CREW RESOURCE MANAGEMENT GOLD RUSH: RESISTING AVIATION IMPERIALISM

What a welcome and timely question to ask: are we too solution focused in importing crew resource management (CRM) training into surgery? As a newly minted airline pilot and a professor at a faculty of medicine, I can see accusations of imperialism brewing. Grafting an off-the-shelf ‘solution’ onto an ongoing and well-established field of practice, without showing the evidence base to justify it, is ‘simplistic’ as Callaghan et al. point out in this issue.¹

So why should medicine be sceptical, or at least think twice before jumping on this bandwagon? Hunt and Callaghan lay out three arguments. The first revolves around the differences between flying and surgery (more about that later). The second is that aviation does not have evidence that CRM training actually improves safety in its own backyard – let alone that it benefits newly colonized areas.² The final argument is that there should be better ways to spend scarce resources on safety improvements in medicine rather than giving it to mercenaries who have found, as Hunt and Callaghan call it, a new ‘cash cow’. They may seduce medicine to embrace a ‘solution’ that will be notoriously difficult to resect once ensconced – if anything because it would give litigators a field day (‘Oh, you abandoned your CRM training for surgeons? No wonder errors were made! Now pay up!’). This, some maintain, is an important reason that no airline (or even regulator) in the world is willing to drop CRM training for its crews.

Now let us look at some of Hunt and Callaghan’s differences between aviation and surgery. First, they say that CRM training is intended to forestall crises rather than resolve them. True, but that difference is possibly more about culture than it is about CRM’s transference to medicine. Whether hierarchy plays a stronger role in aviation than it does in surgery is probably quite debatable. Persons in aviation would argue that authority distances have shrunk enormously over, say, the last few decades (and some would even credit CRM training!) and that junior pilots have a little trouble speaking up to a senior captain as to their own parents. Shifting societal norms about how elders are addressed or respected (or not) seep into the cockpit too (in other words: so much for CRM claim to success). The entire team was supposed to drop everything, step back from the table and do a review (right patient, body part, procedure, that sort of thing). When I asked around, there was no anaesthetist who actually knew what she or he was exactly supposed to review during time-out, so some had come up with their own little mental checklists. An airline could get grounded for squandering such an opportunity at standardization and quality control.

More intriguingly, after talking to some of the scrub staff who were preparing in the side room before one procedure, I made my way into the theatre. The consultant had already opened up the patient and was studiously peeling his way down to a tumour. ‘What about the time-out?’ I enquired quietly. It had already been carried out, I was told, by the surgeon himself. What can you say? His list was long and his day was short. This is where I believe that both pilots and surgeons feel the perfusion of external pressures into their decisions the entire time. True, we do not ask passengers for their opinion in a diversion or cancellation decision. But at a higher level, the airline and the marketplace in which it
operates, does, and such preferences and priorities make their way back into the cockpit through subtle signals about dollars, fuel, load factors, all of which may concatenate to push some crew-member’s trade-off one way or another on a dark and lousy night somewhere.

Although surgical specialties vary widely, as Hunt and Callaghan say, similar or identical specialties (distributed across staff of different rank and experience) will likely find themselves assembled in one operating room for a particular procedure. This again, CRM devotees would argue, provides interventions from others into what is going on, based on similar knowledge, but slightly different perspectives. But Hunt and Callaghan caution that this will be difficult. Where aviation has proceduralized, documented and regulated role authority, responsibility and accountability, surgery lacks such consensus, they say in their piece about followship. My experiences suggest that such consensus probably does exist, but it gets worked out dynamically and subliminally while surgical work is being conducted. This indeed means that CRM golden oldies to challenge authority (Whose? When?) or brief (About what?) or be a team leader (Huh?) are useless without the sorts of evidence of the problem in medicine that Hunt and Callaghan entirely justifiably demand.

Not only may we have become too solution-focused, we may also be starting at the wrong end. Hunt and Callaghan suggest as much: CRM training in aviation falls into a well-prepared bed of human factors knowledge and a life of constant double-checking, peer review, proficiency control. Pilots know about decision-making, authority gradients, cognitive fixation and automation surprises. Otherwise they do not get a licence to begin with. Such fertile ground is generally not created in basic medical training, but it probably should. Before that, I can only agree with Hunt and Callaghan and amplify their message. Not only is a focus on an imported ‘solution’ simplistic, as Hunt and Callaghan argue. It is probably counterproductive, both for medicine and the reputation of human factors. Let us base our interventions on evidence, not on a gold rush.

REFERENCES


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