BMJ

BMJ 2012;344:e3790 doi: 10.1136/bmj.e3790 (Published 25 June 2012)

PRACTICE

EASILY MISSED?

Post-traumatic stress disorder

Ruth V Reed *specialty registrar in child and adolescent psychiatry*[1], Mina Fazel *NIHR postdoctoral research fellow*[2], Lorna Goldring *general practitioner*[3]

[1]Oxford Health NHS Foundation Trust, Warneford Hospital, Oxford OX3 7JX, UK; [2]Oxford University Department of Psychiatry, Warneford Hospital, Oxford; [3]Portobello Surgery, Edinburgh EH15 2AW

This is one of a series of occasional articles highlighting conditions that may be more common than many doctors realise or may be missed at first presentation. The series advisers are Anthony Harnden, university lecturer in general practice, Department of Primary Health Care, University of Oxford, and Richard Lehman, general practitioner, Banbury. To suggest a topic for this series, please email us at easilymissed@bmj.com

A 37 year old woman presented to her general practitioner with a two month history of low mood, poor sleep, and irritability. She was initially treated for depression with sertraline. Her mood improved slightly over six weeks, but, because of continued insomnia and irritability, her medication was changed to citalopram, with no further improvement. Through regular review and the building of a trusting relationship with her doctor, the patient felt able to disclose that she was experiencing intrusive images of past domestic violence. She was diagnosed with post-traumatic stress disorder and referred for trauma-focused cognitive behavioural therapy; over 15 sessions, this led to a substantial reduction in her symptoms.

What is post-traumatic stress disorder?

Post-traumatic stress disorder (PTSD) is a severe, prolonged, and impairing psychological reaction to a distressing event. The precipitating incident must be "exceptionally threatening or catastrophic"[1] and can range from interpersonal violence and combat to accidents and natural disasters; sexual violence is a particularly potent cause.[2] Serious illnesses or medical interventions can also precipitate PTSD if the individual perceived their own or someone else's health or life to be under threat. The individual repeatedly relives the event through intrusive imagery, bodily re-experiencing, nightmares, and flashbacks. Irritability, insomnia, and other symptoms related to increased arousal also occur. Sufferers usually have difficulty remembering aspects of the event and avoid reminders of it (see box of diagnostic criteria). Children may act out the traumatic event through repetitive play, drawings, and stories, and have frightening dreams without recognisable content.[3] Adolescents with PTSD can show aggressive or withdrawn behaviour and can find it difficult to relate to their peers.

Why is it missed?

A survey of London general practitioners indicated that most significantly underestimate the prevalence of PTSD among their patients compared with what is expected from epidemiological data.[11] Many were unfamiliar with guidelines, and referral rates for psychological therapy were low.[11] After the 2005 London bombings, a screening and treatment programme for PTSD received only 14 referrals from GPs, but identified 184 additional severe cases.[12] There are several reasons why PTSD is underdiagnosed or misdiagnosed. About 80% of PTSD cases are comorbid with other conditions, including depression, panic attacks, substance misuse, and personality disorders.[2] Comorbid disorders are often erroneously treated as the sole or primary diagnosis. Patients might not volunteer re-experiencing symptoms because of shame or distress,[13] yet specific inquiries about such features are only made infrequently once a comorbid condition has been diagnosed.

Culture and language are additional barriers to the correct diagnosis. Some patients primarily express distress through somatic symptoms, and the psychological component can be missed.[13] Descriptions of intrusive imagery and auditory re-experiencing can be misinterpreted as psychotic symptoms in patients with limited English.

Why does this matter?

Most treatments for anxiety or depression will be of limited effectiveness for PTSD, and patients might be incorrectly assumed to have a treatment-resistant anxiety or mood disorder. Although some sufferers remit without treatment, especially within the first year, others develop chronic symptoms and comorbid conditions[2] and are at increased risk of suicide.[14] Secondary adversities such as unemployment and separation can arise.[13] PTSD in children can have long term negative

Correspondence to: R V Reed ruth.reed@psych.ox.ac.uk

Diagnostic criteria for post-traumatic stress disorder (ICD-10 (international classification of diseases, 10th revision) classification of mental and behavioural disorders[1])

A. Exposure to a stressful event or situation of an exceptionally threatening or catastrophic nature, which is likely to cause pervasive distress in almost anyone

B. Persistent remembering or "reliving" of the stressor by flashbacks, vivid memories, recurring dreams, or by experiencing distress when exposed to reminders

C. Actual or preferred avoidance of reminders of the stressor

D. Either:
(1) Inability to recall, either partially or completely, some important aspects of the period of exposure to the stressor

(2) Two or more newly arising persistent symptoms of hyperarousal—difficulty in falling or staying asleep, irritability or outbursts of anger, difficulty in concentrating, hypervigilance, exaggerated startle response

For diagnosis, criteria A, B, C, and D should all be met within 6 months of the stressful event; delayed onset PTSD can be diagnosed after this time

How common is post-traumatic stress disorder?

- Post-traumatic stress disorder (PTSD) occurs in both adults and children
- Prevalence varies substantially between countries and contexts, being affected by differing rates of domestic, community, and organised violence, as well as rates of accidents and natural disasters
- In most contexts, PTSD is slightly more common in women than men[2 4]
- A typical estimated 12 month prevalence of PTSD is around 1-3% in adults and adolescents[4-7]
- The prevalence in childhood has been less well studied, and, although it seems lower, PTSD is underestimated in young children by parent report alone and by using adult oriented criteria.[3] A large British survey found a prevalence of 0.14% in 5–15 year olds[8]
- In populations exposed to conflict and in refugee adults and children, prevalence is typically 10–30%[5 9 10]

consequences for psychosocial development and education; children's health and development can also be negatively affected by parental PTSD.[15]

How is post-traumatic stress disorder diagnosed?

PTSD is diagnosed by assessing the patient's symptoms against psychiatric diagnostic criteria in ICD-10[1] (see box) or DSM-IV (diagnostic manual of mental disorders, fourth edition),[16] although these are to be substantially revised in forthcoming editions.[3] A careful chronological symptom history is key, and patients should be offered time alone, whatever their sex or age. For patients with atypical or apparently treatment resistant mood or anxiety disorders, or unexplained physical symptoms, clinicians should consider asking about potentially traumatic events such as assault, accidents, and complicated childbirth.[12] The 10 item Trauma Screening Questionnaire is a useful, validated, freely available tool to elicit symptoms of PTSD.[17]

How is post-traumatic stress disorder managed?

The National Institute for Health and Clinical Excellence (NICE) guideline for PTSD covers recommended treatment strategies for all ages.[13] This and other major guidelines, based on systematic reviews of randomised controlled trials, concur that psychological interventions that include some exposure to reminders of the traumatic event are effective for both children and adults.[18] These include trauma-focused cognitive behavioural therapy or eye movement desensitisation and reprocessing. In adults for whom these psychological therapies are not appropriate or are ineffective, paroxetine or mirtazepine may be offered in either primary or secondary care. Specialist psychiatric management is indicated if there are complex comorbidities, significant risk concerns, or a poor treatment response. PTSD is normally treated before mild or moderate comorbid disorders.[13] Severe comorbid depression or substance misuse can be treated first if they might limit treatment engagement or contribute to significant risk to self or others.[13]

Contributors: RR had the idea for the article and developed this further with MF and LG. RR wrote the first draft, which was then expanded and revised by MF and LG. All authors have approved the final version of the manuscript.

Competing interests: All authors have completed the Unified Competing Interest form at http://www.icmje.org/coi_disclosure.pdf (available on request from the corresponding author) and declare: no support from any organisation for the submitted work; no financial relationships with any organisations that might have an interest in the submitted work in the previous three years, no other relationships or activities that could appear to have influenced the submitted work.

Provenance and peer review: Not commissioned, externally peer reviewed.

Patient consent: Patient consent not required (patient anonymised, dead, or hypothetical).

1 World Health Organization. *ICD-10: international statistical classification of diseases and related health problems* . 10th revision. WHO, 1992.
2 Kessler RC, Sonnega A, Bromet E, Hughes M, Nelson CB. Posttraumatic stress disorder in the national comorbidity survey. *Arch Gen Psychiatry* 1995;52:1048-60.
3 Scheeringa MS, Zeanah CH, Cohen JA. PTSD in children and adolescents: toward an empirically based algorithm. *Depress Anxiety* 2011;28:770-82.
4 Creamer M, Burgess P, McFarlane AC. Post-traumatic stress disorder: findings from the Australian National Survey of Mental Health and Well-being. *Psychol Med* 2001;31:1237-47.
5 Kessler RC, Ruscio AM, Shear K, Wittchen HU. Epidemiology of anxiety disorders. *Curr Topics Behav Neurosci* 2010;2:21-35.
6 Wittchen HU, Nelson CB, Lachner G. Prevalence of mental disorders and psychosocial impairments in adolescents and young adults. *Psychol Med* 1998;28:109-26.
7 McManus S, Meltzer H, Brugha T, Bebbington P, Jenkins R, eds. *Adult psychiatric morbidity in England, 2007; Results of a household survey* . NHS Information Centre for Health And Social Care, 2009.
8 Ford T, Goodman R, Meltzer H. The British child and adolescent mental health survey 1999: the prevalence of DSM-IV disorders. *J Am Acad Child Adolescent Psychiatry* 2003;42:1203-11.
9 Fazel M, Wheeler J, Danesh J. Prevalence of serious mental disorder in 7000 refugees resettled in western countries: a systematic review. *Lancet* 2005;365:1309-14.
10 Steel Z, Chey T, Silove D, Marnane C, Bryant RA, Van Ommeren M. Association of torture and other potentially traumatic events with mental health outcomes among populations exposed to mass conflict and displacement: a systematic review and meta-analysis. *JAMA* 2009;302:537-49.
11 Ehlers A, Gene-Cos N, Perrin S. Low recognition of post-traumatic stress disorder in primary care. *Lond J Primary Care* 2009;(1):36-42.
12 Brewin CR, Scragg P, Robertson M, Thompson M, D'Ardenne P, Ehlers A. Promoting mental health following the London bombings: a screen and treat approach. *J Traumatic Stress* 2008;21:3-8.
13 National Institute for Health and Clinical Excellence. *The management of PTSD in adults and children in primary and secondary care* . National clinical practice guideline No 26. NICE, 2005.

Key points

- Post-traumatic stress disorder can be disabling and is often underdiagnosed as it may coexist with other mental health problems such as depression, panic attacks, substance misuse, and personality disorders
- Re-experiencing a distressing event, hyperarousal, and avoidance are core symptoms
- Patients often do not volunteer re-experiencing symptoms; clinicians are more likely to detect PTSD if they specifically inquire about distressing events and post-traumatic stress symptoms
- Treatment with psychological or pharmacological therapy is effective for many patients, but patients with limited improvement or complex comorbidity require specialist management and have less favourable outcomes

14 Gradus JL, Qin P, Lincoln AK, Miller M, Lawler E, Sørensen HT, et al. Posttraumatic stress disorder and completed suicide. *Am J Epidemiol* 2010;171:721-7.
15 Leen-Feldner EW, Feldner MT, Bunaciu L, Blumenthal H. Associations between parental posttraumatic stress disorder and both offspring internalizing problems and parental aggression within the National Comorbidity Survey-Replication. *J Anxiety Disorders* 2011;25:169-75.
16 American Psychiatric Association. *Diagnostic and statistical manual of mental disorders.* 4th ed. American Psychiatric Press, 1994.
17 Brewin CR, Rose S, Andrew B, Green J, Tata P, McEvedy C, et al. Brief screening instrument for post-traumatic stress disorder. *Br J Psychiatry* 2002;181:158-62.
18 Forbes D, Creamer M, Bisson JI, Cohen JA, Crow BE, Foa EB, et al. A guide to guidelines for the treatment of PTSD and related conditions. *J Traumatic Stress* 2010;23:537-52.

Accepted: 7 March 2012

Cite this as: *BMJ* 2012;344:e3790