Clinical governance Helping the helpers: debriefing following an adverse incident

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Key content:

- A significant proportion of healthcare workers will experience some degree of critical incident stress following adverse events.
- Individuals' responses range from common, uncomplicated stress-related reactions to the more complex post-traumatic stress disorder.
- Under-reporting of clinical incidents results mainly from fear of litigation and disciplinary action.
- Debriefing should be an essential component of critical incident stress management.

Learning objectives:

- To be aware of how healthcare staff can be supported effectively following an adverse incident.
- To learn about the seven phases of the Mitchell debriefing model.

Ethical issues:

- Disclosure of adverse events all too often results in disciplinary action: this 'blame culture' is to the detriment of patients and staff.

Keywords critical incident stress / debriefing / Mitchell model / post-traumatic stress disorder

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Introduction

Historically, the term 'critical incident stress' has been used to describe traumatic stress, combat fatigue and rapid-onset burnout.[1–3] A traumatic event is one that poses a significant threat to life or mental stability. This article discusses how a significant number of healthcare professionals inevitably experience varying degrees of traumatic stress as a result of exposure to traumatic events associated with their work. It also discusses what is an appropriate supportive response from their employers. Traumatic events can be associated with minor incidents and near misses as well as death and major disability.

Critical incidents are known to affect individuals' lives significantly by prompting strong emotional responses ranging from common, uncomplicated stress-related reactions to the more complex post-traumatic stress disorder. Debriefing should, therefore, be an essential component of critical incident stress management. Ideally, it should:

- involve a peer-driven, therapist-guided group approach
- be designed to promote the recovery of individuals in a way that mitigates stress-related responses to such events
- assist in accelerating the readjustment process
- prevent potential long-term effects.

Providing this service is educational and rewarding for both staff and patients. Debriefing has the advantage of relieving stress and, therefore, it helps reduce sick leave amongst health professionals, with obvious financial implications. It also increases motivation, hence productivity, and results in a more stable workplace and happier working environment. Additionally, from an employer's point of view, it results in higher employee confidence, self-esteem and loyalty, leading to improved job security and satisfaction.

There is no formally recognised, routine debriefing option available to support healthcare staff. It would seem appropriate for an effective debriefing system to be in place, together with incident analysis, not only to learn from adverse incidents and to reduce their recurrence but also to reduce their psychological impact upon staff.

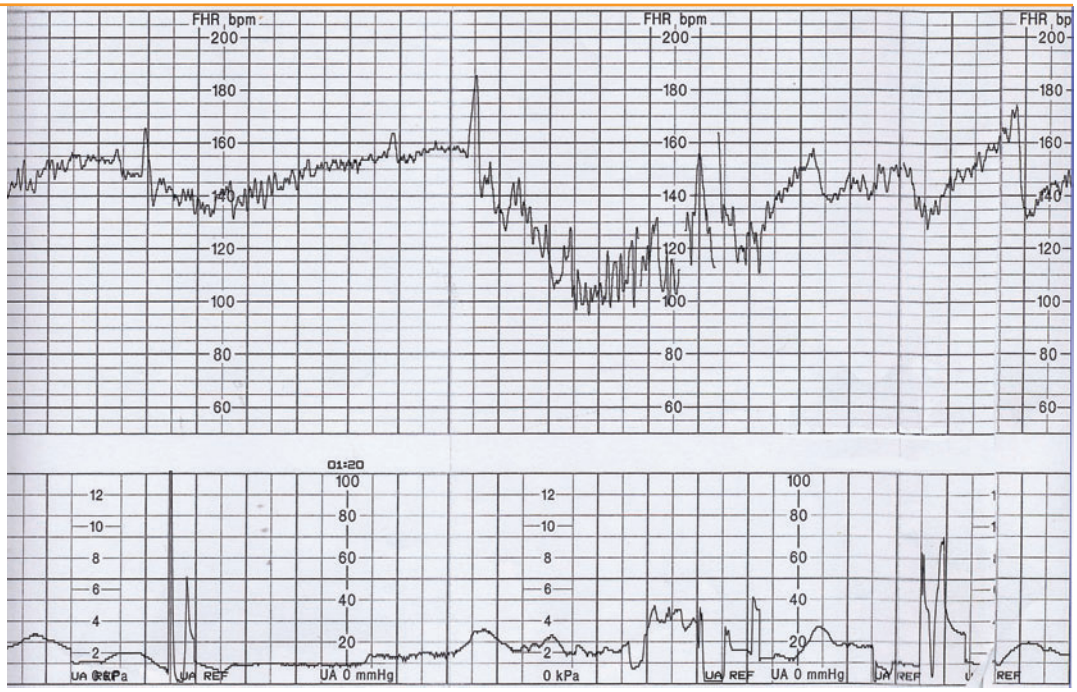
In this article we describe the pathophysiology of critical incident stress and discuss the importance of debriefing in the aftermath of such adverse events, with reference to an actual obstetric incident.

An adverse obstetric incident

A mother was admitted for induction of labour at 42 weeks. She had had two previous spontaneous vaginal deliveries and a miscarriage.

The midwife experienced difficulty in interpreting the cardiotocograph (CTG) in later labour (**Figure 1**) and requested a review by the duty registrar, who was not unduly concerned at the time. Eventually, after full dilatation was achieved active pushing was commenced. When the midwife noted that there were no uterine contractions, the registrar was informed. A vaginal examination showed fresh, blood-stained liquor with the CTG recording a prolonged bradycardic episode without recovery. An urgent caesarean section was performed under general anaesthesia. On opening the peritoneal cavity the surgeon encountered a uterine rupture,

Figure 1
Cardiotocograph trace



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with the fetus and placenta extruded completely into the peritoneal cavity. There was significant blood loss; a consultant obstetrician attended. Despite the severity of the rupture, the neonate survived after extensive resuscitation.

This was an unexpected traumatic event for the on-call obstetric registrar and midwife as well as for the partner and the other health professionals.

Psychological care in the aftermath

The woman and her relatives were counselled soon afterwards by the on-call consultant and the neonatologist who had attended the incident. A little while later a senior midwifery manager also saw them. In contrast, the health professionals involved in the woman's management received no formal debriefing and continued to work for the rest of their shift.

A few of the staff directly involved in the case later suffered from a number of stress-related symptoms such as exhaustion, sleep disturbance, loss of appetite, headaches and lack of concentration at work. The obstetric registrar initially denied experiencing any stress but 24 hours later suffered a severe stress-related reaction consisting of a feeling of isolation from colleagues, strong emotions of guilt and a fear of disciplinary action. At this point the staff requested to meet with senior colleagues for support and guidance.

The registrar appreciated the team's response and the subsequent support of the consultants in the department. The health professionals associated with the case, however, continued to experience symptoms of stress over a prolonged period. This was as a result of the dramatic nature of the obstetric event, the consequential potential for loss of life, the serious injury to the mother's future reproductive capacity and fears of complaint and litigation.

In the absence of a formally-convened group debriefing, staff sought support on an ad hoc basis from their colleagues. Although this may have proved adequate in the immediate aftermath of the event, it did not appear to serve them well in the long term.

Discussion

Involvement in such adverse events will, inevitably, have a psychological impact upon healthcare professionals to varying degrees, depending upon their own experiences, training and personality.

The possible numbers of healthcare workers who may be exposed to clinical incidents, potentially resulting in stress-related disorders, are shown in the 1999 publication, *To Err is Human*,[4] from the US Institute of Medicine. The report concluded that in the USA, medical error contributes to 98 000 deaths every year and that it is the fourth most common cause of death nationally. In addition, a National Audit Office survey[5] found that the number of patient safety incidents reported in England and Wales during 2004–05 totalled 980 000. Under-reporting of clinical incidents results mainly from fear of litigation and disciplinary action by health organisations such as hospital Trusts or the General Medical Council. As a blame culture still exists in the NHS, it is unlikely that staff report all incidents voluntarily.

It is clear, therefore, that adverse medical incidents are not rare events in healthcare systems. It has been demonstrated that, as a result of repeated exposure to traumatic events, those involved in the field of emergency first response and rescue (paramedics, fire-fighters and the police) develop symptoms ranging from those of a minor nature through to post-traumatic stress disorder, with long-term effects (**Box 1**). It seems reasonable to suggest that similar patterns of response are likely to be occurring among healthcare workers encountering repeated exposure to events of this kind.

Having acknowledged the presence and scale of potentially stress-inducing incidents, it is important to appreciate the factors that can affect the degree of critical incident stress experienced by individuals. An advance warning of an impending adverse incident allows time for the individual and team to take action to avoid/mitigate adverse outcomes (for example, performing hysterectomy for placenta praevia) and so reduce the potential stress impact upon staff. It also allows them the opportunity to initiate coping strategies in advance of the event.

Emergency workers' physical and emotional vulnerability and style of coping are influenced by their previous experiences[6] and as a result they develop a range of different coping mechanisms. It is suggested that hospitals can meet the emotional needs of its staff by understanding and supporting these coping strategies.[7]

An individual's professional training and experience, together with personal and social support after a critical incident, can affect the level of response to stress.[8]

Box 1
Symptoms related to stress

Physical	Exhaustion, throbbing headaches, dizziness
Emotional	Grief, anger, depression, irritability, fear, anxiety, suicide
Cognitive	Confusion, nightmares, poor concentration, memory loss
Behavioural	Restlessness, withdrawal from environment, drug/alcohol abuse, change in appetite, loss of libido

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The association between workers and patients also has been shown to have a bearing on the degree of stress experienced. High levels of stress were evident when incidents involved young, healthy patients and multiple lives.[9] It is apparent, therefore, that there is likely to be a high correlation between obstetric incidents and critical incident stress.

An individual can simultaneously react to and deny the effects of stress. In the medical field in particular, a sense of professionalism allows individuals to remain calm and to continue to work, their behaviour having been programmed by previous exposure and/or simulator training. In addition, as the emotional part of the brain absorbs many sights and sounds from a scene, the professional side maintains a detachment. To achieve this division of professional and emotional responses, much more energy is required. If the health professional is already physically and emotionally fatigued, with low reserve energy levels, they are likely to be more susceptible to the effects of stress.[10] Hence, it is important to have a discussion with involved professionals following an adverse event or near miss.

Critical incident stress debriefings were first used to help fire-fighters and other emergency workers cope with the significant stresses associated with their jobs. They were found to reduce the incidence of post-traumatic stress disorder, alcohol abuse and suicide following traumatic incidents.[11]

Taking these factors into account, a debriefing process that is an integral component of an adverse event-reporting protocol, as is the case in other high-risk industries such as aviation and nuclear power, could potentially improve both the quality of incident reporting and support the staff involved. It could help to ameliorate the stress-related reactions and illness that occur all too often in the aftermath.

A debriefing model

Generally, a debriefing process in clinical medicine following an adverse event should consist of two equally important components. The first is the immediate phase response, involving emotional support for patients and staff. The second phase is a process of learning from the incident. Traditionally, more emphasis has been placed upon the learning component rather than upon any ongoing emotional/psychological support for staff. Even though critical incident meetings and perinatal morbidity meetings provide opportunities for staff to discuss different aspects of the clinical management provided and to facilitate improvement of future care, they do not usually include any discussion relating to the emotional needs and support of staff.

So, how can healthcare staff be effectively supported to cope with the stress that occurs as a result of adverse events? The most popular critical incident debriefing model is described by Mitchell[12] and incorporates seven distinct phases for stress reduction (**Box 2**). The main objectives in mitigating the impact of a critical incident are to restore the health and environment of the staff and accelerate their return to routine functions.

It has been demonstrated that a group debriefing held within a 2–14 day period after the event is more beneficial than an individual debriefing.[13] The debriefing should be led by professionals experienced in mental health, clinical counsellors or peer clinicians from the same or a related specialty who have been through a similar incident. If a debriefer judges that the situation requires the intervention of a mental health professional, appropriate referral can be made. This peer-driven process focuses on psychological and emotional aspects of the event. Specifically, it is not an operational critique or group therapy.

Box 2
The seven phases of the Mitchell model[12]

1. **Introduction:** establishment of a good relationship with those individuals associated with the event, as well as maintaining a very high level of confidentiality. Ideally, all individuals taking part should be temporarily 'off duty' and not liable to be bleeped during the procedure. Individuals will be asked to introduce themselves and identify their role in the incident. They will be encouraged to discuss various aspects of the incident that distressed them.
2. **Fact:** individuals provide core facts and fill in missing details. The introduction of missing facts helps correct any misperceptions.
3. **Thought:** explores the emotional aspects prompted by the event. At this point, the group considers the following question, 'When did you first realise this was a critical incident?'. Responses are as varied as the group and this helps individuals to 'personalise' their experiences.
4. **Reaction:** in this most intense phase the group is asked, 'How did you react to the incident?'. Not everyone will feel comfortable talking about this, so it is emphasised that the important part of participation is being present and listening. Some of the participants will discover that their reactions are similar to those of their peers. For those who have suffered more severe stress reactions, the presence and support of their less affected peers is often as important. The most affected individuals can describe the worst part of the event for them and why it has caused them such stress.
5. **Symptom:** the range of symptoms that individuals have been experiencing is discussed. These include those experienced during and immediately after the incident, 3–5 days later and those remaining at the time of the debriefing. During this and the reaction phase, workers come to realise that they are not alone in how they have been feeling. The sudden realisation that their feelings are normal is the first step for many emergency workers towards feeling better.
6. **Teaching:** this is similar to post-incident education. The process of critical incident stress, stress reactions and techniques to decrease stress are explained.
7. **Re-entry:** the final phase, which allows team members to expand relevant points they feel are important and to answer questions. The main purpose is to ensure that emotions are not raw when the participants leave. The team gives a summary and the debriefing meeting is concluded.

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The Mitchell model is designed to alleviate the effects of stress after the event has taken place. It has been suggested, however, that emergency services should teach techniques to be used on anticipating stress and, thus, help to pre-empt its damaging effects.[14] Stress inoculation training—eye movement desensitisation and reprocessing, cognitive behavioural therapy and prolonged exposure therapy[15]—has been shown to benefit emergency workers exposed to a traumatic event, especially in cases of post-traumatic stress disorder. Psychological immunisation strategies are based on prevention, intervention and recovery. With pre-incident education and stress management techniques, an individual develops protective mechanisms against critical incident exposure.

To give an example, individuals can themselves do many things on a regular basis to help mitigate, not only the effects of critical incident stress, but also general life stress. Basic pre- and post-incident strategies are already known.[16] Eating a well-balanced diet with adequate fruit and vegetable consumption, together with a reduction in caffeine usage and sugar intake, is recommended. Regular exercise will help to stimulate the production of endorphins and other neurotransmitters that produce feelings of wellbeing, provide for 'natural' pain relief and help in relaxation. Adequate rest is important. Physical fatigue leads to psychological and emotional fatigue.

Such behavioural therapy and health choices can help to immunise the individual exposed to stressful events and, following the occurrence of a critical incident, the intervening team can interact with the individual to boost their resistance further to adverse psychological sequelae.

The most important elements of the critical incident stress management process are the provision of time given to relieve an individual's stress and the opportunity for them to become aware that they are not alone in the feelings they experience or in their perception of the situation.

Another, more effective, method is to schedule periodic reviews of management of difficult cases, near misses, etc., in the form of weekly CTG review meetings, regular ward rounds on the labour ward and multidisciplinary meetings. This productive peer interaction should be an inherent part of the department routine rather than a casual, 'hit-or-miss' process. This will help develop better interpersonal relationships among staff and a feeling of teamwork. An individual's relationships with peers or seniors can increase or decrease overall stress levels dramatically. Thus, close and effective communication, good interpersonal relationships, co-ordination of workflow and positive feedback are a few of the ways to improve teamwork in a department.

Conclusion

Arguments in favour of a formally recognised debriefing session for healthcare staff who are at risk of, or who have experienced, an adverse event, appear to be unequivocally persuasive. Debriefing addresses, on a personal level, the potential harm to which staff can be routinely exposed and it benefits an overall risk management strategy in terms of openness and a more comprehensive appreciation of an event. Discussion has been demonstrated to be helpful in allowing further processing and understanding of an event. In addition, by acknowledging the grief and guilt emotions experienced by healthcare workers and by encouraging discussion in relation to medical errors, there can be a positive change in an institutional attitude from one of 'blame' to one of 'learning'.[17] Similarly, if senior staff members discuss their own personal involvement and experience in past clinical incidents, this provides a powerful source of support for other colleagues.[18]

It has been documented that staff may feel inhibited in relation to the disclosure of adverse events and medical errors. This is because of discomfort and a lack of training on how to disclose, fear of litigation, a culture of infallibility among health professionals and inadequate systems for analysis, discussion and learning from mistakes.[19] An empathic, supportive and nonjudgmental debriefing process would seem, therefore, to be an obvious choice to strengthen and enhance risk management processes.

Critical incident and risk management policies and guidelines should clearly define what constitutes a critical incident. They should also clarify the roles of professionals and peer counsellors. Ethical guidelines should address confidentiality in relation to reporting adverse events and medical error, as it is important to balance this against fear of potential disciplinary action, which may prohibit disclosure in the first place.

The introduction and implementation of an effective debriefing option requires a skilled and dedicated team approach. It can, however, provide invaluable support to those individuals exposed to adverse/traumatic events and enhance the risk management process itself, which, ultimately, aims to reduce the incidence of such events.

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