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Editorial

Does psychological trauma affect resuscitation providers?

"The one that sticks with me is . . . "

If you ask health professionals about their experiences of resuscitation, they will sometimes tell you about a case that somehow bit deeper into them than they expected. It goes without saying that some events in medicine are more poignant, more disturbing, or more stressful than others. Sometimes, however, upsetting events can have effects that stray past the boundaries of work and into our personal lives. This begs the question: can we can spot those cases likely to affect us in this way? Or perhaps instead we could identify individuals most likely to be affected? In either case, can we do anything about it or is this just part and parcel of being a doctor or nurse?

In this issue of Resuscitation, Spencer et al. have attempted to ask some of these questions in relation to advanced life support teams.[1] Using the Trauma Screening Questionnaire (TSQ) to detect possible evidence of post-traumatic stress disorder (PTSD), they screened cardiac arrest responders for symptoms of psychological distress.

PTSD has become part of common parlance and is regularly in the news.[2–4] In the public mind it is probably most commonly associated with the mental trauma suffered by war veterans.[2,5,6] This is due to a longstanding awareness that dysphoria and anxiety could be triggered by combat exposure. That awareness reaches a long way back into military history, but the specific term PTSD was only included into the Diagnostic and Statistical Manual of Mental Disorders (DSM-III) in 1980.[7] However, the events of war are not the only precursors of PTSD, and the International Statistical Classification of Diseases (ICD 11) specifies only that the trauma should be an "extremely threatening or horrific event or series of events".[8]

It is recognized that other grossly traumatic events such as sexual assaults or civilian disasters, can act as trigger events for PTSD, and as Spencer et al. point out in their discussion, emergency response workers are at increased risk of developing PTSD.[9,10] It seems very reasonable to assume that a paramedic or fireman might be traumatized by horrific incidents, but it becomes less easy to imagine that healthcare professionals might be at risk of PTSD in the controlled, "sterile" hospital setting. Surely events inside a hospital cannot compare with those encountered in a war or catastrophe? Are we in danger of pathologising something normal; distress may be the appropriate reaction to horrible events?[11]

"The one that sticks with me is . . . "

For one of us writing this editorial (MB) the case was a prolonged, unsuccessful resuscitation of a pregnant, twenty-three-year-old patient (with partner and child present). It happened during his time as a junior doctor and it troubled him greatly. It made sleep difficult, but being awake and continually mulling over what had happened wasn't much better. It left him angry – but not at anyone in particular – and over-aware of how fragile life was.

Experience is subjective and relative to the individual. Why shouldn't a chaotic and distressing cardiac arrest be enough to trigger psychological trauma? The symptoms described above probably weren't PTSD, but were still pretty unpleasant.

PTSD encompasses a range of symptoms. Classically one might think of emotionally-charged "intrusions" such as flashbacks or recurring dreams, perhaps accompanied by some form of physiological, perhaps autonomic arousal. But psychiatrists also look for a range of other presentations. These include the avoidance of thoughts about the event and of situations likely to trigger such thoughts. Patients may become hypervigilant, become more easily startled or may become emotionally numb and withdrawn. Amnesia for aspects of the event may occur. The symptoms should be present for several weeks or longer and should lead to some form of functional impairment.

The questionnaire used by Spencer et al. is a validated screening tool to identify those at risk of PTSD that enquires about the presence of any of ten symptoms, such as: "upsetting dreams about the event" or "acting or feeling as though the event was happening again".[12] Setting aside the formal diagnosis of PTSD, many of the symptoms described by the TSQ are arguably worth avoiding in their own right.

Which leads us back our initial questions: can we spot who is at risk, and can we do anything about it?

During the writing of this editorial, colleagues shared experiences of unpleasant resuscitation events with the authors. Anecdotally, common themes were often present: the patient was young; the arrest was unexpected (and stood out as being particularly unusual); they were relatively inexperienced at the time.

This last point is consistent with Spencer et al's findings that Health Care Assistants and Foundation Year 1 doctors had higher TSQ scores than more experienced doctors or nurses.[1] This surely suggests that the symptoms of psychological distress, and even PTSD, are hiding in plain sight; something we have come to expect as part and parcel of our jobs whilst *becoming an experienced* doctor or nurse. In which case, are there tools that can help prevent PTSD?

Spencer et al. have gone a step further in their research and explored the presence, or absence of debriefing after cardiac arrests,

the presumption being that debriefing might provide an opportunity to intervene and head off the symptoms of psychological trauma before they become established.

Traditionally debriefing has been split into two categories: "hot" debriefs, done immediately after the event, and "cold" debriefs, after the dust has had chance to settle.[13] There are plenty of reasons to advocate debriefs of either kind. They offer an opportunity to identify and reinforce good practice, and to highlight problematic issues such as equipment failure. Practical debriefing is advocated by the Resuscitation Council (UK), and it may improve CPR provision.[14–16]

Whether or not debriefing (hot or cold) offers an opportunity for therapeutic intervention in cases of psychological distress is not entirely clear. The Advanced Life Support Manual published by the Resuscitation Council (UK) can be interpreted as implying that debriefing will provide emotional support to ALS providers, but this has yet to be studied.[17]

Psychological debriefing in other situations has had mixed success, with at least one systematic review suggesting that routine debriefing is possibly harmful.[18] More recent studies in other scenarios may suggest potential benefits, but at present a screen-and-treat approach is advocated.[19]

In 2005 the Association of Anaesthetists of Great Britain and Ireland recommended a multifactorial practical and emotional support package for unexpected anaesthetic "catastrophes". Importantly, a departmental approach to managing such cases, with senior involvement, was emphasized.[20] Might it be time to research how best to support members of the resuscitation team, especially where the circumstances of an arrest seem more catastrophic than normal, or when those dealing with it are relatively junior?

Declaration

This manuscript is not under consideration elsewhere.

Disclosures/conflicts

MB has been on an education course sponsored by Stryker (Lifepak)

REFERENCES

1. Spencer SA, Nolan JP, Osborn M, Georgiou A. The presence of psychological trauma symptoms in resuscitation providers and an exploration of debriefing practice. Resuscitation 2019;142:175–81.
2. The Daily Mail Newspaper Article published 11/7/19. Three horrific births gave me PTSD but I felt guilty as I'm not a war veteran.
3. The Sunday Times Newspaper Article published 23/12/18. Keira Knightley opens up about her battle with PTSD and talks new film Colette.
4. PTSD affects 'one in 13 by age of 18'. BBC News published 22/2/19. (https://www.bbc.co.uk/news/health-47317891) [accessed 4/7/19].
5. 'Higher levels of PTSD among veterans' says study. BBC News published 8/10/18. (https://www.bbc.co.uk/news/health-45761546) [accessed 2/7/19].
6. 'I partied all night to hide from my PTSD'. BBC News published 22/11/18. (https://www.bbc.co.uk/news/health-46295439) [accessed 2/7/19].
7. Andreasen NC. Posttraumatic stress disorder: A history and a critique. Ann New York Acad Sci 2010;1208:67–71.
8. World Health Organization. International statistical classification of diseases and related health problems. 2018 (11th Revision). (https://icd.who.int/browse11/l-m/en) [accessed 2/7/19].
9. Bisson JI. Post-traumatic stress disorder. BMJ 2007;334:789.
10. Mao X, Fung OWM, Hu X, Loke AY. Psychological impacts of disaster on rescue workers: A review of the literature. Int J Disaster Risk Reduction 2018;27:601–17.
11. Summerfield D. The invention of post-traumatic stress disorder and the social usefulness of a psychiatric category. BMJ 2001;322:95.
12. Walters JT, Bisson JI, Shepherd JP. Predicting post-traumatic stress disorder: validation of the Trauma Screening Questionnaire in victims of assault. Psychol Med. 2007;37:143–50.
13. Couper K, Perkins GD. Debriefing after resuscitation. Current Opin Crit Care 2013;19:188–94.
14. Resuscitation Council (UK). In-hospital resuscitation. (https://www.resus.org.uk/resuscitation-guidelines/in-hospital-resuscitation/) [accessed 12/7/19].
15. Couper K, Kimani PK, Abella BS, et al. The System-Wide Effect of Real-Time Audiovisual Feedback and Postevent Debriefing for In-Hospital Cardiac Arrest. Crit Care Med 2015;1.
16. Edelson DP, Litzinger B, Arora V, et al. Improving In-Hospital Cardiac Arrest Process and Outcomes With Performance Debriefing. Arch Intern Med 2008;168:1063–9.
17. Advanced Life Support (7th Edition) ISBN 978-1-903812-30-3 Resuscitation Council (UK) 2017.
18. Feldner MT, Monson CM, Friedman MJ. A critical analysis of approaches to targeted PTSD prevention. Behaviour Modification 2007;31:80–116.
19. Rose SC, Jonathan Bisson J, Churchill R, Wessely S. Psychological debriefing for preventing post traumatic stress disorder (PTSD). Cochrane Database of Systematic Reviews 2002, doi:http://dx.doi.org/10.1002/14651858.CD000560.
20. Catastrophes in Anaesthetic Practice– dealing with the aftermath. The Association of Anaesthetists of Great Britain and Ireland 2005.

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