

NON-TECHNICAL SKILLS

Surgeons



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Research from the United States and the UK indicates that between 3 and 17% of patients will experience one or more adverse events during a hospital stay.

An area of particular high risk, in terms of patient safety, is the operating theatre (OR). The OR has many of the characteristics of a high-risk workplace, including the level of complexity, a constantly changing environment and a multi-professional team. Within this environment, the surgeon is the nominated leader of the surgical team and as such, must demonstrate leadership skills, together with technical excellence, in order to maximise patient safety. The focus of this research was on surgeons' leadership behaviours within the OR during the intra-operative period.

Surgeons' leadership in the operating room

A review of the literature¹ was conducted in order to develop a preliminary taxonomy of leadership behaviours based on empirical studies of surgeons' leadership. This research indicated that managing tasks, making decisions, directing and enabling, as well as skills related to guiding and communicating were all critical leadership behaviours. The literature review was followed by an observation study in three hospitals in Scotland² (n = 29). Observations were coded into the elements identified within the preliminary taxonomy with acceptable reliability.

A second study used focus groups (n = 10) to finalise the elements contained within the taxonomy of leadership. Using this additional information, the taxonomy was revised to include the extra element of coping with pressure, taking the number of elements included within the Surgeons' Leadership Inventory (SLI) to eight (*paper under review*).

A final study used the SLI to code videos (n = 29) of live operations. The results indicated that behaviours related to maintaining standards differed before and after the point of no return (PONR) within an operation. Coping with pressure was significantly related to patient blood loss. Finally, behaviours associated with the training and supporting of others differed between operations where an unexpected event occurred, compared to operations which proceeded as expected (*paper under review*).

In summary, this research presents a detailed examination of leadership for surgeons within the OR, providing a first step in identifying important leadership behaviours.

Publications

¹Henrickson Parker, S., Yule, S., Flin, R., & McKinley, A. (2011a) Towards a model of surgeons' leadership in the operating room. *BMJ Quality and Safety*, doi:10.1136/bmjqs.2010.040295

<http://qualitysafety.bmj.com/content/early/2011/01/05/bmjqs.2010.040295.long>

²Henrickson Parker, S., Yule, S., Flin, R., & McKinley, A. (2011b) Surgeons' leadership in the operating room: an observational study. *American Journal of Surgery*, doi.org/10.1016/amjsurg.2011.03.009.

<http://www.sciencedirect.com/science/article/pii/S0002961011003254>