Escape to patient safety!

An educational escape room for multidisciplinary students

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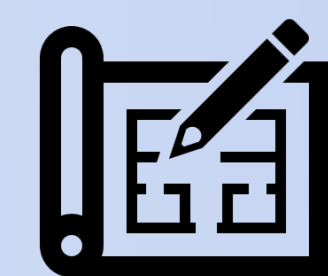
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Background

"Gamification" is increasingly used in medical education to increase active learning [1]

One form of this is an "escape room" where teams work to complete tasks and puzzles which eventually lead to successful "escape".

We planned and implemented an educational escape room to teach patient safety concepts to a multidisciplinary group of pharmacy and medical students.

Proposed Educational Benefits

- Promotes active learning [2]
- Practical interpersonal skills– teamworking, communication [3,4]
- Builds Problem Solving skills [2]
- Collaborative learning [2]

Planning the escape room

Case : Death of 16-year-old girl from liver failure

Concept: Students given binbag of crumpled papers and BNF. Students need to work out cause of death from paperwork that has been thrown away.

Puzzles + learning points: give THREE CLUES

Hospital map maze -> multiple patient ward moves (*gives website address – screen is BLUE)*

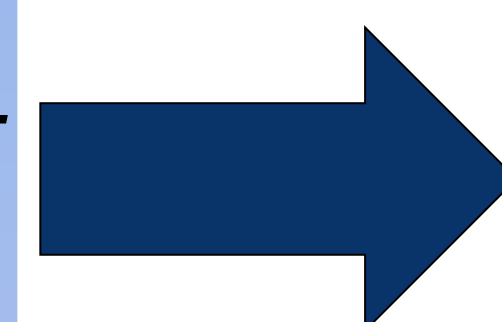**Puzzle with two staff members extra – >**
Staffing issues, lack of senior support (*gives telephone number -> text message MOON)*

Deteriorating blood tests - > diagnostic
Error (*gives BNF page Number -> MCFC written on page)*

Three correct clues: drug chart with paracetamol overdose for weight

To escape!: work out root causes of death

Pilot session

- **30 teams of 4-5 students trying to "escape" simultaneously**
- 125 medical + pharmacy students split into 5 tutor groups with 1-2 tutors per group
- Introductory lecture to patient safety concepts -> escape   room -> debrief teaching
- Feedback obtained from students and tutors informally and via online poll after session
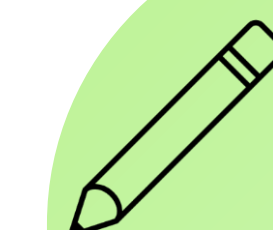
Revised session

- Kept same structure and student groupings
- Refined student instructions: can use phones
- Simplified/Edited puzzles causing confusion
- Teaching plan for post escape room debrief

Feedback

Post teaching feedback form

79 responses

Most commonly reported learning:
Patient safety theory (54%)

	Percentage "agree" or "strongly agree"
I found the format engaging	82%
It helped me think about the patient safety aspects of the case	82%
It is an efficient use of my time as a learning tool	75%
It helped me learn how to solve problems with others	84%
Compared to other methods of learning (lectures, quizzes etc) it is useful for educational purposes	77%

"It was like a mini PBL but compressed and rapid. I loved it!"

"I would have liked the escape room to have more medically related questions to answer"

Top 3 words:
"fun"
"engaging"
"interactive"

"a fun and engaging way to make students think a bit more creatively to solve problems"

"All students had to get involved … no one was able to sit back and not take part"

"teaches … more practical skills like communication, working in a team, critical thinking"
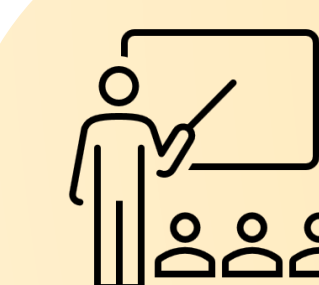
Learning for future escape rooms!

- Topic selection: Useful to make mundane areas of curriculum -more engaging/fun
- Puzzles need very clear instructions
- Puzzles should aim to demonstrate key learning outcome [2]
- "debrief" after escape room – very useful to draw out key learning points [3]
- Require a high number of resources/staffing: need to weigh up educational benefit

References: (1) Guckian J, Eveson L, May H. The great escape? The rise of the escape room in medical education. Future Healthcare Journal 2020 June;7(2):112-115. (2) Shah AS, Pitt M, Norton L. ESCAPE the Boring Lecture: Tips and Tricks on Building Puzzles for Medical Education Escape Rooms. Journal of Medical Education and Curricular Development 2023;10. (3) Davis K, Lo Hy, Lichliter R, Wallin K, Elegores G, Jacobson S, et al. Twelve tips for creating an escape room activity for medical education. Medical Teacher 2022;44 (4) Quek LH, Tan AJQ, Sim MJJ, Ignacio J, Harder N, Lamb A, et al. Educational escape rooms for healthcare students: A systematic review. Nurse Education Today 2024;132.