

Human Factors Training For Core Surgical Trainees: The Severn Experience

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Background: Shortcomings in non-technical skills have frequently been shown to play a role in adverse events during surgery. Human factors training has an increasing role to play in enhancing patient safety and reducing medical errors. Programmes in non-technical skills are promoted by the surgical Royal Colleges in the UK and Ireland, and are currently aimed at consultants, senior trainees and theatre teams. Since 2009, the Severn Postgraduate Deanery School of Surgery in the UK has developed a compulsory one-day human factors simulation training course specifically designed for core surgical trainees. We outline to other trainers the use of this course with the content and structure based on the taxonomy of Non-technical Skills for Surgeons (NOTSS)¹ defining four specific categories to maintain high surgical performance: communication; situation awareness; teamworking and leadership; and decision making.

Aim:

To introduce non-technical skills to surgical trainees early within their career with the aim to reduce non-technical errors.

Method:

Analysis of post-course feedback on self-assessed confidence in the use of non-technical skills was undertaken for all junior surgical trainees undertaking the course in 2012-13 to assess the benefits of the course.

Results:

- 33 junior surgical trainees attended the one-day human factors training course.
- 91% of trainees reported that the course would change their practice.
- There was a statistically significant difference between the self-assessed confidence of trainees in the use of all four categories of non-technical skills ($p \leq 0.001$) before and after the course (see figures).

Discussion

The Severn Deanery School of Surgery

offers a compulsory human factors training course for surgeons at the start of their career. Given the importance of reducing human error, maintaining patient safety and the introduction of competency-based training with an emphasis on simulation, human factors training has a vital place in surgical training and is highly recommended to others involved in training junior surgeons.

References:

1. Yule S, Flin R, Paterson-Brown S, Maran N, Rowlet D. Development of a rating system for surgeons' non-technical skills. *Med Educ* 2006; **40**: 1098-1104

