

STANDING UP FOR SAFETY

Junior doctors are ideally placed to spread safer healthcare practices. **Nigel Hawkes** reports on a conference calling them to arms

Health care is a dangerous business. One in 300 patients admitted to hospital will die as a result of a medical error, and 1 in 10 will be harmed. But need it be so dangerous, and what needs to change to make it safer? A one day conference held in London on 1 June aimed to make junior doctors more aware of patient safety. The conference, which was jointly organised by the Department of Health, BAMMBino (the junior doctor arm of the British Association of Medical Managers), the *BMJ*, and the National Patient Safety Agency, saw a lively exchange of views between the profession's leaders and the next generation—who made it plain in forceful and formidably articulate contributions from the floor that plenty needs to be done.

Would anybody ever get on a commercial airline flight if told before boarding that the chances of dying were 1 in 300? Liam Donaldson, the chief medical officer, who posed the question, said: "That's quite a scary statistic. We shouldn't be performing at this level." Bruce Keogh, the NHS medical director, recalling his days as a junior doctor in the 1980s, said that when he felt on some of his rotations that "things looked dodgy" he was given the long tendered advice: "Look, mate, it's been the same for 30 years. You're only here for six months, lie low and look after your career."

Today, he asserted, things were better. England now had the most comprehensive system for reporting medical mistakes of any country in the world. But the future was in the hands of trainee doctors, many of whom "feel utterly remote as a result of events in the not too distant past," he said, in a veiled reference to the failed medical training application service

(MTAS). Those events have certainly left scars but may have also emboldened junior doctors to be more assertive and less willing to defer.

Sir Bruce offered the 300 junior doctors at the conference at the Hilton Metropole Hotel a deal. "Junior doctors are the best agents for change in our devolved NHS," he said. "Here's the deal. You do it and I'll promise to implement it. It's our opportunity to start something."

Although individual mistakes will always be made, this does not mean that patients will inevitably suffer, insisted James Bagian, chief patient safety officer at the US Department of Veterans Affairs and a former astronaut. Medicine had a "cottage industry mentality," employing virtuosos who collaborated badly. "We try to be perfect," he said. "That's our strategy—and it's ridiculous."

"We think it's only idiots who make mistakes, but everybody does. We cannot be perfect, but we can design systems to reduce risk to an acceptable level. In medicine there's little understanding of such systems, no training in them, and a culture of ignorance and arrogance. Other industries are culturally different."

In the first world war, the Royal Flying Corps (which became the RAF) lost 14 000 pilots, 8000 of them as a result of accidents not enemy action, Dr Bagian said. The average US air mail pilot of the 1920s lasted only three years. In 1954, the US Air Force lost 776 aircraft to accidents—more planes than in today's entire force. "They said 'aviation's dangerous, we expect people to die,'" he said. "That's just the way it is.' But it isn't. When jets came along they were so expensive you couldn't afford to build them at that rate, so everything had to change. Aviation became a



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Sir Liam Donaldson, chief medical officer, described factors that led to the death of Wayne Jowett, a 16 year old boy, who had vincristine wrongly injected into his spine

high reliability organisation."

The same was true of the nuclear industry in Western countries, but health care was "not even on the same piece of graph paper," he declared. "Our accident rate is a joke."

Safety culture

So why are there such huge differences? Health care will always be a tougher proposition, because patients differ. Engineering deals with standard systems—the airspeed indicator is always in the same place, not located at the whim of the pilot—and although engine failure on take-off is extremely rare (only 1 in a 1000 airline pilots will ever experience one) the procedure for dealing with this dangerous incident is checked before every take-off. "Yet we have lots of doctors who say 'I like to do it that way' and surgeons who don't want to use the WHO checklist before operations—if that's not arrogance I don't know what it is," he said.

"We need systems based solutions, adherence to rules, and a no blame culture that doesn't focus on individuals. The question is what happened, why it happened, and how can we prevent it in future? If we concentrate on saying who is responsible we make it harder. We need to give people tools that shape their behaviour, and then it's absorbed and becomes part of the culture. Prevention, not punishment."

Few of the junior doctors felt they stood much chance of making these changes, or even of being listened to. On a show of hands called for by Fiona Godlee, editor in chief of the *BMJ*, only a small minority believed that by raising an issue they could make a change in the trust where they worked. Dr Godlee, in confessional mode, recounted her experience



Fiona Godlee, editor of the *BMJ*, described a clinical incident where she believed she should have been more assertive. “Sometimes you have to make waves”, she said



Dr Kevin Cleary, medical director of the National Patient Safety Agency, said handovers between shifts were among the biggest issues for junior doctors



Sir Bruce Keogh, medical director of the NHS, was told: “Look, mate, it’s been the same for 30 years. You’re only here for six months, lie low and look after your career”



Ann Keogh, director of medical safety at Heart of England NHS Foundation Trust, said that results of patient safety inquiries should be shared

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as a registrar in general medicine when she had correctly diagnosed a newly admitted patient as having necrotising fasciitis but had been talked out of the diagnosis by the surgical registrar. With no space free in intensive care, the patient was managed on the ward but didn’t do well. He had a cardiac arrest—at which point a bed was found in intensive care—and lost fingers and soft tissue.

“I needed to be more assertive,” Dr Godlee said. “I was a good doctor, but I also wanted to be a good corporate citizen. Sometimes you have to make waves.”

A few breakers were certainly generated in the questions to Sir Liam, his role in MTAS still not forgotten. Chris Brown, a surgical trainee from Royal Berkshire Hospital NHS Trust, said that Sir Liam had helped create Modernising Medical Careers, the four hour accident and emergency waiting target, and the 18 week wait between referral and treatment—all of which were stumbling blocks to greater safety. “What will you do to let us act more safely?” asked Mr Brown.

A young psychiatrist, Serab Ozdural, said she had been driven from medicine into psychiatry by the blame culture and the old boy network. “People like me were intimidated,” she said. An oncologist criticised the response to an incident described by Sir Liam in which Wayne Jowett, 16, died after vincristine was wrongly injected into his spine at Queen’s Medical Centre in Nottingham. Although the report Sir Liam commissioned in response had identified 40 steps in the chain of events that, had they gone differently, might have saved Wayne’s life, the registrar who administered the drug had been found guilty of manslaughter.

Was this evidence of a no blame culture, Sir Liam was asked, to a round of applause. What had happened subsequently to that doctor?

Sir Liam said his point had been that the warning on the vincristine ampoules, which the doctor hadn’t read, was of itself not enough. Since the incident he had spent five years trying to get a design solution in which such a confusion between drugs was made impossible but hadn’t been able to do it. “Manufacturers say they don’t see a market and there might be knock-on effects that would increase risks elsewhere,” he explained. Since Wayne Jowett’s death there have been further deaths from the same cause in Hong Kong and California, and the disclosure of large numbers of deaths in China where drugs were contaminated with vincristine during manufacture. As many as 250 patients around the world have now died after having vincristine injected wrongly into their spines, he reported.

Barriers

Asked to identify barriers to greater safety, many of the junior doctors blamed poor handovers between shifts, with inadequate information poorly conveyed. Dr Kevin Cleary, medical director of the National Patient Safety Agency, said this was “almost the biggest issue” for junior doctors. “We are trained in communication skills but we don’t even now know how to communicate with the team or other members of staff,” he said. “There are good and bad ways of doing a handover.”

Dr Bagian said the Department of Veterans Affairs had developed a handover tool, listing core information for every patient. As a result,

handovers took less time and provided better information. As for costs, the department developed a business case for proposed safety changes and found they always paid. “At first managers resisted, but now we don’t even talk about it,” he said.

Low staffing levels, arbitrary cuts in technical support, poor training, and a lack of feedback were other charges laid by the junior doctors at their trusts. In response to a presentation by Ann Keogh, director of medical safety at Heart of England NHS Foundation Trust of an actual incident, again involving confusion between drugs, one questioner asked if the results of the inquiry the trust held had been sent to other trusts. They had not, she said, but should have been. Sir Bruce added that had the incident happened today, it would have to have been reported to the primary care trust but not to the National Patient Safety Agency. “This we have to change,” he said.

Chris Ham, professor of health policy and management at Birmingham University, who chaired the conference, concluded by urging junior doctors not to underestimate their power to get changes made. But he questioned whether Dr Bagian’s estimate of 10 years for health care to catch up with aviation. “That’s a bit ambitious,” he said.

Had the meeting inspired junior doctors to make waves, as both Professor Ham and Dr Godlee urged them? In response to that question, a third said they were very likely to speak up now, and 43% a little more likely to do so.

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