

SHORT COMMUNICATION

Educating undergraduate medical students about patient safety: Priority areas for curriculum development

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Abstract

Learning about patient safety is an important aspect of undergraduate medical curricula but there are no clear priority areas. A recent consensus of international medical educators identified several priority areas and these recommendations include approaches to increase knowledge of patient safety, including the causes and frequency, to develop willingness to take responsibility, to develop self awareness of the situations when patient safety is compromised, to develop communication skills, especially inter-personal, and to develop team working skills.

Patient safety is a major priority for all healthcare providers and it is a reasonable expectation that all undergraduate medical students should have the necessary competence to ensure that harm to patients is minimized in their future career as a doctor. This raises several important questions: What should be learned, when should it be taught and how should it be taught? These questions appear at first sight to be obvious but teaching and learning about patient safety in undergraduate medical education offers a challenge to all medical schools.

The main challenge is to ensure that patient safety is regarded as an essential aspect of the undergraduate medical curriculum. In addition, there is the real dilemma of how it can be included in an already crowded curriculum. These difficulties are compounded by the wide variety of statements on what should be learned, with a range from vague broad aims to long lists of detailed intended learning outcomes. There is an urgent need to clearly identify the main priorities for patient safety in undergraduate medical education. A symposium on patient safety education was recently held at AMEE (2006) and an important outcome was the development of several key recommendations for patient safety education. This was produced by using an electronic audience response system to identify the opinions of the 86 international participants in the symposium.

All participants stated that education on patient safety was important in undergraduate medical education and 37% had already implemented a patient safety curriculum. However, only 7% stated that they thought that they were doing enough in their curriculum.

The main priorities stated by participants included a variety of both specific and more generalized aspects of patient safety (Table 1). It was recommended that all students should increase their knowledge and awareness of patient safety, including the causes and frequency. This aspect was also

associated with the need to encourage students to accept that they have an individual—and a collective—responsibility for improving and maintaining patient safety. The development of self-awareness of the situations when patient safety is compromised was regarded as being important, such as when working under pressure. The more generic skills of inter-personal communication and team-working were identified as essential competences.

Other priorities included the need to develop skills in a range of areas, including root-cause analysis, safe prescribing and procedures, the empowerment of patients to have an involvement in patient safety and dealing with the aftermath of errors, in both doctors and patients.

Table 1. Recommendations for patient safety education in undergraduate medical education.

Main:

- Increase knowledge of patient safety, including the causes and frequency
- Develop willingness to take responsibility
- Develop self-awareness of the situations when patient safety is compromised
- Develop communication skills, especially inter-personal
- Develop team-working skills

Lesser:

- Develop skills in root-cause analysis
- Develop skills in safe prescribing and procedures
- Develop skills to empower patients to have involvement in patient safety
- Develop skills in dealing with the aftermath of errors, in both doctors and patients

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Over 75% of participants stated that patient safety education should be delivered throughout all phases of an undergraduate medical course, including the first few years, although greater emphasis should be placed on this in the later years. In early years, it was recommended that students be made aware of the nature and extent of threats to patient safety but also that more generic skills be developed. There was an overwhelming view that patient safety education should be integrated with the overall undergraduate medical curriculum but that there should be specific awareness-raising sessions.

The importance of inter-professional education on patient safety was highlighted by participants, with over 95% recommending joint learning opportunities with nurses and pharmacists.

These recommendations give emphasis to the importance of developing individual self-awareness and responsibility as an essential attribute for all future doctors. In addition, there is a need to develop a collective responsibility for patient safety (Rochlin 1999). This requires an experiential approach in which all medical students begin to appreciate the effect of human factors, such as fatigue or multiple complex tasks, on their performance, and that they also need to constantly monitor the performance of colleagues when in high-risk situations. This can be achieved by techniques that are used in aviation, such as situational awareness training, in which individuals become aware of situations in which errors are more likely to occur, and they are also empowered to give feedback to colleagues if they note behaviours that can lead to safety being compromised. An essential aspect of this training is its inter-professional approach and the development of effective communication between different professional groups. This approach to patient safety education has not previously been highlighted in the proposed patient safety curricula yet there is increasing research that demonstrates its value in high-risk environments, such as operating theatres (Aggarwal et al. 2004).

Recently the role of patients has been recognized as an important aspect of improving patient safety, such as prompting doctors to wash hands or asking about allergies. This requires an educational approach not only to raise awareness but also to develop skills to enable patients to give information

and feedback to doctors. This can be achieved by communication skills training with simulated patients and role play.

An increase in self-awareness and responsibility for patient safety could have negative effects on the individual doctor and an essential aspect of any undergraduate medical course is the opportunity to consider the effects of medical errors on a doctor and how these effects can be managed. Similarly, it is essential to develop skills in how to communicate regarding medical errors to patients and relatives. This area is a common cause for complaint and often escalates into litigation.

We believe that these recommendations provide a clear direction for implementing and developing patient safety in all undergraduate medical school curricula. The priorities reflect current initiatives to improve patient safety, especially the emphasis on human factors and organizational culture, rather than concentrating on incident reporting and analysis (Leape & Berwick 2005). These recommendations cannot be ignored if we are to be serious about improving patient safety.

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