

Evaluation of the effect of adding a high-fidelity simulation to an existing didactic lecture to teach pharmacy undergraduates the management of sepsis in secondary care

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Aim: To evaluate the effect of adding simulation-based teaching to an existing didactic lecture on the management of sepsis.

Introduction: 'Sepsis Six' has become the recognised treatment pathway for sepsis (1), and has traditionally been taught to our undergraduate pharmacy students in didactic fashion. Interactive teaching methods, such as simulation, are the most effective forms of education to improve patient safety (2).

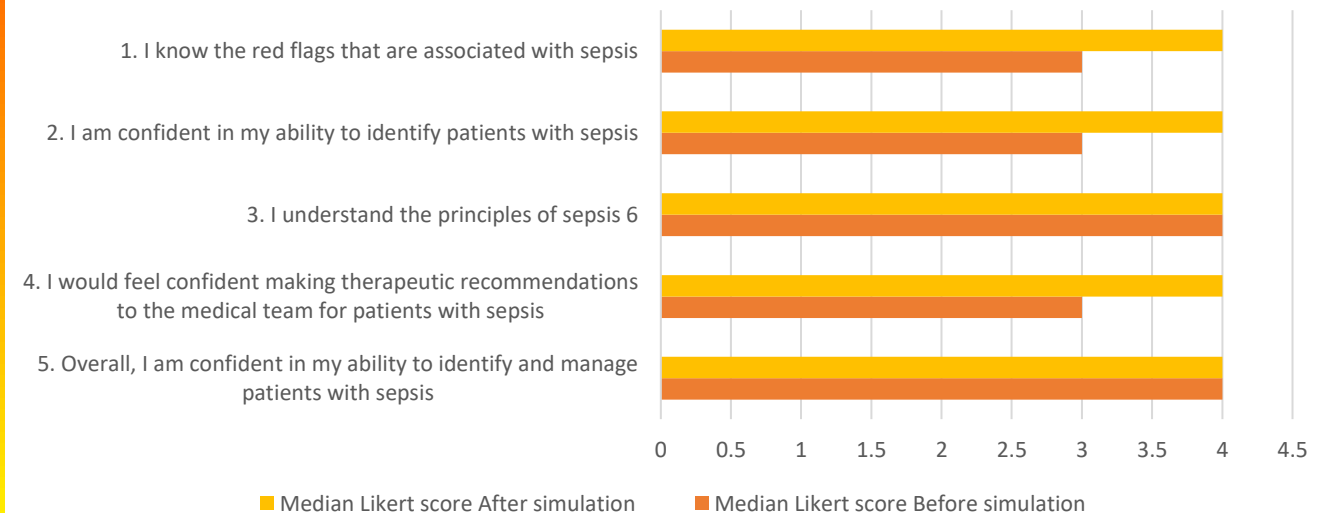
Methods: Year 4 students at the University of Bath (n=92) attended a sepsis lecture and then completed an online survey that used Likert scales to evaluate understanding of sepsis and confidence in managing it.

One week later, small groups of students completed a 30-minute sepsis simulation using SimMan ALS. After the simulation, students underwent de-brief and completed the same online survey a second time. Changes in students' responses between surveys were analysed using Wilcoxon signed-rank tests in SPSS.

References:

- 1) <https://sepsistrust.org/wp-content/uploads/2020/01/5th-Edition-manual-080120.pdf>
- 2) <https://www.pslhub.org/learn/professionalising-patient-safety/training/staff-clinical/evaluation-of-education-and-training-interventions-for-patient-safety-2016-r1393/>

Average Likert survey scores before and after Simulation



Results and conclusion: 26 students completed both surveys (response rate: 28%). Likert scores for questions 1, 2, 4 and 5 were significantly higher following the simulation, indicating improved confidence and knowledge.

Adding a high-fidelity simulation to an existing didactic lecture increased student confidence in identifying and managing sepsis. Self-reported knowledge of sepsis red flags also increased (indicated by the responses to Statement 1). This study should encourage future sepsis teaching to include a blend of didactic and simulated learning