Book Review


The profile of human factors has increased in prominence in medical education over the last decade. Adapted from the aviation industry’s ‘Crew Resource Management’, it is defined as ‘systems, behaviours or actions that modify human performance’, with the aim of improving patient safety. In many courses, such as Intermediate/Advanced Life Support (ILS/ALS), there is now a chapter dedicated to human factors in the course handbook.

‘Human Factors in the Healthcare Setting’ is a course book from the Advanced Life Support Group (ALSG). In terms of size, it sits between the small pamphlets and online resources found on the NHS Patient Safety First website and heavier, more academic tomes such as Flin’s ‘Safety at the Sharp End: A Guide to Non-technical Skills’ or Decker’s ‘Patient Safety: A Human Factors Approach’. The book covers the major human factors topics in small chapters, each about ten pages long. The chapters start with some background models that would be familiar to those who have had formal management teaching: Reason’s Swiss cheese model of accident causation and the Myers-Briggs Type Indicator for personality. The second part of the chapter then deals with practical strategy and application. Some strategies will be familiar to those already working in the NHS such as the SBAR for conducting medical handovers. Others have been adapted from the aviation industry (e.g. T-DODAR used by British Airways pilots to aid decision-making) or locally-developed aids which have not yet achieved wide-spread use (e.g. STARR from the Lancashire Simulation Centre). The book concludes with four clinical scenarios across a wide variety of settings (although not a primary care scenario), some of which will resonate with clinicians’ first-hand experiences.

The book has done well to cover the human factors involved in the provision of healthcare by individuals and small teams. However, the penultimate chapter, which deals with the larger healthcare organisation, feels distinctively under-weight. Healthcare is described as a complex system where additional regulations are introduced in an attempt to increase patient safety, but impractical regulations may perversely increase the risk of harm as policy violations occur to ‘get the job done’. The chapter ends with rather loose statements under the sub-headings of Leadership, Staff Engagement and Assessing Organisational Culture, before concluding with exercises for individual reflection. In the wake of the Francis report, this chapter will be ripe for expansion perhaps by providing examples of how individuals and organisations have successfully driven positive change in their work.

Overall, this book will appeal to not only the ALSG’s target audience of instructors but also any healthcare professional looking for an introduction to human factors without the additional academic references that makes Flin’s or Decker’s books two to three times longer. When I started my clinical medical studies, an ‘experienced’ consultant remarked that when he started his own training, communication skills were not explicitly taught. Today, communication skills are an established part of the medical school curriculum, and assessed in pre- and post-graduate training. Although it is still not clear how the teaching of human factors will develop in healthcare, it may not be long before it, too, becomes an established part of the medical curriculum.

References

Author
Surgeon Lieutenant Commander M Leong RN
Letters to the Editor

Tourniquets – Reinventing the Wheel

I have happened across a beautiful historical example of there being “nothing new under the sun” (1) and of us having a short corporate memory (2). Roy and Lesley Atkins’ historical work on the 18th and 19th century Royal Navy “Jack Tar” (3) cites the identification by Sir Gilbert Blane (of Gilbert Blane Medal fame) of a ‘lesson learnt’ about catastrophic haemorrhage in battle and issues the proposal that every man be issued a tourniquet to stem blood loss, even when, in those times, the CASEVAC distance to damage control surgery at Role 2 was short. In the original 1785 text (5), the passage reads:

“It frequently happens that men bleed to death before assistance can be procured, or loss so much blood as not to be able to go through an operation. In order to prevent this, it has been proposed, and on some occasions practised, to make each man carry about him a garter, or piece of rope yarn, in order to bind up a limb in case of profuse bleeding. If it be objected, that this, from its solemnity may be apt to intimidate common men, officers at least should make use of some precaution, especially as many of them, and those of the highest rank, are stationed on the quarter deck, which is one of the most exposed situations, and far removed from the cockpit, where the surgeon and his assistants are placed. This was the cause of the death of my friend Captain Bayne, of the Alfred, who having had his knee so shattered with round shot that it was necessary to amputate the limb, expired under the operation, in consequence of the weakness induced by loss of blood in carrying him so far. As the Admiral on these occasions allowed me the honour of being at his side, I carried in my pocket several tourniquets of a simple construction, in case that accidents to any person on the quarter deck should have required their use.”

In the intervening years of relative peace we collectively forget previous experiences and these have to be re highlighted time and time again during subsequent conflicts. From a personal point of view, we often only learn from our own bitter experience. As Ernst Jünger stated, “In war you learn your lessons, and they stay learned, but the tuition fees are high” (6).

References
1. Ecclesiastes 1, 9.

Author
Surgeon Commander G Wild RN.

DMSTG - A Truly Tri-Service Medical Field Gun Crew 2013

Defence Medical Services Training Group (DMSTG), commanded by Surgeon Captain Stuart Millar, successfully entered a fully Tri-Service mixed medical crew kindly sponsored for the seventh consecutive year by InT raining, for the 2013 Royal Navy and Royal Marines Charity (RNRMC) Field Gun (FG) Competition. DMSTG delivers high quality medical training to meet the operational requirements of the Royal Navy, Army and Royal Air Force, in order to support their front line Commanders, and thus deliver to our customers – the Serviceman or woman in harm’s way, going into harm’s way or returned from harm’s way.

As in previous years the DMSTG Field Gun Crew reflects this diversity with crew members drawn from permanent staff of all three Services and our MOD Civil Servants, Phase 2 students, Non-Commissioned and Commissioned Officers. Our MOD Civil Servants play a vital role in maintaining the stability and year on year commitment for the DMSTG Crew and facilitate, as well as training and running with the crew at each event. The entire crew demonstrated its potential both on and off the FG track during the RNRMC FG Event.

The last ever DMSTG/Keogh Barracks Crew (renaming to Defence College of Healthcare Education and Training (DCHET) on their move to Defence Medical Services