The non-technical skills of theatre nurses

by Lucy Mitchell

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What are ‘non-technical’ skills and why would they be relevant to theatre practitioners? This is a new area of research for healthcare based on a well developed approach from the world of aviation. Non-technical skills are the cognitive and social skills that complement technical skills to achieve safe and efficient practice in safety-critical occupations. These skills include communication, leadership, teamwork, stress management and situation awareness.

Introduction

In the aviation industry during the 1970s, it was acknowledged that failures in pilots’ non-technical skills contributed to accidents. This led to the development of special research programmes to identify these skills and, subsequently, to the design of training courses called Crew Resource Management (CRM) to reduce errors and improve the performance of flight crews.

CRM courses are also now used in other high risk work settings such as nuclear power, the military and shipping. In recent years, there have been efforts to extend research and training in non-technical skills into areas of acute healthcare services, such as surgery, trauma centres and intensive care units. Work in anaesthesia, surgery and neonatal resuscitation has identified non-technical skills taxonomies and behavioural rating systems for doctors and these are now being used in professional training and formative assessment. There has been research to develop and rate non-technical skills of teams in the operating theatre but the non-technical skills of the operating theatre practitioners have not yet been studied.

NES research

NHS Education for Scotland (NES) is funding a project (March 2007–February 2009) to identify the non-technical skills of the operating theatre nurse. This work began with a review of the literature to discover what was already published on the thinking skills and teamwork of theatre practitioners. Surprisingly, there were very few studies identified from the literature which concentrated on these aspects of the jobs of theatre practitioners. The most common skills examined were communication and teamwork.

We made observations of practitioners in theatre and interviewed 25 scrub nurses in three hospitals in Scotland to begin to identify which non-technical skills they use for best practice. Analysis of the data is still ongoing, however, early indications show that skills which seem to be essential include:

- the ability to anticipate what the surgeon will do next
- listening.

This is listening to the surgeon’s tone of voice and to the changing sounds of equipment and, since the communications are often not intended for the scrub nurse, listening to conversations between surgeon, registrar and anaesthetist to help the practitioners plan and complement his/her understanding of the status of the procedure as it progresses. An aspect of non-verbal communication frequently mentioned was the ability to read the expression displayed in the eyes of other team members.

In the next stage of this project, we will identify the specific non-technical skills of
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scrub nurses. Then, with the assistance of a team of expert practitioners, we will develop a skill set. This could be used to design training of the identified non-technical skills during the education and professional development of scrub practitioners, as well as for assessment. Since the operating theatre environment dictates that teams of individuals must work together to achieve a common goal – the successful surgery of a patient – it is important that these social and cognitive non-technical skills, having already been identified for surgeons and anaesthetists, are also identified for scrub nurses (and ultimately, for other practitioners in the team). Since we are all human and as such, prone to making mistakes, this work aims to assist individuals from different clinical backgrounds to work together in the most effective manner in an effort to maintain patient safety.

References
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