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Why are we not teaching health care professionals about human error?

Learning lessons from how things are done in the aviation industry was a key theme of a patient safety conference held in Luton. Rachel Graham reports

Before take off, pilots with over 30 years service will sometimes say to less experienced colleagues: "let me know if I make a mistake during the flight". In any case, junior pilots know that they are expected to point out errors, even when the phrase is not spoken. This is according to Martin Bromiley, an airline pilot, who, at a conference in Luton, expressed doubts about whether health care professionals are generally quite so open to suggestions about how they can improve their performance.

Mr Bromiley first became involved in patient safety, and whether the approach taken by the airline industry would be applicable to health care, when his wife, Elaine, died after being given a general anaesthetic for a routine operation last year. The unexpected nature of his wife's death meant that there would be an inquest, but Mr Bromiley was surprised to be told by a consultant at the clinic that there would be no substantive further investigation of what happened that could potentially be used for learning purposes, unless, for example, he chose to sue. When an equivalent incident happens in the aviation industry, an independent review automatically takes place, with the (anonymised) conclusions being placed on a website for others to read.

Mr Bromiley could not see why such reviews did not routinely occur in health care settings and requested that one take place regarding his wife's death. The review (carried out by the president of the Association of Anaesthetists of Great Britain and Ireland) found that following the administration of the anaesthetic, an unexpected aspect of Mrs Bromiley's physiology meant that she could not be ventilated using an oxygen mask, or readily intubated. Although this established anaesthetic emergency could not have been anticipated, it would appear that failures in leadership, communication



Practice in the aviation industry could provide lessons for health care professions in safety

and decision making meant that clinicians persisted in attempting to intubate Mrs Bromiley, instead of trying other means to deliver oxygen to her lungs, such as tracheostomy (an intervention which, while not guaranteed to have changed the outcome, has helped other patients survive similar events).

During his presentation, Mr Bromiley described some other aspects of the approach to safety in the airline industry that

might be of value in health care. There is considerable emphasis placed on understanding and anticipating human, rather than just system, error, he said. Pilots, no matter how senior, are assessed three times a year — once while flying and twice in a simulator. Leadership, communication and decision making skills account for half of the assessment results, and focus is given to how pilots react during (generally simulated) emergencies. The study of human error forms part of a pilot's initial training and is the subject of a course that they must attend each year that they are flying aeroplanes. Human error is accepted as normal in the aviation industry, not a weakness or indicative of poor performance. "Once you accept error is normal, you look for it in yourself and others and start anticipating it," he said.

Mr Bromiley added that it is relatively easy to keep pilots motivated about safety because they "go down with the plane". However, he added that although health care workers do not generally run the risk of being killed by their own mistakes, this does not mean that there are no consequences for them.

Medicines reconciliation in practice at Down Lisburn Trust

Medicines reconciliation was another means to improve patient safety discussed at the conference. Anita Lawther, a pharmacist at Down Lisburn Health and Social Services Trust, Northern Ireland (another of the patient safety exemplar sites) explained that the three-step process involves taking a medicines history from each patient, assessing the appropriateness of the medicines and doses for them and then accounting for any discrepancies between the medicines a patient takes when they come into hospital and those that they leave with. It is designed to avoid the most common type of drug errors, which occur at interfaces, such as failing to ensure that medicines used at home, but temporarily stopped during a hospital stay, are restarted when a patient is discharged.

As part of the new system to introduce standardised medicines reconciliation at the trust, a form was developed with space for doctors to explain any changes they make to the medicines regimens. At the Trust, which comprises small hospitals, pharmacy services have been targeted to the admissions unit and to patients being discharged. Monthly reviews show that the percentage of unreconciled medicines has dropped to below ten, which was the target set when the process was introduced.

Carol Haraden, vice president of the Institute for Healthcare Improvement and chair of the conference, pointed out that electronic prescribing can help with medicines reconciliation. She warned, however, that the US experience is that information technology alone will not solve the problem of drug errors.

The "Why safety matters" conference was held at the Luton and Dunstable Hospital NHS Foundation Trust on 6 October. The trust is one of four exemplar sites involved in the Safer Patients Initiative. **Rachel Graham** is staff editor at *Hospital Pharmacist*.