Medical error, incident investigation and the second victim: doing better but feeling worse?

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In the past decade, hospitals and healthcare workers have become more familiar with medical errors and the harm they can cause. As a result, incident investigation has become a routine part of the hospital's response to an adverse event.[1] In the USA, the Joint Commission's Sentinel event policy and the Veterans Affairs hospitals' adoption of root cause analysis have made root cause analysis standard operating procedure.[2] Armed with the results of these investigations, research and quality improvement efforts are now taking on system improvements required to create a safer healthcare environment.

There has also been increased attention paid to the appropriate handling of patients and families harmed by medical errors.[3] There is developing recognition that disclosure of adverse events is necessary if hospitals are to learn from mistakes and improve patient safety outcomes.[4 5] A growing number of accrediting and licensing bodies, as well as governmental entities and professional organisations, have stated the expectation that patients should be told about harmful medical errors.[6–11]

Progress has been slower in translating policy into action at the level of the frontline clinician. The recent worldwide recession and soaring healthcare budgets have resulted in increased pressure on healthcare workers to do more with less. But in the years since, one question has remained: are these policies also beneficial to physicians and other healthcare workers, many of whom are already struggling just to get their work done?

In a typical incident investigation, the goal is to identify what happened, the problems that occurred in healthcare related to these events, and the factors that contributed to their occurrence. Information is extracted from physical artifacts, patient records and other documents, and witness statements.[12]

Once the sequence of events is made clear, there are three main considerations: the problems in care identified among the events, the clinical context of each of these problems, and the factors contributing to their occurrence. Next, interviews are conducted with the staff members involved in the event, asking what happened, how did it happen, and why did it happen?

In conducting these investigations, concern about patient and family rightly takes precedence. In the USA, institutions are also motivated to mollify patients in efforts to forestall potential lawsuits. However, very little attention has been devoted to healthcare workers involved in adverse events to help them cope with their responses to medical errors and/or adverse medical events. No standard operating procedure exists for handling the healthcare workers involved, and organisations run the risk of running roughshod over them.

Healthcare workers are often impacted by medical errors as 'second victims', and experience many of the same emotions and/or feelings that the 'first victims'—the patient and family members.[13] Signs and symptoms are similar to those in acute stress disorder, including initial numbness, detachment, and even depersonalisation, confusion, anxiety, grief and depression, withdrawal or agitation, and re-experiencing of the event. Added symptoms related to medical errors include shame, guilt, anger and self-doubt.[14] Lack of concentration and poor memory are also common, and the affected person may be significantly impaired in performing usual roles. These symptoms may last days to weeks. A few go on to suffer long-term consequences, similar to post-traumatic stress disorder, that include re-experiencing the original trauma through flashbacks and nightmares, avoidance of situations associated with the trauma, increased arousal including sleep disturbance and irritability. These symptoms often result in significant functional impairment.[13 15 16] Some healthcare workers leave their profession and a few even commit suicide because of the experience.[17]

The second victim is a common problem for healthcare organisations. In a few studies, up to half of healthcare workers surveyed reported an incident in which they feel that they were a second victim.[18–20] Trainees may be particularly vulnerable to sustaining damage to their clinical confidence and self-esteem.[21]

In this issue, two papers describe the profound and enduring effects of adverse events on physicians in

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training.[22 23] In their study of residents in the USA, Kronman and colleagues identified the need for training programs to provide structured, meaningful ways for house officers to discuss their errors, to help them cope, and to forestall negative emotional consequences. They identify that the ability to cope successfully with errors may be dependent on appropriate reassurance provided by colleagues and supervisors. The coping response is determined by additional factors, including the severity of the outcome. However, this kind of psychological first aid may be necessary, if not sufficient, to allow for optimal recovery for the second victim.

Venus and her colleagues illustrate this problem with a telling statement from a study of interns in France. Their quotations lose nothing in translation from the original French. The interns' involvement in adverse events made them feel suddenly incompetent. They developed a highly negative self-image, and many did not receive appropriate support. They also wanted, but often did not receive, a dispassionate analysis of the errors—they would have preferred to debrief after the incident, to understand what had happened, so as not to repeat it. Several suffered from a negative reaction from their supervisors, experiencing 'being condemned' by the physicians who were supposed to be teaching them. Several interns continued to think about their mistake, some for more than 2 years after it had occurred, replaying the scenario over in their minds.

There are several points downstream from an adverse event at which a clinician can become a second victim. Initially, a healthcare worker can be severely affected by the adverse event itself and the reactions of the patient and/or family. This effect can be especially severe if the patient–physician relationship is a close or long-term relationship. Subsequently, a healthcare worker can be helped (or harmed further) by unsympathetic comments offered by colleagues.[20] Interactions with other medical colleagues can be critical to the coping process, and without them a clinician may feel isolated. After involvement in an adverse event, clinicians need both professional reaffirmation and personal reassurance.[24–27] As noted by Venus, trainees in particular need both emotional and informational support. The latter is best provided by peers, or by a mentor or supervisor. Lacking this kind of support, many physicians do not discuss their errors with colleagues because they cannot identify physicians who are supportive listeners.[28]

It is well documented that a lawsuit can be among the most emotionally damaging experiences a clinician can experience.[29] However, it is less well recognised that the investigation itself holds the potential to cause additional harm. In describing the natural history of recovery of the second victim, Scott describes 'enduring the inquisition' as a stage to be endured.[13]

In really severe adverse events, there are always second victims. Because the post-incident trajectory for second victims can be 'to recover or to languish and even leave medicine',[27] it is important that healthcare organisations, and policy-making bodies develop and promote a systematic approach to supporting clinicians after adverse events.

There is hope for guidance to occur at the policy level. For example, the Joint Commission is actively considering guidelines for investigation take into account potential second victims in their revised sentinel event policy.[30] In addition, the National Quality Forum,[11] has adopted 'Care of the care giver' as a safe practice, with the objective to 'provide care to the caregivers involved in serious preventable harm to patients…'. This approach should be a building block of a comprehensive approach to preventing, handling and learning from adverse events.[5 31] What are some guidelines for hospitals and training programmes for handling situations involving second victims?

Solutions are needed at multiple levels of the healthcare system. At the frontline, it is crucial to increase the recognition and competence of individual practitioners about the second victim problem, as these colleagues are likely to be the first responders to a second victim. They can help by providing empathy and emotional support. They may also be able to help meet the informational needs of the second victim who is struggling to understand what happened. A proportion of second victims can benefit from greater support from trained counsellors, and a smaller number will require professional treatment in the form of psychotherapy or psychoactive treatment.

There are a few organisations that have developed structures to help support healthcare workers who are emotionally harmed after involvement with a medical error. One of the most well developed programmes is located at the University of Missouri, led by patient safety director Susan Scott. Their 'forYou' programme is delivered by a trained volunteer group of approximately 50 clinicians from multiple specialties.[32] At the University of Illinois at Chicago, quality improvement, risk management and patient safety are integrated into a single system for handling adverse events. When risk management is notified about a significant adverse event, in addition to the root cause investigation that is initiated, there is a parallel investigation to determine if there are second victims.[5]

Medically Induced Trauma Support Services, Inc. is a freestanding

non-profit organisation dedicated to helping both patients and healthcare workers cope with harmful incidents. Medically Induced Trauma Support Services has recently developed a useful 'toolkit' of resources to help organisations establish programmes to help second victims (toolkit).[33]

At the Johns Hopkins Hospital, a multi-disciplinary Second Victims Work Group is working to assist the organisation in providing care and support to the hospital staff. The pilot programme being developed incorporates the need for increased awareness institution-wide, the ability to deliver emotional first aid when serious incidents occur, utilisation of existing resources for counselling when this is necessary, and the necessity of treatment in a few cases.[20]

For hospitals, clear guidelines for handling adverse events should be backed up by an institutional policy on open disclosure. Institutions should offer training in the difficult task of communicating with patients and their families in the aftermath of an adverse event. Basic education about the law and legal process surrounding adverse events should also be offered (which may reduce some of the anxiety about possible legal action).[20] Conway and Weingart recommend leadership initiatives directed at mitigating the impact of medical errors on clinicians, stating that leaders need to establish an organisational expectation that 'anything less than a supportive response is unacceptable'.[31]

This framework should incorporate a humanistic approach to investigation that explicitly acknowledges the inevitability of second victims. The emotional health of caregivers needs to be a consideration in incident investigation and resulting action plans.[20] Organisations should acknowledge the potential need for formal psychological intervention for particularly profound reactions. In conducting the investigation, care should be taken to avoid treating the physician like he or she is on 'trial' for a crime.[34]

In the paper by Venus and colleagues, one intern lamented that after an incident, no one even thought to ask: "so, how are you doing?" This common sense approach can readily be adapted into how investigators should deal with healthcare workers after an adverse event. Why not begin every investigation by saying to the involved staff member, "This must be very difficult for you. How are you doing?"

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