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Changing social relationships

In his review of our paper on pro-anorexia internet communities,¹ Dr Smith introduced one inaccuracy into an otherwise concise summary. He mistakenly attributed a quotation from a participant in the internet forum to our researcher. Angela (a pseudonym) had commented that she was intending to leave the group because she did not approve of some of the comments made by other participants. Dr Smith put these words in the mouth of our own Dr Ward and then wondered why she had decided to stop her research.

This interpretation gives a slightly misleading overall impression of our own response to the pro-anorexia community. Whatever our own feelings about the philosophy of the group, our analysis sought to provide as objective an understanding of the participants' views as possible. We concluded our paper by suggesting that there is a coherent model of anorexia behind the pro-anorexia movement, and that, to comprehend this apparently irrational desire to sustain very low body weight, it is necessary to understand this model first.

We hope this clarification will assist readers in making sense of our research and perhaps to take a look at the original paper.²

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Accepted 3 August 2006

Competing interests: None declared.

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Situational awareness in medicine

As a retired United States Air Force pilot-physician, I commend Singh *et al* for their excellent use of situational awareness as an analysis tool in aviation.¹ I wish only to add a subtle dimension to their illustration of situational awareness: LSA (loss of

situational awareness) began as a universally recognised acronym of the North Atlantic Treaty Organization. But one cannot lose what one never had. Situational awareness in military and air carrier aviation universally begins at a maximum, and may deteriorate backwards from level 3 of Endsley's model. Maximal situational awareness at the outset of a mission is achieved by all team members studying environmental factors that might affect the outcome; mentally rehearsing the mission timeline, actions and threats; and planning for contingencies during the pre-flight briefing. The team begins with a high-level, mental model of what is to come. Sadly, pre-event reviews are becoming increasingly rare in medicine, and doctors begin with very limited or no situational awareness as illustrated by the outpatient case in the paper. Further, situational awareness in outpatient medicine, if it exists at all, is compromised by the fragmentation and time displacement of cues and communications. Ironically, it is easier to discern situational awareness, good and bad, in the confines of the high-risk areas of inpatient care: the operating room, labour and delivery, and the emergency department. Medical team training courses emphasise the value of briefings in setting the stage for good situational awareness, and train high-risk team leaders to conduct them.

Thus far, team training is not widely deployed or accepted. Nor are briefings cited in such patient-safety resources as the Agency of Healthcare and Research Quality Web Morbidity and Mortality. Another fundamental, but subtle, difference between aviation and medicine is decision making. The hapless primary care physician was "flying solo" and making independent judgments. Despite the Hollywood images, fighter pilots rarely make solo decisions. Flying in multiples for mutual support, air combat teams operate with strong, visible, designated leadership, but simultaneously practise collaborative, consensus decision making. Similarly, "cockpit resource management", the progenitor of medical team training, reversed decades of left-seat, hierarchical, autocratic decisions that placed passengers at the same risk level as the described patient in favour of collaborative decision making after inputs by all, even by passengers.² Lastly, the authors omit any discussion of a post-event debriefing of this adverse outcome. Thus, learning was not captured; nor were system improvements made. Debriefings—as short as 30 s or lasting for hours—are mandatory in aviation and result in real-time, actual, lasting continuous quality improvement. Early efforts to use traditional Morbidity and Mortality conferences offer some promise in debriefings). Medicine has much to adopt and adapt from other high-risk professions, aviation, nuclear power and even mining. The authors have advanced that journey considerably.

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Accepted 3 August 2006

Competing interests: None.

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We thank Dr McCarthy for his thoughtful insights on the application of situational awareness in medicine. We agree that doctors begin with a limited amount of situational awareness and often fail to maximise their situational awareness using a team approach. Owing to the increasing complexity and acuity of care in the outpatient setting, the risk of outpatient medical errors has increased during the past several years.¹ Thus, the use of situational awareness in outpatient care has become more critical than ever. Although doctors function at times with a high degree of situational awareness, they seldom continue to be "aggressively sceptic" in the environment of outpatient care, owing to factors such as fragmented communication, as Dr McCarthy noted. In our article, we propose that achieving "team situational awareness" could overcome some of these obstacles. Team situational awareness can act as a safety net for primary care doctors "flying solo" and can be facilitated by a culture change in communication among doctors.

We do acknowledge the omission of a post-event debriefing in our discussion. Nevertheless, we believe that learning resulted from this case to some extent. We discussed the case in detail at a traditional conference on morbidity and mortality and communicated several lessons to the audience. Unfortunately, as many doctors would agree, the quest to make systems improvements and policy changes based on isolated "stories" is not always successful.² Unlike aviation, medicine seeks evidence from randomised controlled trials and other evidence-based literature to change healthcare systems. With decreasing funding opportunities to support research on medical error management, we hope that cases such as ours illustrate the learning opportunities from other high-risk industries.

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