A Systematic Review of the Effect of Surgical Errors on Operating Theatre Staff.

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Aims:
1. The aim of this review was to identify and explore the effect of surgical errors on operating theatre staff (medical and non-medical)
2. To explore any change in attitudes and behaviours after these errors occur.

Background
Health professionals have been recognised as secondary victims of medical errors. Medical errors affect up to 16% of patients admitted to hospital, with 50% of these adverse incidents occurring during surgical or invasive procedures in operating theatres. [1]

A recent NHS England Surgical Never Events Task Force Report 2014, surgical incidents are the most commonly reported types of never events in English NHS.[2] The operating theatre is one of the highest risk environments for incidents, characterised by acute stress, heavy workload, and critical decision-making.

The emotional impact of a serious surgical incidents on health care providers can be quite traumatic; they can experience reactions similar to those of post-traumatic stress syndrome.

We were interested in understanding what effect surgical incidents can have on operating theatre staff, and how their attitudes and behaviours might change following the event.

Research Design

Inclusion and Exclusion criteria
- Primary research or reviews that focused on the effect of surgical errors on operating theatre staff in either the primary, secondary or tertiary care settings.
- We were interested in articles that included data about
  a. the professional and personal impact of a surgical incident on staff,
  b. safety concerns raised by staff affected by a surgical incident, and
  c. the support offered to staff following a surgical incident.
- Studies that were not available in the English language were not included.

Results
21 publications in total were included (19 full text articles and 2 reviews)

| Emotional Support: Common emotional reactions were anxiety, guilt, disappointment, fear and anger. |
| Organisational Support: Health professionals also received inadequate support from their organisations and peer colleagues after an incident, with some hesitating to report or disclose any incidents to their colleagues. |
| Learning from incidents: A need for reflection and keeping things in perspective soon after the incident, are the most common learning themes emerged from studies |
| Coping Strategies: Some surgeons discussed the event with their peers (more likely amongst senior surgeons), while others chose to reflect on the incident privately. |
| Recommendations: Peer support following an incident, mentoring, surgical training, shared learning, debriefing sessions with a trained counsellor, creating a supportive environment, approved absence from work and organisation proactivity after an incident |

Discussion and Conclusion
- It is evident from this review that health professionals suffered emotional distress and changed their behaviour following a surgical incident.
- They appear to be influenced by the severity of the error, patient outcomes, the individual's personality and the support offered by the employing organisation.
- Irrespective of different coping mechanisms used, health care providers found it helpful to informally discuss the incident with their peers to regain self-confidence, positive thinking and open culture for shared learning.
- Future research is needed to explore whether the impact of surgical complications is different amongst wider operating theatre team.
- Limitations: We excluded a number of studies that focused solely on the effect of malpractice claims on health professionals following an adverse incident. Although outside the scope of this review, these studies may have provided further insights on the emotional effects of incidents on theatre staff.

References