mental health practitioners are advised to note the presence and severity of comorbidities in their assessments, with a view to considering their implications for treatment planning. *(Please note also recommendations regarding PTSD and comorbidity)* (p.40)
- GPP16** Residual symptomatology should be addressed after the symptoms of PTSD have been treated. (p.40)
- GPP17** The development of a robust therapeutic alliance should be regarded as the necessary basis for undertaking specific psychological interventions and may require extra time for people who have experienced prolonged and/or repeated traumatic exposure. (p.40)
- GPP18** Mental health practitioners should provide a clear rationale for treatment and promote realistic and hopeful outcome expectancy. (p.40)
- GPP19** Mental health practitioners and rehabilitation practitioners should work together to promote optimal psychological and functional outcomes. (p.40)
- GPP20** In most circumstances, establishing a safe environment is an important precursor to commencement of trauma-focussed therapy or, indeed, any therapeutic intervention. However, where this cannot be achieved (for example, the person is seeking treatment for their PTSD whilst maintaining a work role or domestic situation that may expose them to further trauma), some benefit may still be derived from trauma-focussed therapy. This should follow careful assessment of the person's coping resources and available support. (p.40)

Treatment goals

- GPP21** The practitioner should assess immediate needs for practical and social support and provide education and referrals accordingly. (p.42)
- GPP22** Appropriate goals of treatment should be tailored to the unique circumstances and overall mental health care needs of the individual and established in collaboration with the person. (p.42)
- GPP23** From the outset, there should be a collaborative focus on recovery and rehabilitation between the person and practitioner, and where appropriate, family members. (p.42)



Cultural and linguistic diversity

- GPP24** Recommended treatments for PTSD should be available to all Australians, recognising their different cultural and linguistic backgrounds. (p.42)
- RR1** The conceptualisation of psychological trauma in different and diverse cultural contexts needs to be further researched so that this can inform processes of assessment and management of such trauma syndromes for people of culturally and linguistically diverse backgrounds. (p.42)

The impact of PTSD on family

- GPP25** Wherever possible family members should be included in education and treatment planning, and their own needs for care considered alongside the needs of the person with PTSD. (p.43)

General professional issues

- GPP26** Practitioners who provide mental health care to children, adolescents or adults with ASD and PTSD, regardless of professional background, must be appropriately trained to ensure adequate knowledge and competencies to deliver recommended treatments. This requires specialist training, over and above basic mental health or counselling qualifications. (p.43)
- GPP27** Primary care practitioners, especially in rural and remote areas, who assume responsibility for the care of people with ASD and PTSD in the absence of specialist providers, should be supported with accessible education and training, as well as access to specialist advice and supervision where possible. (p.43)
- GPP28** In their self-care, practitioners should pay particular attention to skill and competency development and maintenance including regular supervision, establishing and maintaining appropriate emotional boundaries with people with PTSD, and effective self-care. This includes maintaining a balanced and healthy lifestyle and responding early to signs of stress. (p.44)
- GPP29** For those practitioners who work in an organisational context, broader policies and practices should support individual practitioners in these self-care measures. (p.44)
- RR2** In recognition of the developing science around dissemination and implementation of evidence-based treatment, future research should explore the most effective ways of generating reliable and sustainable change in policies and practice for areas covered in these Guidelines. (p.44)

General considerations when working with children and adolescents

Assessment

- GPP30** Questions about exposure to commonly experienced potentially traumatic events should be included as standard during any psychiatric assessment of children and adolescents. If such exposure is endorsed, the child should be screened for the presence of PTSD symptoms. (p.61)
- GPP31** Children and adolescents are typically dependent upon an adult to present them for assistance. This means that it is equally important to engage with and maintain the relevant adults' motivation to pursue assistance, as it is the child or adolescent's. (p.61)
- GPP32** Assessment of children and adolescents should include assessment of the system (typically the family) in which they live, as their symptoms will both influence and be influenced by what else is happening within the system. (p.61)
- GPP33** The rate of agreement between parents/caregivers and children in relation to internalising symptoms of posttraumatic mental health problems may be very low. Practitioners should not rely solely on an adult's report of a child's internalising symptoms – even if the child is preschool-aged. Where assessment involves very young children (aged 0-3) this should include an evaluation of the behaviour of the child with particular reference to developmental stage, and attachment status. Some symptoms of PTSD such as sense of foreshortened future and inability to recall some aspects of the trauma are unlikely to be usefully assessed in this age group. (p.61)
- GPP34** In children, the range of potential posttraumatic mental health problems includes behavioural and attentional problems (such as oppositional defiant disorder and attention deficit hyperactivity disorder) as well as anxiety disorders (such as separation anxiety disorder) and affective disorders. (p.61)
- GPP35** For children and adolescents, a structured clinical interview is regarded as a better assessment measure than a questionnaire for making a diagnosis. (p.61)



Intervention planning

- GPP36** As noted in reference to assessment, children and adolescents are typically dependent upon an adult to present them for treatment and ensure that they attend subsequent appointments. This means that it is equally important to engage with and maintain the relevant adults' motivation to pursue treatment, as it is the child or adolescent's. (p.63)
- GPP37** For children and adolescents, treatment needs to be tailored to meet the developmental needs of the individual. Protocols that have been designed specifically for children and adolescents should be used in preference to attempting to modify an adult treatment protocol. (p.63)
- GPP38** When the adult caregiver of a child with PTSD is also experiencing posttraumatic mental health problems, their symptoms may exacerbate each other's. For this reason, it may be preferable to treat the caregiver first or in parallel. (p.63)
- GPP39** In the treatment of children and adolescents, parents/caregivers need to be involved to some degree, not only because of their gatekeeper role in terms of access to and continued engagement in therapy, but also because of their role in helping to generalise and maintain treatment gains, direct participation in homework tasks (e.g., reward systems), and providing important information that the child may have forgotten, be unaware of, or not recognise the importance of. (p.63)
- GPP40** The delivery of services in schools may be an effective strategy for engaging and keeping children, adolescents and families in treatment. (p.63)
- GPP41** Parent/caregiver involvement in assessment and treatment is desirable for children and adolescents with ASD or PTSD. (p.63)
- GPP42** Practitioners who provide mental health care to children, adolescents or adults with ASD and PTSD, regardless of professional background, must be appropriately trained to ensure adequate knowledge and competencies to deliver recommended treatments. This requires specialist training, over and above basic mental health or counselling qualifications. (p.63)

Evidence review and treatment recommendations

- GPP43** Best practice procedures should be adopted when using psychological, psychosocial or pharmacological treatments, including provision of information prior to commencement, monitoring and management of side effects, monitoring of suicide risk, and in the case of pharmacological intervention, appropriate discontinuation and withdrawal practices. (p.84)

Early psychological interventions for adults

Pre-incident preparedness training

- CP1** For adults likely to be exposed to a potentially traumatic event, pre-incident preparedness training may facilitate psychological adaptation following the event. (p.85)
- RR3** There is an urgent need for carefully controlled research to study the content and possible benefits of preparedness training prior to trauma exposure. (p.85)

Early psychological interventions for all

Grade

- | | | Grade |
|--------------|---|----------|
| R1 | For adults exposed to a potentially traumatic event, a one-session, structured, psychological intervention in the acute phase, such as psychological debriefing, should not be offered on a routine basis for the prevention of PTSD. (p.87) | B |
| GPP44 | For adults exposed to a potentially traumatic event, if required, provide practical and emotional support, facilitate ways to manage distress and access social supports, and promote positive expectations. (p.87) | |
| GPP45 | Adults exposed to a potentially traumatic event who wish to discuss the experience, and demonstrate a capacity to tolerate associated distress, should be supported in doing so. In doing this the practitioner should keep in mind the potential adverse effects of excessive ventilation in those who are very distressed. (p.87) | |
| GPP46 | For adults exposed to a potentially traumatic event, a stepped care approach tailored to individual need is advised. This would involve ongoing monitoring of people who are more distressed and/or at heightened risk of adverse mental health impact, with targeted assessment and intervention when indicated. (p.87) | |





- GPP47** For adults who develop an extreme level of distress or are at risk of harm to self or others, thorough diagnostic assessment and appropriate interventions should be provided. (p.87)
- RR4** In view of the importance of providing a best practice response for adults exposed to a potentially traumatic event for high risk industries and for the general community, future research should examine the most effective strategy to adopt for all those exposed to a traumatic event. (p.88)

Psychological treatment for adults with ASD or acute PTSD Grade

- | | | Grade |
|-----------|---|----------|
| R2 | For adults displaying symptoms consistent with ASD or PTSD in the initial four weeks after a potentially traumatic event, individual trauma-focussed cognitive behavioural therapy including exposure and/or cognitive therapy, should be considered if indicated by a thorough clinical assessment. (p.88) | C |

Psychological interventions for adults with PTSD Grade

- | | | Grade |
|--------------|---|----------|
| R3 | Adults with PTSD should be offered trauma-focussed cognitive behavioural interventions or eye movement desensitisation and reprocessing. (p.91) | A |
| R4 | Where symptoms have not responded to a range of trauma-focussed interventions, evidence-based non-trauma-focussed psychological interventions (such as stress inoculation training) should be considered. (p.91) | D |
| CP2 | On the basis of some evidence that <i>in vivo</i> exposure (graded exposure to feared/avoided situations) contributes to treatment gains, it is recommended that <i>in vivo</i> exposure be included in treatment. (p.91) | |
| GPP48 | Where symptoms have not responded to one form of first line trauma-focussed intervention (trauma-focussed cognitive behavioural therapy or eye movement desensitisation and reprocessing), health practitioners may consider the alternative form of trauma-focussed intervention. (p.92) | |
| GPP49 | For adults with PTSD with several problems arising from multiple traumatic events, traumatic bereavement, or where PTSD is chronic and associated with significant disability and comorbidity, sessions using specific treatments to address those problems may be required. (p.92) | |
| GPP50 | Where adults have developed PTSD and associated features following exposure to prolonged and/or repeated traumatic events, more time to establish a trusting therapeutic alliance and more attention to teaching emotional regulation skills may be required. (p.92) | |
| GPP51 | Prescribed medication can continue while people are undertaking psychological treatments and any changes should only occur in close consultation with the treating physician. However, some medications, such as benzodiazepines, may interfere with some effective psychological treatments. (p.92) | |
| GPP52 | Sessions that involve imaginal exposure may require up to 90 minutes to avoid premature termination of therapy while anxiety is still high, and to ensure appropriate management of distress. (p.92) | |
| RR5 | Mechanisms underpinning effective treatments should be subject to systematic research. (p.92) | |
| RR6 | There should be large and well-controlled trials of new and emerging interventions for PTSD. (p.92) | |
| RR7 | Further research is required that evaluates the extent to which treatments with demonstrated efficacy are effective when delivered by non-specialist practitioners in real-world settings. The focus of research should not be restricted to outcomes only, but should also include factors such as cost-effectiveness, acceptability for practitioners and clients, treatment fidelity, and success of practitioner training. (p.92) | |

Individual vs group therapy Grade

- | | | Grade |
|-----------|--|----------|
| R5 | Group cognitive behavioural therapy (trauma-focussed or non-trauma-focussed) may be provided as adjunctive to, but not be considered an alternative to, individual trauma-focussed therapy. (p.93) | C |

Self-delivered interventions Grade

- | | | Grade |
|-----------|--|----------|
| R6 | Internet-delivered trauma-focussed therapy involving trauma-focussed cognitive behavioural therapy may be offered in preference to no intervention. (p.94) | C |



Early pharmacological interventions for adults

Early pharmacological interventions for all

Grade

- R7** For adults exposed to a potentially traumatic event, drug treatments should not be used for all those exposed as a preventive intervention. (p.95)

C

GPP53. Where significant sleep disturbance does not settle in response to reassurance, sleep hygiene and appropriate psychological interventions, cautious and time-limited use of appropriate sleep medication may be helpful for adults. (p.96)

Pharmacological treatment for adults with ASD or acute PTSD

Grade

- R8** The routine use of pharmacotherapy to treat ASD or early PTSD (i.e., within four weeks of symptom onset) in adults is not recommended. (p.96)

D

GPP54 Pharmacotherapy may be indicated if the severity of the person's distress cannot be managed by psychological means alone, particularly when there is a pattern of extreme hyperarousal, sleep disturbance or nightmares. (p.96)

GPP55 For people who have a prior psychiatric history that has responded well to medication, the prescription of an appropriate medication should be considered if a progressive pattern of clinically significant symptoms, such as persistent intrusions with increasing affective distress, begin to emerge. (p.96)

GPP56 For adults with ASD or early PTSD, where significant sleep disturbance does not settle in response to reassurance, sleep hygiene and appropriate psychological interventions, cautious and time-limited use of appropriate sleep medication may be helpful. (p.96)

RR8 The effect of pharmacological treatment of ASD on subsequent PTSD status and severity following cessation of medication should be investigated. These studies may go beyond common psychotropic medication to include other agents that have shown promise such as narcotic analgesics, cortisol, and alcohol. (p.96)

Pharmacological interventions for adults with PTSD

Grade

- R9** Drug treatments for PTSD should not be preferentially used as a routine first treatment for adults, over trauma-focussed cognitive behavioural therapy or eye movement desensitisation and reprocessing. (p.100)

B

- R10** Where medication is considered for the treatment of PTSD in adults, selective serotonin reuptake inhibitor antidepressants should be considered the first choice. (p.100)

C

GPP57 Selective serotonin reuptake inhibitor antidepressant medication should be considered for the treatment of PTSD in adults when:

- the person is unwilling or not in a position to engage in or access trauma-focussed psychological treatment (p.100)
- the person has a comorbid condition or associated symptoms (e.g., severe depression and high levels of dissociation) where selective serotonin reuptake inhibitors are indicated (p.100)
- the person's circumstances are not sufficiently stable to commence trauma-focussed psychological treatment (as a result, for example, of severe ongoing life stress such as domestic violence) (p.100)
- the person has not gained significant benefit from trauma-focussed psychological treatment. (p.100)

GPP58 Where a decision has been made to commence pharmacotherapy, the person's mental state should be regularly monitored with a view to commencing adjunctive psychological treatment if/when appropriate. In the interim, supportive psychotherapy with a substantial psychoeducational component should be offered. (p.100)

GPP59 Where significant sleep disturbance or excessive distress does not settle in response to reassurance, sleep hygiene and evidence-based psychological interventions, or other non-drug intervention, cautious and time-limited use of appropriate sleep medication may be helpful. If the sleep disturbance is of more than one month's duration and medication is likely to be of benefit in the management of the person's PTSD, a suitable antidepressant should be considered. The risk of tolerance and dependence are relative contraindications to the use of hypnotics for more than one month except if their use is intermittent. (p.100)



- GPP60** Where symptoms have not responded adequately to pharmacotherapy, further consultation with a specialist in the field should be undertaken to determine the appropriateness of:
- a) increasing the dosage within approved limits (p.100)
 - b) switching to an alternative antidepressant medication (p.100)
 - c) adding prazosin, risperidone or olanzapine as an adjunctive medication (p.100)
 - d) reconsidering the potential for psychological intervention. (p.100)
- GPP61** When an adult with PTSD has responded to drug treatment without experiencing any adverse effects, it should be continued for at least 12 months before gradual withdrawal. (p.100)
- RR11** Given the extent to which adjunctive pharmacotherapy is used in routine clinical practice, particularly with chronic and treatment-resistant cases, it is recommended that large, well-controlled trials be conducted to clarify the benefits of multiple medications. (p.105)
- RR12** Since preliminary evidence suggests that a range of medications may enhance psychological treatments, future research should further investigate this question. (p.105)
- RR13** Further exploration is required of the potential benefits of combination and sequencing (pharmacological and trauma-focussed psychological) treatments. (p.105)
- RR14** Future research should explore neurobiological and psychological markers that may be used in predicting likely treatment response. This research recommendation applies equally to pharmacological and psychological interventions. (p.105)

Psychosocial rehabilitation

- CP3** Adult refugees with PTSD who have experienced war and famine may benefit from appropriate psychosocial support groups. (p.101) (Note that a broader discussion of the application of these Guidelines for refugee and asylum seeker populations is included in the "Specific populations" chapter later in this document).
- GPP62** There should be a focus on vocational, family, and social rehabilitation interventions from the beginning of treatment to prevent or reduce disability associated with the disorder, and to promote recovery, community integration and quality of life. (p.102)
- GPP63** In cases where people with PTSD have not benefited from a number of courses of evidence-based treatment, psychosocial rehabilitation interventions should be considered to prevent or reduce disability, and to promote recovery, community integration and quality of life. (p.102)
- GPP64** Health care and rehabilitation professionals should be aware of the potential benefits of psychosocial rehabilitation and promote practical advice on how to access appropriate information and services. (p.102)
- GPP65** In cases of work-related trauma, management of any return-to-work process needs to occur in the context of a thorough risk assessment of the potential for exposure to further stressors, balanced with the potential benefits of return to work. (p.102)
- RR9** In adults with PTSD the impact of psychosocial rehabilitation on PTSD and social and occupational functioning should be investigated. (p.102)

Exercise and physical therapies

- | | | Grade |
|--------------|---|----------|
| R11 | Acupuncture may be considered as a potential intervention for PTSD for people who have not responded to trauma-focussed psychological therapy or pharmacotherapy. (p.103) | D |
| GPP66 | As part of general mental health care, practitioners may wish to advise people with PTSD that regular aerobic exercise can be helpful in managing their symptoms and as part of self-care practices more generally. Exercise may assist in the management of sleep disturbance and somatic symptoms that are common accompaniments of PTSD. (p.103) | |
| RR10 | Further research is needed into the effect of physical and exercise based interventions on PTSD. (p.103) | |



Single vs multiple interventions

- GPP67** Psychosocial rehabilitation interventions should be used as an adjunctive therapy in combination with psychotherapy or pharmacotherapy. (p.106)
- RR15** Large, well-controlled randomised trials comparing pharmacological with trauma-focused psychological treatment across different trauma populations are required. This may be best achieved through coordinated international multi-site trials. (p.108)

Sequencing comorbidities

- CP4** In the context of comorbid PTSD and mild to moderate depression, health practitioners may consider treating the PTSD first, as the depression will often improve with treatment of the PTSD. (p.109)
- CP5** Where the severity of comorbid depression precludes effective engagement in therapy and/or is associated with high risk suicidality, health practitioners are advised to manage the suicide risk and treat the depression prior to treating the PTSD. (p.109)
- CP6** In the context of PTSD and substance use disorders, practitioners should consider integrated treatment of both conditions. (p.109)
- CP7** In the context of PTSD and substance use disorders, the trauma-focused component of PTSD treatment should not commence until the person has demonstrated a capacity to manage distress without recourse to substance misuse and to attend sessions without being drug or alcohol affected. (p.109)
- CP8** In the context of PTSD and substance use disorders, where the decision is made to treat substance use disorders first, clinicians should be aware that PTSD symptoms may worsen due to acute substance withdrawal or loss of substance use as a coping mechanism. Treatment should include information on PTSD and strategies to deal with PTSD symptoms as the person controls their substance abuse. (p.109)

Early psychological interventions for children and adolescents

Early psychological interventions for all

Grade

- | R12 | For children exposed to a potentially traumatic event, psychological debriefing should not be offered. (p.110) | B |
|--------------|---|----------|
| GPP68 | Children, ranging from infants and pre-schoolers to older children and adolescents can be affected significantly by traumatic events, at higher rates than adults. Practitioners need to be conscious of this risk, must be proactive in assessing the range of psychological impacts of trauma, and should be prepared to provide appropriate assistance, including referral to specialist services if needed. (p.111) | |
| GPP69 | Information is often provided to assist children following traumatic events. The content, when used, should be of high quality and tailored to the traumatic event type and the target audience. Information given following traumatic events may include: a) information about likely outcomes (most frequently positive); b) reinforcement of existing and new positive coping; c) advice on avenues for seeking further assistance if required; and d) possible indicators of a need for further assistance. Information following traumatic events may also include a recognition of the role of, and impact on, caregivers, siblings and teachers. (p.111) | |
| GPP70 | For children exposed to trauma, psychoeducation should be integrated into a stepped-care approach that involves parents and the range of health, education and welfare service providers, and includes monitoring, targeted assessment and intervention, if necessary. (p.111) | |
| GPP71 | Psychological first aid may be appropriate with children in the immediate aftermath of trauma, however if it is used there must be access available to infant, child and adolescent mental health specialists if and when required. (p.111) | |
| GPP72 | Parents and caregivers provide a protective/buffering function against child traumatic stress. Clinicians should be aware of the potential for parents' own distress or other factors to compromise their capacity to provide a protective/buffering function. If distress or other relevant factors are identified, the clinician should respond accordingly. (p.111) | |
| RR16 | Research across a range of trauma-exposed child and adolescent populations is needed to improve understanding of the role and effectiveness of early intervention. (p.111) | |



Early psychological interventions for children and adolescents with ASD or acute PTSD

- CP9** Trauma-focussed cognitive behavioural therapy may be useful as an early psychological intervention for children with a diagnosis of ASD in the initial four weeks after the traumatic event, based on the positive evidence for cognitive behavioural therapy in children with PTSD. However, the effectiveness of this approach with ASD in children is not yet established. (p.111)

Psychological interventions for children and adolescents with PTSD

	Grade
R13 For children of school age and above with PTSD, developmentally appropriate trauma-focussed cognitive behavioural therapy should be considered. (p.113)	C
GPP73 When assessing a child or adolescent for PTSD, healthcare professionals should ensure that they separately and directly assess the child or adolescent for the presence of PTSD symptoms. It is preferable not to rely solely on information from the parent or guardian in any assessment. (p.113)	
GPP74 Given that retention in therapy and the effectiveness of trauma-focussed cognitive behavioural therapy with children and adolescents both require strong parent and/or caregiver involvement, an initial phase of trauma-focussed cognitive behavioural therapy with this group is engagement of the parent(s) to improve their understanding and support of this treatment modality. (p.113)	
RR17 The effectiveness of trauma-focussed cognitive behavioural therapy on depression and other posttraumatic presentations (internalising and externalising behaviours) requires further investigation. (p.113)	
RR18 We recommend that further research examining eye movement desensitisation and reprocessing for PTSD in children is conducted. (p.113)	
RR20 The impact of treatment of trauma-related psychopathology in parents and/or caregivers of abused children prior to treatment of the children should be explored. (p.118)	

Individual vs group therapy

	Grade
R14 For children with PTSD, individual psychological interventions should be considered in preference to group interventions. (p.114)	C

Early pharmacological interventions for children and adolescents

	Grade
R15 For children exposed to a potentially traumatic event, pharmacotherapy should not be used as a preventive intervention for all those exposed. (p.115)	D

Pharmacological interventions for children and adolescents with PTSD

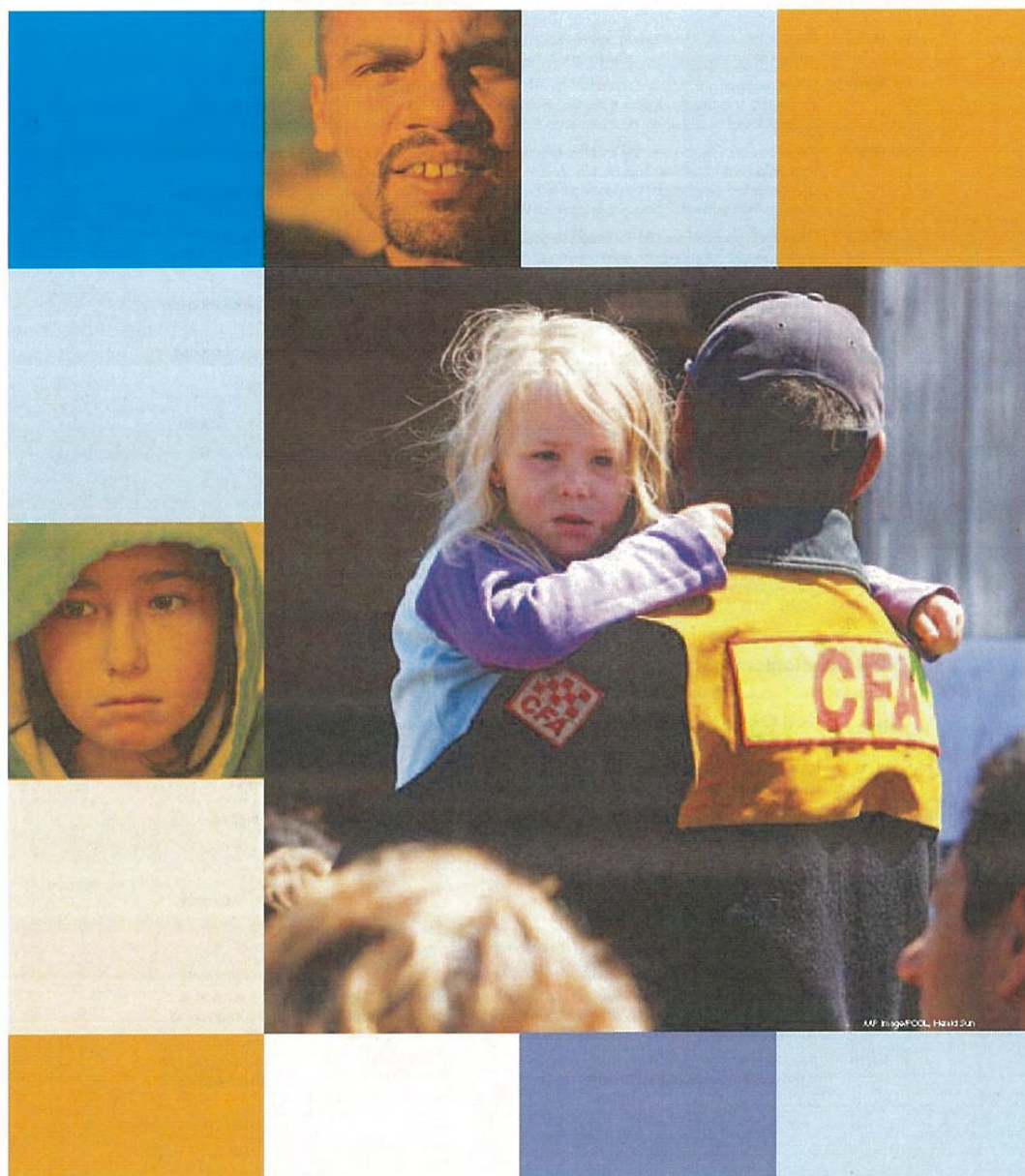
	Grade
R16 For children and adolescents with PTSD, pharmacotherapy should not be used as a routine first treatment over trauma-focussed cognitive behavioural therapy. (p.117)	D
R17 For children and adolescents with PTSD, pharmacotherapy should not be used routinely as an adjunct to trauma-focussed cognitive behavioural therapy. (p.117)	D
GPP75 Prescription of antidepressants in children should be guided by specific practice guidelines on depression, and practitioners should be aware of age-related side effects. (p.117)	

School-based interventions

	Grade
R18 For children exposed to trauma with symptoms of PTSD, where they were exposed to the same event, a school-based trauma-focussed cognitive-behavioural intervention aimed at reducing symptoms of PTSD should be considered. (p.117)	C
GPP76 An integrated model between education and health providers that facilitates appropriate support and referral is recommended. It is recommended that schools provide a facilitative function in intervening with children following trauma, especially after large-scale traumas. (p.118)	
RR19 There is a need to understand how the impact of trauma presents for children in schools, and the role of the school community in providing support to affected children and assisting in referral if required. (p.118)	

Complete List of Guideline Recommendations

118





Introduction

1

In 2007, the National Health and Medical Research Council (NHMRC) approved the first Australian Guidelines for the Treatment of Adults with Acute Stress Disorder and Posttraumatic Stress Disorder. The Guidelines were approved by the NHMRC for a five-year period and therefore were due for revision in 2012. The purpose of this chapter is to describe the revised Guideline aims, scope, development process and implementation strategy.

Please note that these Guidelines were commenced prior to January 2011 and as such were developed in accord with the NHMRC standards and procedures for externally developed guidelines (2007).

Comparison with the 2007 Guidelines

The current revision of the Guidelines includes a systematic review of the evidence that has been published in peer reviewed journals since the last Guidelines were published, a broadening of the research questions in certain areas, and perhaps most significantly, expansion to include the treatment of children and adolescents.

Although the basic approach to guideline development is the same for this version as it was for the 2007 Guidelines, there are minor differences. Membership of both the working party and the multidisciplinary panel was broader for the current Guidelines, reflecting the addition of people with expertise in child and adolescent trauma. The number and range of questions was broader on this occasion, predominantly reflecting the addition of evidence around children and adolescents.

The approach to conducting the systematic review was the same, although the manner in which the data was summarised is slightly different; notably, evidence statement matrices appear in this version, but were not used in the 2007 Guidelines. This is important in understanding the grading of recommendations. NHMRC criteria now dictate that a recommendation cannot be graded A or B unless the evidence base and consistency of the evidence are both rated A or B on some of the evidence forms (not necessarily all). This requirement did not exist for the 2007 Guidelines, and explains why some recommendations are lower on this occasion than in the earlier version, despite the evidence base being the same or comparable. The process of conducting the systematic review is described at the beginning of Chapter 5 and the full systematic review is included as Appendix 3.

Guideline aims

These Guidelines aim to support high quality treatment for children, adolescents and adults with ASD and PTSD by providing a framework of best practice around which to structure treatment. The Guidelines have been designed to be used by: a) the range of general and mental health practitioners planning and providing treatment across clinical settings; b) people affected by trauma making decisions about their treatment; and c) funding bodies making service purchasing decisions. The intended outcome of the Guidelines is increased recognition of ASD and PTSD, increased uptake of evidence-based care, and ultimately, better outcomes for people affected by trauma.

These Guidelines should not be regarded as an inflexible prescription for the content or delivery of treatment. They are guidelines, to be interpreted and implemented in the context of good clinical judgement, not rigid rules. They should not limit treatment innovation and development that is based upon scientific evidence, expert consensus, practitioner judgment of the needs of the person, and the person's preferences. Equally, these Guidelines should be used to drive the delivery of first and second line evidence-based treatment approaches unless there is a strong justification for not doing so in a particular case.



Scope of the Guidelines

These Guidelines provide information and recommendations about evidence-based methods of treating people who, following exposure to potentially traumatic events, have developed (or are at risk of developing) problems consistent with the criteria for ASD and PTSD. They do not seek to address the full range of possible responses to traumatic exposure, including those known as Complex PTSD or Disorders of Extreme Stress Not Otherwise Specified (DESNOS). They focus on the conditions of ASD and PTSD, not on the type of trauma that may have precipitated these disorders (although the final chapter discusses the application of the Guideline recommendations to various traumatised populations). It needs to be recognised that PTSD may exist in the context of a complex life history, other disorders and ongoing life issues and stressors.

The diagnostic criteria for ASD and PTSD are defined in internationally accepted diagnostic manuals. In research settings, the most widely used is the Diagnostic and Statistical Manual of Mental Disorders (DSM) published by the American Psychiatric Association. The fourth version of this manual (DSM-IV) was in use during the development of these guidelines and a large majority of the studies included in the systematic literature review adopted the DSM-IV criteria for ASD or PTSD. The release of the fifth version (DSM-5) coincides with these guidelines. Thus, although most of the discussion that follows refers to DSM-IV criteria, DSM-5 will be mentioned where appropriate. The other major diagnostic classificatory system is the International Classification of Diseases (ICD), with the current version being ICD-10. ICD-11 is in the early stages of development with release planned for 2015. Although widely used in clinical practice throughout many parts of the world, ICD is rarely used in the type of research trial included in this systematic review. Nevertheless, ICD will be mentioned in these guidelines where appropriate.

The Guidelines are intended to influence the care of all Australian men, women and children, across the full range of populations, who develop, or are at risk of developing, these forms of distress following traumatic events. They are intended to include the care of older adults who do not have significant age-related comorbidity.

The Guideline developers recognise that there are a number of interventions that are widely used in clinical practice that have not been adequately tested, and it is important to acknowledge that the absence of evidence does not necessarily mean that these interventions are ineffective. The gap between evidence-based interventions and clinical practice should help define the research agenda into the future. Equally, evidence-based interventions should be used in preference to non-evidence-based interventions, unless there is a strong reason not to do so.

The Guidelines have been formulated with the assumption that treatment will be provided by qualified professionals who are skilled in the relevant psychosocial and medical interventions, as assessed against the prevailing professional standards. The Guidelines do not substitute for the knowledge and skill of competent individual practitioners. The recommendations are not intended to be used prescriptively, but as a guide to appropriate interventions in the context of each person's unique circumstances and their overall mental healthcare needs. Practitioners should use their experience and expertise in applying these Guidelines in routine clinical practice and all clinical interventions should be provided with compassion and sensitivity. In the application of these Guidelines to the Australian healthcare setting, consideration needs to be given to the availability and accessibility of appropriate and relevant services – especially in rural and remote settings – and of appropriate education and training to support practitioners in the delivery of the recommended evidence-based interventions.

While those who have PTSD in combination with broader posttraumatic mental health problems or other mental health problems may require additional treatment and care, the recommendations in these Guidelines are still relevant and applicable. Where possible, recommendations are provided on the management of people with PTSD and comorbid conditions. The Guidelines are intended to include the care of older adults who do not have significant age-related comorbidity, and a brief section in the 'Specific Populations' chapter discusses issues relevant to that age group. Unlike the earlier (2007) Guidelines, this version is also intended to cover the treatment of children and adolescents with PTSD.

Limitations of the Guidelines

As noted above, these Guidelines do not seek to address the full range of possible responses to traumatic exposure beyond ASD and PTSD. The Guidelines are not intended to be used prescriptively; rather practitioners should use their experience and expertise in applying the Guidelines. All clinical interventions should be provided with compassion and sensitivity.

These guidelines are based on the highest quality research currently available. It is possible that new and emerging treatments will develop a sufficiently strong evidence base to be included as recommended interventions in subsequent updates to the Guidelines. For this reason, it is recommended that the Guidelines be reviewed every five years.





Development of the Guidelines

The terms of reference for the Guidelines, including the roles and responsibilities of personnel involved, is provided in Appendix 2. A brief overview is provided here.

Personnel

The Guideline development group was made up of three committees:

- a small core working party, comprising clinical and research experts in the field of traumatic stress
- a broad multidisciplinary panel, comprising representatives of providers, professional associations, and people affected by trauma
- a two-person steering committee, comprising Professor David Forbes (as Director, Phoenix Australia - Centre for Posttraumatic Mental Health) and Professor Beverley Raphael (as Chair of the working party and multidisciplinary panel).

The composition of the working party and multidisciplinary panel is listed at the front of the Guidelines document.

Adelaide Health Technology Assessment at the University of Adelaide (AHTA) is an external organisation with specific expertise in the conduct of systematic literature reviews. AHTA was engaged to undertake the systematic review of the literature.

The Guideline development group was supported by an independent methodologist, Dr Adele Weston, who was responsible for advising the Guideline development group on issues related to NHMRC requirements, particularly in relation to deriving recommendations from the systematic review and grading those recommendations.

The Guideline development group was also supported by the Phoenix Australia project team, led by Dr Andrea Phelps, Dr Lisa Dell and Dr Bronwyn Wolfgang who were responsible for coordinating the development and writing of the Guidelines.

Process

The working party and multidisciplinary panel worked in collaboration to establish the research questions for the systematic review of the literature, and to develop the recommendations arising from the literature review. With respect to the research questions, the working party drafted questions based on their knowledge of key questions for the field. The multidisciplinary panel provided feedback on the relevance and applicability of the draft questions to the stakeholders they represented. The agreed questions were then put to the systematic review of the literature, undertaken by AHTA. The AHTA report summarised the research evidence under each research question for consideration by the Guideline development group. The full evidence review is very lengthy and is available in Appendix 3, downloadable from www.phoenixaustralia.org.

The process for developing recommendations involved four stages. First, evidence contained in the systematic review was allocated to working party members based on their particular expertise and working party members were required to work in pairs to develop draft recommendations. Secondly, these draft recommendations were presented to others, including the independent methodologist, at a working party meeting. The methodologist ensured that the recommendations and their grading could be justified. Thirdly, the draft recommendations were circulated to the multidisciplinary panel for feedback on their relevance and applicability to the stakeholders they represented. Finally, the Chair of the working party led a process of formally voting on acceptance of each of the recommendations. Working party members with potential conflicts of interest were excluded from the vote on specific recommendations related to the conflict. In this process one significant difference of opinion arose. A member of the multidisciplinary panel objected to the inclusion of a good practice point (GPP) that indicated that eye movements per se had not been proven to have any active effect in the efficacy of eye movement desensitisation and reprocessing (EMDR). A vote was taken within the working party in relation to this issue and it was agreed that this GPP should be removed as the question of mechanisms of treatment had not been specifically addressed in the evidence review nor addressed in the recommendations pertaining to any other intervention. One member of the working party dissented from this view given the purported centrality of the eye movements to EMDR as reflected in its title.

Both committees, the working party and multidisciplinary panel, were chaired by Professor Beverley Raphael. As Chair, Professor Raphael oversaw the work done by the two committees and ensured that the diversity of views of the overall Guideline development group was considered in formulation of the final research questions and recommendations.



The Draft Guidelines for the Treatment of ASD and PTSD were made available for public consultation between November 30 2012 and January 11 2013. Four submissions were received and a small number of amendments were made to the Guidelines as a result. Please see Appendix 4 for details of the public consultation process, submissions received, and amendments made to the Guidelines. Further details of the process of Guideline development are available in the NHMRC administrative report. A copy of this report is available upon request to phoenix-info@unimelb.edu.au.

Additional notes

1. The Guideline developers recognise that the treatment studies subjected to this review are often specific to a particular trauma affected population, using different measurement instruments. The conduct of large national trials conducted across trauma affected populations with consistency of measurement will further inform future revisions to these Guidelines.

2. On a point of terminology, the terms *efficacy* and *effectiveness* appear in the literature review and carry different meanings in the context of clinical trials. Most of the evidence reviewed in this Guideline comes from 'efficacy' trials. These trials are conducted under carefully controlled conditions, with strict participant selection and randomisation, which often involves substantial deviation from usual care, for example, *"eliminating treatment preferences, providing free care, using specialised providers and settings, maintaining high treatment compliance, and excluding patients with major comorbid conditions"*.¹

In contrast, 'effectiveness' trials evaluate the effects of treatment under standard practice conditions; until recently, there have been few of these trials conducted with ASD and PTSD. Although these trials would seem at face value to be more relevant for clinical practice, the difficulty of standardising aspects of the treatment delivery dramatically increases the risk of errors in the results. In recent years, however, the methodology of these effectiveness trials has improved substantially, and many have been able to closely approach the rigour of a traditional efficacy trial while delivering the treatment in real-world settings. While the recommendations outlined in these Guidelines are applicable and appropriate to the Australian healthcare context, there is a need for further effectiveness trials to evaluate the recommended interventions under conditions approximating usual care. As the methodological rigour of effectiveness trials continues to improve, it is hoped that future guidelines may be in a stronger position to include such research in the body of evidence used to formulate recommendations. The enhanced ecological validity provided by those designs would help to ensure the applicability of guideline recommendations to real-world clinical settings.

3. In interpreting data from treatment outcome studies, several caveats are worthy of consideration. The recommendations in these Guidelines are, of necessity, derived from a sound statistical approach to the systematic literature review. While universally accepted as the best approach for clinical practice guidelines, it should be recognised that it does risk overlooking some of the many complexities underlying the data.

First, it is important to be aware of the comparator group used in the trial. Older studies (and a few more contemporary ones) used 'waitlist control' (WLC) as the comparator, with a random allocation to active treatment or WLC. More recent studies often use 'treatment as usual' (TAU) as the comparator (although the difference between WLC and TAU is often one in name only). In both cases, it is very hard to control for the care received by the person – we know that some 'usual care' will be highly effective, while in others the person may receive no care at all. This makes it difficult to compare effect sizes within, and across, studies.

In a related issue, pharmacological trials routinely test the active treatment against a placebo and, as shown later in pharmacological trial outcomes, substantial effects are often seen in the placebo group. The 'effect size' of the active medication is derived from the difference between the drug and the placebo. In psychological treatment trials, a genuine placebo arm is very hard to devise and it is much more likely that the effect size will compare active treatment to WLC or TAU. Only in comparisons of two active treatments is the effect size of one over the other used. Thus, when comparing pharmacological treatment effect sizes with psychological treatment effect sizes, it is important to remember that we are not comparing like with like.

It is relatively easy to rigorously monitor the type, quality and quantity of medication being administered. It is another thing altogether to be confident about these parameters in the delivery of psychological treatments. High quality contemporary trials now routinely include rigorous treatment fidelity checks, ideally by an independent expert in the therapy under consideration, and these go some way towards ensuring standardisation. In earlier trials, however, the reader must rely on the description provided in the paper, and unfortunately, a myriad of therapist characteristics and nuances in treatment, many of which may be important therapeutic elements, are lost in these descriptions. This highlights the importance of different clinical research groups publishing trials of the same intervention.



The question of how to deal in the analyses with research participants who drop out prematurely is a difficult issue. As noted in Chapter 5, one approach that is routinely used in high quality studies is to present 'intent to treat' (ITT) data – that is, all those who enrolled in the trial are included in the analyses. If the person drops out before completing treatment, his or her last data point is used as the outcome (even if this is the pre-treatment point). ITT data are not reported in many of the research trials included in the systematic review and we are forced to use the 'completer only' data for those trials. Evidence statements are based on a combined analysis of ITT and completer only trials. Where sufficient trials were available, however, a separate analysis of ITT studies only was conducted (see Appendix 3 for details, downloadable from www.phoenixaustralia.org). These comparisons were: a) trauma-focussed CBT versus waitlist control and versus treatment as usual; and b) paroxetine and fluoxetine versus placebo. Not surprisingly, effect sizes tend to be smaller in ITT trials compared with trials that only include those who finish treatment, but the main findings remained the same.

The fact is that accurately reviewing interventions for psychiatric disorders, and pooling data to generate recommendations about which we can be confident, presents multiple challenges. These Guidelines follow best practice approaches to produce the best possible recommendations. With the above caveats in mind, however, clinical judgement in interpreting the recommendations in routine clinical practice remains vital.

Implementation of the Guidelines

The overarching objective of these Guidelines is to improve outcomes for people affected by trauma. For this to be achieved, the key Guideline recommendations need to be effectively disseminated to health practitioners, service planners and purchasers and people directly affected by trauma. The communication objectives of the dissemination strategy include, to:

- generate awareness of the Guidelines and recommended interventions amongst health practitioners
- generate awareness of the Guidelines amongst education and child mental health professionals
- engage professional bodies and peak organisations in the dissemination process
- engage organisations that promote best practice in the dissemination process
- ensure mental health consumers have access to the Guidelines' key recommendations through the support of organisations such as the Mental Health Council of Australia
- demonstrate practical policy implications of the Guidelines to decision makers in key government departments and industry organisations.

These objectives will be met through a range of activities including the development of accessible Guideline companion documents for practitioners and community members, peer reviewed publications, media releases (including the use of social media), targeted consultation with key stakeholders and decision makers in government and mental health services and the integration of recommendations into relevant policy and training initiatives.

In regard to the implementation in Australia of pharmacological recommendations outlined in these Guidelines, doctors should be mindful of regulations that may apply where the cost of the medicine is subsidised by the Government (Pharmaceutical Benefits Schedule) or another third party.

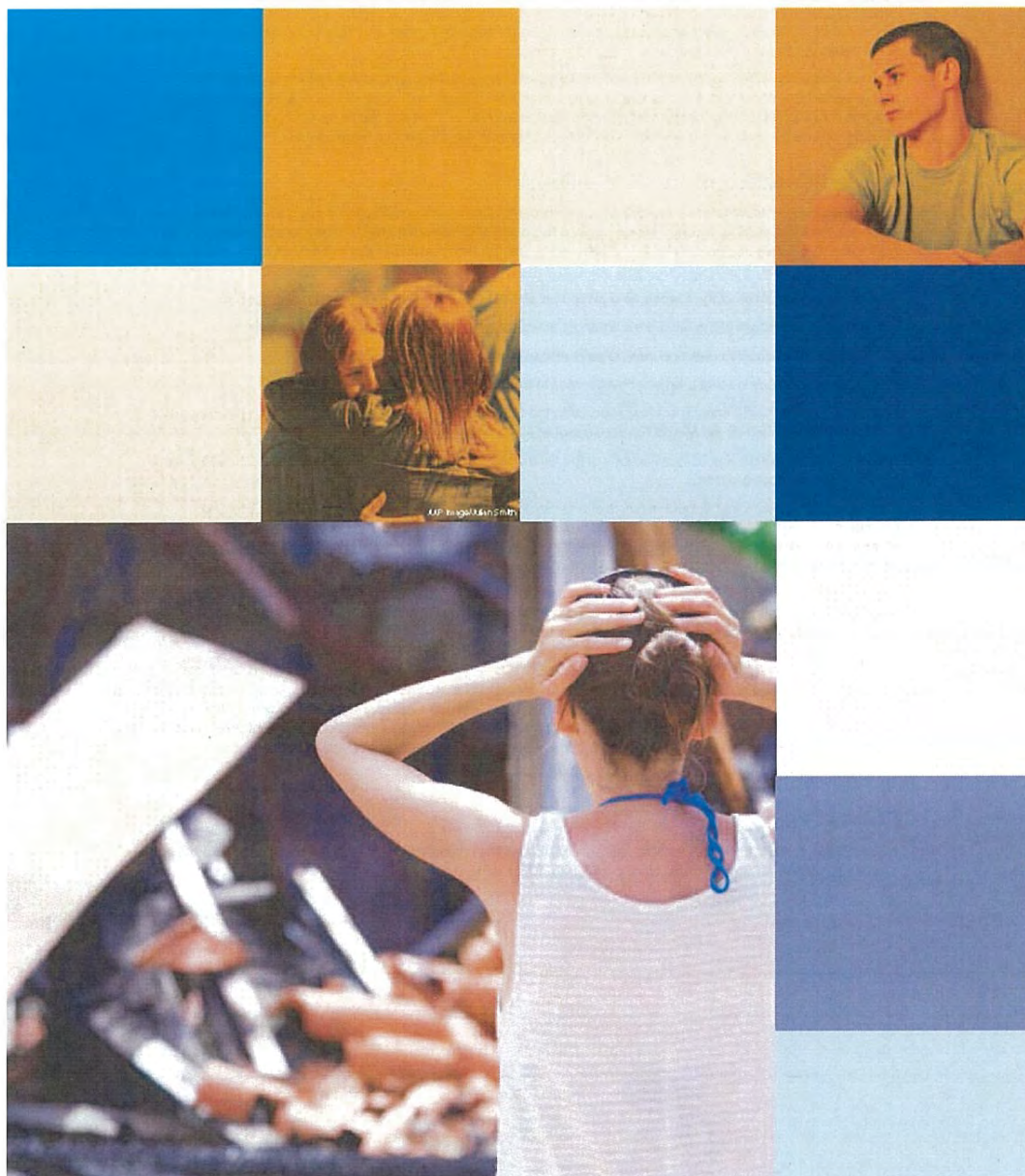
Disclaimer

The recommendations in this document are based on the best evidence available at the time of compilation (November 2011). These Guidelines must be used in conjunction with clinical judgement and patient preference. The attending clinician has ultimate responsibility for the appropriate choice of therapy.

It is recommended that these Guidelines be reviewed in 2017.

References

1. Wells, K. B. (1999). Treatment research at the crossroads: The scientific interface of clinical trials and effectiveness research. *American Journal of Psychiatry*, 156(1), 5-10.





Trauma and Trauma Reactions

2

Trauma, traumatic event and potentially traumatic event

The word trauma is used inconsistently within the mental health field, referring at times to an event and at other times to psychological injury arising from an event. Literally, trauma means wound, and the word is used routinely in the physical health sector to describe an injury. In mental health terms, it refers to an injury or wound to the 'psyche'; that is, damage to a person's emotional or psychological health and wellbeing. It is recognised that such an injury is characterised by biological, psychological, and social aspects (i.e., a biopsychosocial approach).

Potentially traumatic event (PTE) will be used in these Guidelines to refer to events that meet the *Diagnostic and Statistical Manual of Mental Disorders* (fourth edition, text revision; DSM-IV-TR)¹ stressor criterion for PTSD and ASD. This term recognises the wide variation in individual appraisals of, and responses to, an event. A particular event, regardless of how threatening it may seem, is not necessarily going to cause 'psychic injury' to all who experience it.

Traumatic event will be used in these Guidelines to refer to an event that has actually resulted in psychic injury, and *trauma* will be used to refer to the psychic injury itself.

Potentially traumatic events

As defined by DSM-IV-TR, PTEs include any threat, actual or perceived, to the life or physical safety of the individual, their loved ones or those around them. PTEs include, but are not limited to, war, torture, sexual assault, physical assault, natural disasters, accidents and terrorism. Exposure to a PTE may be direct (i.e., actually experienced or witnessed), or indirect (i.e., confronted with or learnt about)², and may be experienced on a single occasion, or repeatedly. By their very nature, some events are more likely to be experienced as extremely traumatic, and more likely to cause ongoing difficulties and clinically diagnosable symptoms of ASD and/or PTSD. Intentional acts of interpersonal violence, such as torture and assault, and prolonged and/or repeated events, such as childhood sexual abuse and concentration camp experiences, are more likely than natural events or accidents to result in a traumatic response.^{2,3}

Although beyond the conceptualisation of PTEs, it is important to recognise the potential for transgenerational effects of trauma, in which the impact of systematic torture, genocide or family violence may be seen in mental health problems in the next generation.^{4,5}

Generally, events that do not include an element of serious physical threat are not considered PTEs even if they constitute significant threats to psychological integrity or wellbeing. Thus, events such as divorce or separation, job loss, and verbal abuse/harassment are not considered PTEs and do not meet the stressor criterion for a PTSD diagnosis.

Common responses to potentially traumatic events

A degree of psychological distress is very common in the early aftermath of traumatic exposure and can be considered a part of the normal response. In cases of severe traumatic events, most people may be symptomatic in the initial fortnight after the event. Traumatized people are likely to experience emotional upset, increased anxiety, and sleep and appetite disturbance. Some will have additional reactions such as fear, sadness, guilt or anger. In most cases, psychological symptoms of distress settle down in the days and weeks following the traumatic event as people make use of their customary coping strategies and naturally occurring support networks to come to terms with the experience.⁶ However, in a minority of people the symptoms persist and develop into ASD and/or PTSD.

¹ The stressor criterion for DSM-5 explicitly excludes the witnessing of traumatic events via electronic media, television, movies or pictures, unless this is part of a person's vocational role.



Traumatic stress syndromes

When the individual's psychological distress following exposure to a traumatic event persists, and is severe enough to interfere with important areas of psychosocial functioning, it can no longer be considered a normal response to traumatic exposure. The possibility of a posttraumatic mental health disorder such as ASD or PTSD should be considered. It should be noted that a wide range of other mental health conditions including anxiety, affective, and substance use disorders might be present either alone or together with ASD or PTSD. For example, a large study of traumatic injury survivors found that, while almost a third had a psychiatric diagnosis at 12 months post-injury, more than two-thirds of those did not have a diagnosis of PTSD.⁷ The most common diagnosis at 12 months was depression (16%), followed by generalised anxiety disorder (GAD; 11%), substance abuse (10%), PTSD (10%), agoraphobia (10%), social phobia (7%), panic disorder (6%) and obsessive-compulsive disorder (OCD; 4%).

Acute stress disorder

After an individual has been exposed to a traumatic event, he or she may experience significant distress and/or impairment in social, occupational or other important areas of functioning. When this lasts longer than two days, a diagnosis of acute stress disorder may be considered.

The DSM-IV-TR requires several sets of criteria to be met for a diagnosis of ASD (see Table 2.1). Criterion A1 requires that the individual experienced or witnessed an event that involved actual or threatened death or serious injury to self or others, and Criterion A2 requires that the individual responded with fear, helplessness or horror. The B Criteria refer to dissociative symptoms during or after the event (*three or more of: a subjective sense of numbing, detachment or absence of emotional responsiveness, reduced awareness of one's surroundings, derealisation, depersonalisation, and dissociative amnesia*). The C Criteria require one or more re-experiencing symptoms (*reliving the event through one or more of: recurrent images, thoughts, dreams, illusions, flashbacks, sense of reliving the experience or distress on exposure to reminders of the event*). Criterion D requires "marked avoidance of reminders", Criterion E requires "marked anxiety or increased arousal", and Criterion F requires evidence of significant distress or impairment. These symptoms must last for a minimum of two days and a maximum of four weeks following the event, after which time a diagnosis of PTSD should be considered.

It is worth noting that several revisions to the ASD diagnostic criteria have been included in the recently released DSM-5.⁸ Firstly, ASD has been moved from the Anxiety Disorders section to a new category – Trauma- and Stressor-Related Disorders.⁹ The main criteria changes include eliminating Criterion A2 (as there is little empirical support for its utility), and removing the requirement for dissociative symptoms (as research indicates that dissociation is not always present). ASD is conceptualised as an acute stress response that does not require specific symptom clusters to be present. Rather, the person requires a certain number from a broad list of dissociative, re-experiencing, avoidance, and arousal symptoms.

Bryant¹⁰ conducted a systematic analysis of literature examining the predictive utility of ASD. The review reported that individuals who experience ASD are at high risk of developing PTSD, with most studies indicating that at least half of those with ASD subsequently meet criteria for PTSD. However, the review also found that the majority of individuals who eventually developed PTSD did not previously meet full criteria for ASD. Thus, having an ASD diagnosis is moderately predictive of PTSD, but not having an ASD diagnosis should not necessarily be interpreted as indicating a good prognosis.



Table 2.1: DSM-IV-TR diagnostic criteria for acute stress disorder (DSM-IV-TR code 308.3)

- A. The person has been exposed to a traumatic event in which both of the following were present:
 - (1) The person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others
 - (2) The person's response involved intense fear, helplessness, or horror.
- B. Either while experiencing or after experiencing the distressing event, the individual has three (or more) of the following dissociative symptoms:
 - (1) A subjective sense of numbing, detachment or absence of emotional responsiveness
 - (2) A reduction in awareness of his or her surroundings (e.g., 'being in a daze')
 - (3) Derealisation
 - (4) Depersonalisation
 - (5) Dissociative amnesia (i.e., inability to recall an important aspect of the trauma)
- C. The traumatic event is persistently re-experienced in at least one of the following ways: recurrent images, thoughts, dreams, illusions, flashback episodes, or a sense of reliving the experience; or distress on exposure to reminders of the traumatic event.
- D. Marked avoidance of stimuli that arouse recollections of the trauma (e.g., thoughts, feelings, conversations, activities, places, people).
- E. Marked symptoms of anxiety or increased arousal (e.g., difficulty sleeping, irritability, poor concentration, hypervigilance, exaggerated startle response, motor restlessness).
- F. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning or impairs the individual's ability to pursue some necessary tasks, such as obtaining necessary assistance or mobilising personal resources by telling family members about the traumatic experience.
- G. The disturbance lasts for a minimum of two days and a maximum of four weeks and occurs within four weeks of the traumatic event.
- H. The disturbance is not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition, is not accounted for by Brief Psychotic Disorder, and is not merely an exacerbation of a pre-existing Axis I or Axis II disorder.





Posttraumatic stress disorder

As seen in Table 2.2, DSM-IV-TR requires six sets of criteria to be met in order for the diagnosis of PTSD to be made. Criterion A defines the stressor, including features relating to the event itself (Criterion A1) and the person's response to the stressor as 'fear, helplessness or horror' (Criterion A2). The B, C, and D Criteria refer to re-experiencing, avoidance and numbing, and hyperarousal symptom clusters, respectively. In the B, C and D symptom clusters, one of five symptoms, three of seven symptoms, and two of five symptoms respectively, are required to qualify for the diagnosis. Criterion E stipulates that the symptoms of clusters B, C and D need to have been present for at least one month. Criterion F requires that the disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning. PTSD is specified as acute when the duration of the symptoms is less than three months, and chronic if the duration of the symptoms is three months or more. In instances where the onset of symptoms is at least six months following the event, the disorder is specified as delayed onset.

It is worth noting that several revisions to the PTSD diagnostic criteria have been introduced in DSM-5.¹¹ Firstly, PTSD has been moved from the Anxiety Disorders section to a new category – Trauma- and Stressor-Related Disorders.⁹ The changes to Criterion A include narrowing the definition of 'traumatic event' in Criterion A1, and eliminating Criterion A2 as there is little empirical support for its utility. The other main change includes having four rather than three symptom clusters by dividing the avoidance and numbing symptom cluster into two. This reflects the research showing active and passive avoidance to be independent phenomena. The passive avoidance cluster has become a more general set of dysphoric symptoms. The full DSM-5 criteria for PTSD can be found in Appendix 5.

Re-experiencing symptoms

The re-experiencing or 'intrusive' symptoms are often regarded as the hallmark feature of traumatic stress. Re-experiencing symptoms include intrusive and unwanted thoughts and images of the event and distressing dreams or nightmares. Re-experiencing symptoms can also include 'flashbacks' where people may lose awareness of their surroundings and become immersed in the memory of the event. These flashbacks may be so vivid that people feel as if they are experiencing the traumatic event again. People can become upset or distressed when reminded of what happened, and have intense physical reactions like sweating and rapid heartbeat.

Avoidance and numbing symptoms

Avoidance and numbing symptoms are generally understood to result from different underlying mechanisms. Avoidance is characterised by deliberate attempts to keep memories of the traumatic event out of mind by actively avoiding any possible reminders. Such avoidance can result in a person going to extreme lengths to avoid people, places, and activities that trigger distressing memories, as well as internal triggers such as thoughts and feelings. While those active avoidance symptoms involve effortful behaviour, numbing symptoms are more passive and may be less under voluntary control. Numbing symptoms are reflected through a loss of interest in activities that formerly brought enjoyment, detachment or estrangement from others, restricted emotional responses (e.g., being unable to experience joy or love), and a sense of a foreshortened future. These numbing symptoms are thought to particularly characterise more chronic and severe forms of the disorder. As such, they are usually considered to be a poor prognostic indicator.¹² As noted above, since empirical research indicates that avoidance and numbing are optimally considered as separate clusters, DSM-5 divides the existing C Criterion into two: (1) 'avoidance behaviour' (one symptom needed); and (2) 'negative alterations in cognitions and mood' which encompasses and expands upon the current numbing symptoms (two symptoms needed).

Arousal symptoms

PTSD is associated with a sustained increase in sympathetic nervous system activity, well beyond its adaptive function in response to the traumatic event. The individual experiences ongoing increased arousal, as though the 'fear system' has been recalibrated to a higher idling level. Increased arousal is evident in a range of symptoms such as poor concentration and memory, irritability and anger, difficulty in falling and staying asleep, being easily startled, and being constantly alert to signs of danger (hypervigilance). In DSM-5, an additional symptom of 'reckless or self-destructive behaviour' has been included in this cluster.



Table 2.2: DSM-IV-TR diagnostic criteria for posttraumatic stress disorder (DSM-IV-TR code 309.81)

- A. The person has been exposed to a traumatic event in which both of the following were present:
 - (1) The person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others
 - (2) The person's response involved intense fear, helplessness, or horror. Note: In children, this may be expressed instead by disorganised or agitated behaviour
- B. The traumatic event is persistently re-experienced in one (or more) of the following ways:
 - (1) Recurrent and intrusive distressing recollections of the event, including images, thoughts or perceptions. Note: In young children, repetitive play may occur in which themes or aspects of the trauma are expressed
 - (2) Recurrent distressing dreams of the event. Note: In children, there may be frightening dreams without recognisable content
 - (3) Acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur on awakening or when intoxicated). Note: In young children, trauma-specific re-enactment may occur
 - (4) Intense psychological distress at exposure to internal or external cues that symbolise or resemble an aspect of the traumatic event
 - (5) Physiological reactivity on exposure to internal or external cues that symbolise or resemble an aspect of the traumatic event
- C. Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by three (or more) of the following:
 - (1) Efforts to avoid thoughts, feelings or conversations associated with the trauma
 - (2) Efforts to avoid activities, places, or people that arouse recollections of the trauma
 - (3) Inability to recall an important aspect of the trauma
 - (4) Markedly diminished interest or participation in significant activities
 - (5) Feeling of detachment or estrangement from others
 - (6) Restricted range of affect (e.g., unable to have loving feelings)
 - (7) Sense of a foreshortened future (e.g., does not expect to have a career, marriage, children, or a normal life span)
- D. Persistent symptoms of increased arousal (not present before the trauma), as indicated by two (or more) of the following:
 - (1) Difficulty falling or staying asleep
 - (2) Irritability or outbursts of anger
 - (3) Difficulty concentrating
 - (4) Hypervigilance
 - (5) Exaggerated startle response
- E. Duration of the disturbance (symptoms in Criteria B, C, and D) is more than 1 month.
- F. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Specify if:

Acute: if duration of symptoms is less than three months

Chronic: if duration of symptoms is three months or more

Specify if:

With delayed onset: if onset of symptoms is at least six months after the stressor



Features commonly associated with PTSD

In addition to these core symptoms, PTSD is also commonly associated with a range of features including anger,¹³ guilt,^{14,15} dissociation,¹⁶ marked functional limitations and diminished quality of life,¹⁷ and physical health problems.¹⁸

A subset of individuals with PTSD, more commonly those who have experienced events of an interpersonal, prolonged and repeated nature (e.g., childhood sexual abuse, imprisonment, torture), often referred to as Type II trauma,¹⁹ present with a constellation of characteristic features alongside the core PTSD symptoms. These features can include: impaired emotional control; self-destructive and impulsive behaviour; impaired relationships with others; hostility; social withdrawal; feeling constantly threatened; dissociation; somatic complaints; feelings of ineffectiveness, shame, despair or hopelessness; feeling permanently damaged; and a loss of prior beliefs and assumptions about their safety and the trustworthiness of others.^{20,21} Issues of chronic self-harm and/or suicidal ideation are more common in this group.

People exhibiting this constellation of features are often referred to as having Complex PTSD²² or Disorders of Extreme Stress Not Otherwise Specified (DESNOS).²³ While these diagnoses are not included in either DSM-IV or DSM-5, ICD-10 includes "Enduring personality change after catastrophic experience (F62.0)" which closely resembles those categories. It is not yet known how ICD-11 will deal with these constructs.

Prevalence and incidence of PTSD

Rates of PTSD should be considered in the context of rates of exposure to PTEs in the general community. Large community surveys^{2,22,24} indicate that 50–75 per cent of people report at least one PTE in their lives, with most reporting two or more events. Since the first Australian Guidelines were published, Mills and colleagues²⁴ have examined the Australian rates of exposure for a wider range of more specific PTEs than in previous studies. Their findings suggest that the most commonly reported PTEs are having someone close to the individual die unexpectedly (reported by about 35% of the population); witnessing someone being badly injured or killed, or unexpectedly seeing a dead body (27%); and being involved in a life-threatening car accident (13%). Although these figures are important in informing our understanding of trauma exposure rates, this type of retrospective data should always be interpreted with some caution.

When examining PTSD rates, both prevalence and incidence figures are used. Prevalence refers to the proportion of a population that has had PTSD during a given period of time, and incidence refers to the rate at which new diagnoses of PTSD occur following exposure to a PTE.

Reports of lifetime prevalence of PTSD (percentage of the population who have had PTSD at some time in their lives) in community samples range between 5 and 10 per cent. This can be interpreted to mean that approximately 15–25 per cent of people exposed to PTEs have also had a PTSD diagnosis.²⁵ These lifetime prevalence rates may be somewhat misleading however, as around half those people who develop PTSD recover in the first 12 months regardless of treatment.³ In addition, of course, lifetime rates need to be interpreted with caution due to the retrospective nature of the inquiry. Reports of 12-month prevalence of PTSD (percentage of the population who have had PTSD in the past year) are 4.4 per cent in Australia²⁶ and 3.5 per cent in the United States.²⁷

An important risk factor for developing PTSD following a PTE is the nature of the traumatic exposure. Those PTEs associated with the highest rates of PTSD are not necessarily the most commonly occurring PTEs.²⁴ Creamer and colleagues³ found the highest 12-month prevalence of PTSD was associated with a prior history of rape and molestation, and the lowest 12-month prevalence of PTSD was associated with natural disasters and witnessing someone being badly injured or killed. Similar findings have been reported in the United States.³ PTSD has traditionally been associated with military combat, and a recent review²⁸ found that point prevalence rates amongst US veterans since the Vietnam War range from 2–17 per cent. The review found that, in general, rates of combat-related PTSD are lower in veterans from other Western countries than in those from the US. For example, PTSD is estimated to affect 3–6 per cent of returning UK Iraq War veterans,²⁹ compared with around 13 per cent of US troops.³⁰ The prevalence of PTSD following natural disasters ranges from approximately 4–60 per cent with most studies reporting prevalence in the lower half of this range.³¹ These rates are often lower than those following human-made disasters (including acts of terrorism) or technological disasters. The highest disaster-related PTSD prevalence is found amongst survivors (30–40%) and first responders (10–20%) in comparison to the general population (5–10%). See Neria et al.³¹ for a recent review.

Currently, prevalence rates of ASD in the general Australian community are not available. However, a recent review of studies examining ASD found much variability between different PTEs, including, rates of 9 per cent following terrorist attacks, 13–25 per cent following motor vehicle accidents (MVAs), and a 33 per cent prevalence rate for witnesses to drive-by shootings. The prevalence of ASD varies considerably even when examining the same PTE type across settings. For example, most injury study prevalence rates lie between 6 and 10 per cent,⁶ however in Australia alone studies have found an ASD prevalence of between 1³² and 14 per cent³³ following traumatic injury.



Comorbid conditions

In chronic cases of PTSD (beyond three months), the core symptoms rarely exist in isolation. More commonly they exist alongside a number of associated features and other comorbid mental health disorders.^{49, 2.3.34,35} Since the previous Guidelines were published, Australia and the USA have both conducted further epidemiological national health surveys, and have published updated comorbidity data. Data from the 2007 Australian National Mental Health and Wellbeing study³⁴ found that 86 per cent of men and 77 per cent of women with PTSD also met criteria for another lifetime Axis I disorder. This included anxiety (52% of men and 54% of women), affective (50% of men and 51% of women), and substance use disorders (65% of men and 32% of women).

A number of studies have found high rates of comorbidity between personality disorder and PTSD in the US adult population, although much of this research has been conducted with male combat veterans with longstanding PTSD.³⁶⁻³⁹

In addition to complexities arising from comorbidity, health practitioners working with individuals with more chronic PTSD often find themselves having to work with a myriad of psychosocial problems that have evolved secondary to the core disorder. These often include pain and somatic health complaints, relationship problems, and occupational impairment.

The course of PTSD

Information about the course of PTSD has been derived from large epidemiological studies^{40, 3.34} that ask respondents how many weeks, months or years after the onset of the disorder they continued to experience symptoms. These retrospective reports are used to create 'survival curves' or models of the course of PTSD following exposure to a traumatic event. The survival curves suggest that most people with PTSD will eventually remit, with symptoms decreasing most substantially in the first 12 months following the event, although a substantial minority will continue to experience PTSD for decades. Findings from studies of the general population in the United States³⁴ and Australia³⁴ suggest that there is approximately 50–60 per cent remission between two and ten years after the event, with probable further remission over subsequent decades. Studies with specific trauma types and populations also show significant remission from PTSD over time. For example, a study of adults who survived a shipping disaster as adolescents found that 70 per cent of survivors who were diagnosed with PTSD after the incident did not meet criteria for PTSD between five and eight years after the disaster.⁴⁰ Research following the September 11, 2001 terrorist attacks has provided further evidence of a general decline in PTSD prevalence,⁴¹ however, to date there has been no published research assessing the course of PTSD over several years following those events. Few published studies currently exist on the longer term course of PTSD following traumatic injury. Any future studies would need to be interpreted with caution, since the course of recovery in those samples is often heavily influenced by physical disability, rendering generalisation to other PTSD populations difficult.

Most of those studies used retrospective reports to determine the course of recovery. Lower rates of PTSD remission have been found in other populations particularly when more reliable prospective research designs have been used. A study that assessed Australian Vietnam veterans at two points 15 years apart found increased rates of PTSD at the later time point.⁴² Similar rates of chronic PTSD have been found in firefighters after a major bushfire, where 56 per cent of those who had the disorder following the fire still had it four years later.⁴³ In a 20-year follow-up of Israeli veterans, Solomon found fluctuating PTSD prevalence, with reduced rates three years after the war but substantial increases at the 20-year point.⁴⁴ Data from several studies suggest that people who meet PTSD criteria at around six months post-trauma are likely (in the absence of effective treatment) to show a chronic course with symptoms potentially lasting for many decades.^{3,45}

PTSD is less likely to follow a chronic course with effective treatment. Based on several studies it is reasonable to assume that around one-third of patients will make a good recovery following effective treatment, one-third will do moderately well, and one-third are unlikely to benefit.

Resilience in the face of potentially traumatic events

While the primary focus of these Guidelines is the treatment of people who develop ASD and/or PTSD following a traumatic experience, it needs to be emphasised that the majority of people exposed to trauma do not go on to develop these conditions. Resilience is the usual outcome following traumatic exposure,^{46,47} although consensus on the definition of resilience is yet to be reached. Recent definitions of resilience have included: "a dynamic process encompassing positive adaptation within the context of significant adversity",⁴⁸ and "the ability to adapt and cope successfully despite threatening or challenging situations".⁴⁹ Some researchers have chosen to define resilience as the absence of PTSD symptomatology following exposure to a PTE,^{49, 50} but others argue that the absence of PTSD symptoms does not equate to resilience any more than absence of disease equals health.⁵¹ An excellent review of the area is provided by Layne and colleagues.⁵²



Posttraumatic mental health disorders: Key differences between ASD and PTSD

There is significant overlap in the diagnostic criteria for the two posttraumatic mental health conditions, ASD and PTSD, described above. The key distinguishing feature between the two disorders is the duration of symptoms required for the diagnosis to be made. ASD is diagnosed between two days and one month following the traumatic event, while PTSD requires that the symptoms be present for at least one month following the traumatic event. Acute PTSD is diagnosed if symptoms have persisted for between one and three months; chronic PTSD is diagnosed if symptoms have persisted for three months or more. In terms of symptom constellation, the DSM-IV diagnoses differ in terms of dissociative and avoidance symptoms; ASD requires a number of dissociative symptoms not included in PTSD, while PTSD places greater emphasis on avoidance symptoms. Notably, the DSM-5 ASD criteria remove the requirement for dissociative symptoms, so that ASD is conceptualised as an acute stress response that does not require specific symptom clusters to be present.

Screening, assessment and diagnosis

People with ASD or PTSD will not necessarily express concern about a traumatic experience to their doctor or mental health professional in the first instance. They may present with any of a range of problems including mood disorders, anger, relationship problems, poor sleep, sexual dysfunction, or physical health complaints such as headaches, gastrointestinal problems, rheumatic pains, and skin disorders. Their traumatic experience may not even be mentioned. Indeed, a recent study found that only 11 per cent of primary care patients with PTSD had the diagnosis listed in their medical files.⁵³ This problem is due, in part, to the avoidance that is characteristic of PTSD, which may prevent the person speaking about it or seeking assistance. It also needs to be acknowledged that there remains a social stigma attached to mental health problems, and the fear of discrimination may be a barrier to some people reporting their symptoms. Furthermore, there is stigma attached to some forms of traumatic exposure, such as sexual assault, which may discourage the individual from disclosing the experience. The practitioner needs to be sensitive to these issues when screening for PTSD, and consider this when selecting cut-off scores on self-report instruments. This problem highlights the importance of empirically establishing the optimal cut-offs in different populations, and of educating clinicians about the appropriate use of such instruments. Self-report measures should be used as a guide, rather than as a categorical diagnostic tool.

In seeking to understand the origins of presenting problems, the practitioner should routinely enquire about any stressful or traumatic experiences, recently or in the past. If a traumatic experience is suspected, the practitioner may utilise a traumatic events checklist. If the person endorses any events on the checklist, then it is recommended that a brief PTSD screening tool be administered. Although the primary focus of such questions will be events experienced by the person, clinicians should also be sensitive to the potential for transgenerational effects of trauma, particularly among high-risk groups such as children of veterans or holocaust survivors.

There is a range of brief PTSD screening measures currently in use (see Brewin et al.⁵⁴ for a review). These include the Startle, Physiological arousal, Anger, and Numbness scale⁵⁵ (SPAN; four items), the Brief DSMPTSD-IV scale⁵⁶ (BPTSD-6; six items), and the Disaster-Related Psychological Screening Test⁵⁷ (DRPST; seven items). Measures recommended in the US Veterans Affairs/Department of Defense PTSD clinical practice guidelines⁵⁸ include the four-item Primary Care PTSD Screen⁵⁹ (PC-PTSD), the Short Screening Scale for DSM-IV PTSD⁶⁰ (SSSP; seven items) and the PTSD Brief Screen.⁶¹ More recently, the PTSD Checklist (PCL)⁶² has been abbreviated into four-item⁶³ and six-item versions.⁶⁴ There is probably little to choose between the various measures. The following is an example of a screening measure⁶⁰ that has been empirically validated and is widely used.

The Primary Care PTSD Screen (PC-PTSD):

In your life, have you ever had any experience that was so frightening, horrible, or upsetting that, in the past month, you:

1. Have had nightmares about it or thought about it when you did not want to?
2. Tried hard not to think about it or went out of your way to avoid situations that reminded you of it?
3. Were constantly on guard, watchful, or easily startled?
4. Felt numb or detached from others, activities, or your surroundings?



Current research suggests that a patient who responds "yes" to two or more items should be assessed further for trauma symptoms. In the original validation study using US Veterans Affairs primary care patients, a cut-off score of two favours sensitivity (with a sensitivity of .91 and specificity of .72) and a cut-off score of three favours specificity (with a sensitivity of .78 and specificity of .87). The PC-PTSD also displays good test-retest reliability.

The section above considers the implementation of screening in the context of people presenting to a practitioner for care. In considering the use of broader population screening, the potential benefits should be weighed up against practical concerns such as time constraints, staffing, follow-up care resources, and current clinical practice systems. For example, consideration may be given to systematic screening of populations identified as high risk on the basis of their exposure to a major disaster, occupational role (e.g., emergency services and military personnel), or other traumatic experience (e.g., refugees). Such an approach would have important implications for service planning, with the goal of identifying those at risk and targeting the limited available resources to those most likely to benefit from the provision of an evidence-based intervention. This, of course, assumes that there exists an adequate pool of trained and experienced clinicians to provide evidence-based care to those who screen positive within the affected community. Currently, there are many locations where individuals who screen positive for PTSD (or other high prevalence conditions) would have significant difficulty accessing evidence-based care. Population-based screening under those circumstances raises difficult ethical questions and should not be undertaken without careful consideration.

Good practice points

- GPP1** For people presenting to primary care services with repeated non-specific physical health problems, it is recommended that the primary care practitioner considers screening for psychological causes, including asking whether the person has experienced a traumatic event and describing some examples of such events.
- GPP2** Service planning should consider the application of screening (case finding) of individuals at high risk for PTSD after major disasters or incidents, as well as those in high-risk occupations.
- GPP3** The choice of screening tool should be determined by the best available evidence, with a view to selecting the best performing screen for the population of interest. Application of an inappropriate screening tool may result in over- or under-identification of problems.
- GPP4** Different populations may require different screening procedures. Programs responsible for the management of refugees should consider the application of culturally appropriate screening for refugees and asylum seekers at high risk of developing PTSD. Similarly, screening of children will require the use of developmentally sensitive tools designed for the purpose.
- GPP5** Screening should be undertaken in the context of a service system that includes adequate provision of services for those who require care.
- GPP6** Any individual who screens positive should receive a thorough diagnostic assessment.

Comprehensive assessment of PTSD

PTSD is often associated with diffuse and broad patterns of symptoms and impairments, and clinical presentations vary according to the unique characteristics and circumstances of the individual. As such, a comprehensive assessment, including a detailed history as per any good clinical assessment, is recommended. In PTSD and related conditions, assessment should include a trauma history covering prior traumatic experiences as well as the 'index' traumatic event. It is not necessary to obtain details of these experiences in the initial sessions; it is sufficient to get a brief idea of the traumatic events to which the person has been exposed. An insistence on obtaining details at this early assessment stage may not only be distressing for the person, but may actually be counter-therapeutic. Subsequent treatment for the PTSD, of course, is likely to involve going through the detailed descriptions of the traumatic events.

As part of assessing the history and current circumstances, current and past psychosocial functioning (past psychosocial functioning is particularly important where trauma has involved early sexual or physical abuse), the presence and course of PTSD symptoms, and any comorbid problems (including substance use) should all be considered. Clinicians should also be sensitive to the potential for transgenerational effects of trauma, particularly among high-risk groups such as children of veterans or holocaust survivors. Particular attention should also be paid to physical health issues. This may include issues related to injury arising from the traumatic incident, health behaviour change following the incident, concurrent or developing physical health problems, and medical treatment being undertaken for any physical health issues.





Broader quality of life indicators such as satisfaction with physical, social, environmental, and health status, marital and family situation, and occupational, legal and financial status should also be assessed. Accurate assessment of the person's support network is particularly important, since good social support is strongly associated with recovery.^{65,66} Importantly, *perceived* social support may be more closely associated with mental health and wellbeing amongst first responders to traumatic events than *actual* social support.⁶⁷

Where possible, and with the person's permission, information from other sources should be incorporated into the assessment process. This may include, for example, discussions with informants such as a partner, other family member, or colleague. It may include information from other health providers involved in the person's care, particularly those who have known the person over several years (and, ideally, since prior to the traumatic event). It may include information from medical notes or other documentation. This 'third party' information becomes especially important in cases where legal liability and/or compensation may be an issue, and where there is concern about the possibility of exaggeration or fabrication of symptoms. Even in routine clinical practice, it is possible to encounter individuals who may be exaggerating symptoms for non-financial secondary gain, such as for family dynamics and being in a sick role. This may, of course, also impact on financial benefits not connected with litigation (e.g., sickness benefits).

In formulating a treatment plan, consideration should be given to factors likely to influence outcome, such as prior mental health problems, especially depression,⁶⁸ prior treatment experience, and pre-trauma coping strategies. Risk of self-harm, suicide and harm to others should be considered; people with PTSD who are suicidal or homicidal need to be closely monitored. Attention should also be paid in the assessment to the person's resilience factors and strengths. Treatment plans should aim to build upon these strengths.

Comprehensive assessment and case formulation should not be confined to the initial presentation but should be an ongoing process. Throughout treatment, a collaborative approach should be adopted with the client to monitor wellbeing and progress. This becomes particularly critical where treatment does not appear to be helping the person to recover. In these circumstances, the practitioner should thoroughly reassess and address co-existing psychosocial problems and more thoroughly assess personality. Collaboratively discussing the formulation with the person, with particular reference to maintaining factors and barriers to improvement, increases engagement and is likely to enhance outcomes.

Good practice points

- GPP7** A thorough assessment is required, covering relevant history (including trauma history), PTSD and related diagnoses, general psychiatric status (noting extent of comorbidity), physical health, substance use, marital and family situation, social and occupational functional capacity, and quality of life.
- GPP8** Assessment should include assessment of strengths and resilience, as well as responses to previous treatment.
- GPP9** Assessment and intervention must be considered in the context of the time that has elapsed since the traumatic event occurred. Assessment needs to recognise that whereas the majority of people will display distress in the initial weeks after trauma exposure, most of these reactions will remit within the following three months.
- GPP10** As part of good clinical practice, assessment needs to occur at multiple time points following trauma exposure, particularly if the person displays signs of ongoing difficulties or psychological deterioration.
- GPP11** Assessment and monitoring should be undertaken throughout treatment. When adequate progress in treatment is not being made, the practitioner should revisit the case formulation, reassess potential treatment obstacles, and implement appropriate strategies, or refer to another practitioner. Effective interprofessional collaboration and communication is essential at such times.



Diagnosis

In most clinical settings, an unstructured clinical interview comprises the primary assessment strategy. However, because PTSD may be linked to compensation, at some point there may be a need for objective assessment that will stand up to more rigorous scrutiny. Regardless of the context, the clinician must maintain a balance between providing empathic support to a distressed person while obtaining reliable and objective information. For a comprehensive overview of assessment issues in PTSD see Simon,⁶⁸ and Wilson and Keane.⁶⁹

There is currently no agreed gold standard with which to make a comprehensive diagnostic assessment for PTSD. Rather, clinicians should adopt a multifaceted approach incorporating information from a variety of sources. In clinical settings, this may comprise unstructured psychiatric interviews (to explore the presenting problems and to collect the information detailed in the previous paragraphs), structured clinical interviews, self-report inventories, and (where possible) the reports of significant others in the person's life. In research contexts, the addition of psychophysiological measures that assess sympathetic nervous system activity through measures such as heart rate, muscle tension, blood pressure, and perspiration may provide an extra degree of objectivity, although this is rarely practical in clinical settings.

Differential diagnosis

It is important to remember that PTSD is not the only mental health consequence of exposure to traumatic events. Other common diagnoses for consideration include depression, other anxiety disorders such as panic disorder, generalised anxiety disorder and specific phobias, substance abuse/dependence and adjustment disorders. Consideration should also be given to the diagnosis of complicated grief (formerly known as traumatic grief) following bereavement, with increasing demand for its inclusion as a separate diagnostic entity. It is likely to be included in the DSM-5 Appendix as Bereavement Related Disorder while awaiting further study (see Shear et al.⁷⁰ for a review). Recent proposed criteria for complicated grief^{70,71} contain some similarities to PTSD in regard to symptoms such as intrusive thoughts and memories of the deceased, avoidance of reminders of the loss, and feeling estranged from others. Importantly, however, the hallmark of complicated grief is yearning and sadness, unlike PTSD, which tends to be characterised by fear.

These disorders may develop following traumatic exposure instead of, or comorbid with, PTSD. Both possibilities should be considered when the clinical picture is complex. Although not necessarily part of the diagnostic picture, several associated features are also common, including guilt, aggression, somatic complaints, relationship problems, and impaired occupational functioning. These features are important to assess as they may influence treatment effectiveness and/or become targets themselves for direct intervention.

Survivors of prolonged or repeated traumatic events (e.g., childhood sexual abuse, torture) are more likely to experience a number of the associated features of PTSD, particularly somatic concerns, interpersonal and affective dysregulation, and identity disturbances. There is substantial symptom overlap between this more complex PTSD presentation and borderline personality disorder. Careful assessment is required to differentiate between these two diagnoses.

Good practice point

GPP12 Assessment should cover the broad range of potential posttraumatic mental health problems beyond PTSD, including other anxiety disorders, depression and substance abuse.





'Recovered memories'

The recollection of a memory that has been unavailable to deliberate recall for some period of time has been termed a recovered memory. This is distinct from incomplete or fragmented memories that may be commonly associated with PTSD. The issue of recovered memories has most commonly arisen in the area of childhood abuse. It is controversial and has attracted debate in both the professional and public arenas (see Loftus & Davis⁷² for a review). The evidence suggests that trauma memories can be forgotten and then remembered at some later time. There is also evidence that 'false memories' can be suggested and remembered as true (see McNally⁷³ for a review). Therapy that attempts to recover otherwise forgotten memories of traumatic events has been criticised for lacking a sound theoretical basis, failing to consider the fallibility of memory, and using techniques such as suggestion that increase memory distortion and confabulation. In the absence of corroboration, it is not possible to unequivocally determine the validity of recovered memories. Such approaches are entirely inappropriate.

Risk associated with recovered memories can be minimised when clinicians are trained to professional standards, conduct full assessments at the start of treatment, adopt a neutral stance towards a history of abuse, avoid preconceived beliefs about factors that may or may not be causing the presenting problems, and avoid use of techniques that increase suggestibility and memory distortion. In the absence of corroboration of new memories, treatment should enable the person to arrive at their own conclusions with some understanding of memory processes, and to adapt to uncertainty when it persists. The Australian Psychological Society has developed ethical guidelines for clinicians working with clients who report previously unreported traumatic memories, and they advise against using interventions designed to 'recover' such memories. The relevant American and British professional bodies have also issued strong warnings against this therapy approach.

Symptom exaggeration and malingering

ASD and PTSD are the only mental health conditions with experience of a traumatic event as part of the diagnosis. Legal actions are, therefore, not uncommon. These legal actions may involve the individual seeking compensation for psychiatric conditions (e.g., PTSD following a motor vehicle accident or violent crime). Studies investigating whether compensation-seeking affects assessment processes have had mixed results and any possible relationship between financial incentives and symptom reporting in PTSD is presently unclear. It is important, however, to consider the possibility of symptom exaggeration and malingering in the assessment of PTSD where financial remuneration, government benefit eligibility, forensic determinations, or other potential gains are involved. A detailed description of this area is beyond the scope of these Guidelines and the interested reader is referred to appropriate books on the subject.⁷⁴

The possibility of symptom exaggeration should be carefully considered if the person reports all 17 PTSD symptoms, particularly with a high severity rating for all, if the person emphasises re-experiencing (rather than avoidance and numbing) symptoms, or if the person's symptom report is inconsistent with their reported functioning. In order to assist in clarification of this issue, clinicians should not be satisfied with a simple 'yes/no' response to questions, but should request further elaboration of reported symptoms (e.g., "tell me about the last time you experienced that – what was it like?"). During the interview the clinician should remain alert for PTSD symptoms that are directly observable (e.g., hypervigilance and flattened affect) and to any contradictions in the person's reports (e.g., complete inability to work but retention of an active social life). It is also useful to determine the course of the symptoms relative to the timing of the legal and compensation-seeking actions.

It needs to be emphasised that the issue of symptom exaggeration and malingering primarily arises in the context of litigation, compensation claims and contested cases rather than in the course of routine clinical practice. Even in these settings, the practitioner must retain and convey empathy for the person to avoid the risk of compounding suffering by being interviewed in an interrogatory fashion.

There are, of course, factors other than financial gain that can contribute to prolonged symptoms. Secondary gain in social, family or occupational settings may exert a powerful influence on the individual's sick role and ongoing disability, of which they may be unaware.

Assessment instruments

Diagnostic instruments for PTSD include both structured clinical interviews and self-report measures. Table 2.3 provides details of the most commonly used assessment instruments.



Structured clinical interviews

Structured clinical interviews provide the optimal strategy for making a reliable clinical diagnosis and an indication of symptom severity. For a competent, well-trained practitioner, these measures combine a standardised and objective instrument with an element of clinical judgment. The questions directly address PTSD symptoms and an objective scale determines whether each is sufficiently severe to meet criteria.

The Clinician Administered PTSD Scale (CAPS)^{75,76} is a psychometrically robust instrument designed to overcome many of the limitations of other structured PTSD interviews.⁷⁶ Each symptom is assessed for intensity and frequency and, where possible, is behaviourally defined. While the CAPS is highly recommended in research settings, it is a little complex for use in routine clinical practice. Several other well-validated structured PTSD interviews, which are briefer and simpler to administer, are appropriate in this context. See Weiss⁷⁷ for a review. Two that are strongly recommended include the PTSD Symptom Scale Interview (PSS-I)⁷⁸ and the Structured Interview for PTSD (SIP).⁷⁹

Self-report measures

There are a variety of general and population-specific self-report measures available to assess PTSD symptoms and a number of comprehensive reviews of measures are available.^{80,81} The best scales are psychometrically robust and relatively non-intrusive. While these measures provide a valid assessment of the person's own perception of his or her symptoms without influence from the interviewer, they may be more prone than interviews to symptom exaggeration or minimisation. They are also limited in their diagnostic accuracy as they pick up general feelings of distress more reliably than specific symptoms. Accordingly, it is not appropriate to rely on self-report measures as the only (or even the primary) diagnostic tool. Rather, they provide a useful screening device prior to more intensive interview procedures, or to assess symptom change as a function of treatment through repeated administration.⁸²

Several established scales have been in use for decades and continue to be popular among clinicians and researchers (e.g., the Impact of Events Scale⁸³). However, the diagnostic criteria have evolved in recent years and it is recommended newer scales that are both psychometrically strong and consistent with the current diagnostic criteria be used where possible. One example is the PTSD Checklist (PCL)⁸² which assesses the 17 DSM-IV PTSD symptoms, with each rated on a five-point scale from 'not at all bothersome' to 'extremely bothersome'. Separate forms are available for military (M), civilian (C), and specific (S) stressors. The scale takes only a few minutes to complete and possesses sound psychometric qualities.^{82,84} A score of 50 is most commonly recommended as the diagnostic cut-off, although the best approach to selecting a PCL cut-off score is to use one identified in studies examining similar trauma types in similar settings. There is notable variation in recommended cut-off scores; for example, a cut-off score of 50 is recommended for combat veterans, while lower cut-off scores of between 30 and 37 are recommended for use in civilian primary care settings^{81,85}. McDonald and Calhoun⁸⁶ provide an up-to-date and valuable review of the PCL's diagnostic accuracy. The self-report version of the PTSD Symptom Scale (PSS-SR)⁷⁷ is similar to the PCL, while the Davidson Trauma Scale (DTS)⁸⁸ allows for both frequency and intensity ratings. In the final analysis, there is probably little to choose between these scales; any would be a useful addition for clinicians and researchers alike. It is worth noting however, that the PCL is one of the few scales available to clinicians around the world at no cost.

In addition to symptom measures, a broader quality of life instrument that measures progress in recovery and rehabilitation would be of value. One of the most commonly used quality of life measures is the short form of the World Health Organisation Quality of Life instrument (WHOQOL), the WHOQOL-BREF⁸⁹ which research demonstrates is cross-culturally valid and has sound psychometric properties.⁹⁰

Although resilience is an oft-cited outcome after exposure to a traumatic event, very few empirical measures of resilience exist. Instead, indicators of adaptive outcomes are described as evidence of resilience, usually in the realm of social and psychological competence. Available measures include the Resilience Scale⁹¹ and the Connor-Davidson Resilience Scale⁹² (CD-RISC). Although these show promise, there is not yet sufficient data from which to identify an optimal or recommended measure.

Good practice points

- GPP13** It is recommended that practitioners be guided in their assessment of PTSD, comorbidity and quality of life, by the available validated self-report and structured clinical interview measures.
- GPP14** It is recommended that practitioners also use validated, user-friendly self-report measures to support their assessments of treatment outcomes over time.



Table 2.3. Commonly used assessment instruments

Instrument	Number of items	Description
Interviews		
Clinician Administered PTSD Scale (CAPS) ^{75,76}	34 (+10)	Considered the 'gold standard' of PTSD assessment, although a little complex for use in routine clinical practice. Each DSM-IV PTSD symptom is assessed for intensity and frequency and, where possible, is behaviourally defined. In addition to the 17 core items, there are optional questions assessing guilt (4 questions) and dissociation (6 questions).
PTSD Symptom Scale Interview (PSS-I) ⁷⁸	17	Provides a single estimate of severity (from 0–3) for each PTSD symptom, yielding a total PTSD severity score as well as re-experiencing, avoidance, and arousal scores. Shorter administration time than the CAPS, particularly for patients with significant PTSD symptoms. ⁹³
Structured Interview for PTSD (SIP) ⁷⁹	17 (+2)	Assesses the 17 PTSD symptoms, with two additional questions assessing guilt. Each item is rated from 0–4 and provides a single estimate of frequency, severity, and functional impairment.
Self-report measures		
Impact of Event Scale – Revised (IES-R) ⁸⁴	22	Does not correspond directly with DSM-IV PTSD criteria, therefore does not provide direct information about PTSD diagnosis or severity.
PTSD Checklist (PCL) ⁸²	17	Assesses the 17 DSM-IV PTSD symptoms, with each rated on a five-point scale from 'not at all bothersome' to 'extremely bothersome'. Separate forms are available for military (M), civilian (C) and specific (S) stressors. There is notable variation in recommended cut-off scores; for example, a cut-off score of 50 is recommended for combat veterans, while lower cut-off scores of between 30 and 37 are recommended for use in civilian primary care settings. ^{89, 85}
Posttraumatic Diagnostic Scale (PDS) ⁹⁵	49	In addition to measuring the severity of PTSD symptoms (Criteria B, C & D), the PDS also inquires about the experience of Criterion A traumatic events, about duration of symptoms (Criterion E), and the effects of symptoms on daily functioning (Criterion F).
PTSD Symptom Scale (PSS-SR) ⁷⁸	17	The PSS-SR was a pre-cursor to the PDS. It consists of the same 17 items as the PSS-I (see 'Interviews' above), although some items are re-worded for clarity. As with the interview version, the severity of each symptom is rated from 0 to 3.
Davidson Trauma Scale (DTS) ⁸⁸	34	Each PTSD symptom is rated on a five-point scale for frequency ('not at all' to 'every day') and severity ('not at all' to 'extremely').
Detailed Assessment of Posttraumatic Stress (DAPS) ⁹⁶	105	Provides detailed information on the individual's history of trauma exposure, as well as his/her immediate psychological reactions, enduring posttraumatic stress symptoms, and level of posttraumatic impairment in the context of a specific traumatic event.
Trauma Symptom Inventory (TSI) ⁹⁷	100	Each symptom item is rated according to its frequency of occurrence over the prior six months, using a four-point scale ranging from 0 ('never') to 3 ('often'). The TSI does not generate DSM-IV diagnoses; instead, it evaluates the relative level of various forms of posttraumatic distress.
Harvard Trauma Questionnaire (HTQ) ⁹⁸	Varies	Cross-cultural assessment of trauma and PTSD. Several versions are available. The HTQ assesses exposure to a wide range of traumatic events, DSM-IV PTSD symptoms, culture specific symptoms, and social functioning. It also asks respondents to provide a subjective description of the most traumatic event(s) they have experienced.



Psychometric properties
Excellent reliability and validity. ⁷⁶
Good test-retest reliability (.66 to .80) over a 1-month period, and excellent interrater reliability (.93 to .97). ⁷⁸ The PSS-I correlates strongly with the CAPS (.87). ⁸³
Good internal consistency (.80). Excellent test-retest reliability (.89) and interrater reliability (.90).
High internal consistency (.84 to .92) and fair to excellent test-retest reliability (.51 to .94). ⁸⁴
Excellent test-retest reliability over a 2–3 day period. Internal consistency is very high for each of the DSM-IV symptom clusters as well as for the full 17-item scale. The PCL has a high level of validity when tested against the CAPS. ⁸⁴
Excellent internal consistency (.84 to .92) and test-retest reliability (.77 to .85). The PDS has a sensitivity of .89 and specificity of .75. ⁸⁵
Good to excellent internal consistency (.78 to .91) and poor to acceptable test-retest reliability (.56 to .74). The PSS-SR demonstrates acceptable correlation with the PSS-I (.73). ⁷⁸
Excellent internal consistency (.83 to .93). Correlations between the symptom cluster scores on the DTS and CAPS range from .53 (avoidance) to .73 (arousal).
The probable DSM-IV PTSD diagnosis generated by the DAPS has good sensitivity (.88) and specificity (.86) when compared to the CAPS.
Excellent internal consistency (.84 to .87) and reasonable validity. Validity scales co-vary as expected with similar scales from other measures.
Varies according to version used.



Intervention planning

Factors influencing treatment outcome

Several factors that have been found to potentially influence treatment outcome and dropout should be considered when planning interventions. These factors include chronicity of PTSD, comorbid psychological, cognitive and physical conditions, therapeutic alliance, treatment expectancy and treatment setting. Although some patterns emerge from the research to guide the clinician, the findings are not as clear cut as might be expected, and it would be a mistake to be overly pessimistic at the start of treatment because of these factors.

Chronicity and delay in treatment

Surprisingly little research has looked at the impact of chronicity (duration of illness or delay in seeking treatment) on treatment outcomes in PTSD. The only two studies to date that have been designed explicitly to answer this question by randomly allocating participants to immediate or delayed treatment, found no differences in outcome between those receiving early treatment and those in the delayed treatment group.^{99,100} Both studies used a 12-week waitlist condition and the sample populations were single trauma survivors. Other large treatment outcome studies that have explored this question retrospectively (that is, duration of illness before seeking treatment), have generally reached the same conclusion.^{99, 101,102} Some caveats, however, should be noted. First, it may be that those who delay their treatment differ in some important ways from those who seek treatment earlier. Second, there is evidence to suggest that early intervention is associated with better outcomes in depression, a disorder that shares many clinical and neurobiological features with PTSD. From a clinical perspective, it is reasonable to assume that longer duration of illness will be associated with a range of other social and occupational problems, as well as significant distress. For that reason alone, it would be sensible to encourage those with PTSD to access treatment as early as reasonably possible. Equally, it is important to emphasise to people who experienced trauma some time ago that the limited available data suggest that treatment can be effective regardless of duration of illness.

Comorbidity

In terms of influence of psychological comorbidity on treatment response, the data are also mixed and inconsistent. Several studies identify features such as depression,^{103,104} generalised anxiety disorder,¹⁰⁵ borderline personality disorder,^{106,107} anger,^{108,109} alcohol use disorder,^{111,112} social alienation,^{107,113,114} and emotional dysregulation¹¹⁵ as negatively influencing outcome. On the other hand, a number of studies have failed to find an effect of comorbidity on outcome^{99, 116,117,118} suggesting that the influence of comorbidity may be sample specific¹⁰³ or that more specific predictive components of these factors have not yet been identified.

Where comorbidity is present, the extent to which it should become a focus of treatment before, alongside, or following the PTSD treatment is a decision to be made by the clinician. While no studies have compared sequencing models specifically, there have been some studies that have commenced consideration of the treatment of PTSD and comorbidity, particularly substance use and depression.

Substance use

There is some limited evidence favouring combined substance abuse and PTSD treatment. One systematic review provided some support for the notion that simultaneously treating substance use disorders and PTSD may be more effective than treating either disorder alone.¹¹⁹ In line with the recommendations of these Guidelines, this advantage appeared to be limited to trauma-focussed therapies. These conclusions should be interpreted with caution, however, as the review included only a small number of studies, with few participants.

Dismantling studies are required to provide stronger evidence regarding elements of the interventions that may be applied sequentially or simultaneously for the treatment of comorbid PTSD and substance use. In the absence of such evidence, these Guidelines provide additional recommendations for practitioners based on expert consensus opinion (see Chapter 5, "Sequencing comorbidities"). Simultaneous treatment is most commonly characterised by educative and symptom-focussed cognitive behavioural interventions for both disorders prior to the introduction of trauma-focussed interventions, *in vivo* or imaginal.¹²⁰ The research at present provides no firm conclusion on the temporal course of improvement in comorbid PTSD and substance use; some authors report that initial improvement in PTSD severity leads to decreased substance use,¹²¹ while others have suggested that decreased substance use is likely to effect a change in PTSD symptoms.¹¹⁹

PTSD and comorbid substance use may also be treated concurrently with pharmacotherapy, keeping in mind the potential for drug interactions. For example, in the case of comorbid opioid dependence, some selective serotonin reuptake inhibitors (SSRIs) may inhibit methadone metabolism, increasing the risk of toxicity.¹²² Note also that antidepressants may not be appropriate for patients actively abusing alcohol or other central nervous system (CNS) depressants.





Depression

Depression is another condition often comorbid with PTSD. The early and ongoing assessment of suicide risk is of primary importance in these cases of comorbid PTSD and depression. There are as yet no studies examining the sequencing of the treatment of comorbid depression and PTSD. There is, however, a body of research outlining the effectiveness of PTSD treatment on comorbid depression and prediction studies; this literature identifies comorbid depression severity as a negative influence on PTSD outcome (see above). This information has been considered in the consensus points in Chapter 5 on the sequencing of treatment in the context of PTSD and major depression.

Two recent studies have examined the effectiveness of integrating depression and PTSD treatment, focussing on behavioural activation during the first half of treatment and exposure during the second. The effect of reversing the order of treatment has not been investigated. Both studies found that behavioural activation improved symptoms of both comorbid disorders and that the exposure component resulted in decreased PTSD severity.^{123,124} Gros and his colleagues reported that the exposure component also resulted in significant change in depression, but that across both phases of treatment, improvements in depression were explained by improvements in PTSD. Thus, in many cases, addressing PTSD symptoms will result in improvements in comorbid depression. People with severe depression, with symptoms that are unlikely to respond to PTSD treatment, may benefit from the addition of depression-specific techniques.

In terms of pharmacological treatment for comorbid PTSD and depression, there is some evidence to suggest that patients who show an incomplete or non-response to antidepressants may benefit from adjunctive treatment with the antipsychotic aripiprazole.¹²⁵

Terminal illness

Terminally ill people with PTSD, regardless of its cause, may suffer more emotional distress, lower quality of life and poorer medical prognosis than those without PTSD.¹²⁶ The appropriateness of standard treatment for PTSD is largely dependent on the patient's stage of illness. For patients in the final stages of terminal illness, numerous lengthy and intensive sessions designed to effect long-lasting improvement in PTSD symptoms would not generally be considered appropriate. Instead, a focus on maximising quality of life in the short term may be more beneficial. One potential approach to PTSD management in this population is a stepped care model in which the intensity of treatment is increased only if the patient's prognosis allows sufficient time to do so, and if lower-level interventions have not been effective.¹²⁷ So for example, the initial stage of treatment may involve addressing practical issues such as social connectedness, while subsequent stages may teach coping strategies such as relaxation or cognitive restructuring, and with the introduction of trauma-focussed techniques only if required and if time permits.¹²⁸ Modifications to standard exposure-based therapy may be required, for example by shortening the length of sessions if fatigue is a concern or by decreasing the intensity of exposure.¹²⁹

Traumatic brain injury and other physical comorbidity

In recent years, there has been considerable interest in the association between mild traumatic brain injury (mTBI) and PTSD, with particular reference to military personnel. There appears to be substantial overlap, with some evidence to suggest that when the two co-exist the cognitive deficits can be accounted for entirely by the PTSD,^{127,128} although this is not a universal finding.¹²⁹ The effect of mTBI on PTSD treatment response is unclear. A recent systematic review of the literature commissioned by US Veterans Affairs noted the almost total lack of adequate research on the subject, and concluded that high-quality randomised trials are urgently needed to examine the effectiveness (as well as the potential for harm) of treatments for individuals with mTBI/PTSD.¹³⁰ Notwithstanding that caveat, those authors refer to case material suggesting the benefits of a standard cognitive behavioural therapy (CBT) approach, albeit with minor modifications as required. To manage mTBI-related symptoms, therapists may encourage patients to use compensatory strategies (e.g., using personal digital assistants, scheduling cognitive breaks).

Increasing attention has also been paid in recent years to the impact of other physical comorbidity (particularly pain), on the maintenance of, and recovery from, PTSD. There is a general recognition that pain and PTSD may exacerbate – or at least mutually maintain – each other, and there is some evidence that the two may share similar neurobiological features.^{132,133} A recent study of US veterans found that two-thirds of those with PTSD also met criteria for chronic pain,¹³⁴ highlighting the need to include pain as part of a routine assessment for PTSD. Those authors also reported that effective PTSD treatment resulted in a reduction in chronic pain. Although it is premature to make definitive recommendations, it is reasonable to assume on the basis of the limited available data that attention to chronic pain in people with PTSD would be good clinical practice.



Compensation

It is sometimes speculated that outcomes are compromised in people seeking compensation for PTSD and this is, not surprisingly, a topic of considerable interest and concern. An important distinction should be made between the possible impact of compensation in reporting (or even developing) PTSD and the impact of compensation on treatment outcome. There is some evidence, albeit variable, that compensation may affect reporting and diagnosis of PTSD (see, for example, Marx et al.¹³⁶ and McNally et al.¹³⁶). A recent review, however,¹³⁷ found no consistent evidence that compensation status predicts PTSD outcome in veterans or motor vehicle accident survivors. Studies examining broader recovery outcomes have mixed findings.¹³⁸⁻¹⁴⁰ In summary, the relationship between compensation and health outcomes is complex and requires further study. Rigorous attention to appropriate methodology is essential to reduce the chances of artifactual findings.

Therapeutic alliance and treatment expectations

The establishment of a good therapeutic alliance has been found to improve the outcome of PTSD treatment.^{115,141,142} This is consistent with findings for a range of other anxiety and mood disorders.¹⁴³ Unfortunately, for people who have experienced a severe interpersonal trauma such as torture or childhood sexual abuse, the establishment of a trusting therapeutic relationship can often be particularly difficult. In most cases, this difficulty will be overcome if the practitioner is able to convey genuine empathy and warmth towards the person, and the use of introductory components to treatment – such as psychoeducation and symptom management skills – may also help. More time may need to be devoted to developing the therapeutic relationship prior to focussing on the trauma with these populations.

There is also evidence that a person's expectation of the outcome of their treatment is positively related to actual outcomes. This effect of treatment expectancy has been found with Vietnam veterans with PTSD,¹⁴⁴ and others with PTSD, generalised anxiety disorder,^{145,146} social anxiety,^{147,148} and chronic pain.¹⁴⁹ These findings highlight the importance of the clinician taking the time in the early stages to clearly explain the nature and expected outcomes of treatment, generating a collaborative and (realistically) optimistic approach.

Motivation for change

Another potential influence on response to treatment is the patient's motivation to change. Some individuals with PTSD may find it difficult to recognise when their thoughts or behaviours are unhelpful and therefore do not see any reason to change. Prochaska and DiClemente's Transtheoretical Model¹⁵⁰ suggests that the five stages of readiness for change (precontemplation, contemplation, preparation, action, maintenance) require different therapeutic approaches. According to this model, trauma-focussed treatment for PTSD is unlikely to be effective for patients who are in the early stages of change and who may not yet recognise that their symptoms are problematic. Such patients may however benefit from motivational interviewing techniques, shown to be helpful in facilitating readiness for change in populations such as substance abusers.¹⁵¹ This approach may include providing psychoeducation, assisting the patient to think of the pros and cons associated with his or her behaviour, and comparing behaviour to that of the average person without PTSD.¹⁵¹ Understanding the need for change will allow the patient to more seriously consider taking steps to enact that change, such as engaging in trauma-focussed therapy.

Demographics

The large majority of research in the PTSD field has been conducted on adults, generally between the ages of 18 and 65. Less research is available on younger people, but the following chapter is devoted to PTSD in children and adolescents, and outlines issues for consideration for the treatment of these age groups. A similar dearth of empirical data exists with regard to the treatment of PTSD in the elderly. While it is often speculated that older adults (defined as adults aged 65 and older) may be less responsive to PTSD treatment, there is limited research to inform this question. Promisingly, however, two recent reviews do not support this speculation. On the contrary, both conclude that mainstream psychological treatments such as CBT do benefit older adults with PTSD,^{152,153} although there is some evidence to suggest that the addition of a narrative life-review approach to standard CBT may be helpful with the elderly. Further research in this area is needed.

Interestingly, the evidence suggests that other demographic variables such as marital status, employment and level of education are largely unrelated to treatment outcome.^{113,154,155} Epidemiological studies generally indicate a higher prevalence of PTSD in females than males, although the reasons for this are unclear. It may, for example, be explained by trauma type, with females more likely to suffer interpersonal violence perpetrated by someone they know and trust. Research has yet to reliably identify any other biopsychosocial factors that may explain this gender difference. In terms of treatment, research findings suggest either that females respond better to psychological treatment¹⁵⁶ or that there are no significant gender differences in outcome.^{156,157} Although there are some suggestions that females may respond better to pharmacological treatments for PTSD than males, it is hard to disentangle these findings from other sample characteristics such as veteran status that may explain poorer outcomes.¹⁵⁸



Treatment setting

There are times when treatment for PTSD needs to be delivered in settings where there is exposure to ongoing stress and trauma. Such settings may include immigration detention facilities and refugee camps, corrective facilities, theatres of combat, and where there is the threat of domestic violence. As well as the degree of stress inherent in these settings, treatment delivery can be further complicated by potential for exposure to further trauma, short and unpredictable lengths of stay, lack of access to mental health history, and the client's reluctance to disclose information for fear of compromising their status (e.g., legal, application for asylum, deployment status). Despite the large number of people that could benefit from PTSD treatment in these settings, few studies have examined the implementation and effectiveness of interventions under such conditions. Neuner and colleagues, however, conducted two notable studies on the delivery of PTSD treatment to individuals in a Ugandan refugee camp.^{159,160} Both studies showed promising results. A review by Heckman, Cropsey, and Olds-Davis¹⁶¹ highlighted the lack of methodologically sound research on PTSD treatment in correctional settings, citing only one study with promising results.¹⁶² Similarly, there is very little research on PTSD treatment for serving personnel while still in the combat theatre.^{69,163} In summary, more research on the effectiveness of PTSD treatment and strategies for implementation in these settings is greatly needed.

Good practice points

- GPP15** Mental health practitioners are advised to note the presence and severity of comorbidities in their assessments, with a view to considering their implications for treatment planning.
- GPP16** Residual symptomatology should be addressed after the symptoms of PTSD have been treated.
- GPP17** The development of a robust therapeutic alliance should be regarded as the necessary basis for undertaking specific psychological interventions and may require extra time for people who have experienced prolonged and/or repeated traumatic exposure.
- GPP18** Mental health practitioners should provide a clear rationale for treatment and promote realistic and hopeful outcome expectancy.
- GPP19** Mental health practitioners and rehabilitation practitioners should work together to promote optimal psychological and functional outcomes.
- GPP20** In most circumstances, establishing a safe environment is an important precursor to commencement of trauma-focused therapy, or indeed, any therapeutic intervention. However, where this cannot be achieved (for example, the person is seeking treatment for their PTSD whilst maintaining a work role or domestic situation that may expose them to further trauma), some benefit may still be derived from trauma-focused therapy. This should follow careful assessment of the person's coping resources and available support.

Potential mechanisms of change

While some treatments are clearly more effective than others, the fact is that a variety of therapeutic approaches have demonstrated beneficial effects in the treatment of PTSD. In light of that, there is a strong argument for suggesting that future research should focus on furthering our understanding of what mechanisms are involved in the development and maintenance of PTSD and, by extension, what mechanisms need to be targeted in treatment.¹⁶⁴ Research identifying common mechanisms may help to explain why some apparently quite different therapeutic approaches can all produce improved outcomes. Although much has been written regarding mechanisms underlying trauma-focused approaches (see, for example, Ehlers et al.¹⁶⁶ or Foa et al.¹⁶⁹), it is important to understand the mechanisms by which present-focused therapy, interpersonal therapy, stress inoculation training, and other forms of therapy that do not involve a focus on the traumatic memories may work. If the mechanisms were better understood, refinement of procedures that target these mechanisms in treatment may lead to improved outcomes.

In this context, it is important to note that the concept of placebo controls in psychological treatment trials is problematic¹⁶⁷ and, as noted below, can make comparisons between psychological and pharmacological treatments difficult. Psychological control treatments aim to control for non-specific elements of treatment such as a trusting relationship, emotional support, education about PTSD, mobilisation of hope, giving a rationale, or homework assignments.¹⁶⁴ Some of these non-specific elements may actually be active mechanisms of change. For example, many patients with PTSD following interpersonal violence believe that they cannot trust anybody. Establishing a trusting relationship with the therapist can help shift this belief, modifying the 'traumatic memory network' so central to trauma-focused approaches.





At this stage of our knowledge, identifying the active ingredients of treatment – the mechanisms of change beyond those non-specific components – must remain largely speculative. On the basis of existing evidence-based guidelines regarding successful treatment, however, it may be speculated that the most effective treatments for PTSD all involve:

- an opportunity to activate or confront the traumatic memories in a safe environment
- an opportunity to modify the traumatic memories, with particular reference to the relationship between the stimulus material (the sights, sounds, etc.) and the response components (physiological, behavioural, cognitive appraisals, etc.)
- an opportunity to repeatedly (but safely) confront situations or activities that had been avoided or that provoked high anxiety, since the trauma.

The manner in which these elements are delivered may, of course, differ widely across treatment approaches.

Treatment goals

The goals of treatment should be established collaboratively with the patient following the initial assessment, and should be guided by a comprehensive assessment of the individual and their personal priorities. Treatment goals should be collaboratively reviewed, and modified as required, at regular intervals during the treatment process. Ideally, goals should be SMART: specific, measurable, attainable, relevant, and time-bound (or, better, SMARTER – with the addition of evaluate and re-evaluate).

The first goal of treatment is likely to be a reduction in PTSD and related symptoms. The evidence-based treatment research routinely uses measures of PTSD symptom severity as the primary outcome, and it is this goal that the interventions are designed to achieve. In addition to core PTSD symptoms, likely targets may include comorbid depression and anxiety, as well as anger and guilt. All have implications for treatment, with some likely to adversely affect outcomes of PTSD symptoms. For some, especially those who have been subjected to protracted child sexual abuse or torture, clinical interventions often need to focus initially on symptoms of dissociation, impulsivity, emotional lability (affect regulation), somatisation and interpersonal difficulties.¹⁶⁸

While most of the evidence-based literature focusses on symptom reduction, the practitioner should not lose sight of the broader wellbeing, daily functioning and quality of life issues. Achievement of optimal psychosocial functioning is as important, if not more so, than symptom reduction. Indeed, for those with chronic PTSD, improvements in psychosocial functioning may be the primary goal over and above reduction of PTSD symptoms. With this end in mind, immediate needs for practical and social support should be assessed, and treatment planning focussed on wellbeing and psychosocial rehabilitation from the outset.

Psychosocial rehabilitation may improve functional ability and facilitate recovery by minimising associated problems such as homelessness, social inactivity, high-risk behaviours, and unemployment.¹⁶⁹ Targeted clinical and disability management interventions may assist people with PTSD improve their role functioning, and develop skills and resources specific to their individual needs with the aim of averting, preventing further, or reducing, disability associated with the disorder.¹⁷⁰

Psychosocial rehabilitation interventions have strong empirical support in populations experiencing a range of mental disorders,¹⁷¹ and a growing literature identifies such approaches as being beneficial for people with PTSD (for reviews see^{169,172}). Interventions including family psychoeducation, supported education, housing and employment, intensive case management, peer counselling, and 'vet to vet' services are being implemented with positive outcomes in veteran populations with varying mental disorders and several randomised controlled trials (RCTs) of their efficacy are currently underway.¹⁷² Among other mental health populations, similar interventions are associated with a range of positive outcomes, including symptom reduction, decreased risk of relapse, increased housing stability, improved social and work functioning, reduced stress in families, and enhanced quality of life.¹⁷³⁻¹⁷⁸

Therefore attention should be paid to social reintegration and vocational rehabilitation needs during the initial assessment and treatment planning phase. In some cases, this may include supporting the individual's capacity to stay at work or facilitating return to work as soon as is practical, even if on restricted work duties. It should also involve review of, and if necessary, intervention to optimise the person's social support networks. The family and broader system of care should be engaged early and provided with information about PTSD, as well as being involved in the collaborative care and recovery plan as far as is possible.





Good practice points

- GPP21** The practitioner should assess immediate needs for practical and social support and provide education and referrals accordingly.
- GPP22** Appropriate goals of treatment should be tailored to the unique circumstances and overall mental healthcare needs of the individual and established in collaboration with the person.
- GPP23** From the outset, there should be a collaborative focus on recovery and rehabilitation between the person and practitioner, and where appropriate, family members.

Cultural and linguistic diversity (CALD)

Australian adults with PTSD come from diverse ethnic and cultural backgrounds, with English a second language for many. Services should be made as accessible as possible, with information available in a number of different languages and distributed through general practitioners and health centres that provide primary care services to various ethnic and cultural groups. Further, interpreters should be available as required. Several issues for consideration when working with interpreters (and other issues related to CALD populations) are included in the section on Refugees and Asylum Seekers in Chapter 7 of these Guidelines.

An obvious question for the mental health field in general, and the PTSD field in particular, is the extent to which treatments that have proven efficacy in Western countries can be applied in other contexts and cultures. Clearly, culturally sensitive adjustments to the manner in which treatment is delivered are crucial. Beyond that, however, as noted in the systematic literature review that follows, several well-controlled trials of evidence-based treatment for PTSD have now been completed in non-Western cultural settings with encouraging results. There is every reason to assume that these treatments are likely to be effective across cultures, provided that they are delivered in culturally sensitive and appropriate ways. When working with an individual from a non-English speaking background, the practitioner should become familiar with the person's cultural background and liaise with population-specific healthcare providers as necessary, to understand cultural expressions of distress and support the appropriate applications of the interventions described in these Guidelines.

Good practice point

- GPP24** Recommended treatments for PTSD should be available to all Australians, recognising their different cultural and linguistic backgrounds.

Research recommendation

- RR1** The conceptualisation of psychological trauma in different and diverse cultural contexts needs to be further researched so that this can inform processes of assessment and management of such trauma syndromes for people of culturally and linguistically diverse backgrounds.

The impact of PTSD on family

The impact of PTSD can extend beyond the individual directly affected to those around them – family and close friends. As such, the practitioner should consider the support and treatment needs of those close to the person with PTSD, as well as the person's own needs. In involving family members, the person's confidentiality must be respected and the family members' own needs considered. In exceptional circumstances, where there are issues of risk of harm to self or others, family involvement may need to occur without the person's consent.

Family members can be affected both directly and indirectly by the person's PTSD symptoms. Research has consistently shown that partners of people with PTSD experience significant psychological distress in comparison to the general population.¹⁷⁷ They may develop significant emotional difficulties of their own as a result of their partner's PTSD. Symptoms such as irritability and anger, withdrawal from family involvement, emotional numbing, or substance abuse can have profound effects on close personal relationships. Additional problems such as being unable to cope at work may emerge, leading to financial pressures for the family. Family members may adjust their own lives in an attempt to support the family member with PTSD or to conceal difficulties from those outside the family.

In some cases, family members may develop problems that mirror those of the person with PTSD, for example, adopting similar views of the world as a dangerous place, and resultant fear and avoidant behaviours. In other cases, emotional problems of family members may be in response to living with the person with PTSD, for example, developing feelings of helplessness and hopelessness if the person with PTSD's condition remains untreated and unchanged over time, or turning to alcohol to avoid having to face the problems at home.



Although empirical evidence is lacking, good clinical practice would suggest that effective treatment of PTSD should involve partners at some level, where appropriate (and with the person's permission). Partners have the potential to be a great ally if they understand the nature of PTSD and the likely course of treatment. A lack of understanding can contribute to partners inadvertently undermining treatment efforts. It is often useful to invite the partner to a session early in the treatment process to discuss the rationale for subsequent interventions and to clarify the partner's role – usually simply one of support and gentle encouragement (but not one of co-therapist). The partner's own need for mental healthcare or support should be considered and, where appropriate, referral made to another provider for assessment and possible treatment.

Good practice point

- GPP25** Wherever possible, family members should be included in education and treatment planning, and their own needs for care considered alongside the needs of the person with PTSD.

General professional issues

The Guidelines make recommendations about treatment for people with ASD and PTSD on the assumption that treatment is being provided by appropriately qualified and professionally supported practitioners. In effect, this means that individual practitioners should not deliver interventions that are beyond their level of expertise.

It needs to be recognised that various practitioners will contribute to the care of the individual with PTSD in different ways. In most cases, the specialist symptom-focussed interventions will be undertaken by psychiatrists, psychologists and other mental health practitioners specifically trained in recommended treatments, while occupational therapists, rehabilitation counsellors and social workers are more likely to address family, social and occupational recovery, and rehabilitation issues. Ideally, the general practitioner will have an existing relationship with the individual that allows provision of holistic care and support to the person and family over time. In some settings, particularly in the military and following large-scale disasters in the civilian community, chaplains and other pastoral care providers can play an important role. Where a number of practitioners are involved in care, the general practitioner is well placed to assume overall management of care, making appropriate referrals and coordinating the contribution of other practitioners. The individual, their family and carers also play a critical role in support and recovery. Effective collaboration between all relevant people is important for optimal care of the person with PTSD.

Unfortunately, this ideal circumstance is not always possible, most notably in rural and remote parts of Australia where a visiting nurse or general practitioner may be the sole health professional in the region. In these circumstances, the responsibility for care of people with ASD and PTSD may largely rest with these primary care practitioners. It needs to be recognised that these practitioners are unlikely to have the time or training to undertake the full range of recommended psychological and psychosocial rehabilitation interventions for ASD and PTSD. Their role is more likely to involve screening, assessment, pharmacotherapy, and possibly general psychological interventions such as psychoeducation and simple arousal management. Where the person with PTSD is using self-help materials (e.g., web-based treatment) the primary care practitioner may also offer support and monitoring. Wherever possible the person should be referred to an appropriately trained mental health practitioner who can provide time-limited specialist psychological treatment and ongoing consultation to the primary care practitioner. In some cases, it may be possible to achieve this through telemedicine or even telephone consultations. To address psychosocial rehabilitation needs, the primary care practitioner should ideally consult with a psychosocial rehabilitation specialist in planning interventions. In their care of people with ASD and PTSD, primary care practitioners should be supported with provision of education and training materials that can be accessed remotely, for example, via the internet.

Good practice points

- GPP26** Practitioners who provide mental healthcare to children, adolescents or adults with ASD and PTSD, regardless of professional background, must be appropriately trained to ensure adequate knowledge and competencies to deliver recommended treatments. This requires specialist training, over and above basic mental health or counselling qualifications.
- GPP27** Primary care practitioners, especially in rural and remote areas, who assume responsibility for the care of people with ASD and PTSD in the absence of specialist providers, should be supported with accessible education and training, as well as access to specialist advice and supervision where possible.



Self-care

All practitioners in the field of posttraumatic mental health need to be aware of the potential adverse impacts of the work on themselves. Repeated exposure to the traumatic experiences of others, combined with the high levels of distress often seen when people recount their experiences, can take a toll on the practitioner. Often referred to as 'compassion fatigue', health professionals can be at risk of general stress or adverse psychological reactions such as depression, substance abuse and professional burnout. This compassion fatigue can negatively impact upon the practitioner's clinical skills and consequently on patient care.¹⁷⁹ These adverse impacts may be particularly apparent if the practitioner does not place appropriate limits on the nature and size of their caseload, and if he or she does not receive sufficient training and support.

Responsibility for self-care should be shared between the individual practitioner and, where appropriate, their employer organisation and professional body.¹⁷⁹ With evidence that isolation is a risk factor for developing stress-related problems, the needs of practitioners working in isolated rural and remote communities warrant special consideration. For these practitioners, routine training and support may need to be addressed remotely (for example, via the internet and teleconferencing). For general practitioners who are geographically isolated, Belint groups offering peer support operate in some areas of Australia.¹⁸⁰

Good practice points

- GPP28** In their self-care, practitioners should pay particular attention to skill and competency development and maintenance including regular supervision, establishing and maintaining appropriate emotional boundaries with people with PTSD, and effective self-care. This includes maintaining a balanced and healthy lifestyle and responding early to signs of stress.
- GPP29** For those practitioners who work in an organisational context, broader policies and practices should support individual practitioners in these self-care measures.

Research recommendation

- RR2** In recognition of the developing science around dissemination and implementation of evidence-based treatment, future research should explore the most effective ways of generating reliable and sustainable change in policies and practice for areas covered in these Guidelines.



References

1. American Psychiatric Association. (2000). *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision*. Washington DC: American Psychiatric Association.
2. Creamer, M., Burgess, P., & McFarlane, A. C. (2001). Post-traumatic stress disorder: Findings from the Australian National Survey of Mental Health and Well-being. *Psychological Medicine*, 31(7), 1237-1247.
3. Kessler, R. C., Sonnega, A., Hughes, M., & Nelson, C. B. (1995). Posttraumatic stress disorder in the National Comorbidity Survey. *Archives of General Psychiatry*, 52(12), 1043-1060.
4. Yehuda, R., Bell, A., Bierer, L. M., & Schmeidler, J. (2008). Maternal, not paternal, PTSD is related to increased risk for PTSD in offspring of Holocaust survivors. *Journal of Psychiatric Research*, 42(13), 1104-1111.
5. Yehuda, R., Halligan, S. L., & Bierer, L. M. (2001). Relationship of parental trauma exposure and PTSD to PTSD, depressive and anxiety disorders in offspring. *Journal of Psychiatric Research*, 35(5), 261-270.
6. Norris, F. H., Friedman, M. J., & Watson, P. J. (2002). 60,000 disaster victims speak: Part II. Summary and implications of the disaster mental health research. *Psychiatry*, 65(3), 240-260.
7. Bryant, R. A., O'Donnell, M. L., Creamer, M., McFarlane, A. C., Clark, C. R., & Silove, D. (2010). The psychiatric sequelae of traumatic injury. *American Journal of Psychiatry*, 167(3), 312-320. doi: 10.1176/appi.ajp.2009.09050617
8. Bryant, R. A., Friedman, M. J., Spiegel, D., Ursano, R., & Strain, J. (2011). A review of acute stress disorder in DSM-5. *Depression and Anxiety*, 28(9), 802-817. doi: 10.1002/da.20737
9. Friedman, M. J., Resick, P. A., Bryant, R. A., Strain, J., Horowitz, M., & Spiegel, D. (2011). Classification of trauma and stressor-related disorders in DSM-5. *Depression and Anxiety*, 28(9), 737-749. doi: 10.1002/da.20845
10. Bryant, R. A. (2011). Acute stress disorder as a predictor of posttraumatic stress disorder: A systematic review. *Journal of Clinical Psychiatry*, 72(2), 233-239. doi: 10.4088/JCP.09r05072b1u
11. Friedman, M. J., Resick, P. A., Bryant, R. A., & Brewin, C. R. (2011). Considering PTSD for DSM-5. *Depression and Anxiety*, 28(9), 750-769. doi: 10.1002/da.20767
12. Breslau, N., Reboussin, B. A., Anthony, J. C., & Storr, C. L. (2005). The structure of posttraumatic stress disorder: Latent class analysis in 2 community samples. *Archives of General Psychiatry*, 62(12), 1343-1351.
13. Forbes, D., Creamer, M., Hawthorne, G., Allen, N., & McHugh, T. (2003). Comorbidity as a predictor of symptom change after treatment in combat-related posttraumatic stress disorder. *Journal of Nervous and Mental Disease*, 191(2), 93-99.
14. Kubany, E. S., Abueg, F. R., Owens, J. A., Brennan, J. M., Kaplan, A. S., & Watson, S. B. (1995). Initial examination of a multidimensional model of trauma-related guilt: Applications to combat veterans and battered women. *Journal of Psychopathology and Behavioral Assessment*, 17(4), 353-376.
15. Kubany, E. S., Haynes, S. N., Abueg, F. R., Manke, F. P., & et al. (1996). Development and validation of the Trauma-Related Guilt Inventory (TRGI). *Psychological Assessment*, 8(4), 428-444.
16. van der Hart, O., Nijenhuis, E. R. S., & Steele, K. (2005). Dissociation: An insufficiently recognized major feature of complex posttraumatic stress disorder. *Journal of Traumatic Stress*, 18(5), 413-423.
17. Zatzick, D. F., Jurkovich, G. J., Gentilello, L., Wisner, D., & Rivara, F. P. (2002). Posttraumatic stress, problem drinking, and functional outcomes after injury. *Archives of Surgery*, 137(2), 200-205.
18. Schnurr, P. P., Lunney, C. A., Sengupta, A., & Spiro, A. (2005). A longitudinal study of retirement in older male veterans. *Journal of Consulting and Clinical Psychology*, 73(3), 561-569.
19. Terr, L. C. (1991). Acute responses to external events and posttraumatic stress disorders. In M. Lewis (Ed.), *Child and adolescent psychiatry: A comprehensive textbook* (pp. 755-763). Baltimore, MD: Williams and Wilkins.
20. van der Kolk, B. A., Roth, S., Pelcovitz, D., Sunday, S., & Spinazzola, J. (2005). Disorders of extreme stress: The empirical foundation of a complex adaptation to trauma. *Journal of Traumatic Stress*, 18(5), 389-399.
21. Ford, J. D., & Courtois, C. A. (2009). Defining and understanding complex trauma and complex traumatic stress disorders. In C. A. Courtois & J. D. Ford (Eds.), *Treating complex stress disorders: An evidence-based guide* (pp. 13-30). New York: Guilford Press.
22. Herman, J. L. (1992). Complex PTSD: A syndrome in survivors of prolonged and repeated trauma. *Journal of Traumatic Stress*, 5(3), 377-391.
23. Zlotnick, C., Zakriski, A. L., Shea, M. T., & Costello, E. (1996). The long-term sequelae of sexual abuse: Support for a complex posttraumatic stress disorder. *Journal of Traumatic Stress*, 9(2), 195-205.
24. Mills, K. L., McFarlane, A. C., Slade, T., Creamer, M., Silove, D., Teesson, M., & Bryant, R. (2011). Assessing the prevalence of trauma exposure in epidemiological surveys. *Australian and New Zealand Journal of Psychiatry*, 45(5), 407-415. doi: 10.3109/00048674.2010.543654
25. Breslau, N. (2001). The epidemiology of posttraumatic stress disorder: What is the extent of the problem? *Journal of Clinical Psychiatry*, 62(Suppl 17), 16-22.
26. McEvoy, P. M., Grove, R., & Slade, T. (2011). Epidemiology of anxiety disorders in the Australian general population: Findings of the 2007 Australian National Survey of Mental Health and Wellbeing. *Australian and New Zealand Journal of Psychiatry*, 45(11), 957-967. doi: 10.3109/00048674.2011.624083
27. Kessler, R. C., Chiu, W. T., Demler, O., & Walters, E. E. (2005). Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62(6), 617-627.
28. Richardson, L. K., Frueh, B. C., & Acierno, R. (2010). Prevalence estimates of combat-related post-traumatic stress disorder: Critical review. *Australian and New Zealand Journal of Psychiatry*, 44(1), 4-19.
29. Hotopf, M., Hull, L., Fear, N. T., Browne, T., Horn, O., Iversen, A., Wessely, S. (2006). The health of UK military personnel who deployed to the 2003 Iraq war: A cohort study. *Lancet*, 367(9524), 1731-1741.
30. Hoge, C. W., Castro, C. A., Messer, S. C., McGurk, D., Cotting, D. I., & Koffman, R. L. (2004). Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *New England Journal of Medicine*, 351(1), 13-22. doi: 10.1056/NEJMoa040603



31. Neria, Y., Nandi, A., & Galea, S. (2008). Post-traumatic stress disorder following disasters: A systematic review. *Psychological Medicine*, 38(4), 467-480. doi: 10.1017/S0033291707001353.
32. Creamer, M., O'Donnell, M. L., & Pattison, P. (2004). The relationship between acute stress disorder and posttraumatic stress disorder in severely injured trauma survivors. *Behaviour Research and Therapy*, 42(3), 315-328.
33. Bryant, R. A., & Harvey, A. G. (1998). Relationship between acute stress disorder and posttraumatic stress disorder following mild traumatic brain injury. *American Journal of Psychiatry*, 155(5), 625-629.
34. Chapman, C., Mills, K., Slade, T., McFarlane, A. C., Bryant, R. A., Creamer, M., Teesson, M. (2012). Remission from post-traumatic stress disorder in the general population. *Psychological Medicine*, 42(8), 1695-1706. doi: 10.1017/S0033291711002856.
35. Ehari, J. D., Grubaugh, A. L., Kashdan, T. B., & Frueh, B. C. (2008). Empirical examination of a proposed refinement to DSM-IV posttraumatic stress disorder symptom criteria using the National Comorbidity Survey Replication data. *Journal of Clinical Psychiatry*, 69(4), 597-602.
36. Pietrzak, R. H., Goldstein, R. B., Southwick, S. M., & Grant, B. F. (2011). Personality disorders associated with full and partial posttraumatic stress disorder in the U.S. population: Results from wave 2 of the National Epidemiologic Survey on Alcohol and Related Conditions. *Journal of Psychiatric Research*, 45(5), 678-686. doi: 10.1016/j.jpsychires.2010.09.013.
37. Gomez-Beneyto, M., Salazar-Fraile, J., Marti-Sanjuan, V., & Gonzalez-Lujan, L. (2006). Posttraumatic stress disorder in primary care with special reference to personality disorder comorbidity. *British Journal of General Practice*, 56(526), 349-354.
38. Bollinger, A. R., Riggs, D. S., Blake, D. D., & Ruzek, J. I. (2000). Prevalence of personality disorders among combat veterans with posttraumatic stress disorder. *Journal of Traumatic Stress*, 13(2), 255-270.
39. Southwick, S. M., Yehuda, R., & Giller, E. L. (1993). Personality disorders in treatment-seeking combat veterans with posttraumatic stress disorder. *American Journal of Psychiatry*, 150(7), 1020-1023.
40. Yule, W., Bolton, D., Udwin, O., Boyle, S., O'Ryan, D., & Nurrish, J. (2000). The long-term psychological effects of a disaster experienced in adolescence: I. The incidence and course of PTSD. *Journal of Child Psychology and Psychiatry*, 41(4), 503-511.
41. Galea, S., Vlahov, D., Resnick, H., Ahern, J., Susser, E., Gold, J., Kilpatrick, D. (2003). Trends of probable post-traumatic stress disorder in New York City after the September 11 terrorist attacks. *American Journal of Epidemiology*, 158(6), 514-524.
42. O'Toole, B. I., Catta, S. V., Outram, S., Fiese, K. R., & Cockburn, J. (2009). The physical and mental health of Australian Vietnam veterans 3 decades after the war and its relation to military service, combat, and post-traumatic stress disorder. *American Journal of Epidemiology*, 170(3), 318-330.
43. McFarlane, A. C., & Papay, P. (1992). Multiple diagnoses in posttraumatic stress disorder in the victims of a natural disaster. *Journal of Nervous and Mental Disease*, 180(6), 498-504.
44. Solomon, Z., & Mikulincer, M. (2006). Trajectories of PTSD: A 20-year longitudinal study. *American Journal of Psychiatry*, 163(4), 659-666.
45. Solomon, Z. (1999). PTSD and social functioning: A three year prospective study. *Social Psychiatry and Psychiatric Epidemiology*, 24(3), 127-133.
46. Bonanno, G. A., Galea, S., Buicciarelli, A., & Vlahov, D. (2005). Psychological resilience after disaster: New York City in the aftermath of the September 11th terrorist attack. *Psychological Science*, 17(3), 181-186.
47. Shalev, A. Y., Tuval-Mashiach, R., & Hadar, H. (2004). Posttraumatic stress disorder as a result of mass trauma. *Journal of Clinical Psychiatry*, 65, 4-10.
48. Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71(3), 543-562.
49. Agabbi, C. E., & Wilson, J. P. (2005). Trauma, PTSD, and resilience: A review of the literature. *Trauma, Violence, & Abuse*, 6(3), 195-216.
50. Resnick, H. S., Galea, S., Kilpatrick, D. G., & Vlahov, D. (2004). Research on trauma and PTSD in the aftermath of 9/11. *PTSD Research Quarterly*, 15, 1-7.
51. Almedom, A. M., & Glandon, D. (2007). Resilience is not the absence of PTSD any more than health is the absence of disease. *Journal of Loss & Trauma*, 12(2), 127-143.
52. Layne, C. M., Warren, J. S., Watson, P., & Shalev, A. (2007). Risk vulnerability, resistance and resilience: Towards and integrative conceptualization of posttraumatic adaptation. In M. J. Friedman, T. M. Kean & P. A. Resick (Eds.), *PTSD: Science and practice: A comprehensive handbook*. New York: Guilford.
53. Liebschutz, J., Saltz, R., Brower, V., Keane, T. M., Lloyd-Travaglini, C., Averbuch, T., & Sarret, J. H. (2007). PTSD in urban primary care: High prevalence and low physician recognition. *Journal of General Internal Medicine*, 22(6), 719-726.
54. Brewin, C. R. (2005). Systematic review of screening instruments for adults at risk of PTSD. *Journal of Traumatic Stress*, 18(1), 53-62.
55. Meltzer-Brody, S., Churchill, E., & Davidson, J. (1999). Derivation of the SPAN, a brief diagnostic screening test for post-traumatic stress disorder. *Psychiatry Research*, 88(1), 63-70.
56. Fullerton, C. S., Ursano, R. J., Epstein, R. S., Crowley, B., Vance, K. L., Craig, K. J., & Baum, A. (2000). Measurement of posttraumatic stress disorder in community samples. *Nordic Journal of Psychiatry*, 54(1), 5-12.
57. Chou, F. H., Su, T. T., Ou-Yang, W. C., Chien, I. C., Lu, M. K., & Chou, P. (2003). Establishment of a disaster-related psychological screening test. *Australian and New Zealand Journal of Psychiatry*, 37(1), 97-103.
58. Department of Veterans Affairs/Department of Defense. (2010). *VA/DoD clinical practice guideline for management of post-traumatic stress, version 2.0*. Washington, D.C.: VA/DoD.
59. Prins, A., Quimette, P., Kimerling, R., Cameron, R. P., Hugelshofer, D. S., Shaw-Hegwer, J., . . . Sheikh, J. I. (2003). The primary care PTSD screen (PC-PTSD): Development and operating characteristics. *Primary Care Psychiatry*, 9(1), 9-14.
60. Breslau, N., Peterson, E. L., Kessler, R. C., & Schultz, L. R. (1999). Short screening scale for DSM-IV posttraumatic stress disorder. *American Journal of Psychiatry*, 156, 908-911.
61. Leskin, G. A., & Westrup, D. (2002). PTSD brief screen. *Posttraumatic stress disorder implications for primary care 1999*, Department of Defense/EES.
62. Weathers, F. W., Litz, B. T., Herman, D. S., Huska, J. A., & Keane, T. M. (1993). *The PTSD Checklist (PCL): Reliability, validity, and diagnostic utility*. Paper presented at the 9th Annual Conference of the ISTSS, San Antonio.



63. Bliese, P. D., Wright, K. M., Adler, A. B., Cabrera, O., Castro, C. A., & Hoge, C. W. (2008). Validating the primary care posttraumatic stress disorder screen and the posttraumatic stress disorder checklist with soldiers returning from combat. *Journal of Consulting and Clinical Psychology, 76*(2), 272-281.
64. Lang, A. J., & Stein, M. B. (2005). An abbreviated PTSD checklist for use as a screening instrument in primary care. *Behaviour Research and Therapy, 43*(5), 585-594. doi: 10.1016/j.brat.2004.04.005
65. Brewin, C. R., Andrews, B., & Valentine, J. D. (2000). Meta-analysis of risk factors for posttraumatic stress disorder in trauma-exposed adults. *Journal of Consulting and Clinical Psychology, 68*(5), 748-766. doi: 10.1037/0022-006X.68.5.748
66. Ozer, E. J., Best, S. R., Lipsey, T. L., & Weiss, D. S. (2003). Predictors of posttraumatic stress disorder and symptoms in adults: A meta-analysis. *Psychological Bulletin, 129*(1), 52-73. doi: 10.1037/0033-2909.129.1.52
67. Prati, G., & Pietrantonio, L. (2010). The relation of perceived and received social support to mental health among first responders: A meta-analytic review. *Journal of Community Psychology, 38*(3), 403-417. doi: 10.1002/jcop.20371
68. Simon, R. I. (2003). *Posttraumatic stress disorder in litigation: Guidelines for forensic assessment* (2nd ed.). Washington, D.C.: American Psychiatric Publishing, Inc.
69. Wilson, J. P., & Keane, T. M. (2004). *Assessing psychological trauma and PTSD* (2nd ed.). New York: Guilford Press.
70. Shear, M. K., Simon, N., Wall, M., Zisook, S., Nemeroff, R., Duan, N., Keshaviah, A. (2011). Complicated grief and related bereavement issues for DSM-5. *Depression and Anxiety, 26*(2), 103-117. doi: 10.1002/da.20780
71. Prigerson, H. G., Horowitz, M. J., Jacobs, S. C., Parkes, C. M., Aslan, M., Goodkin, K., Maciejewski, P. K. (2009). Prolonged grief disorder: Psychometric validation of criteria proposed for DSM-V and ICD-11. *PLoS Medicine, 6*(8). doi: 10.1371/journal.pmed.1000121
72. Loftus, E. F., & Davis, D. (2006). Recovered memories. *Annual Review of Clinical Psychology, 2*, 469-498. doi: 10.1146/annurev-clinpsy.2.023005.095315
73. McNally, R. J. (2006). *Remembering trauma*. Boston: Harvard University Press.
74. Young, G., Kane, A., & Nicholson, K. (2006). *Psychological knowledge in court: PTSD, pain, and TBI*. New York: Springer Publishing Co.
75. Blake, D. D., Weathers, F., Nagy, L. M., Kaloupek, D. G., Gusman, F. D., Charney, D. S., & Keane, T. M. (1995). The development of a clinician administered PTSD scale. *Journal of Traumatic Stress, 8*(1), 75-90. doi: 10.1002/jts.2450080106
76. Weathers, F. W., Keane, T. M., & Davidson, J. (2001). Clinician-administered PTSD scale: A review of the first ten years of research. *Depression and Anxiety, 13*(3), 132-156.
77. Weiss, D. S. (1997). Structured clinical interview techniques. In J. Wilson & T. Keane (Eds.), *Assessing psychological trauma and PTSD* (pp. 493-511). New York: Guilford Press.
78. Foa, E. B., Riggs, D. S., Dancu, C. V., & Rothbaum, B. O. (1993). Reliability and validity of a brief instrument for assessing post-traumatic stress disorder. *Journal of Traumatic Stress, 6*(4), 459-473.
79. Davidson, J., Malik, M., & Travers, J. (1997). Structured interview for PTSD (SIF): Psychometric validation for DSM-IV criteria. *Depression and Anxiety, 5*, 127-129.
80. Norris, F. H., & Radd, J. K. (1997). Standardized self-report measures of civilian trauma and posttraumatic stress disorder. In J. P. Wilson & T. M. Keane (Eds.), *Assessing psychological trauma and PTSD* (pp. 7-42). New York: Guilford Press.
81. Solomon, Z., Keane, T., Newman, E., & Kaloupek, D. (1996). Choosing self-report measures and structured interviews. In E. B. Carlson (Ed.), *Trauma Research Methodology* (pp. 56-81). Lutherville, MD: Sidran Press.
82. Forbes, D., Creamer, M., & Eiddle, D. (2001). The validity of the PTSD checklist as a measure of symptomatic change in combat-related PTSD. *Behaviour Research and Therapy, 39*(8), 977-986. doi: 10.1016/S0005-7967(00)00064-X
83. Horowitz, M. J., Wilner, N., & Alvarez, W. (1979). Impact of Events Scale: A measure of subjective stress. *Psychosomatic Medicine, 41*(3), 209-218.
84. Blanchard, E. B., Jones-Alexander, J., Buckley, T. C., & Forneris, C. A. (1996). Psychometric properties of the PTSD Checklist (PCL). *Behaviour Research and Therapy, 34*(8), 669-673.
85. Cook, J. M., Ehli, J. D., & Areson, P. A. (2005). Psychometric properties of the PTSD checklist with older primary care patients. *Journal of Traumatic Stress, 18*(4), 371-376.
86. McDonald, S. D., & Cahoun, P. S. (2010). The diagnostic accuracy of the PTSD checklist: A critical review. *Clinical Psychology Review, 30*(8), 978-987.
87. Falsetti, S. A., Resnick, H. S., Resick, P. A., & Kilpatrick, D. G. (1993). The modified PTSD Symptom Scale: A brief self report measure of posttraumatic stress disorder. *Behavior Therapy, 16*, 161-162.
88. Zlotnick, C., Davidson, J., Shea, M. T., & Pearlstein, T. (1996). Validation of the Davidson Trauma Scale in a sample of survivors of childhood sexual abuse. *Journal of Nervous and Mental Disease, 184*(4), 255-257.
89. WHOQOL Group. (1998). Development of the World Health Organisation WHOQOL-BREF Quality of Life Assessment. *Psychological Medicine, 28*(3), 551-558.
90. Skevington, S. M., Lofy, M., & Connell, K. A. (2004). The World Health Organization's WHOQOL-BREF quality of life assessment: Psychometric properties and results of the international field trial. A Report from the WHOQOL Group. *Quality of Life Research, 13*(2), 299-310.
91. Wagnild, G. M., & Young, H. M. (1993). Development and psychometric evaluation of the Resilience Scale. *Journal of Nursing Measurement, 1*(2), 165-178.
92. Connor, K. M., & Davidson, J. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety, 18*(2), 76-82.
93. Foa, E. B., & Tolin, D. F. (2000). Comparison of the PTSD Symptom Scale-Interview Version and the Clinician-Administered PTSD scale. *Journal of Traumatic Stress, 13*(2), 181-191.
94. Weiss, D. S., & Marmar, C. R. (1997). The Impact of Event Scale--Revised. In J. P. Wilson & T. M. Keane (Eds.), *Assessing psychological trauma and PTSD: A handbook for practitioners* (pp. 399-411). New York: Guilford Press.
95. Foa, E. B., Cashman, L., Jaycox, L. H., & Perry, K. J. (1997). The validation of a self-report measure of posttraumatic stress disorder: The Posttraumatic Diagnostic Scale. *Psychological Assessment, 9*(4), 445-451.



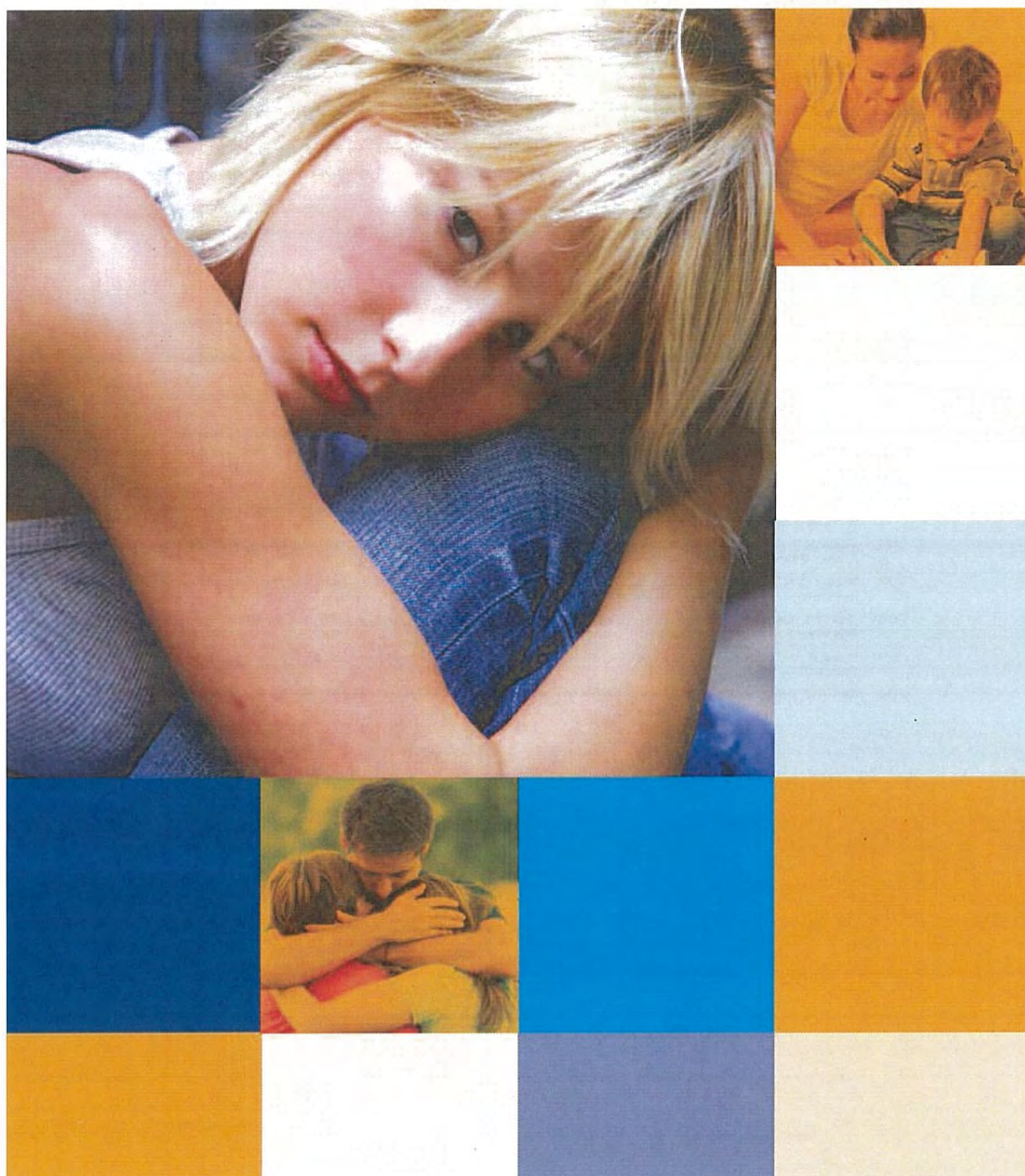
96. Briere, J. (2001). *Detailed Assessment of Posttraumatic Stress (DAPS)*. Odessa, Florida: Psychological Assessment Resources.
97. Briere, J., Elliott, D. M., & Gannon Rowley, J. (1995). Trauma Symptom Inventory – Psychometrics and association with childhood and adult victimisation in clinical samples. *Journal of Interpersonal Violence*, 10(4), 397-401.
98. Molica, R. F., Caspi Yavin, Y., Bollini, P., Truong, T., & et al. (1992). The Harvard Trauma Questionnaire: Validating a cross-cultural instrument for measuring torture, trauma, and posttraumatic stress disorder in Indochinese refugees. *Journal of Nervous and Mental Disease*, 180(2), 111-116.
99. Duffy, M., Gillespie, K., & Clark, D. M. (2007). Post-traumatic stress disorder in the context of terrorism and other civil conflict in Northern Ireland: Randomised controlled trial. *British Medical Journal*, 334(7604), 1147.
100. Shalev, A. Y., Ankit, Y., Israeli-Shalev, Y., Peleg, T., Adessky, R., & Freedman, S. (2012). Prevention of posttraumatic stress disorder by early treatment: Results from the Jerusalem Trauma Outreach and Prevention Study. *Archives of General Psychiatry*, 69(2), 166-176. doi: 10.1001/archgenpsychiatry.2011.127
101. Gillespie, K., Duffy, M., Hackmann, A., & Clark, D. M. (2002). Community based cognitive therapy in the treatment of posttraumatic stress disorder following the Omagh bomb. *Behaviour Research and Therapy*, 40(4), 345-357.
102. Resick, P. A., Nishith, P., Weaver, T. L., Aetn, M. C., & Feuer, C. A. (2002). A comparison of cognitive-processing therapy with prolonged exposure and a waiting condition for the treatment of chronic posttraumatic stress disorder in female rape victims. *Journal of Consulting and Clinical Psychology*, 70(4), 867-879.
103. van Minnen, A., Arntz, A., & Keijsers, G. P. J. (2002). Prolonged exposure in patients with chronic PTSD: Predictors of treatment outcome and dropout. *Behaviour Research and Therapy*, 40(4), 439-457.
104. Stein, N. R., Dickstein, B. D., Schuster, J., Litz, B. T., & Resick, P. A. (2012). Trajectories of response to treatment for posttraumatic stress disorder. *Behavior Therapy*, 43(4), 790-800.
105. Tarrier, N., Sommerfield, C., Pilgrim, H., & Faragher, B. (2000). Factors associated with outcome of cognitive-behavioural treatment of chronic post-traumatic stress disorder. *Behaviour Research and Therapy*, 38(2), 191-202.
106. Feeny, N. C., Zoellner, L. A., & Foa, E. B. (2002). Treatment outcome for chronic PTSD among female assault victims with borderline personality characteristics: A preliminary examination. *Journal of Personality Disorders*, 16(1), 30-40.
107. Forbes, D., Creamer, M., Allen, N., Elliott, P., McHugh, A., Debenham, P., & Hopwood, M. (2002). The MMPI-2 as a predictor of symptom change following treatment for posttraumatic stress disorder. *Journal of Personality Assessment*, 79(2), 321-336.
108. Foa, E. B., Riggs, D. S., Massie, E. D., & Yarczower, M. (1995). The impact of fear activation and anger on the efficacy of exposure treatment for posttraumatic stress disorder. *Behavior Therapy*, 26(3), 487-499.
109. Forbes, D., Bennett, N., Biddle, D., Crompton, D., McHugh, T., Elliott, P., & Creamer, M. (2005). Clinical presentations and treatment outcomes of peacekeeper veterans with PTSD: Preliminary findings. *American Journal of Psychiatry*, 162(11), 2168-2180.
110. Forbes, D., Parslow, R., Creamer, M., Allen, N., McHugh, T., & Hopwood, M. (2008). Mechanisms of anger and treatment outcome in combat veterans with posttraumatic stress disorder. *Journal of Traumatic Stress*, 21(2), 142-149.
111. Perconte, S. T., & Griger, M. L. (1991). Comparison of successful, unsuccessful, and relapsed Vietnam veterans treated for posttraumatic stress disorder. *Journal of Nervous and Mental Disease*, 179(3), 558-562.
112. Steindl, S. R., Young, R. M., Creamer, M., & Crompton, D. (2003). Hazardous alcohol use and treatment outcome in male combat veterans with posttraumatic stress disorder. *Journal of Traumatic Stress*, 18(1), 27-34.
113. Briere, A., Clark, D. M., Dunmore, E., Jaycox, L. H., Meadows, E. A., & Foa, E. B. (1998). Predicting response to exposure treatment in PTSD: The role of mental defeat and alienation. *Journal of Traumatic Stress*, 11(3), 457-471.
114. Thrasher, S., Power, M., Morant, N., Marks, I., & Dalgleish, T. (2010). Social support moderates outcome in a randomized controlled trial of exposure therapy and (or) cognitive restructuring for chronic posttraumatic stress disorder. *Canadian Journal of Psychiatry*, 55(3), 187-190.
115. Cloitre, M., Koenen, K. C., Cohen, L. R., & Han, H. (2002). Skills training in affective and interpersonal regulation followed by exposure: A phase-based treatment for PTSD related to childhood abuse. *Journal of Consulting and Clinical Psychology*, 70(5), 1067-1074.
116. Clarke, S. B., Rizvi, S. L., & Resick, P. A. (2006). Borderline personality characteristics and treatment outcome in cognitive-behavioral treatments for PTSD in female rape victims. *Behavior Therapy*, 39(1), 72-78. doi: 10.1016/j.beth.2007.05.002
117. Clatunji, B. O., Oslor, J. M., & Tolin, D. F. (2010). A meta-analysis of the influence of comorbidity on treatment outcome in the anxiety disorders. *Clinical Psychology Review*, 30(6), 642-654.
118. Fontana, A., Rosenheck, R., & Desai, R. (2012). Comparison of treatment outcomes for veterans with posttraumatic stress disorder with and without comorbid substance use/dependence. *Journal of Psychiatric Research*, 46(8), 1003-1014. doi: 10.1016/j.jpsychires.2012.05.004
119. van Dam, D., Vedel, E., Ehling, T., & Emmelkamp, P. M. (2012). Psychological treatments for concurrent posttraumatic stress disorder and substance use disorder: A systematic review. *Clinical Psychology Review*, 32(3), 202-214. doi: 10.1016/j.cpr.2012.01.004
120. Mills, K. L., Teesson, M., Back, S. E., Brady, K. T., Baker, A. L., Hopwood, S., ... Ewer, P. L. (2012). Integrated exposure-based therapy for co-occurring posttraumatic stress disorder and substance dependence: A randomized controlled trial. *Journal of the American Medical Association*, 308(7), 690-699. doi: 10.1001/jama.2012.9071
121. Hien, D. A., Jiang, H. P., Campbell, A. N. C., Hu, M. C., Miele, G. M., Cohen, L. R., ... Nunes, E. V. (2010). Do treatment improvements in PTSD severity affect substance use outcomes? A secondary analysis from a randomized clinical trial in NIDA's clinical trials network. *American Journal of Psychiatry*, 167(1), 95-101. doi: 10.1176/appi.ajp.2009.09061261
122. Substance Abuse and Mental Health Services Administration. (2012). *Pharmacologic guidelines for treating individuals with post-traumatic stress disorder and co-occurring opioid use disorders* (HHS Publication No. SMA-12-4686). Rockville, MD: Substance Abuse and Mental Health Services Administration.
123. Gros, D. F., Price, M., Strachan, M., Yuen, E. K., Milanak, M. E., & Acerno, R. (2012). Behavioral activation and therapeutic exposure: An investigation of relative symptom changes in PTSD and depression during the course of integrated behavioral activation, situational exposure, and imaginal exposure techniques. *Behavior Modification*, 36(4), 580-599. doi: 10.1177/0145445512448097
124. Nixon, R. D. V., & Neamy, D. M. (2011). Treatment of comorbid posttraumatic stress disorder and major depressive disorder: A pilot study. *Journal of Traumatic Stress*, 24(4), 451-455. doi: 10.1002/jts.20654
125. Richardson, J. D., Fkretoglu, D., Liu, A., & Mohitosh, D. (2011). Aripiprazole augmentation in the treatment of military-related PTSD with major depression: A retrospective chart review. *BMC Psychiatry*, 11(article no.66). doi: 10.1186/1471-244x-11-66



126. Feldman, D. B. (2011). Posttraumatic stress disorder at the end of life: Extant research and proposed psychosocial treatment approach. *Palliative & Supportive Care*, 9(4), 407-418. doi: 10.1017/S1478961511000435
127. Hoge, C. W., McGurk, D., Thomas, J. L., Cox, A. L., Engel, C. C., & Castro, C. A. (2006). Mild traumatic brain injury in US soldiers returning from Iraq. *New England Journal of Medicine*, 358(5), 453-463.
128. Bryant, R. A. (2008). Disentangling mild traumatic brain injury and stress reactions. *New England Journal of Medicine*, 358(5), 525-527.
129. Vanderploeg, R. D., Belanger, H. G., & Curtiss, G. (2009). Mild traumatic brain injury and posttraumatic stress disorder and their associations with health symptoms. *Archives of Physical Medicine and Rehabilitation*, 90(7), 1084-1093.
130. Carlson, K. F., Kehle, S. M., Meis, L. A., Greer, N., MacDonald, R., Rutks, I., Wilt, T. J. (2011). Prevalence, assessment, and treatment of mild traumatic brain injury and posttraumatic stress disorder: A systematic review of the evidence. *Journal of Head Trauma Rehabilitation*, 26(2), 103-115. doi: 10.1097/HTR.0b013e3181e50e1f
131. Sharp, T. J., & Harvey, A. G. (2001). Chronic pain and posttraumatic stress disorder: Mutual maintenance? *Clinical Psychology Review*, 21(6), 857-877.
132. Ramage, A. E., Laird, A. R., Eickhoff, S. B., Adelson, A., Williamson, D. E., & Fox, P. T. (2011). A coordinate-based meta-analysis of trauma processing in PTSD: Associations with the pain monitoring network. *Biological Psychiatry*, 69(3), 262. doi: 10.1002/hbm.22155
133. Moeller-Bertram, T., Keltner, J., & String, I. A. (2012). Pain and post traumatic stress disorder: Review of clinical and experimental evidence. *Neuropharmacology*, 62(2), 586-597. doi: 10.1016/j.neuropharm.2011.04.028
134. Shepherd, J. C., Keyes, M., Jovanovic, T., Ready, D. J., Baltzell, D., Worley, V., ... Duncan, E. (2007). Veterans seeking treatment for posttraumatic stress disorder: What about comorbid chronic pain? *Journal of Rehabilitation Research and Development*, 44(2), 153-165.
135. Marx, B. P., Jackson, J. C., Schnurr, P. P., Murdoch, M., Sayer, N. A., Keane, T. M., ... Speroff, T. (2012). The reality of malingering PTSD among veterans: Reply to McNally and Frueh (2012). *Journal of Traumatic Stress*, 25(4), 457-460. doi: 10.1002/jts.21714
136. McNally, R. J., & Frueh, B. C. (2012). Why we should worry about malingering in the VA system: Comment on Jackson et al. (2011). *Journal of Traumatic Stress*, 25(4), 454-456. doi: 10.1002/jts.21713
137. Laffaye, C., Rosen, C. S., Schnurr, P. P., Friedman, M. J. (2007). Does compensation status influence treatment participation and course of recovery from post-traumatic stress disorder? *Military Medicine*, 172(10), 1039-1045.
138. Gabbe, B. J., Cameron, P. A., Williamson, O., Edwards, E., Graves, S., & Richardson, M. (2007). The relationship between compensation status and long-term patient outcomes following orthopaedic trauma. *Medical Journal of Australia*, 187(1), 14-17.
139. O'Donnell, M. L., Creamer, M., McFarlane, A., Silove, D., & Bryant, R. (2010). Does access to compensation have an impact on recovery outcomes after injury? *Medical Journal of Australia*, 192, 328-333.
140. Spearling, N. M., Connelly, L. B., Gargett, S., & Sterling, M. (2012). Does injury compensation lead to worse health after whiplash? A systematic review. *Pain*, 153(6), 1274-1282. doi: 10.1016/j.pain.2012.03.007
141. Cloutier, M., Stovall-McClough, K. C., Miranda, R., & Chemtob, C. M. (2004). Therapeutic alliance, negative mood regulation, and treatment outcome in child abuse-related posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology*, 72(3), 411-416.
142. Ruglass, L. M., Miele, G. M., Hien, D. A., Campbell, A. N. C., Hu, M. C., Caldeira, N., ... Nunes, E. V. (2012). Helping alliance, retention, and treatment outcomes: A secondary analysis from the NIDA Clinical Trials Network Women and Trauma Study. *Substance Use & Misuse*, 47(6), 695-707. doi: 10.1080/10826084.2012.659789
143. Hatcher, R. L., & Barends, A. W. (1996). Patients' view of the alliance in psychotherapy: Exploratory factor analysis of three alliance measures. *Journal of Consulting and Clinical Psychology*, 64(6), 1526-1536.
144. Collins, J., & Hyer, L. (1986). Treatment expectancy among psychiatric inpatients. *Journal of Clinical Psychology*, 42(4), 562-569.
145. Borkovec, T. D., & Costello, E. (1993). Efficacy of applied relaxation and cognitive-behavioral therapy in the treatment of generalized anxiety disorder. *Journal of Consulting and Clinical Psychology*, 61(4), 611-619.
146. Devilly, G. J., & Borkovec, T. D. (2000). Psychometric properties of the Credibility/Expectancy Questionnaire. *Journal of Behavior Therapy and Experimental Psychiatry*, 31, 73-86. doi: 10.1016/S0005-7916(00)0012-4
147. Chambless, D. L., Tran, G. Q., & Glass, C. R. (1997). Predictors of response to cognitive-behavioral group therapy for social phobia. *Journal of Anxiety Disorders*, 11(3), 221-240.
148. Price, M., & Anderson, P. L. (2012). Outcome expectancy as a predictor of treatment response in cognitive behavioral therapy for public speaking fears within social anxiety disorder. *Psychotherapy*, 49(2), 173-179. doi: 10.1037/a0024734
149. Goossens, M., Maeyen, J. W. S., Hidding, A., Kole-Snijders, A., & Evers, S. (2005). Treatment expectancy affects the outcome of cognitive-behavioral interventions in chronic pain. *Clinical Journal of Pain*, 21(1), 18-26. doi: 10.1097/00002508-200501000-00003
150. Prochaska, J. O., & DiClemente, C. C. (1983). Stages and processes of self-change of smoking: Toward an integrative model of change. *Journal of Consulting and Clinical Psychology*, 51(3), 390-395. doi: 10.1037/0022-006X.51.3.390
151. Murphy, R. T., Rosen, C. S., Cameron, R. P., & Thompson, K. E. (2002). Development of a group treatment for enhancing motivation to change PTSD symptoms. *Cognitive and Behavioral Practice*, 9(4), 308-316. doi: 10.1016/S1077-7229(02)80025-6
152. Clapp, J. D., & Beck, J. G. (2012). Treatment of PTSD in older adults: Do cognitive-behavioral interventions remain viable? *Cognitive and Behavioral Practice*, 19(1), 126-135. doi: 10.1016/j.cbpra.2010.10.002
153. Bottohe, M., Kuwert, P., & Knasvetsrud, C. (2012). Posttraumatic stress disorder in older adults: An overview of characteristics and treatment approaches. *International Journal of Geriatric Psychiatry*, 27(3), 230-239. doi: 10.1002/gps.2725
154. Munley, P. H., Bains, D. S., Frazee, J., & Schwartz, L. T. (1994). Inpatient PTSD treatment: A study of pretreatment measures, treatment dropout, and therapist ratings of response to treatment. *Journal of Traumatic Stress*, 7(2), 319-325.
155. Foa, E. B., Rothbaum, B. O., Riggs, D. S., & Murdock, T. B. (1991). Treatment of posttraumatic stress disorder in rape victims: A comparison between cognitive-behavioral procedures and counseling. *Journal of Consulting and Clinical Psychology*, 59(5), 715-723.
156. Jaycox, L. H., Foa, E. B., & Morral, A. R. (1998). Influence of emotional engagement and habituation on exposure therapy for PTSD. *Journal of Consulting and Clinical Psychology*, 66(1), 185-192.
157. Marks, I., Lovell, K., Noshirvani, H., Livanou, M., & Thrasher, S. (1998). Treatment of posttraumatic stress disorder by exposure and/or cognitive restructuring: A controlled study. *Archives of General Psychiatry*, 55(4), 317-325.



158. Stein, D. J., Ipser, J., & McAnda, N. (2009). Pharmacotherapy of posttraumatic stress disorder: A review of meta-analyses and treatment guidelines. *CNS Spectrums*, 14(1 Suppl 1), 25-31.
159. Neuner, F., Onyut, P. L., Ertl, V., Odenwald, M., Schauer, E., & Elbert, T. (2008). Treatment of posttraumatic stress disorder by trained lay counselors in an African refugee settlement: A randomized controlled trial. *Journal of Consulting and Clinical Psychology*, 76(4), 686-694.
160. Neuner, F., Schauer, M., Klaschik, C., Karunakara, U., & Elbert, T. (2004). A comparison of narrative exposure therapy, supportive counseling, and psychoeducation for treating posttraumatic stress disorder in an African refugee settlement. *Journal of Consulting and Clinical Psychology*, 72(4), 579-587.
161. Heckman, C. J., Cropsey, K. L., & Olds-Davis, T. (2007). Posttraumatic stress disorder treatment in correctional settings: A brief review of the empirical literature and suggestions for future research. *Psychotherapy*, 44(1), 46-53.
162. Valentine, P. V., & Smith, T. E. (2001). Evaluating traumatic incident reduction therapy with female inmates: A randomized controlled clinical trial. *Research on Social Work Practice*, 11(1 Special Issue SI), 40-52.
163. McLay, R. N., McBrien, C., Wiederhold, M. D., & Wiederhold, B. K. (2010). Exposure therapy with and without virtual reality to treat PTSD while in the combat theater: A parallel case series. *Cyberpsychology, Behavior, and Social Networking*, 13(1), 37-42. doi: 10.1089/cyber.2009.0346
164. Ehlers, A., Bleson, J., Clark, D. M., Creamer, M., Pilling, S., Richards, D., Yule, W. (2010). Do all psychological treatments really work the same in posttraumatic stress disorder? *Clinical Psychology Review*, 30(2), 269-278.
165. Ehlers, A., & Clark, D. M. (2000). A cognitive model of posttraumatic stress disorder. *Behaviour Research and Therapy*, 38(4), 319-345.
166. Foa, E. B., Steketee, G., & Rothbaum, B. O. (1989). Behavioral/cognitive conceptualizations of post-traumatic stress disorder. *Behavior Therapy*, 20(2), 155-176. doi: 10.1016/S0005-7894(89)90067-X
167. Schnurr, P. P. (2007). The rocks and hard places in psychotherapy outcome research. *Journal of Traumatic Stress*, 20(5), 779-792.
168. Foa, E. B., Keane, T. M., & Friedman, M. J. (2000). *Effective treatments for PTSD: Practice guidelines from the International Society for Traumatic Stress Studies*. New York: Guilford Press.
169. Glynn, S. M., Drebing, C. E., & Penk, W. (2009). Psychosocial rehabilitation. In E. B. Foa, T. M. Keane, M. J. Friedman & J. A. Cohen (Eds.), *Effective treatments for PTSD: Practice guidelines from the International Society for Traumatic Stress Studies* (pp. 388-426). New York: The Guilford Press.
170. NSW Health and Hunter Institute of Mental Health. (2002). *Moving forward: A focus on recovery, wellbeing and rehabilitation directions*. Newcastle, NSW: HIMH.
171. Corrigan, P. W., Mueser, K. T., Bond, G. R., Drake, R. E., & Solomon, P. (2009). *Principles and practice of psychiatric rehabilitation: An empirical approach*. New York: Guilford Press.
172. Penk, W., Little, D., & Ainspan, N. (2011). Psychosocial rehabilitation. In B. A. Moore & W. E. Penk (Eds.), *Treating PTSD in military personnel: A clinical handbook*. New York: Guilford Press.
173. Bond, G. R., Drake, R. E., & Becker, D. R. (2008). An update on randomized controlled trials of evidence-based supported employment. *Psychiatric Rehabilitation Journal*, 59(4), 280-290.
174. Dieterich, M., Irving, C. B., Park, B., & Marshall, M. (2010). Intensive case management for severe mental illness. *Cochrane Database of Systematic Reviews*, Issue 10. Art. No. CD007906. doi: 10.1002/14651858.CD007906.pub2
175. Dixon, L., McFarlane, W. R., Lefley, H., Lucksted, A., Cohen, M., Falloon, I., . . . Sontheimer, D. (2001). Evidence-based practices for services to families of people with psychiatric disabilities. *Psychiatric Services*, 52(7), 903-910.
176. Mueser, K. T., Corrigan, P. W., Hilton, D. W., Tanzman, B., Schaub, A., Gingerich, S., . . . Herz, M. I. (2002). Illness management and recovery: A review of the research. *Psychiatric Services*, 53(10), 1272-1284. doi: 10.1176/appi.ps.53.10.1272
177. Monson, C. M., Talt, C. T., & Friedman, S. J. (2009). Military-related PTSD and intimate relationships: From description to theory-driven research and intervention development. *Clinical Psychology Review*, 29(3), 707-714. doi: 10.1016/j.cpr.2009.09.002
178. Smith, P. L., & Moss, S. B. (2009). Psychologist impairment: What is it, how can it be prevented, and what can be done to address it? *Clinical Psychology: Science and Practice*, 16(1), 1-15. doi: 10.1111/j.1468-2850.2009.01137.x
179. Phelps, A., Lloyd, D., Creamer, M., & Forbes, D. (2009). Caring for carers in the aftermath of trauma. *Journal of Aggression, Maltreatment & Trauma*, 18, 313-330.
180. Benson, J., & Magraith, K. (2005). Compassion fatigue and burnout: The role of Balint groups. *Australian Family Physician*, 34(6), 497-498.





General Considerations when Working with Children and Adolescents

3

Although most principles that underpin good clinical practice apply equally when working across various age groups, some differences will inevitably apply when working with children and adolescents. The following considerations should inform every aspect of the way in which clinicians think about, assess, and treat posttraumatic mental health problems in children and adolescents. Many of these points will be elaborated on in the following sections.

1. Children and adolescents are typically dependent upon an adult to present them for treatment in the first instance and to ensure that they attend subsequent appointments. This means that it is as important to engage with, and maintain, the relevant adult's motivation to pursue treatment, as it is to do these things with the child or adolescent client.
2. Children and adolescents are part of a system (typically a family). Thus, their symptoms have the potential to both influence, and be influenced by, anything that is happening within the system in which they live. Thus, the clinician needs to be continually aware of what is happening within the child's system (e.g., significant life events for other family members, emotional wellbeing of other family members, and relationships within the family – not only those between the child and his/her parents).
3. In line with the first two considerations, common sense suggests that involving parents/caregivers in children's treatment should be helpful. However, as will be discussed below, there are many reasons why parents/caregivers may be unwilling or unable to participate in their child's treatment in a helpful manner. The clinician needs to be aware of this and to manage the relationships accordingly.
4. The rate of agreement between parents/caregivers and children in relation to internalising symptoms (and especially posttraumatic mental health problems) is very low. Never rely solely on an adult's report of a child's internalising symptoms – even if the child is of preschool age.
5. Infancy and adolescence are the two most change-filled periods of development in the entire lifespan. Keeping in mind models of psychosocial development such as that proposed by Erik Erikson,¹ children and adolescents have substantially more developmental challenges and conflicts to master than adults. It is essential to keep this kind of framework in mind when assessing and treating children and adolescents with posttraumatic mental health problems. For instance, a 40-year-old who is assaulted physically is less likely than a three-year-old to develop attachment problems. In other words, children and adolescents have a much greater potential to be rendered either 'stuck' or developmentally regressed by trauma.
6. Depending on their age and developmental stage, children have less well-developed linguistic, affect regulation, cognitive and perceptual capacities than adults. Naturally, these developmental limitations will influence the nature of treatment and the manner in which it is delivered.

Note: For the purposes of this chapter, the term 'pre-schoolers' or 'preschool-aged children' is used to refer to children aged birth to 5 years. The term 'primary school-aged children' is used to refer to children aged 6 to 11 years, and the term 'adolescents' is used to refer to youth aged 12 to 17 years. Where the term 'children and adolescents' is used, the reader can assume that this entire age span is being referred to.



Trauma and trauma reactions

Trauma, traumatic event and potentially traumatic event

As noted in the previous chapter, the terms *trauma*, *traumatic event*, and *potentially traumatic event* are used in a variety of ways. The *Diagnostic and Statistical Manual of Mental Disorders* (fourth edition; DSM-IV) defines a traumatic event as one in which “the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others”.² Children and adolescents are commonly exposed to such events, with more than two-thirds of children in the US reporting exposure to at least one traumatic event by the age of 16 years.³ Terr⁴ proposed two broad categories of childhood trauma: Type I trauma in which a child experiences a single event (such as a physical assault, a natural or man-made disaster, traffic accident, other accidental injury, house fire, a terrorist attack, or witnessing a single episode of violence); and Type II trauma, in which a child experiences multiple repeated exposures to the traumatic event (such as physical and/or sexual abuse, neglect, domestic violence, or war).

By no means do all young people exposed to such events develop significant psychological problems. More recently, use of the term potentially traumatic events (PTEs) has been advocated to highlight this point. Bonanno and Mancini⁵ note that, “highly aversive events that typically fall outside the range of normal everyday experience are ‘potentially’ traumatic because not everyone experiences them as traumatic” (p. 369). In other words, not everyone develops a (psychological) injury as a consequence. In the Copeland et al.⁶ study, for example, 1420 children and adolescents aged 9, 11, and 13 years at intake were followed up annually until they were 16 years of age. Although trauma exposure (across the full range of potentially traumatic events) was common, the development of full PTSD as per DSM-IV criteria was very rare (0.5%).

Increasingly, it is being recognised that exposure to PTEs can result in the development of many forms of psychopathology. To date, most attention has been focussed on PTSD, other anxiety disorders, and affective disorders. Increasingly, however, in the field of children and adolescents (especially preschool-aged children) this focus is broadening to include behavioural and attentional problems (such as oppositional defiant disorder and attention deficit hyperactivity disorder).

Clinical presentations in children and adolescents following potentially traumatic events

Yule⁸ described the manifestation of traumatic stress responses in children and adolescents in a manner that has withstood the test of time and burgeoning research. He noted that, while the majority of children are bothered almost immediately by repetitive, intrusive thoughts about the event, dissociative flashbacks are not common. In the first few weeks, disturbances in sleep are often seen – including nightmares (where the content is not necessarily able to be articulated, or where it is not necessarily linked in an obvious way to the PTE), fear of the dark, fear of going to sleep and risking the possibility of a nightmare, and waking during the night. Separation anxiety is common in young children and even among adolescents. As in adults, irritability, anger and aggression are common, often manifested as temper tantrums in preschool-aged children. Many primary school-aged children and adolescents are able to articulate a desire to talk about their experiences, but also note that they find it difficult to speak about what happened with their parents and peers. Children and adolescents frequently report, and demonstrate, difficulties in concentration and memory. Hypervigilance to danger in their environment (including increased awareness of trauma-related reminders in the media) is typical. Primary school-aged children and adolescents often endorse a sense of foreshortened future, or what is perhaps more usefully viewed as a new awareness of their own mortality. The development of increased general anxiety, as well as specific fears related to aspects of their trauma experience, is common – although often the link between the feared stimulus and the trauma experience is not always immediately obvious (for instance, a child who develops a fear of helicopters after being involved in a natural disaster where helicopters were used to rescue people). Some primary school-aged children and adolescents will describe feeling survivor guilt, while depression and increased substance use is often reported by adolescents exposed to PTEs. Other important aspects of clinical presentation in preschool-aged children that were not explicitly described by Yule include new oppositional behaviour, regression in, or loss of, previously mastered developmental skills (e.g., speech, toileting), and new fears not associated with the traumatic event (e.g., fear of going to the toilet alone).⁷



Traumatic stress syndromes

To date, diagnostic classification systems have tended to not include specific child and adolescent versions of traumatic stress syndromes. Rather, the clinician is required to apply the same criteria as those used for adults, albeit sometimes with minor adjustments. As noted below, it is likely that some modifications will be made to child-specific criteria in DSM-5.

Acute stress disorder

Given that the DSM-IV diagnostic criteria for ASD do not differ depending on whether the individual in question is an adult, adolescent or child, these criteria will not be reviewed in any detail here (see previous chapter for the diagnostic criteria). However, the relationship between this diagnosis and the diagnosis of PTSD in youth – a focus of much research in the adult literature – is worthy of brief attention. The DSM-IV diagnosis of ASD requires that an individual demonstrate three or more dissociative symptoms. With the exception of the duration criteria (maximum of four weeks), the remaining diagnostic criteria for ASD are similar to those for PTSD. The presence of dissociation in an individual's acute response to trauma exposure is thought to identify those at risk for long-term PTSD, meaning that one of the key functions of ASD as a diagnosis is to assist in the prediction of which individuals experiencing distress after trauma exposure will go on to develop PTSD.⁸ However, paralleling the adult research (e.g., Harvey and Bryant⁹), in a large study of youth aged 6 to 17 years who had survived a motor vehicle accident, dissociation (when considered in isolation – that is, separate to the other criteria of ASD) failed to account for any unique variance in predicting later PTSD.¹⁰ As a result of this body of research across the lifespan, the requirement for dissociation in ASD has been dropped in DSM-5.

Posttraumatic stress disorder

The diagnosis of PTSD was officially extended to youth for the first time in 1987 with the advent of DSM-III-R (Diagnostic and Statistical Manual of Mental Disorders, third edition, revised). The DSM-IV criteria for PTSD as applied to children and adolescents are identical to those used with adults, with a few caveats (as there are for many of the DSM-IV diagnoses). Thus, the full adult-centric diagnostic criteria will not be reviewed here (see previous chapter for the diagnostic criteria). In assessing children and adolescents using the DSM-IV criteria, clinicians are asked to consider the following caveats:

A2 – 'In children, this [the person's response] may be expressed instead by disorganised or agitated behavior'.

B1 – 'In young children, repetitive play may occur in which themes or aspects of the trauma are expressed'.

B2 – 'In children, there may be frightening dreams without recognisable content'.

B3 – 'In young children, trauma-specific re-enactment may occur'.

Debate regarding the validity and utility of the DSM-IV PTSD criteria for children and adolescents, and particularly for preschool-aged children, has been ongoing since their publication. This is not surprising given that the DSM-IV field trial for PTSD did not involve any participants under the age of 15 years. One of the strongest criticisms of the criteria concerns the requirement for children to report on complex internal states (e.g., C5 feeling of detachment or estrangement from others, and C7 sense of a foreshortened future) which are often difficult for children to understand and almost impossible for adults around a child to observe. This debate has been informed by strong empirical data. Importantly, it has been demonstrated that there is no difference in terms of distress, or social and academic impairment, between children meeting full criteria (i.e., all three of the symptom clusters) and children demonstrating what is referred to as 'partial PTSD' – that is, two of the three symptom clusters.¹¹

In relation to preschool-aged children – a group for whom, until fairly recently, uncertainty about the relevance of PTSD existed – a substantial body of work now exists documenting a distinct and detectable constellation of PTSD symptomatology in this age group. Research has demonstrated these symptom profiles following disaster,^{12,13} terrorist attack,¹⁴ and exposure to domestic violence.^{15,16}

In response to concerns about the validity of the existing diagnostic criteria, several alternative algorithms have been proposed in considering how best to conceptualise and assess PTSD in children and adolescents. The most prominent of these are the 'two of three' method,¹¹ and the PTSD-AA (alternative algorithm) method.¹⁷ In line with the results noted above, the two of three method requires children and adolescents to meet criteria for only two of the three symptom clusters. Scheeringa and colleagues' PTSD-AA algorithm requires preschool-aged children to demonstrate one Cluster B symptom, one Cluster C symptom and two Cluster D symptoms.¹⁸ Such an approach is largely consistent with widely accepted criteria for partial and subsyndromal PTSD in adults (e.g., Mylle and Maes¹⁹).



Moving to DSM-5

In relation to PTSD in children and adolescents, a number of important changes have been introduced in DSM-5. In a significant restructure, the existing diagnoses of ASD and PTSD have been moved from the Anxiety Disorders section to a new category – Trauma- and Stressor-Related Disorders.²⁰ This new category also includes reactive attachment disorder and disinhibited social engagement disorder (analogous to the inhibited and disinhibited subtypes of DSM-IV reactive attachment disorder and important diagnoses in understanding reactions to trauma in children with longstanding histories of maltreatment), and the age-related PTSD subtype – PTSD in preschool children – for children under the age of 6 years.

As noted in the previous chapter, the most significant change to the PTSD criteria is to separate the existing Cluster C symptoms into Criterion C (persistent avoidance of stimuli related to the trauma) and Criterion D (negative alterations in cognitions and mood). For children aged 6 years and over, the diagnosis of PTSD requires that the following criteria be met: one symptom from Criterion C, two symptoms from Criterion D, and two symptoms from Criterion E (alterations in arousal and physical reactivity). In relation to preschool-aged children, following much research examining the PTSD-AA algorithm,^{9, 21} the DSM-5 PTSD criteria for this age group requires a child to demonstrate only one symptom from either Criterion C or D. In recent research with young burns victims, the new DSM-5 criteria for preschool-aged children has been demonstrated to be the most developmentally sensitive and valid measure of PTSD.²²

Prevalence

Few studies have examined the prevalence of ASD in children and adolescents. The studies that have been conducted have focussed on samples of youth involved in motor vehicle accidents and single assaults, with relatively low prevalence rates reported: 8 per cent;²³ 19 per cent;²⁴ and 9 per cent.²⁵ In preschool-aged children, only one study has examined the prevalence of ASD to date. Meiser-Stedman et al.²¹ found that 1.6 per cent of 60 children aged 2 to 6 years met criteria for ASD following an MVA.

In terms of PTSD, the prevalence rates vary widely depending on the sample under study, the type of trauma experienced, and the methodology used to make the diagnosis.^{26, 27} Lifetime estimates of PTSD in children and adolescents in the overall population range from 6 per cent²⁸ to a low 1.6 per cent reported in a large scale (N=1035) German study of youth aged 12 to 17 years.²⁹ In preschool-aged children, prevalence rates range from 13 per cent of burned children³⁰ to 38 per cent of war-exposed children.³¹ Other studies focussing on specific types of trauma exposure have reported on the prevalence of PTSD at short-term follow-up (generally just over one month following trauma exposure). Thus, 22.5 per cent of children exposed to physical injury,³² 34 per cent of youths exposed to community violence in an urban setting,³³ and 36 per cent of maltreated (physically and/or sexually abused) children³⁴ have been reported to meet criteria for acute PTSD. Examining trauma exposure to a motor vehicle accident across studies, approximately 27 per cent of children and adolescents meet criteria for PTSD between one and two months later,^{9, 35, 36, 37} reducing to approximately 13 per cent between three and six months later.^{9, 35, 37, 38} A meta-analysis of primary school-aged children and adolescents exposed to a range of trauma events found that, overall, 36 per cent of participants were diagnosed with PTSD.³⁹

In summary, while the numbers vary widely, it is clear that only a minority of children and adolescents exposed to a PTE will go on to develop PTSD. It is equally clear that the numbers – even at the low end of the ranges – are substantial and highlight the need for effective evidence-based treatment.

Comorbid conditions

In preschool-aged children, comorbidity is common. Scheeringa and Zeanah⁴⁰ reported the following comorbidity prevalence rates among preschool children with PTSD following Hurricane Katrina: 61 per cent met criteria for oppositional defiant disorder (ODD); 21 per cent met criteria for separation anxiety disorder (SAD); 33 per cent for attention deficit hyperactivity disorder (ADHD); and 43 per cent met criteria for major depressive disorder (MDD). In a mixed sample of traumatised pre-schoolers, Scheeringa et al.¹⁸ reported similarly high levels of comorbidity. In a recent sample of preschool-aged burns victims, children with PTSD at one month were more likely to have comorbid MDD, ODD, SAD, and a specific phobia; while children with PTSD at six months were significantly more likely to meet criteria for comorbid ADHD, ODD and SAD.³⁰

In primary school-aged children, PTSD is commonly comorbid with other anxiety disorders, mood disorders (most notably depression), and attention deficit hyperactivity disorder.⁴¹ Other comorbid problems less commonly seen in primary school-aged children, but more common in adolescents, include suicidal ideation and substance dependence.^{41, 42}



One of the largest studies of adolescents following a disaster centred around the survivors of the cruise ship, *Jupiter*, which sank in 1988. Of the adolescents on board, 217 agreed to participate in an assessment conducted between five and eight years after the event.⁴³ These young people were found to have developed a wide range of psychiatric disorders in addition to PTSD following the sinking.⁴⁴ Over 40 per cent of the sample met criteria for 'any anxiety disorder', with specific phobia (24%), panic disorder (12%), SAD (7%), and generalised anxiety disorder (GAD; 6%) being the most common anxiety disorders. With the exception of GAD, the risk for these disorders was significantly higher in survivors compared to controls. Similarly, 38 per cent of the sample met criteria for 'any affective disorder', with 34 per cent meeting criteria for MDD. Again, the risk to survivors of developing any affective disorder or MDD was significantly higher when compared with controls. Most of these conditions were comorbid with PTSD. When the survivor sample was separated into those with PTSD and those without, the rates of other psychiatric diagnoses in those without PTSD were not significantly different from the rates seen in controls. Mueser and Taub⁴⁵ have also reported that adolescents with PTSD are more likely to engage in high-risk behaviours, such as running away from home, self-injury, and substance use.

Importantly, although a largely neglected area, an association has recently been demonstrated between the development of PTSD and children's health-related quality of life (i.e., the impact of disease and therapy on a person's life situation), both in the short term and the long term. A wide range of adverse health consequences for pre-schoolers through to adolescents has been identified,^{46, 48} including poorer adherence to medical protocols.⁴⁷

The course and prognosis of PTSD in children and adolescents

In preschool-aged children, symptoms of PTSD tend to be persistent over time.^{49, 50} Scheeringa et al.⁵⁰ reported that the mean severity of PTSD ratings for preschool-aged children did not reduce over a two-year period. Importantly, PTSD in very young children is also associated with a range of poor developmental outcomes,^{49, 51} which in turn negatively impact upon children's developmental trajectories.

Recently, two very long-term follow-ups of children who experienced a landslide and bushfire disaster were reported. McFarlane and Van Hooff⁵² reported on the rates of PTSD and other mental disorders in adults who had experienced a devastating bushfire 20 years previously. This group was compared with matched controls recruited at the time of the original study. No difference was found in the lifetime prevalence of PTSD between the group who had been impacted by the bushfire as children (mean age at time of original assessment = 8.44) and the matched control group. In fact, the only difference in terms of lifetime rates for an individual disorder was specific phobia (environmental subtype), with this being more prevalent in the disaster-impacted sample. Interestingly, however, 30 per cent of the bushfire-impacted sample nominated the bushfire as the worst experience of their life. In stark contrast to McFarlane, Morgan et al.⁵³ conducted a 33-year follow-up of children who experienced the Aberfan landslide (children were aged 4 to 11 years at the time of the disaster) and reported that 29 per cent of those adults able to be contacted continued to meet criteria for PTSD. Of the disaster-impacted sample, 46 per cent met criteria for a lifetime history of PTSD, compared to 20 per cent in the matched control group.

Referring back to the long-term follow-up of the *Jupiter* survivors,⁴³ 52 per cent of the adolescents (mean age 14.7 years at time of disaster; mean age 21.3 years at follow-up) had developed PTSD, most commonly in the first few weeks following the disaster. There were few cases of delayed or late-onset PTSD reported. Approximately one-third of the youth had recovered spontaneously within a year of onset, but 34 per cent still met criteria for PTSD between five and eight years after the sinking.

Risk factors

In relation to preschool-aged children, the following risk factors have been identified for the development of PTSD in infants and young children exposed to war-related trauma: child age, maternal psychopathology, family social support, and maternal and child attachment-related behaviours.³¹ It has been suggested that parental and familial factors (e.g., psychopathology, social support) may be more important for younger children in the development of PTSD, given that they are more dependent on their parents and family system in order to have their needs met.

A recent meta-analysis conducted by Trickey, Siddaway, Meiser-Stedman, Serpell, and Field,⁵⁴ provides the most up-to-date and thorough summary of risk factors for the development of PTSD in primary school-aged children and adolescents. Trickey et al. found that across 64 studies of children and adolescents aged 6 to 18 years of age, factors relating to the subjective experience of the event and post-trauma variables (specifically, low social support, pre-trauma fear, perceived threat to life, social withdrawal, psychiatric comorbidity, poor family functioning, use of cognitive strategies such as distraction and thought suppression, and diagnosis of PTSD at an earlier assessment point following the trauma event) accounted for medium-to-large population effect sizes. Small-to-medium effect sizes were found for the following risk factors: being female, low intelligence, low socioeconomic status, pre- and post-trauma life events, pre-trauma low self-esteem, pre-trauma psychological problems in the youth and parent, post-trauma parental psychological problems, bereavement, time elapsed since the trauma event, trauma severity, and media exposure to the event. Small effect sizes were observed for younger age and race. Interestingly, a risk factor that has only recently been hypothesised to be important in the development of child PTSD, namely, parenting practices, was not able to be studied in this meta-analysis due to lack of research examining this potential risk factor.



Relational PTSD patterns: The importance of parents

In the meta-analysis reviewed above,⁵⁴ poor family functioning was observed to have a medium-to-large population effect size, while pre- and post-trauma psychopathology were observed to have small-to-medium population effect sizes in predicting child PTSD. These factors are only a few of the many variables included in the meta-analysis – clearly, they do not account for all, or even a majority, of the variance in predicting which children and adolescents develop PTSD. Nevertheless, they are important, not least because these are among the few factors listed above that can be targeted for change. Across the age span that makes up childhood and adolescence, parents or caregivers and the family system occupy unique positions of reciprocal influence (in other words, children and adolescents influence their parents' behaviour, and vice versa). These systemic influences can be crucial in relation to seeking and receiving psychological help following traumatic exposure. Children and adolescents very rarely decide themselves that they require professional help with a psychological problem (the exception being school counselling). Even if they were to do so, it would be almost impossible for children and adolescents to independently access such outside assistance. Typically, children and adolescents require their parent or caregiver to make the decision that professional help is warranted and to access that help. When parents and caregivers do not make these decisions, children and adolescents do not receive treatment. Among the many reasons why parents and the family system are important in the assessment and treatment of children and adolescents, the single fact that they determine whether or not treatment is received makes parents critically important.

In 2001, Scheeringa and Zeanah¹³ proposed three relational PTSD patterns to describe a situation in which posttraumatic stress exists in both an adult caregiver and a young child. (The traumatic stress may be in relation to the same event or different events.) The relational patterns illustrate how the symptomatology of one member of this dyad (typically the parent or caregiver) exacerbates the symptoms of the other member. Although these patterns were proposed for cases where the caregiver also demonstrates PTSD symptomatology, there is significant overlap between these patterns and the substantial literature examining the reciprocal patterns of influence between parents and their anxiety-disordered children. It is suggested, therefore, that the patterns described below should be kept in mind when working with a child of any age with PTSD, regardless of whether or not their caregiver also demonstrates PTSD symptoms (although, clearly they are more salient where the caregiver is also experiencing posttraumatic stress). It is also suggested that the second pattern in particular (overprotection) is likely to be reciprocal in nature. As is well documented in the child anxiety literature, when parents respond in an overprotective manner to a child's distress, that response contributes to the maintenance of the distress and elicits continuing overprotection. Understanding these reciprocal relationships is important to avoid falling into the trap of blaming one or other member of the dyad.

The three patterns are:

1. Withdrawn/ Unresponsive/ Unavailable
Owing to their own trauma-induced impairments, the adult is less available to the child. Their ability to read, recognise and respond sensitively to the child is significantly compromised.
2. Overprotective/ Constricting
After a traumatic event occurs, parents may become more protective and less granting of autonomy. Although an understandable response, often driven by fear that the child may be traumatised again, prolonged overprotection can send negative messages to a child, including, 'the world is not safe', and 'there is still something to be frightened of'.⁵⁵
3. Re-enacting/ Endangering/ Frightening
A traumatised adult may become preoccupied with reminders of the traumatic event and attempt to discuss the event repeatedly with their child. (Of course, it is also possible that a non-traumatised caregiver who is concerned for their child may engage in this same pattern – of talking with their child at length about the traumatic event and how they are feeling. While avoiding the topic altogether is not helpful either, it is important to find a balance and not to allow the issue to continually dominate interactions with the child).

In concluding their discussion of these relational patterns, Scheeringa and Zeanah¹³ recommended that for young children experiencing posttraumatic stress, caregiver symptomatology must be attended to first. This recommendation will be further discussed below.

Assessment

Note that many of the screening, assessment, and diagnosis issues discussed in the previous chapter with reference to adults, are relevant for children and adolescents also. Clearly, clinical judgement is required to make adjustments as necessary. This section highlights some specific issues to be considered when working with this age group.



Who to talk to? The low rate of agreement between parents and children

There is a long history of studies indicating a low level of agreement between parents and children when it comes to internalising symptoms.⁵⁶ Many studies have suggested that this pattern holds true for trauma exposure and posttraumatic stress symptoms, with parents under-reporting children's and adolescent's exposure and symptomatology.⁵⁶ Unfortunately, as noted by Stover et al.,⁶⁰ in the acute aftermath of a traumatic event, first responders typically refer questions about a child's wellbeing and responses to parents, rather than to the child. Even when children are included in their own assessment, clinicians often give priority to parent report, based on the assumption that parents are more accurate reporters.⁶¹ When it comes to pre-schoolers, clinicians have traditionally been in the habit of relying solely on parental report.

Parents' tendency to underreport their children's trauma exposure and posttraumatic stress symptoms is troubling for a number of reasons:

- Family and social support has been found to be an important protective factor in terms of whether exposure to PTEs converts into a posttraumatic mental health problem in children and adolescents.^{62,63} However, if parents do not realise that their children have been exposed to a PTE (or that they have been distressed by it), they are not able to provide appropriate support.
- As already noted, parents are gatekeepers for their children's access to psychological care. If they do not see that there is a problem, they are not likely to seek intervention for their children.
- Similarly, if parents are not aware of their children's exposure to a PTE, they may not be appropriately protective (e.g., in the case of physical or sexual abuse).

The simple conclusion to be drawn from the above information is that, even in the case of preschool-aged children, it is not only important, but necessary, to seek information from the child as well as the parent(s). Shemesh et al.⁶⁰ note that parental reports of their children's trauma symptomatology often offer important information about the parents' own level of posttraumatic stress.

When to assess for trauma exposure and symptoms

In their Practice Parameters, the American Academy of Child and Adolescent Psychiatry²⁷ (AACAP) recommends, as a minimum standard, inclusion of questions about exposure to potentially traumatic events during any psychiatric assessment of children and adolescents. This recommendation is based on the high degree of trauma exposure experienced by children and adolescents, and the importance of identifying symptoms early. Thus, the guidelines state that "even if trauma is not the reason for referral, clinicians should routinely ask children about exposure to commonly experienced traumatic events... and if such exposure is endorsed, the child should be screened for the presence of PTSD symptoms" (p. 418).

Following on from this recommendation, it is important to briefly consider the place of screening in the identification of children and adolescents at risk for developing PTSD. Trauma exposure is a diagnostic requirement for PTSD. And yet, as discussed, not all children and adolescents exposed to a PTE develop PTSD. The use of screening instruments to identify at-risk youth following trauma exposure would, in principle, seem to be a good idea in that it potentially allows for the early identification and treatment of this group. Unfortunately, very few cost-effective and valid screening tools for the identification of childhood PTSD exist.⁶⁴ Commonly used screening tools include the University of California at Los Angeles Posttraumatic Stress Disorder Reaction Index (UCLA PTSD-RI)⁶⁵, the Child Trauma Screening Questionnaire (CTSQ)⁶⁶, and the PTSD subscale of the Child Behaviour Checklist (CBCL).⁶⁷ Although relatively little literature examining the merits of screening children and adolescents for PTSD exists, in line with the adult literature, the developing consensus appears to be that screening of high-risk groups, as opposed to non-targeted population-wide screening (e.g., all youth in a disaster-impacted community) may be the more useful approach. While population-wide screening arguably identifies children who would not otherwise be identified, there are risks associated – including the risk of false positives, and the service/resource implications.

How to assess for trauma exposure and symptoms

A number of reviews of PTSD measures in children and adolescents have now been published.⁶⁸⁻⁶⁹ These reviews provide useful information regarding the assessment of PTSD in children and adolescents at a level of detail beyond the scope of this chapter. Many of the most commonly used assessment tools are open to the following criticisms:

- They represent downward extensions of measures originally designed for adults and often have not undergone systematic psychometric evaluation in their revised form.
- They often fail to take developmental considerations into account, with scales typically designed for broad age ranges, such as 8 to 16 years.
- They lack different versions for different informants – the necessity of obtaining information from both the child and parent has already been discussed, yet many of the most commonly used measures do not have parallel versions that allow clinicians to do this.
- They may require intensive training to administer and are very lengthy (pertains to interviews only).

³ General Considerations when Working with Children and Adolescents

**Table 3.1. Assessment tools for children and adolescents**

Instrument	Age range	Interview / questionnaire
Preschool Age Psychiatric Assessment (PAPA) ⁶⁰	2–5 years	Structured diagnostic interview completed with caregiver.
Diagnostic Infant Preschool Assessment (DIPA) ⁶¹	1–6 years	Structured diagnostic interview completed with caregiver.
The Trauma Exposure Symptom Inventory – Parent Report Revised (TESI-PRR) ⁷²	0–6 years	Checklist completed by caregiver.
Trauma Symptom Checklist for Young Children (TSCYC) ⁷³	3–12 years	Questionnaire completed by caregiver.
The Trauma Exposure Symptom Inventory – Parent Report (TESI-PR) ⁷⁶	3–18 years	Checklist completed by caregiver.
The Clinician Administered PTSD Scale for Children and Adolescents (CAPS-CA) ⁷⁷	8–15 years	Interview completed with youth.
The Children's PTSD Inventory (CPTSDI) ⁷⁹	7–18 years	Interview completed with youth.
The Anxiety Disorders Interview Schedule for Children – Child and Parent Versions (ADIS-IV-C/P) ⁸⁰	7–17 years	Interview completed separately with youth and caregiver (i.e., parallel versions).
The Kiddie Schedule for Affective Disorders and Schizophrenia for School-Aged Children – Parent and Lifetime Version (K-SADS-PL) ⁸¹	7–17 years	Interview completed separately with youth and caregiver (i.e., parallel versions).
The Trauma Symptom Checklist for Children (TSCC) ⁸²	8–16 years	Questionnaire completed by youth.
The Child PTSD Reaction Index (CPTSD-RI) ⁸⁵ and the UCLA PTSD Index for DSM-IV (UPID) ⁸⁶	6–18 years	Questionnaire completed by youth. UPID has parallel child, adolescent and parent versions.
The Child PTSD Symptom Scale (CPSS) ⁸⁷	8–18 years	Questionnaire completed by youth.



Description	Psychometric properties
Allows diagnosis of most common childhood psychiatric disorders (ODD, SAD, ADHD, MDD & PTSD). Includes empirically validated developmental modifications to PTSD criteria. Provides measure of degree of impairment or disability caused by symptoms.	Good test-retest reliability. Adequate intraclass coefficients for the PTSD category. ⁷⁰
First interview to be evaluated with children under the age of 2 years. Allows diagnosis of most childhood psychiatric disorders. Includes empirically validated developmental modifications to PTSD criteria. Provides assessment of child distress and functional impairment caused by symptoms.	Acceptable reliability and validity. Adequate-excellent test-retest reliability. ⁷¹
Checklist of potentially traumatic events to which a child may have been exposed – e.g., accidents, abuse, witnessing community and domestic violence, terrorism. Caregiver indicates the child's age when the event occurred and indicates whether the child experienced reactions to each event.	Currently no psychometric data available.
Assesses post-trauma responses. Produces nine clinical scales and a total scale (providing tentative PTSD diagnosis). Yields several scales designed to ascertain the validity of caregiver reports. Designed specifically for traumatised children in this age range.	Established norms and clinical cut-offs based on standardisation sample (containing only a small number of 3 & 4 year olds). Acceptable scale internal consistency, moderate convergent and discriminant validity on the Trauma Symptom Checklist completed by 8–12 year olds. ⁷⁴ Excellent concurrent validity demonstrated with other parent report measures. ⁷⁵
Original measure of trauma exposure. Caregivers indicate whether their child has experienced any of a range of trauma events (ranging from accidental injury to sexual assault). Caregivers indicate their child's age for each event endorsed, as well the child's reactions in response to the trauma.	Adequate test-retest reliability.
Downward modification of the Clinician Administered PTSD Scale (CAPS). ⁷⁶ Assesses current and lifetime trauma exposure + frequency and intensity of PTSD symptoms in relation to these events.	Sound psychometric properties. ^{11,41}
Assesses presence of PTSD symptoms relative to specific events. Allows for DSM-IV diagnosis.	
Caregiver and child interviewed separately. Diagnoses reached on the basis of the combined information. Allows for diagnosis of all anxiety disorders, depressive disorders and behavioural disorders following DSM-IV criteria. The PTSD module lacks specificity around symptom clusters, frequency and duration of symptoms. Allows for identification of lifetime or present exposure to specified traumatic events.	Strong psychometric properties for the interviews in their entirety. Psychometric data on the PTSD module less well described, with existing data suggesting excellent inter-rater reliability and fair parent-child agreement. ²⁵
Assesses broad psychopathology using DSM-IV criteria. Allows assessment for lifetime and present PTSD, trauma exposure, and distinction between full and partial PTSD.	Strong psychometric properties for the overall scale. However, the PTSD module has poor test-retest reliability. ⁸¹
Typically used to assess PTSD symptoms following sexual-related trauma, although can be used more generally. Generates six clinical scales (depression, anger, anxiety, posttraumatic stress, sexual concerns and dissociation).	One of the most thoroughly validated measures, with strong psychometric properties. ^{83,84}
The UPID is a revision of the CPTSD-RI. Both assess for frequency and duration of posttraumatic symptoms. Revision necessary because the CPTSD-RI does not address all PTSD symptoms. UPID assesses exposure to 26 different types of trauma and assesses all DSM-IV diagnostic criteria.	Original CPTSD-RI has strong psychometric properties. Little research to date on the UPID.
Downward modification of the adult Posttraumatic Diagnostic Scale. Assesses for presence, frequency and severity of DSM-IV PTSD symptoms in the past month. Able to generate a diagnosis. Allows assessment of functional impairment related to PTSD symptomatology.	Strong psychometric properties.



Table 3.1 summarises key information relating to the most commonly used and psychometrically strong assessment tools. Generally speaking, although many of the clinical interviews require training and are quite time-intensive, a structured interview is regarded as a better assessment measure for diagnostic purposes than a questionnaire.^{26,27} Questionnaires, on the other hand, can be very useful for repeated assessments when monitoring treatment progress over time. The Clinician Administered PTSD Scale for Children and Adolescents (CAPS-CA)⁷⁷ is arguably the most commonly used diagnostic interview, although it is best suited to research settings and can be cumbersome to use in routine clinical practice. The Diagnostic Infant Preschool Assessment (DIPA)⁷¹ is a recently published interview for use with preschool-aged children that is expected to become the gold standard in assessing this age group. Among the self-report questionnaires, the Child PTSD Reaction Index (CPTSD-RI)⁸⁶ and its revision, the UCLA PTSD Index for DSM-IV (UPID),⁸⁶ as well as the Child PTSD Symptom Scale (CPSS),⁸⁷ tend to be the most commonly used measures. More general measures such as the Child Behavior Checklist (CBCL)⁸⁸ are also often used to complement the more specialised assessment of trauma symptoms.

Good practice points

- GPP30** Questions about exposure to commonly experienced potentially traumatic events should be included as standard during any psychiatric assessment of children and adolescents. If such exposure is endorsed, the child should be screened for the presence of PTSD symptoms.
- GPP31** Children and adolescents are typically dependent upon an adult to present them for assistance. This means that it is equally important to engage with and maintain the relevant adults' motivation to pursue assistance, as it is the child or adolescent's.
- GPP32** Assessment of children and adolescents should include assessment of the system (typically the family) in which they live, as their symptoms will both influence and be influenced by what else is happening within the system.
- GPP33** The rate of agreement between parents/caregivers and children in relation to internalising symptoms of posttraumatic mental health problems may be very low. Practitioners should not rely solely on an adult's report of a child's internalising symptoms – even if the child is preschool-aged. Where assessment involves very young children (aged 0–3) this should include an evaluation of the behaviour of the child with particular reference to developmental stage and attachment status. Some symptoms of PTSD such as sense of foreshortened future and inability to recall some aspects of the trauma are unlikely to be usefully assessed in this age group.
- GPP34** In children, the range of potential posttraumatic mental health problems includes behavioural and attentional problems (such as oppositional defiant disorder and attention deficit hyperactivity disorder) as well as anxiety disorders (such as separation anxiety disorder) and affective disorders.
- GPP35** For children and adolescents, a structured clinical interview is regarded as a better assessment measure than a questionnaire for making a diagnosis.

Intervention planning

Access to psychological care

Many of the issues identified in the intervention planning section of the previous chapter apply equally to working with children and adolescents. However, there are some additional considerations in working with children and adolescents outlined in this section.

Although efficacious treatments for PTSD in children and adolescents exist, only a minority of children with posttraumatic mental health problems engage in treatment. For instance, of traumatised children and adolescents living in urban settings, up to 90 per cent have been reported to terminate treatment early.^{89, 90} In the aftermath of a community-wide event, such as a natural disaster, it has been repeatedly noted that children and families do not access existing care pathways (such as child and adolescent mental health services). One of the most promising strategies for engaging and keeping children, adolescents and families in treatment has been found to be the delivery of services in schools.⁹⁰ This is discussed in greater detail below.



What's different about working with children and adolescents?

Although the core principles of each of the major therapeutic approaches used is very similar when applied to either children, adolescents or adults experiencing posttraumatic stress, there are several considerations that need to be kept in mind when working with children and adolescents.

- Parents/caregivers need to be involved to some degree. There are many reasons for this:
 - As previously discussed, the significant adults around children and adolescents function as gatekeepers in terms of access to and continued engagement in therapy. In order to ensure that children and adolescents return for therapy sessions, parents/caregivers need to be convinced that the work proposed is worthwhile. This is particularly true of trauma-focused cognitive behavioural therapy (TF-CBT), where one of the core elements (the telling and retelling of the trauma narrative) often seems counter-intuitive to parents, who tend to be concerned that this will serve only to re-traumatise their child. Time spent explaining the rationale for this kind of strategy, as well as answering any questions parents might have is essential for the successful engagement of families.
 - The majority of children and adolescents (obviously this varies depending on the age and temperament of the child) benefit from parental 'coaching' around the use of strategies they are learning in therapy. Thus, parents or caregivers can play a crucial role in helping children and adolescents to generalise and maintain any gains they make in a therapy situation.
 - Many of the homework tasks set in therapeutic approaches such as TF-CBT require the active participation of a parent/caregiver (e.g., *in vivo* exposure hierarchies, reward systems and behavioural experiments).
 - Despite the documented tendency for parents to underreport their children's trauma exposure and symptomatology, they are often able to provide important information that children may have forgotten, were not aware of, or do not consider to be important. It is also important to regularly get parents' perspectives on how the family as a whole is functioning.
 - As discussed, parents and children influence each other. It is important for clinicians to regularly (if informally) assess how parents are functioning. (This is particularly important following exposure to a community-wide trauma such as a natural disaster, but research has also shown that a significant proportion of parents develop trauma symptomatology themselves after their child has been exposed to a PTE – such as a car accident – in which they themselves were not involved).
 - Parents are experts when it comes to their children (although, as previously discussed, this expertise may be compromised if parents themselves are struggling). An excellent example of this is the way in which parents are able to interpret or 'translate' their preschool-aged child's body language for therapists.
- Programs need to be tailored to meet the developmental needs of an individual child. It is not usually appropriate to simply take an adult treatment protocol and try to modify it for a child or adolescent. Well-validated protocols designed specifically for children and adolescents of all ages now exist, and these should be used in preference to attempting to modify an adult program. At all times, the developmental stage and capabilities of the child should be kept in mind – remembering that chronological age does not necessarily equate to levels of cognitive functioning and developmental mastery.
- Children tend to respond well to highly visual materials. Educationalists also recommend the use of different media in working with adolescents, who are used to being exposed on an everyday basis to a variety of media.

The role of parents/caregivers in treatment

Somewhat unusually in the field of child and adolescent mental health, there are some types of trauma exposure resulting in PTSD (child sexual and physical abuse) where, historically, treatment has been offered to parents alone, without involving children. In other types of trauma exposure (e.g., accidental injury, natural disaster), treatment has historically focussed on the child. Thus, there are different questions to be considered depending on the type of trauma exposure examined. In the child sexual and physical abuse literature, the focus is on how three distinct types of treatment (parent-only, child-only, and parent + child) compare. In other literatures, the focus is on whether involving parents in treatment enhances outcomes for children and adolescents. Unfortunately, this area has not been well researched to date. However, early work with children who had experienced sexual abuse^{9, 91} suggested that treating parents in isolation from their children may not be the best way to help children overcome PTSD. In this study, Deblinger et al.⁹¹ delivered TF-CBT to parents alone, children alone, or parents plus children. These three conditions were then compared with community treatment as usual. The results indicated that the combined parent and child condition produced superior results. Runyon, Deblinger and Steer⁹² compared a parent-only group cognitive behavioural therapy (CBT) treatment with a parent plus child group CBT treatment in 60 youth aged 7 to 13 years who had experienced physical abuse. The combined intervention was found to produce greater improvements in posttraumatic symptoms and parenting skills compared to the parent-only condition.



Studies have also indicated that parental distress is negatively related^{93,94} and parental support is positively related⁹⁵ to children's outcomes (as measured by PTSD symptomatology), following TF-CBT. In these studies, the trauma exposure was to a terrorist act and sexual abuse.^{94,95}

However, a recent study⁹⁶ found that posttraumatic symptoms in adult caregivers did not compromise treatment outcomes for children. Thus, in circumstances where the adult caregiver is also experiencing posttraumatic mental health problems, it is preferable to treat the caregiver before treating the child, but if this is not possible, the emerging evidence supports going ahead and treating the child.

Does it matter where treatment occurs?

Increasingly, treatments for child PTSD are being offered within a school environment, often by school professionals.⁹⁷ In an important paper, Jaycox et al.⁹⁸ demonstrated the significance of location. This study allocated non-treatment-seeking children who were experiencing posttraumatic stress 15–24 months following Hurricane Katrina to one of two active treatments: TF-CBT delivered individually in a clinic setting versus group-based cognitive behavioural intervention for trauma in schools (CBITS). Both treatments were offered free of charge as part of Project Fleur-de-lis.⁹⁹ The average age of children was 11.6 years. Although both treatments produced comparable and significant reductions in PTSD symptoms, the crucial difference was in uptake. Within the CBITS condition, 98 per cent and 91 per cent of children commenced and completed treatment, respectively. Within the TF-CBT condition, only 37 per cent of children attended the initial assessment. Of these children, 32 per cent were found not to meet PTSD criteria on the K-SADS. Thus, 23 per cent of allocated children commenced treatment in this condition, with 15 per cent completing treatment. The authors noted that, “CBITS was far more accessible to families who may not have been willing or able to participate in individual, clinic-based treatment” (p. 230).

Clearly, it will not always be possible or appropriate to offer treatment within the school setting, particularly where an individual traumatic event is the focus. In situations where many children in the same school were exposed, however – such as a natural disaster or terrorist attack – school-based group interventions should be considered seriously in the first instance.

Good practice points

- GPP36** As noted in reference to assessment, children and adolescents are typically dependent upon an adult to present them for treatment and ensure that they attend subsequent appointments. This means that it is equally important to engage with and maintain the relevant adults' motivation to pursue treatment, as it is the child or adolescent's.
- GPP37** For children and adolescents, treatment needs to be tailored to meet the developmental needs of the individual. Protocols that have been designed specifically for children and adolescents should be used in preference to attempting to modify an adult treatment protocol.
- GPP38** When the adult caregiver of a child with PTSD is also experiencing posttraumatic mental health problems, their symptoms may exacerbate each other's. For this reason, it may be preferable to treat the caregiver first or in parallel.
- GPP39** In the treatment of children and adolescents, parents/caregivers need to be involved to some degree, not only because of their gatekeeper role in terms of access to and continued engagement in therapy, but also because of their role in helping to generalise and maintain treatment gains, direct participation in homework tasks (e.g., reward systems), and providing important information that the child may have forgotten, be unaware of, or not recognise the importance of.
- GPP40** The delivery of services in schools may be an effective strategy for engaging and keeping children, adolescents and families in treatment.
- GPP41** Parent/caregiver involvement in assessment and treatment is desirable for children and adolescents with ASD or PTSD.
- GPP42** Practitioners who provide mental healthcare to children, adolescents or adults with ASD and PTSD, regardless of professional background, must be appropriately trained to ensure adequate knowledge and competencies to deliver recommended treatments. This requires specialist training, over and above basic mental health or counselling qualifications.



References

1. Erikson, E. H. (1950). *Childhood and society*. New York: Norton.
2. American Psychiatric Association. (1994) *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.) Washington DC: American Psychiatric Association.
3. Copeland, W. E., Keeler, G., Angold, A., & Costello, E. J. (2007). Traumatic events and posttraumatic stress in childhood. *Archives of General Psychiatry*, 64(5), 577-584.
4. Terr, L. C. (1991). Acute responses to external events and posttraumatic stress disorders. In M. Lewis (Ed.), *Child and adolescent psychiatry: A comprehensive textbook* (pp. 755-763). Baltimore, MD: Williams and Wilkins.
5. Bonanno, G. A., & Mancini, A. D. (2006). The human capacity to thrive in the face of potential trauma. *Pediatrics*, 121(2), 369-375.
6. Yule, W. (2001). Post-traumatic stress disorders in children and adolescents. *International Review of Psychiatry*, 13(3), 194-200.
7. Scheeringa, M., Peebles, C. D., Cook, C. A., & Zeanah, C. H. (2001). Toward establishing procedural, criterion, and discriminant validity for PTSD in early childhood. *Journal of the American Academy of Child and Adolescent Psychiatry*, 40(1), 52-60.
8. Harvey, A. G., & Bryant, R. A. (2002). Acute stress disorder: A synthesis and critique. *Psychological Bulletin*, 128(6), 886-902.
9. Harvey, A. G., & Bryant, R. A. (1998). The relationship between acute stress disorder and posttraumatic stress disorder: A prospective evaluation of motor vehicle accident survivors. *Journal of Consulting and Clinical Psychology*, 66(3), 507-512.
10. Dalgleish, T., Meiser-Stedman, R., Kassam-Adams, N., Ehlers, A., Winston, F., Smith, P., Yule, W. (2008). Predictive validity of acute stress disorder in children and adolescents. *British Journal of Psychiatry*, 192(5), 392-393.
11. Carrion, V. G., Weems, C. F., Ray, R., & Reiss, A. L. (2002). Toward an empirical definition of pediatric PTSD: The phenomenology of PTSD symptoms in youth. *Journal of the American Academy of Child and Adolescent Psychiatry*, 41(2), 166-173.
12. Chmi, H., Sayoko, K., Awai, Y., Kamata, S., Sasaki, K., Tanaka, Y., Hata, A. (2002). Post-traumatic stress disorder in pre-school aged children after a gas explosion. *European Journal of Pediatrics*, 161(12), 643-648.
13. Scheeringa, M., & Zeanah, C. H. (2001). A relational perspective on PTSD in early childhood. *Journal of Traumatic Stress*, 14(4), 799-815.
14. Coates, S., & Schachter, D. (2004). Preschoolers' traumatic stress post-9/11: Relational and developmental perspectives. *Psychiatric Clinics of North America*, 27(3), 479-489.
15. Cohen, J. A., & Mannarino, A. P. (1996). A treatment outcome study for sexually abused preschool children: Initial findings. *Journal of the American Academy of Child and Adolescent Psychiatry*, 35(1), 42-50.
16. Lieberman, A. F., Van Horn, P., & Czer, E. J. (2005). Preschooler witnesses of marital violence: Predictors and mediators of child behavior problems. *Development and Psychopathology*, 17(2), 385-396.
17. Scheeringa, M., Zeanah, C. H., & Cohen, J. A. (2011). PTSD in children and adolescents: Toward an empirically based algorithm. *Depression and Anxiety*, 28(9), 770-782. doi: 10.1002/da.20736
18. Scheeringa, M., Zeanah, C. H., Myers, L., & Putnam, F. W. (2003). New findings on alternative criteria for PTSD in preschool children. *Journal of the American Academy of Child and Adolescent Psychiatry*, 42(5), 561-570.
19. Mylle, J., & Maes, M. (2004). Partial posttraumatic stress disorder revisited. *Journal of Affective Disorders*, 78(1), 37-48.
20. Friedman, M. J., Resick, P. A., Bryant, R. A., Strain, J., Horowitz, M., & Spiegel, D. (2011). Classification of trauma and stressor-related disorders in DSM-5. *Depression and Anxiety*, 28(9), 737-749. doi: 10.1002/da.20845
21. Meiser-Stedman, R., Smith, P., Gluckman, E., Yule, W., & Dalgleish, T. (2008). The posttraumatic stress disorder diagnosis in preschool- and elementary school-age children exposed to motor vehicle accidents. *American Journal of Psychiatry*, 165(10), 1326-1337.
22. De Young, A. C., Kenardy, J. A., & Cobham, V. E. (2011). Diagnosis of posttraumatic stress disorder in preschool children. *Journal of Clinical Child and Adolescent Psychology*, 40(3), 375-384. doi: 10.1080/15374416.2011.563474
23. Kassam-Adams, N., & Winston, F. K. (2004). Predicting child PTSD: The relationship between acute stress disorder and PTSD in injured children. *Journal of the American Academy of Child and Adolescent Psychiatry*, 43(4), 403-411.
24. Meiser-Stedman, R., Yule, W., Smith, P., Gluckman, E., & Dalgleish, T. (2005). Acute stress disorder and posttraumatic stress disorder in children and adolescents involved in assaults or motor vehicle accidents. *American Journal of Psychiatry*, 162(7), 1361-1363.
25. Meiser-Stedman, R., Dalgleish, T., Smith, P., Yule, W., Bryant, B., Ehlers, A., & Winston, F. (2007). Dissociative symptoms and the acute stress disorder diagnosis in children and adolescents: A replication of the Harvey and Bryant (1999) study. *Journal of Traumatic Stress*, 20(3), 359-364.
26. American Academy of Child and Adolescent Psychiatry. (1998). Practice parameters for the assessment and treatment of children and adolescents with posttraumatic stress disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, 37(10 Suppl), 4S-26S.
27. Cohen, J. A., Bukstein, O., Walter, H., Benson, R. S., Chrisman, A., Farchione, T. R., & Medeiros, J. (2010). Practice parameter for the assessment and treatment of children and adolescents with posttraumatic stress disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, 49(4), 414-430.
28. Giaconia, R. M., Reinherz, H. Z., Silverman, A. B., Pakiz, B., Frost, A. K., & Cohen, E. (1995). Traumas and posttraumatic stress disorder in a community population of older adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 34(10), 1369-1380.
29. Eisau, C. A., Conradt, J., & Petermann, F. (1999). Frequency of posttraumatic stress disorder among adolescents: Results of the Bremen Adolescent Study. *Zeitschrift Für Kinder-Und Jugendpsychiatrie Und Psychotherapie*, 27(1), 37-45. doi: 10.1024/1422-4917.27.1.37
30. De Young, A. C., Kenardy, J. A., Cobham, V. E., & Kimble, R. (2012). Prevalence, comorbidity and course of trauma reactions in young burn-injured children. *Journal of Child Psychology and Psychiatry*, 53(1), 56-63. doi: 10.1111/j.1469-7610.2011.02431.x
31. Feldman, R., & Vengrober, A. (2011). Posttraumatic stress disorder in infants and young children exposed to war-related trauma. *Journal of the American Academy of Child and Adolescent Psychiatry*, 50(7), 645-658. doi: 10.1016/j.jaac.2011.03.001
32. Aaron, J., Zagul, H., & Emery, R. E. (1999). Posttraumatic stress in children following acute physical injury. *Journal of Pediatric Psychology*, 24(4), 335-343.
33. Berman, S. L., Kurtines, W. M., Silverman, W. K., & Serafini, L. T. (1996). The impact of exposure to crime and violence on urban youth. *American Journal of Orthopsychiatry*, 66(3), 329-336.
34. Ackerman, P. T., Newton, J. E. O., McPherson, W. B., Jones, J. G., & Dykman, R. A. (1998). Prevalence of post traumatic stress disorder and other psychiatric diagnoses in three groups of abused children (sexual, physical, and both). *Child Abuse & Neglect*, 22(6), 759-774.

3 General Considerations when Working with Children and Adolescents



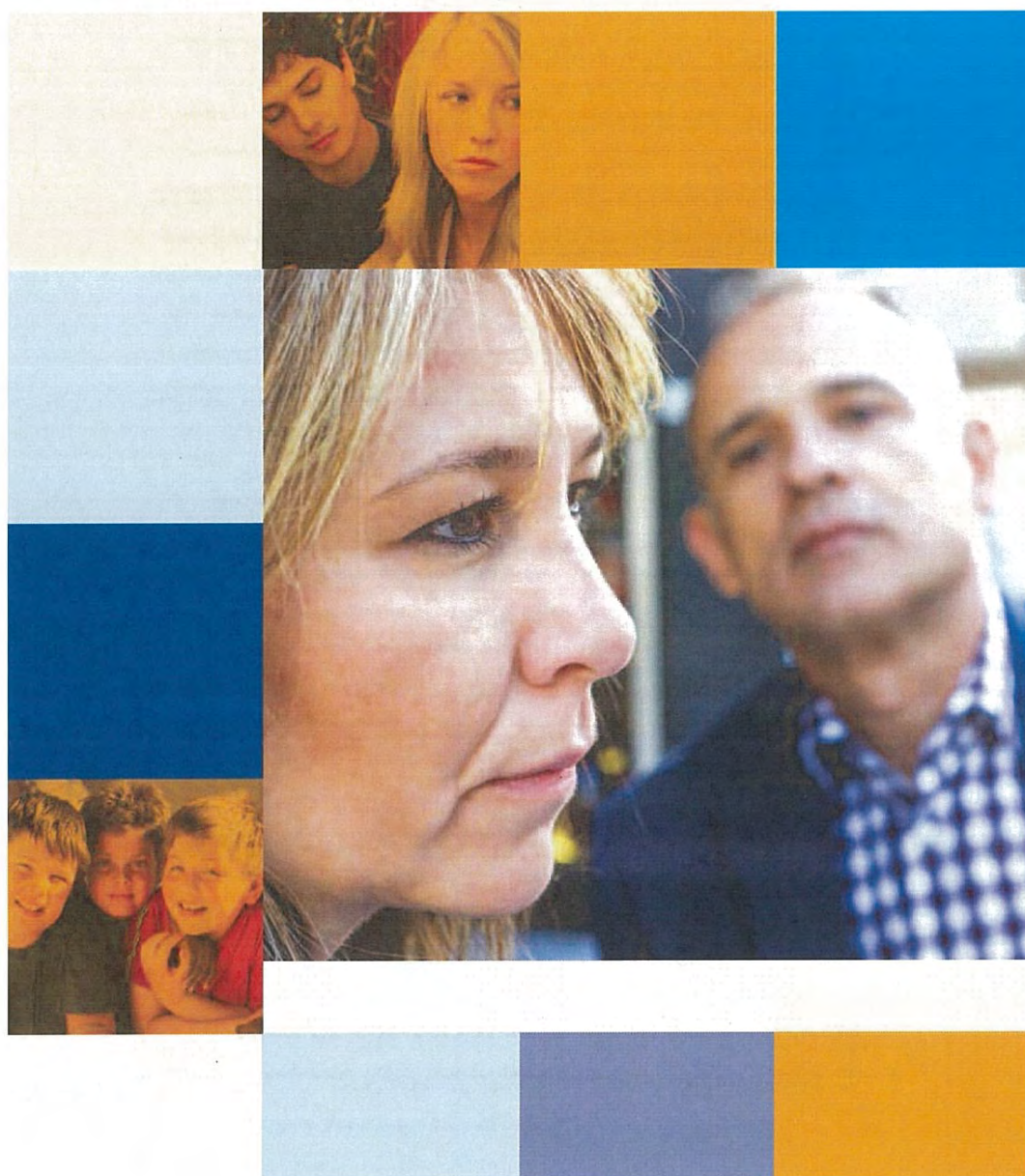
35. Clotfuss, E., Bunketorp, O., & Andersson, A. L. (2009). Children and adolescents injured in traffic-associated psychological consequences: A literature review. *Acta Paediatrica*, 98(1), 17-22. doi: 10.1111/j.1651-2227.2008.00988.x
36. Stallard, P., Salter, E., & Velleman, R. (2004). Posttraumatic stress disorder following road traffic accidents: A second prospective study. *European Child & Adolescent Psychiatry*, 13(3), 172-178.
37. Zink, K. A., & McCann, G. C. (2003). Post-traumatic stress disorder in children and adolescents with motor vehicle-related injuries. *Journal for Specialists in Pediatric Nursing*, 8(3), 99-106.
38. Bryant, B., Mayou, R., Wiggs, L., Ehlers, A., & Stores, G. (2004). Psychological consequences of road traffic accidents for children and their mothers. *Psychological Medicine*, 34(2), 335-346.
39. Fletcher, K. E. (1996). Childhood posttraumatic stress disorder. In E. J. Mash & R. Barkley (Eds.), *Child psychopathology* (pp. 242-276). New York: Guilford Press.
40. Scheeringa, M., & Zeanah, C. H. (2008). Reconsideration of harm's way: Onsets and comorbidity patterns of disorders in preschool children and their caregivers following Hurricane Katrina. *Journal of Clinical Child & Adolescent Psychology*, 37(3), 508-518.
41. Davis, L., & Siegel, L.-J. (2000). Posttraumatic stress disorder in children and adolescents: A review and analysis. *Clinical Child and Family Psychology Review*, 3(3), 135-154.
42. Reed, P. L., Anthony, J. C., & Breslau, N. (2007). Incidence of drug problems in young adults exposed to trauma and posttraumatic stress disorder - Do early life experiences and predispositions matter? *Archives of General Psychiatry*, 64(12), 1435-1442.
43. Yule, W., Bolton, D., Udwin, O., Boyle, S., O'Ryan, D., & Nunn, J. (2000). The long-term psychological effects of a disaster experienced in adolescence. I: The incidence and course of PTSD. *Journal of Child Psychology and Psychiatry*, 41(4), 503-511.
44. Bolton, D., O'Ryan, D., Udwin, O., Boyle, S., & Yule, W. (2000). The long-term psychological effects of a disaster experienced in adolescence. II: General psychopathology. *Journal of Child Psychology and Psychiatry*, 41(4), 513-523.
45. Mueser, K. T., & Taub, J. (2008). Trauma and PTSD among adolescents with severe emotional disorders involved in multiple service systems. *Psychiatric Services*, 59(6), 627-634.
46. Graham-Bermann, S. A., & Seng, J. (2005). Violence exposure and traumatic stress symptoms as additional predictors of health problems in high-risk children. *Journal of Pediatrics*, 146(3), 349-354.
47. Shemesh, E. (2004). Non-adherence to medications following pediatric liver transplantation. *Pediatric Transplantation*, 8(6), 600-605.
48. Scheeringa, M., Wright, M. J., Hunt, J. P., & Zeanah, C. H. (2006). Factors affecting the diagnosis and prediction of PTSD symptomatology in children and adolescents. *American Journal of Psychiatry*, 163(4), 644-651.
49. Scheeringa, M., Zeanah, C. H., Myers, L., & Putnam, F. W. (2005). Predictive validity in a prospective follow-up of PTSD in preschool children. *Journal of the American Academy of Child and Adolescent Psychiatry*, 44(9), 999-1006.
50. Scheeringa, M., Zeanah, C. H., Myers, L., & Putnam, F. W. (2005). Heart period and availability findings in preschool children with posttraumatic stress symptoms. *Biological Psychiatry*, 55(7), 685-691.
51. Yates, T. M., Dodd, M. F., Scoute, L. A., & Egeland, B. (2003). Exposure to partner violence and child behavior problems: A prospective study controlling for child physical abuse and neglect, child cognitive ability, socioeconomic status, and life stress. *Development and Psychopathology*, 15(1), 189-218. doi: 10.1017/S0954579403000117
52. McFarlane, A. C., & Van Hool, M. (2009). Impact of childhood exposure to a natural disaster on adult mental health: 20-year longitudinal follow-up study. *British Journal of Psychiatry*, 195(2), 142-148.
53. Morgan, L., Scourfield, J., Williams, D., Jasper, A., & Lewis, G. (2003). The Aberfan disaster: 33-year follow-up of survivors. *British Journal of Psychiatry*, 182, 532-536. doi: 10.1192/02-417
54. Trickey, D., Siddaway, A. P., Meiser-Stedman, R., Serpell, L., & Field, A. P. (2012). A meta-analysis of risk factors for post-traumatic stress disorder in children and adolescents. *Clinical Psychology Review*, 32(2), 122-138. doi: 10.1016/j.cpr.2011.12.001
55. Cobham, V., McDermott, B., & Sanders, M. R. (2012). *The development and evaluation of Disaster Recovery Triple P: After the disaster*. Paper presented at the Helping Families Change Conference, Glasgow.
56. Achenbach, T. M., Moenau, S. H., & Howell, C. T. (1987). Child / adolescent behavioral and emotional problems: Implications of cross-informant correlations for situational specificity. *Psychological Bulletin*, 101(2), 213-232.
57. Meiser-Stedman, R., Smith, P., Gluckman, E., Yule, W., & Dalgleish, T. (2007). Parent and child agreement for acute stress disorder, post-traumatic stress disorder and other psychopathology in a prospective study of children and adolescents exposed to single-event trauma. *Journal of Abnormal Child Psychology*, 35(2), 191-201.
58. Dyb, G., Holen, A., Braenne, K., Indredavik, M. S., & Aase, J. (2003). Parent-child discrepancy in reporting children's post-traumatic stress reactions after a traffic accident. *Nordic Journal of Psychiatry*, 57(5), 339-344. doi: 10.1080/08039480310002660
59. Shemesh, E., Newcorn, J. H., Rockmore, L., Schneider, B. L., Enrie, S., Gelb, B. D., ... Yehuda, R. (2005). Comparison of parent and child reports of emotional trauma symptoms in pediatric outpatient settings. *Pediatrics*, 115(5), E582-E589.
60. Stover, C. S., Hahn, H., Im, J. J. Y., & Berkowitz, S. (2010). Agreement of parent and child reports of trauma exposure and symptoms in the early aftermath of a traumatic event. *Psychological Trauma-Theory Research Practice and Policy*, 2(3), 159-168. doi: 10.1037/a0019185
61. Grills, A. E., & Olfendick, T. H. (2003). Multiple informant agreement and the Anxiety Disorders Interview Schedule for parents and children. *Journal of the American Academy of Child and Adolescent Psychiatry*, 42(1), 30-40. doi: 10.1097/01.Chi.0000024899.60748.Ee
62. Bal, S., de Bourdesaudhui, I., Crombez, G., & Van Oost, P. (2004). Differences in trauma symptoms and family functioning in intra- and extrafamilial sexually abused adolescents. *Journal of Interpersonal Violence*, 19(1), 108-123. doi: 10.1177/0886260503259053
63. Kaufman, J., Yang, B. Z., Douglas-Palumbi, H., Houshyar, S., Lipschitz, D., Krystal, J. H., & Gelernter, J. (2004). Social supports and serotonin transporter gene moderate depression in maltreated children. *Proceedings of the National Academy of Sciences of the United States of America*, 101(49), 17316-17321.
64. Hawkins, S. S., & Radcliffe, J. (2006). Current measures of PTSD for children and adolescents. *Journal of Pediatric Psychology*, 31(4), 420-430.
65. Steinberg, A. M., Brymer, M. J., Decker, K. B., & Pynoos, R. S. (2004). The University of California at Los Angeles Post-traumatic Stress Disorder Reaction Index. *Current Psychiatry Reports*, 6(2), 98-100.
66. Brewin, C. R., Rose, S., Andrews, B., Green, J., Tata, P., McEvedy, C., ... Foa, E. B. (2002). Brief screening instrument for post-traumatic stress disorder. *British Journal of Psychiatry*, 181, 158-162.
67. Achenbach, T. M., & Rescorla, L. A. (2001). *Manual for the ASEBA School-Age Forms & Profiles*. University of Vermont, Research Center for Children, Youth and Families, Burlington, VT.



68. March, S., De Young, A. C., Murray, B., & Kenardy, J. (2012). Assessment of posttraumatic stress in children and adolescents. In J. G. Beck & D. Slovic (Eds.), *The Oxford handbook of traumatic stress disorders* (pp. 262-281). New York: Oxford University Press.
69. Egger, H. L., & Angold, A. (2004). The Preschool Age Psychiatric Assessment (PAPA): A structured parent interview for diagnosing psychiatric disorders in preschool children. In R. DelCarmen-Wiggins & A. Carter (Eds.), *Handbook of infant, toddler, and preschool mental assessment* (pp. 223-243). New York: Oxford University Press.
70. Egger, H. L., Erkanli, A., Keeler, G., Potts, E., Walter, B. K., & Angold, A. (2006). Test-retest reliability of the Preschool Age Psychiatric Assessment (PAPA). *Journal of the American Academy of Child and Adolescent Psychiatry*, 45(5), 538-549. doi: 10.1097/01.chi.0000205705.71194.b8
71. Scheeringa, M., & Haselett, N. (2010). The reliability and criterion validity of the Diagnostic Infant and Preschool Assessment: A new diagnostic instrument for young children. *Child Psychiatry & Human Development*, 41(3), 299-312. doi: 10.1007/s10578-009-0169-2
72. Ghosh-Ippen, C., Ford, J., Rounsley, R., Acker, M., Bosquet, K., Rogers, C., & et al. (2002). *Trauma Events Screening Inventory - Parent Report Revised*. San Francisco: The Child Trauma Research Project of the Early Trauma Network and The National Centre for PTSD. Dartmouth Child Trauma Research Group.
73. Briere, J. (2005). *Trauma Symptom Checklist for Young Children (TSCYC)*. Odessa, FL: Psychological Assessment Resources.
74. Briere, J., Johnson, K., Bissada, A., Damon, L., Crouch, J., Gil, E., Ernet, V. (2001). The Trauma Symptom Checklist for Young Children (TSCYC): Reliability and association with abuse exposure in a multi-site study. *Child Abuse & Neglect*, 25(6), 1001-1014.
75. Gilbert, A. M. (2004). *Psychometric properties of the Trauma Symptom Checklist for Young Children (TSCYC)*. Dissertation Abstracts International. Section B: The Sciences & Engineering, 65(1-B), 478.
76. Ford, J. D., Rounsley, R., Ellis, C. G., Davies, W. B., Reiser, J., Fleischer, A., & Thomas, J. (2000). Child maltreatment, other trauma exposure, and posttraumatic symptomatology among children with oppositional defiant and attention deficit hyperactivity disorders. *Child Maltreatment*, 5(3), 205-217.
77. Newman, E., Weathers, F. W., Nader, K., Kaloupek, D. G., Pynoos, R., Blake, D. D., & et al. (2004). *Clinician-Administered PTSD Scale for Children and Adolescents (CAPS-CA)*. Los Angeles: Western Psychological Services.
78. Blake, D. D., Weathers, F. W., Nagy, L. M., Kaloupek, D. G., Klauminzer, G., Charney, D. S., & Keane, T. M. (1990). A clinician rating scale for assessing current and lifetime PTSD: The CAPS-1. *Behavior Therapist*, 187-188.
79. Saigh, P. A., Yask, A. E., Oberfeld, R. A., Green, B. L., Halamandaris, P. V., Rubenstein, H., . . . McHugh, M. (2000). The Children's PTSD Inventory: Development and reliability. *Journal of Traumatic Stress*, 13(3), 369-380.
80. Silverman, W. K., & Albano, A. M. (1996). *The Anxiety Disorders Interview Schedule for Children for DSM-IV: Child and Parent Versions*. San Antonio, TX: Psychological Corporation.
81. Kautman, J., Birmaher, B., Brent, D., Rao, U., Rynn, C., Moreci, P., Ryan, N. (1997). Schedule for Affective Disorders and Schizophrenia for School-Age Children - Present and Lifetime Version (K-SADS-PL): Initial reliability and validity data. *Journal of the American Academy of Child and Adolescent Psychiatry*, 36(7), 980-988.
82. Briere, J. (1996). *Trauma Symptom Checklist for Children (TSCC)*. Odessa, FL: Psychological Assessment Resources.
83. Lanktree, C. B., Gilbert, A. M., Briere, J., Taylor, N., Chen, K., Maida, C. A., & Saltzman, W. R. (2008). Multi-informant assessment of maltreated children: Convergent and discriminant validity of the TSCC and TSCYC. *Child Abuse & Neglect*, 32(6), 621-625.
84. Sadowski, C. M., & Friedrich, W. N. (2000). Psychometric properties of the Trauma Symptom Checklist for Children (TSCC) with psychiatrically hospitalized adolescents. *Child Maltreatment*, 5(4), 364.
85. Frederick, C. J., Pynoos, R., & Nader, K. (1992). *Childhood Post-Traumatic Stress Reaction Index*. Available from UCLA Department of Psychiatry and Biobehavioral Sciences, 760 Westwood Plaza, Los Angeles, CA 90024.
86. Pynoos, R. S., Rodriguez, N., Steinberg, A., Stuber, M. L., & Frederick, C. (1998). *UCLA PTSD Index for DSM-IV*. Los Angeles: UCLA Trauma Psychiatry Program.
87. Foa, E. B., Johnson, K. M., Feeny, N. C., & Treadwell, K. R. (2001). The Child PTSD Symptom Scale: A preliminary examination of its psychometric properties. *Journal of Clinical Child Psychology*, 30(3), 376-384.
88. Achenbach, T. M., & Edelbrock, C. S. (1983). *Manual for the Child Behavior Checklist and Revised Child Behavior Profile*. University Associates in Psychiatry.
89. McKay, M. M., Lynn, C. J., & Bannon, W. M. (2005). Understanding inner city child mental health need and trauma exposure: Implications for preparing urban service providers. *American Journal of Orthopsychiatry*, 75(2), 201-210.
90. Stein, B. D., Jaycox, L. H., Kataoka, S. H., Wong, M., Tu, W. L., Elliott, M. N., & Fink, A. (2003). A mental health intervention for schoolchildren exposed to violence: A randomized controlled trial. *Journal of the American Medical Association*, 290(5), 603-611.
91. Deblinger, E., Lippman, J., & Steer, R. (1996). Sexually abused children suffering posttraumatic stress symptoms: Initial treatment outcome findings. *Child Maltreatment*, 1(4), 310-321. doi: 10.1177/1077559596001004003
92. Runyon, M. K., Deblinger, E., & Steer, R. A. (2010). Group cognitive behavioral treatment for parents and children at-risk for physical abuse: An initial study. *Child & Family Behavior Therapy*, 32(3), 196-218. doi: 10.1080/07317107.2010.500515
93. Pfefferbaum, B., Nixon, S. J., Tucker, P. M., Trivis, R. D., Moore, V. L., Gurwitsch, R. H., & et al. (1999). Posttraumatic stress responses in bereaved children after the Oklahoma City bombing. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38, 1372-1379.
94. Cohen, J. A., & Mannarino, A. P. (1998). Factors that mediate treatment outcome of sexually abused preschool children: Six- and 12-month follow-up. *Journal of the American Academy of Child and Adolescent Psychiatry*, 37(1), 44-51.
95. Cohen, J. A., & Mannarino, A. P. (2000). Predictors of treatment outcome in sexually abused children. *Child Abuse & Neglect*, 24(7), 983-994.
96. Scheeringa, M., Weems, C. F., Cohen, J. A., Amaya-Jackson, L., & Guthrie, D. (2011). Trauma-focused cognitive-behavioral therapy for posttraumatic stress disorder in three-through six year-old children: A randomized clinical trial. *Journal of Child Psychology and Psychiatry*, 52(8), 853-860. doi: 10.1111/j.1469-7610.2010.02354.x
97. Ridsnes, E. S., & Idsøe, T. (2011). School-based intervention programs for PTSD symptoms: A review and meta-analysis. *Journal of Traumatic Stress*. doi: 10.1002/jts.20622
98. Jaycox, L. H., Cohen, J. A., Mannarino, A. P., Walker, D. W., Langley, A. K., Gegenheimer, K. L., Schonlau, M. (2010). Children's mental health care following Hurricane Katrina: A field trial of trauma-focused psychotherapies. *Journal of Traumatic Stress*, 23(2), 223-231. doi: 10.1002/jts.20518
99. Cohen, J. A., Jaycox, L. H., Walker, D. W., Mannarino, A. P., Langley, A. K., & DuClos, J. L. (2009). Treating traumatized children after Hurricane Katrina: Project Fleur-de Lis (TM). *Clinical Child and Family Psychology Review*, 12(1), 55-64.

3. General Considerations when Working with Children and Adolescents

66





Interventions

4

Please note that the interventions described in this section are those that are referenced in the systematic review of the literature; not all are recommended treatments. Interventions within each category are listed in alphabetical order.

A range of psychological and pharmacological interventions is currently used in the treatment of people with ASD and PTSD. The purpose of this chapter is to provide a brief summary of the most common interventions. In routine clinical practice, of course, these interventions do not occur in isolation but in the context of a trusting therapeutic relationship and, in many cases, broader mental healthcare for a range of associated posttraumatic mental health issues. They are also not mutually exclusive and the overall treatment may involve several of these interventions at various stages of the treatment process.

The systematic evidence review underpinning the development of these Guidelines investigated the full range of current treatments used for people with PTSD, people with ASD, and 'treatment for all' following exposure to a traumatic event. In this section, the main interventions are described with particular attention to those mentioned in any of the Guidelines recommendations. It is beyond the scope of these Guidelines to describe every intervention (including those with little or no empirical evidence base) and the interested reader is referred to the relevant literature.

This chapter begins with brief descriptions of pre-incident preparedness and interventions for all, before going on to discuss psychological interventions, pharmacological interventions, psychosocial rehabilitation, and physical therapies. These distinctions are somewhat arbitrary. Psychological first aid, for example, while usually considered an 'intervention for all' in the exposed populations, could be (and is) also offered as pre-incident preparedness training. Similarly, stress management (or stress inoculation), while considered below as a psychological treatment for PTSD, could also be used appropriately as pre-incident preparedness or an intervention for all.

Pre-incident preparedness

Pre-incident preparedness training

Very little has been written on pre-incident preparedness training and, as noted in the systematic review, there is little in the way of research evidence to suggest which elements may or may not be helpful. Nevertheless, it usually involves a broad range of strategies to enhance expectations of recovery and provide education about adaptive coping strategies to reduce the adverse impact of a traumatic experience.

Post-incident interventions for all

Psychological debriefing

The terms psychological debriefing and critical incident stress debriefing (CISD) are often used interchangeably. The former describes a class of interventions delivered shortly following a trauma (usually between 24 and 72 hours) that aim to relieve distress and facilitate a rapid return to normal functioning, thereby mediating or avoiding long-term psychopathology. Psychological debriefing operates on the principles of ventilation (an opportunity to talk about the experience), normalisation of distress, and psychoeducation regarding presumed symptoms. CISD, on the other hand, is a specific form of debriefing developed in the 1980s.¹ It centres predominantly around group-based interventions for secondary victims such as emergency services personnel, rather than primary victims. While generally group-based, it also advocates individual (or one-on-one) interventions as an acceptable and expected variant. It relies heavily on processes of reconstruction of the traumatic event, ventilation, and normalisation, and includes a structured education component. More recently, CISD has been amalgamated within a framework of self-help activities and structured organisational processes, called critical incident stress management (CISM).² Note that CISD and psychological debriefing differ from operational debriefing, a group process undertaken in high-risk industries to review a particular operation or activity. The aim of operational debriefing is to review the events and processes of the operation and to apply the lessons learnt to future events. Operational debriefing is considered good practice in high-risk industries as a method of improving service quality and is not a focus of these Guidelines.



Psychological first aid

Psychological first aid (PFA) seeks to reduce distress and attend to basic needs following a potentially traumatic event by providing simple interventions such as comfort, information, support, and practical assistance.³ There are eight core components of psychological first aid, as follows:

1. initiating contact and engaging with an affected person in a non-intrusive, compassionate and helpful manner
2. ensuring immediate and ongoing safety, and providing both physical and emotional comfort
3. stabilising survivors who are overwhelmed and distraught by providing reassurance and containment
4. gathering information in order to determine immediate priority needs and concerns, and to tailor subsequent PFA interventions
5. providing practical assistance in helping the survivor address immediate needs and concerns
6. connecting the survivor with social supports by helping to structure opportunities for brief or ongoing contacts with primary support persons and/or community helping services
7. providing information on coping, including education about stress reactions and coping (often in a written format)
8. linking the survivor with appropriate services and providing information about services that may be needed in the future.

Thus, the primary goal of PFA is to enhance an individual's natural resilience and coping ability in the face of trauma.

Stepped care

A stepped care model recognises that not all those exposed will develop a diagnosable disorder; many will experience only subthreshold symptoms and others will not experience significant symptomatology at all. Therefore, stepped care aims to ensure that individuals receive care commensurate with the severity and complexity of their need. The approach involves ongoing monitoring of people who are more distressed and/or at heightened risk of poor psychological adjustment, with increasingly intensive interventions delivered as indicated.

Psychological interventions for ASD and PTSD

Brief psychodynamic psychotherapy

Building on traditional psychotherapeutic approaches, psychodynamic therapy encourages the individual to use the supportive relationship with a therapist, and the transference that occurs within that relationship, to verbalise and reflect upon their experiences. This process allows unconsciously held thoughts, urges and emotions to be brought into conscious awareness, which in turn allows the cognitive, emotional and social aspects of experience to be integrated into a meaningful structure that helps the person to accept and adapt to their experiences. Brief models of psychodynamic psychotherapy have been developed for the treatment of PTSD following recent traumatic events. Brief psychodynamic therapy focusses on the emotional conflicts caused by a specific traumatic event. The patient is encouraged to put their experience into words and examine the meaning that the event and surrounding circumstances holds for them. Through this retelling, the therapist assists the individual to integrate the event and re-establish a sense of purpose and meaning in life.

Eye movement desensitisation and reprocessing

Another type of trauma-focussed psychological intervention is eye movement desensitisation and reprocessing (EMDR), a treatment for PTSD developed by Shapiro in the late 1980s. EMDR is based on the assumption that, during a traumatic event, overwhelming emotions or dissociative processes may interfere with information processing. This leads to the experience being stored in an 'unprocessed' way, disconnected from existing memory networks. In EMDR the person is asked to focus on trauma-related imagery, negative thoughts, emotions, and body sensations while simultaneously moving their eyes back and forth following the movement of the therapist's fingers across their field of vision for 20–30 seconds or more. This process may be repeated many times. It is proposed that this dual attention facilitates the processing of the traumatic memory into existing knowledge networks, although the precise mechanism involved is not known. (Forms of bilateral stimulation other than following a therapist's fingers, such as tapping, light bars, or auditory stimulation, have also been used. These will not be discussed further here since they have not been tested in the RCTs reported in the systematic literature review).



Over time, EMDR has increasingly included more treatment components that are comparable with the cognitive behavioural therapy (CBT) interventions described below. These include cognitive interweaving (analogous to cognitive therapy), imaginal templating (rehearsal of mastery or coping responses to anticipated stressors), and standard *in vivo* exposure. Combined with its initial inclusion of imaginal focus on traumatic images, EMDR now includes most of the core elements of standard trauma-focussed CBT (TF-CBT). In addition, the protocol has shifted from a single session treatment to eight phases of treatment with the above elements included, comparable in length to standard trauma-focussed CBT. The unique feature of EMDR is the use of eye movements as a core and fundamental component throughout treatment.

Group therapy

Group therapy is, of course, not an intervention *per se*, but rather a vehicle for delivering an intervention. Group therapies for PTSD have included supportive, psychodynamic and cognitive behavioural approaches (including exposure, cognitive processing therapy (CPT), problem-solving, etc.). Common features include: a relatively homogenous group membership, provision of mutual support, acknowledgement and validation of the traumatic experience, and normalisation of traumatic responses. The presence of other individuals with similar experiences may help to overcome a belief that the therapist cannot be helpful because he or she has not experienced the specific trauma. The group may also be used to promote a non-judgmental approach towards behaviour required for survival during the traumatic event.

Hypnosis

Hypnotherapy is the therapeutic application of hypnosis to various mental health problems. Hypnosis is achieved through an induction process and may be likened to a form of dissociation. The hypnotic state is characterised by heightened mental focus and suggestibility, allowing the therapist to implant suggestions that aid the individual in better controlling their symptoms. It is important to recognise that hypnosis is not an intervention in itself; rather, it is the induction of a state of relaxation and receptivity that (purportedly) makes interventions easier to implement. Thus, hypnosis in PTSD may be used as a precursor to several interventions including imagery, stress management techniques, ego strengthening self-talk, and exposure.

Imagery rehearsal

Imagery rehearsal therapy (IRT) is a cognitive behavioural approach for the treatment of chronic trauma-related nightmares. IRT involves the person recalling the dream and then changing the imagery of the dream in such a way that the new version is not upsetting and that increases their sense of mastery or control. The individual then rehearses the changed imagery in their imagination, particularly just before going to bed.

Interapy

Interapy is a broad term applied to a range of internet-mediated therapies. Although some web-based interventions operate as purely self-help approaches with no therapist involvement, in most cases there is some limited contact between the therapist and the individual with PTSD via a computer. This approach is likely to be particularly useful for people living in remote areas, for those who are physically disabled and have restricted mobility, or who are unwilling to seek face-to-face therapy due to anxiety or fear of stigmatisation. Web-based treatment for PTSD usually includes psychoeducation, symptom management, exposure, and cognitive reappraisal, all of which involve structured writing assignments that can be submitted to the therapist for feedback.

Interpersonal therapy

Interpersonal therapy (IPT) is a time-limited therapy that was originally designed for the treatment of depression. IPT considers that interpersonal relationships are important to the formation and maintenance of psychological problems due to a strong relationship between symptoms and social environment, that is, interactions with other people affect psychological wellbeing and vice versa. IPT focusses on identifying specific problems and patterns in personal relationships, and on building skills to improve interpersonal functioning and increase social support. It may include addressing grief over lost relationships, different expectations in relationships, changing roles in relationships, and improving social skills.

Mindfulness-based therapies

Mindfulness-based therapies are considered part of the 'third-wave' of cognitive and behavioural psychotherapies, and include acceptance and commitment therapy (ACT), mindfulness-based cognitive behavioural therapy (MCBT) and mindful meditation. Although relatively new to Western approaches, mindfulness has a long history of practice in Eastern philosophies (e.g., Buddhism, Taoism and Yoga). Mindfulness can be defined as 'paying attention in a particular way: on purpose, in the present moment, and non-judgmentally'.⁵





Narrative exposure therapy

Narrative exposure therapy (NET) is a standardised short-term intervention adapted from testimony therapy (traditionally used with survivors of torture and civilian casualties of war), as well as from mainstream exposure approaches. It was originally developed both to treat survivors and to document human rights violations. In NET, the person is asked to construct a narrative of their life from early childhood to present, focussing in detail on the traumatic events and elaborating on the associated thoughts and emotions. It is proposed that NET works in two ways: promoting habituation to traumatic memories through exposure, and reconstructing the individual's autobiographic memory.

Stress management

The term *stress management* is used here to cover a broad range of non-trauma-focussed cognitive, behavioural and physiological techniques aimed at reducing levels of arousal and modifying lifestyle factors that contribute to an individual's level of stress or anxiety. The application of stress management to PTSD aims to reduce arousal symptoms and address the impact of anxiety and avoidance symptoms on the individual's lifestyle. Core components of stress management used in PTSD may include: a) physical strategies such as relaxation training, controlled breathing (to counter hyperventilation), aerobic exercise, sleep hygiene and diet; b) cognitive strategies such as adaptive coping self-statements for use when confronting feared or avoided situations, distraction techniques and thought stopping; and c) behavioural strategies such as structuring daily routines, increasing enjoyable activities and utilising social support.

Supportive counselling and present centred therapy

Supportive counselling, another non-trauma-focussed approach, focusses on aspects of a person's current life situation with a view to addressing and solving current issues or problems. In PTSD, supportive counselling addresses problems arising from posttraumatic psychopathology as well as other general life circumstances. It aims to help the individual better understand and help themselves through the application of practical problem-solving and coping strategies. The level of therapist direction and advice varies in supportive counselling. One variant of supportive counselling is present centred therapy. These approaches are often used as comparison conditions in randomised controlled trials.

Trauma-focussed cognitive behavioural therapy

The term *trauma-focussed cognitive behavioural therapy* (TF-CBT) is a subset of trauma-focussed psychological treatment. Although it often includes psychoeducation and symptom management strategies (notably arousal reduction), the two core interventions under the rubric of TF-CBT for PTSD are exposure and cognitive restructuring. Thus, TF-CBT strategies are derived from behavioural and cognitive theories. These are short-term, structured psychological interventions that aim to address the emotional, cognitive and behavioural sequelae of exposure to traumatic events.

Although the following intervention types are described separately, there is much overlap and experienced clinicians often use combinations in routine clinical practice. A common approach, for example, would be to use psychoeducation, anxiety management, exposure, cognitive restructuring, and relapse prevention to treat PTSD. Eye movement desensitisation and reprocessing incorporates many of these elements also, and EMDR practitioners will often add *in vivo* exposure to their intervention.

Exposure therapy

Exposure therapy has long been established as an effective treatment for a range of anxiety disorders. The key objective of exposure therapy is to help the person confront the object of their anxieties. A fundamental principle underlying the process of exposure is that of *habituation*, the notion that if people can be kept in contact with the anxiety-provoking stimulus for long enough, their anxiety will inevitably reduce. This may occur within an exposure session (within-session habituation) or across a series of sessions (between-session habituation). More contemporary models emphasise information processing as a key mechanism. Exposure therapy, starting with the early desensitisation treatments with veterans conducted by Keane and colleagues and then developed by Foa's group into prolonged exposure (PE), has become the cornerstone of psychological treatment of PTSD. Exposure therapy for PTSD involves confronting the memory of traumatic experiences in a controlled and safe environment (imaginal exposure), as well as confronting trauma-related avoided situations and activities through *in vivo* exposure. The importance of grading the exposure (often using a hierarchy), prolonging the exposure until the anxiety has reduced, and repeating the exposure item until it evokes minimal anxiety are central to traditional exposure approaches.



Cognitive therapy

Beck introduced cognitive therapy (CT) as a treatment for depression in the 1970s, and several others were promoting similar approaches around the same time (e.g., Ellis, Meichenbaum). Since then, it has been successfully used in the treatment of a range of other emotional disorders including anxiety disorders and, to some extent, the psychoses and personality disorders (see Beck⁶ for an overview). In the treatment of PTSD, cognitive therapy helps the individual to identify, challenge and modify any biased or distorted thoughts and memories of their traumatic experience, as well as any subsequent maladaptive or unhelpful beliefs about themselves and the world that they may have developed.

Cognitive processing therapy

A particular form of cognitive therapy refined specifically for the treatment of PTSD is cognitive processing therapy.⁷ CPT appeared as a 12-session cognitive-behavioural manualised treatment for PTSD that systematically addresses key posttraumatic themes, including safety, trust, power and control, self-esteem and intimacy. Treatment helps the person to identify unhelpful thoughts and beliefs ('stuck points'), challenge them, and replace them with rational alternatives in an adaptation of standard cognitive therapy approaches. The systematic manner in which CPT identifies key themes and issues associated with reactions to the trauma makes it highly suitable for addressing the more complex psychiatric sequelae emerging from recent military conflicts. It has a smaller exposure component than imaginal exposure therapy (restricted to writing an account of the experience) and is therefore potentially more acceptable to veterans or practitioners seeking alternatives to purely exposure-focussed treatments. It also has the advantage of helping to address associated problems such as depression, guilt and anger.

Alternative approaches

Several novel treatments for PTSD have been promoted as working much more rapidly than standard treatments, although properly controlled studies are generally lacking at this point. These are sometimes collectively known as "power therapies". The most well known of these is emotion freedom techniques (EFT). EFT requires the client to focus on the traumatic memory while the therapist (or patient) taps lightly on various traditional acupuncture meridian points on the face, upper body and hands. Underlying EFT is the assumption that emotional disturbances associated with traumatic events are caused by disturbances in the body's energy field (meridian system) that can be restored using this technique. Other related approaches include thought field therapy (TFT), visual-kinaesthetic dissociation (VKD) and traumatic incident reduction (TIR). Another alternative approach, the counting method, was developed by Ochberg.⁴ This method involves the therapist counting out loud from 1 to 100 as the patient goes through the traumatic memory from start to finish in their mind. The counting itself is considered a way of assisting the patient to maintain focus on the traumatic memory and impede avoidance. Readers interested in any of these approaches are encouraged to consult the relevant literature.

Pharmacological interventions for PTSD

Pharmacological treatments (medications) used in PTSD are intended to ameliorate symptoms and, as a result, improve function. When the person is less symptomatic it may be easier to 'work through' or confront the traumatic memories in line with normal recovery processes. Medication is often used in combination with psychological treatment. A wide range of psychotropic (affecting a person's mental state) medications have been examined and used in clinical practice to treat PTSD. Of these, most are the focus of only one trial (if that), with the only group of drugs having a substantial body of research evidence being the selective serotonin reuptake inhibitor (SSRI) antidepressants.

Antidepressants

There are many different classes of antidepressant medication and a full description is beyond the scope of this chapter. Brief reference only will be made to those classes that have been used in the treatment of PTSD.

Often referred to as the 'new generation antidepressants', the SSRIs are the most widely used class in PTSD (and more generally), and the class that has the strongest research base. Common agents include fluoxetine, sertraline, paroxetine, and escitalopram, but there are several others. Although they have several possible side effects, they tend to have fewer than the older antidepressants, are relatively easy to use, and are relatively safe in overdose.

Since the SSRIs came onto the market, several other new generation antidepressants have appeared. The other common classes are: serotonin-noradrenaline reuptake inhibitors (SNRIs, e.g., venlafaxine); selective noradrenaline reuptake inhibitors (NRIs); noradrenaline-dopamine reuptake inhibitors (NDRIs); and noradrenergic and specific serotonergic antidepressants (NaSSAs).

The monoamine oxidase inhibitor (MAOI) antidepressants have been around for a long time. The best known of the older MAOIs is phenelzine, a drug that has been used in PTSD. The main problem with MAOI antidepressants is that they are very difficult to use and require careful dietary restrictions. More recently, a new type of MAOI has been developed, known as a reversible inhibitor of monoamine oxidase (RIMA, e.g., moclobemide), which is easier to use and does not require the dietary restrictions.



The other most common older class of antidepressant medications is the tricyclic antidepressants (TCAs, e.g., imipramine). These have been used with some success in PTSD in the past, but are less commonly used now and tend to be unsafe in overdose.

Atypical antipsychotics

The new generation of antipsychotic medications, usually known as 'atypical antipsychotics', are sometimes used as adjunctive pharmacotherapy in PTSD to supplement other medications in complex and treatment resistant cases. Commonly used antipsychotics in Australia include olanzapine, quetiapine, clozapine, and risperidone. They are designed to treat the agitation often seen in more chronic and complex PTSD presentations.

Hypnotosedative agents

Another type of psychotropic medication that may be used to treat PTSD and related symptoms includes hypnotosedative agents that are designed to reduce anxiety and treat insomnia. They are, therefore, drugs that have both sedative (quietening, tranquilising) and hypnotic (sleep-producing) effects. The group includes benzodiazepines (e.g., diazepam, temazepam, alprazolam), barbiturates (now only used in rare circumstances), and other sleeping medications.

Other medications

Although generally not supported by empirical data, several other classes of medication are often used in PTSD. Mood stabilisers are used to treat intense and sustained mood shifts; bipolar disorder is the primary example, but some people with chronic PTSD also show intense alterations in mood. Common mood stabilisers in Australia include carbamazepine and topiramate. Although originally developed for the treatment of epileptic seizures, anticonvulsants also appear to have mood stabilising properties and are occasionally used in PTSD.

Medications that are not traditionally considered to be psychotropic have also been borrowed from other areas of medicine to target specific PTSD symptoms. The most commonly used of these are medications that alter adrenergic function. These include beta-blockers (e.g., propranolol), alpha-1 adrenergic agonists (e.g., prazosin), and alpha-2 adrenergic agonists (e.g., clonidine). These drugs may be useful in reducing physiological arousal. A final example of a non-psychotropic medication that has been used to treat PTSD symptoms is the older antihistamine medicines.

Psychosocial rehabilitation interventions for PTSD

Traditionally, psychosocial rehabilitation interventions are used to facilitate independent living, socialisation, and effective life management in people who have chronic mental health conditions including PTSD.⁸ Psychosocial interventions help an individual compensate for the negative effects of disability by reducing some of the problems associated with PTSD, such as lack of self-care/independent living skills, homelessness, high-risk behaviours, interactions with family or friends who do not understand PTSD, social inactivity, unemployment, and other barriers to receiving various forms of treatment/rehabilitation.⁹ Components of psychosocial rehabilitation include social skills training and activities, job skills training, housing support, vocational rehabilitation, case management, and family support.⁸

Psychosocial rehabilitation often occurs alongside other treatments, but rather than aiming to reduce symptoms, it is designed to promote community integration and improved functioning.

There is increasing recognition that rehabilitation interventions that promote optimal vocational, family and social functioning should routinely begin in the earliest phase of care rather than being reserved for chronic conditions. For an individual with PTSD, this would entail early psychoeducation of the individual and family members, maximising existing social supports or creating new ones, and providing vocational support to enable the individual to maintain their optimal work/study performance.

Social emotional rehabilitation

Social emotional rehabilitation (SER) was designed as part of therapy specifically for veterans, and has three components. The first component is social skills training, which focusses on practising basic conversational skills, particularly those important for creating and maintaining social networks. The second component is anger management and problem-solving skills training which was designed to reduce temper outbursts by introducing alternative ways of expressing anger, teaching problem-solving and emotion regulation skills, as well as teaching veterans how to communicate assertively in a non-threatening way. The third component is veterans' issues management. In this component, veterans are taught how to talk to civilians about combat trauma and other military issues in a way that fosters understanding of these issues by the veteran's significant others. They are also taught to identify and challenge negative and dichotomous thinking (e.g., the notion that all civilians will not understand them/ cannot be trusted because they have not been to war), which limits their social connections with others.



Vocational rehabilitation

A common focus of psychosocial rehabilitation will be vocational, helping the person with PTSD return to an optimal level of functioning. Although the goal for many will be paid employment, it does not have to be the only goal. Voluntary work, study, and other key roles in society such as parenting, are all a valid focus for vocational rehabilitation.

Depending on the current level of functioning, interventions may involve support to stay in the person's current role or employment, and/or to return to that role in a supported and graded fashion. In other cases, it may be a longer process, potentially involving retraining, with a view to finding meaningful occupation for the person. The benefits of work and related activities are well established¹⁰ – provided that the workplace is not 'psychologically toxic' for the person. Psychosocial rehabilitation helps the person to regain the best possible level of social functioning and occupational functioning, which is so fundamental to quality of life.

Physical therapies for PTSD

Acupuncture

Acupuncture is an alternative medicine that treats patients by manipulating thin, solid needles that have been inserted into acupuncture points in the skin. According to traditional Chinese medicine, stimulating these points can correct imbalances in the flow of energy through channels known as meridians. The use of acupuncture for certain conditions (e.g., several types of pain, nausea, osteoarthritis of the knee) has been endorsed by the United States National Institutes of Health, the National Health Service of the United Kingdom, and the World Health Organisation. There is general agreement that acupuncture is safe when administered by well-trained practitioners using sterile needles, and carries a very low risk of serious adverse effects.

Repeated transcranial magnetic stimulation

An innovative and relatively new treatment that has shown some promise in depression has also been considered for the treatment of PTSD. Repeated transcranial magnetic stimulation (rTMS) involves the application of a pulsing high intensity current through an electromagnetic coil placed on the side of the head. Although immediate comparisons may be drawn with electroconvulsive therapy (ECT), the two procedures are completely different in application and in the effect on the patient. rTMS is a pain-free, non-invasive technique for stimulating cortical neurons which may assist in reducing the symptoms of various conditions, including PTSD.¹¹

Interventions for children and adolescents

Most of the above interventions have been applied with children and adolescents, sometimes with minor adjustments, although few have been the subject of rigorous evaluation with that population. The purpose of this section is to provide additional information specific to this age group.

Cognitive behavioural intervention for trauma in schools

Cognitive behavioural intervention for trauma in schools (CBITS) includes most of the PRACTICE components of the TF-CBT program of Cohen et al. (see below)¹² It can be administered in either a group or individual format, does not typically include a parent component, and perhaps most importantly, is implemented in schools. It comprises ten group sessions and one to three individual sessions, and is specifically designed to be used in schools. CBITS provides a teacher component designed to educate teachers about the potential impact of trauma exposure on children's classroom behaviour and learning. In CBITS, the trauma narrative is developed and explored in individual sessions.

Psychodynamic trauma-focussed psychotherapies

Designed for younger children (three to five years of age in trials conducted to date), child-parent psychotherapy (CPP)¹³ is a relationship-based treatment developed for young children exposed to domestic violence. CPP integrates elements of psychodynamic, attachment, trauma, cognitive-behavioural, and social learning theories. The child-parent relationship is viewed as the key mechanism for change in improving the child's emotional, social and cognitive functioning. The therapy focusses on safety, the joint construction between parent and child of a trauma narrative, affect regulation, and behavioural activation. Children and parents are seen together and individual sessions with the mother are scheduled as necessary. The following domains of functioning are targeted by the intervention: play; sensorimotor disorganisation and disruption of biological rhythms; fearfulness; recklessness, self-endangering and accident-prone behaviour; aggression; punitive and critical parenting; the child's relationship with the perpetrator of the violence and/or the absent father; and separation issues related to therapy termination.¹⁴





Trauma-focussed cognitive behavioural therapy

Silverman and colleagues¹⁶ reviewed psychological treatments for youth exposed to traumatic events using criteria for establishing empirically supported therapies developed by Chambless and colleagues.^{16,17} Trauma-focussed cognitive behavioural therapy was the only treatment to meet these well-established criteria.

Although many different programs and protocols exist, the version of TF-CBT that is most well-known is the intervention developed by Cohen et al.¹² This program has been widely researched, and disseminated internationally (including through a web-based training program maintained by the Medical University of South Carolina; this high quality TF-CBT training program is free of charge). This program has been manualised and consists of a highly structured intervention in which parents and children are seen conjointly in 90-minute weekly sessions. The clinician works through eight standard components with the parent and child, adapting the pace and focus to meet the client's needs. The intervention is based on the acronym PRACTICE, with the eight components comprising:

Psychoeducation: educating parents and children about the type of traumatic event experienced (e.g., how common exposure to this type of event is), common trauma reactions, and the TF-CBT approach, as well as parenting skills (e.g., use of effective parenting interventions such as positive attention, praise, selective attention, time out, etc.)

Relaxation: controlled breathing, progressive muscle relaxation

Affective modulation skills: identification of feelings, positive self-talk, thought stopping, positive imagery, problem-solving, and self-regulation of negative affective states

Cognitive coping and processing: recognising the relationship between thoughts, feelings and behaviours; monitoring and changing inaccurate, unhelpful thoughts

Trauma narrative development and processing: creating a narrative of the child's trauma experience and helping the child to correct cognitive distortions related to this experience

In vivo exposure: gradual exposure to feared, trauma-related stimuli

Conjoint parent/child sessions: in which the child shares their trauma narrative with their parent(s), and other family issues are addressed

Enhancing safety/future development: addressing concerns related to prevention of future trauma and a return to a normal developmental trajectory.

Completion of the PTSD module of the Kiddie Schedule for Affective Disorders and Schizophrenia for School-Aged Children – Parent and Lifetime Version (K-SADS-PL) interview¹⁸ is also part of the TF-CBT protocol.

Scheeringa and colleagues have recently reported on the development and evaluation of a TF-CBT program for three-to-six-year-old children with PTSD.¹⁹ The program is described as highly structured and consists of 12 sessions. Specific therapy strategies include psychoeducation about PTSD, recognition of feelings, training in coping skills, graduated exposure to trauma-related reminders using three modalities (drawings, imaginal and *in vivo*), and safety planning. The primary caregiver sits in on sessions 1, 2 and 12. Caregivers observe the remaining sessions on a TV monitor in order to become familiar with the material being taught to their children. Sessions 3–11 are split into two halves, with the therapist working with the child in the first half (observed by caregivers), and the therapist working with the caregiver in the second half of the session. This second half of the session was used by therapists to obtain caregivers' assistance in making sense of children's words and body language, as well as to discuss and problem-solve around homework tasks.

Summary

As noted above, many of the approaches described earlier in this chapter with reference to adults, have also been used with children. These include EMDR, stress management, and pharmacotherapy, to name but a few. In most cases, however, these treatments have not been studied systematically in the treatment of PTSD in children and adolescents, and/or the details of the approach taken – to the point that it can be reliably replicated – have not been provided.



References

1. Mitchell, J. T. (1983). When disaster strikes: The critical incident stress debriefing process. *Journal of Emergency Medical Services*, 8, 36-39.
2. Everly, G. S., Jr., & Mitchell, J. T. (1996). Prevention of work-related posttraumatic stress: The critical incident stress debriefing process. In L. R. Murphy, J. J. Hurrell, Jr., S. L. Sauter & G. P. Keita (Eds.), *Job stress interventions* (pp. 173-183). Washington DC: American Psychological Association.
3. National Child Traumatic Stress Network and National Center for PTSD. (2006). *Psychological first aid: Field operations guide* (2nd ed.). National Child Traumatic Stress Network and National Center for PTSD.
4. Ochsberg, F. M. (1996). The counting method for ameliorating traumatic memories. *Journal of Traumatic Stress*, 9(4), 873-880.
5. Kabat-Zinn, J. (1994). *Wherever you go, there you are*. New York: Hyperion.
6. Beck, A. T. (2005). The current state of cognitive therapy: A 40-year retrospective. *Archives of General Psychiatry*, 62(9), 953-959.
7. Resick, P. A., Monson, C. M., & Chard, K. M. (2007). *Cognitive processing therapy: Veteran/military version*. Washington, DC: Department of Veterans Affairs.
8. Weinstein, D., & Hughes, R. (2000). Understanding severe and persistent mental illness. In R. Hughes & D. Weinstein (Eds.), *Best practices in psychosocial rehabilitation* (pp. 35-62). Columbia: International Association of Psychosocial Rehabilitation Services.
9. Department of Veterans Affairs/Department of Defence. (2004). *VA/DoD clinical practice guideline for the management of posttraumatic stress*, version 1.0. Washington DC: Veterans Health Administration, Department of Defence.
10. Royal Australasian College of Physicians. (2010). *Australasian Faculty of Occupational and Environmental Medicine position statement on realising the health benefits of work*. Sydney: RACP.
11. Grisar, N., Amir, M., Cohen, H., & Kaplan, Z. (1998). Effect of transcranial magnetic stimulation in posttraumatic stress disorder: A preliminary study. *Biological Psychiatry*, 44(1), 52-55.
12. Cohen, J. A., Mannarino, A. P., & Deblinger, E. (2006). *Treating trauma and traumatic grief in children and adolescents*. New York: Guilford Press.
13. Lieberman, A. F., & Van Horn, P. (2005). *Don't hit my mommy!: A manual for child-parent psychotherapy with young witnesses of family violence*. Washington, D.C.: Zero to Three.
14. Lieberman, A. F., Van Horn, P., & Ippen, C. G. (2005). Toward evidence-based treatment: Child-parent psychotherapy with preschoolers exposed to marital violence. *Journal of the American Academy of Child and Adolescent Psychiatry*, 44(12), 1241-1248.
15. Silverman, W. K., Ortiz, C. D., Viswesvaran, C., Burns, B. J., Kolko, D. J., Putnam, F. W., & Amaya-Jackson, L. (2006). Evidence-based psychosocial treatments for children and adolescents exposed to traumatic events. *Journal of Clinical Child and Adolescent Psychology*, 37(1), 155-183.
16. Chambless, D. L., & Hollon, S. D. (1998). Defining empirically supported therapies. *Journal of Consulting and Clinical Psychology*, 66(1), 7-18.
17. Chambless, D. L., Sanderson, W. C., Shoham, V., Bennett Johnson, S., Pope, K. S., Critt-Christoph, P., McCurry, S. (1996). An update on empirically validated therapies. *Clinical Psychologist*, 49, 5-18.
18. Kaufman, J., Birmaher, B., Brent, D., Rao, U., Flynn, C., Moreci, P., Ryan, N. (1997). Schedule for Affective Disorders and Schizophrenia for School-Age Children - Present and Lifetime Version (K-SADS-PL): Initial reliability and validity data. *Journal of the American Academy of Child and Adolescent Psychiatry*, 36(7), 980-988.
19. Scheeringa, M., Weems, C. F., Cohen, J. A., Amaya-Jackson, L., & Guthrie, D. (2011). Trauma-focused cognitive-behavioral therapy for posttraumatic stress disorder in three-through six year-old children: A randomized clinical trial. *Journal of Child Psychology and Psychiatry*, 52(8), 853-860. doi: 10.1111/j.1469-7610.2010.02354.x