

EDITORIAL

## Potential mental health consequences for workers in the Ebola regions of West Africa – a lesson for all challenging environments

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Traumatic events may take many forms. The experiences of paid and volunteer staff from many statutory and charitable organisations who have responded to the Ebola outbreak in West Africa are likely to be at least challenging and potentially traumatic. Their work is also high profile; the Time magazine's prestigious "Person of the Year" title, for 2014, was collectively awarded to the healthcare workers treating the Ebola epidemic (Deutsche Welle, 2014). These staff members were praised for their "tireless acts of courage and mercy". However, whilst the work of these healthcare workers should indeed be applauded, how best to protect their psychological health is likely to pose a challenge for the senior managers of the organisations they work for. Unsurprisingly, there is evidence that medical staff working in highly challenging environments are at risk of developing poor mental health, although the evidence how best to protect their mental health is meagre (Ruotsalainen et al., 2014). It is also notable that the impact of traumatic events is not confined to those in the frontline. For instance, a study of London Ambulance workers responding to the aftermath of the 2007 London bombings showed that personnel in call centres many miles from the scene of the blasts were also at risk of developing trauma-related mental health conditions (Misra et al., 2009).

There is considerable evidence that most individuals who are exposed to highly challenging or traumatic events, exhibit resilience and do not suffer any long-term negative psychological effects (Rubin et al., 2005). However, inevitably a proportion will suffer distress; in most cases these symptoms resolve without the need for any formal interventions although it is equally true that some trauma-exposed individuals will develop formal mental health disorders including, but not limited to, Post Traumatic Stress Disorder (PTSD;

Henriksen et al., 2010). It follows that organisations that operate in environments in which the likelihood of trauma exposure is considerable (referred to as trauma-exposed organisations) should carefully consider the potential psychological fallout arising from this sort of work. Trauma-exposed organisations which fail to proactively protect the mental health of their staff, as far as is reasonably practicable, are likely to find that staff members feel demotivated and function less effectively are laying themselves open to legal challenges relating to "duty of care" (UK Psychological Trauma Society, 2014).

What sort of specific challenges, traumatic or otherwise, might the healthcare staff working on the Ebola response be exposed to? Apart from the demanding nature of organising or delivering "life or death" healthcare in highly pressured circumstances, these staff may have to deal with the loss of close colleagues from the host country, and from their own team, as well as for deployed staff. This is in addition to directly facing the threat of becoming infected themselves. Some who are deployed will also have to deal with a 21-day period of relative isolation when they return home during which time they have to balance the desire to interact with family and friends whilst facing the possibility of the very slight risk that they may be infectious (Royal College of Psychiatrists, 2014).

### How should trauma-exposed staff be supported?

How might the various organisations protect the mental health of staff who are responding to the ongoing Ebola outbreak? In broad terms, the age-old adage that prevention is better than cure still works, and so following a preventative medicine approach makes sense. Primary prevention aims to prevent the onset of disorders, secondary prevention aims to detect the early indications of disorders in order to intervene and prevent progression and tertiary prevention aims to provide those who are found to suffer with a formal disorder with effective and timely treatment. This model sounds simple but without guidance that is easy to interpret, organisations who delve into the vast numbers of publications

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on resilience and early intervention might not know where to begin. However, the recently published guidance on this topic from the UK Psychological Trauma Society (2014) does provide a useful starting point for any trauma-exposed organisation wishing to “do the right thing”.

### Primary prevention (prevent)

So, with the guidance in mind, what should the organisations responding to the Ebola outbreak be doing practically given the available evidence? Firstly, it makes good sense to ensure that staff who want to work in higher risk roles, including non-deployed staff, have the opportunity to properly reflect on their suitability and preparedness for this work. This requires a proper briefing about what the role will be, what they might be asked to do and so on. However, there is no evidence to support the use of formal pre-enlistment or pre-deployment screening processes based upon psychometric testing or profiling. This has been tried many times and is not only ineffective, but has the potential to exclude perfectly capable and resilient candidates and provides false reassurance that an individual will remain resilient whatever they are exposed to (Rona et al., 2006). It also makes sense to ensure that any required occupational health clearance considers prior experiences of working in challenging roles and where possible concerns are identified (e.g. a prior history of PTSD). These are then discussed with a healthcare professional who is knowledgeable about traumatic stress as well as with the individual themselves to arrive at a balanced decision about fitness for the role.

One consistent finding from military studies of deployed troops is that cohesion between personnel, both horizontally (between colleagues) and vertically (between leaders and their teams) is highly correlated with mental health. For instance, a study by Jones et al. (2012) of UK troops deployed to Afghanistan in 2010 found a 10-fold difference in trauma-related mental health status between troops who perceived themselves as having a good or bad leader. Whilst responding to a humanitarian crisis is quite different to deploying to a theatre of war, the available evidence suggests that preparatory training should aim to foster strong supportive links between team members and their leaders (Jones et al, 2012). In essence, the resilience of the team may well be more related to the bonds between team members than the psychological make-up or coping styles of any individual.

### Secondary prevention (detect)

Despite being well-prepared, well-selected and with an internally supportive team, some will inevitably develop mental health symptoms. Problematically, it is likely that those who do become distressed will not seek formal help; this is often because the individual may fail to recognise that they have a problem, and even when they do acknowledge its existence, their fears about the perceived reputational and career impact of seeking help, will deter them. This is where secondary prevention initiatives can help. Organisationally these can take the form of peer support training, which

enables active monitoring for traumatic stress symptoms without the need for routine interaction with health or welfare providers after a traumatic event. One example is the Trauma Risk Management (TRiM) programme, which is used by a number of military forces, media companies and diplomatic organisations (Greenberg et al., 2008). There is some evidence (Hunt et al., 2013) that the use of TRiM may be associated with less mental health-related sickness absence after traumatic events. Other models such as psychological first aid (Pekevski, 2013) may also be suitable to upskill “frontline” staff to be able to better support staff who show early signs of distress.

Alongside peer support, there is a strong argument for trauma-exposed organisations to actively promote both symptom recognition and to reduce stigma in order to increase help-seeking. Whilst not an easy task, this may be achieved by providing strong and clear messages about the value of seeking help at an early stage upon maintaining one’s career and also to ensure that information about a range of confidential support options are made available to trauma-exposed staff and their families. Contemporary evidence suggests that most often help-seeking tends to occur only after a crisis has happened or the end of a key relationship appears imminent (Murphy et al., 2014).

### Tertiary prevention (treat)

There is good evidence on how to manage established trauma-related mental health problems such as PTSD. In particular, the National Institute for Health and Care Excellence (2005) promotes the use of trauma-focused cognitive behavioural therapy and Eye Movement Desensitisation and Reprocessing as being effective. Importantly, whilst antidepressants may have a secondary role to play for some people with PTSD, especially those with co-morbid depression, they are not recommended as first line treatments. Organisations dealing with the Ebola crisis will need to consider how to deal with staff who experience work-related mental health problems where national healthcare providers are unable to provide trauma-focused healthcare in a timely fashion. It may well be that funding alternative care provision to both improve the affected individual’s mental health, and to ensure they regain occupational fitness within a reasonable time period is warranted.

### In summary

Whilst many organisations are working around the clock to provide humanitarian and medical support to a number of West African countries as they battle with Ebola, the psychological health needs of the staff carrying out this important work should not be forgotten. To date, there has understandably been a focus on ensuring that staff have the right personnel protective equipment and know how to use it, and that the physical health needs of deployed staff have been fully considered. It may now be appropriate to ensure that any long-term psychological impact of this important work is minimised both for those deploying to West Africa but also for the “home teams” who also have had to deal with a range

of highly challenging and potentially traumatic material. We suggest that trauma-exposed organisations would do well to follow an evidence-based preventative medicine approach to this issue as highlighted in this editorial.

Evaluations of new methods of support are now sorely needed as the evidence is sparse and often focussed on troop deployment. One novel support system is now provided by the South London and Maudsley NHS Foundation Trust following discussions with healthcare workers in Sierra Leone. The NHS Trust's clinical psychologists have set up a volunteer support system that provides a listening ear for individuals who are deployed before, during and after their deployment through face-to-face contacts, email, phone and skype. This provides more support than is currently provided in the trauma world particularly during deployment, but mirrors some of the suggestions in the TRiM programme for peer support. The programme aims to support resilience, prevent motivational decreases which may result in errors during deployment, and to sustain team leadership and cohesion which is a clear predictor of trauma effects. Whether this is too much or too little support will only be apparent after independent evaluation. We hope this happens soon so that we can pass on good practice not only to the Ebola health workers, but also to deployments to combat future health epidemics.

### Declaration of interest

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### References

- Deutsche Welle. (2014). Ebola healthcare workers awarded Time Magazine's Person of the Year. 11 December 2014. Available from: <http://www.dw.de/ebola-health-workers-awarded-time-magazines-person-of-the-year/a-18122127> [last accessed 14 Dec 2014].
- Greenberg N, Langston V, Jones N. (2008). Trauma risk management (TRiM) in the UK Armed Forces. *J Royal Army Med Corps*, 154, 124–7.
- Henriksen CA, Bolton JM, Sareen J. (2010). The psychological impact of terrorist attacks: Examining a dose–response relationship between exposure to 9/11 and Axis I mental disorders. *Depress Anxiety*, 27, 993–1000.
- Hunt E, Jones N, Hastings V, Greenberg N. (2013). TRiM: An organizational response to traumatic events in Cumbria Constabulary. *Occup Med (Lond)*, 63, 549–55.
- Jones N, Seddon R, Fear NT, et al. (2012). Leadership, cohesion, morale, and the mental health of UK armed forces in Afghanistan. *Psychiatry*, 75, 49–59.
- Misra M, Greenberg N, Hutchinson C, et al. (2009). Psychological impact upon London Ambulance Service of the 2005 bombings. *Occup Med (Lond)*, 59, 428–33.
- Murphy D, Hunt E, Luzon O, Greenberg N. (2014). Exploring positive pathways to care for members of the UK Armed Forces receiving treatment for PTSD: A qualitative study. *Eur J Psychotraumatol*, 5: 21759 – <http://dx.doi.org/10.3402/ejpt.v5.21759>.
- National Institute of Health and Care Excellence. (2005). Post-traumatic stress disorder (PTSD): The management of PTSD in adults and children in primary and secondary care. London: NICE.
- Pekevski J. (2013). First responders and psychological first aid. *J Emerg Manage*, 11, 39–48.
- Rona R, Jones M, Hooper R, et al. (2006). Mental health screening in armed forces before the Iraq war and prevention of subsequent psychological morbidity: Follow-up study. *BMJ*, 333, 991–5.
- Royal College of Psychiatrists. (3 November, 2014) Apyrexial. 3 November 2014. Available from: <http://www.rcpsych.ac.uk/discoverpsychiatry/overseasblogs/sierraleone/apyrexial.aspx> [last accessed 14 Dec 2014].
- Rubin GJ, Brewin CR, Greenberg N, et al. (2005). Psychological and behavioural reactions to the bombings in London on 7 July 2005: Cross sectional survey of a representative sample of Londoners. *BMJ*, 331, 606.
- Ruotsalainen JH, Verbeek JH, Mariné A, Serra C. (2014). Preventing occupational stress in healthcare workers. *Cochrane Database Syst Rev*, 12, CD002892.
- United Kingdom Psychological Trauma Society. (2014). Traumatic stress management guidance: For organisations whose staff work in high risk environments. Leeds: UK Psychological Trauma Society/ European Society of Traumatic Stress Studies.