Evaluating the Use of the 'Top 9 Surgical Conditions' Bingo Card For Medical Students On Their **Surgical Placement**



Dr Anna Brown and Dr Amy McIntosh Clinical Teaching Fellows 2023-24, Queen Elizabeth University Hospital, Glasgow.

Greater Glasgow and Clyde

Background

Gamification of learning is becoming increasing popular and has been shown to have significant positive effects on cognitive, motivational and behavioural learning outcomes (1). 'Bingo' is a novel approach when it comes to increasing students engagement on placement. It can has been shown to increase motivation to learn as well as highlight the patient presentations a student has encountered (2,3)

The bingo card was introduced to 3rd year medical students on their 5 week surgical placement in the Queen Elizabeth University Hospital. The presentations included were based on the list of 'top presentations' students should learn about on their placement provided by the University of Glasgow. These were presented in an SBAR format in order to help students gain confidence with using this tool.

Aim

The aim of this study was to evaluate the use of the 'Top 9 Surgical Conditions' Bingo card for medical students on their junior general surgical block

Methods

Online surveys were conducted pre and post students undertaking the activity.

The students rated current confidence on assessing patients with common surgical conditions, using a 5 point Likert scale.

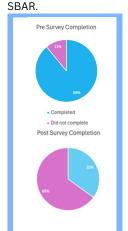
Students completed the 'Top 9 Surgical Conditions' Bingo card to complete during their placement (Image 1)

TOP SURGICAL PRESENTATIONS BINGO JUNIOR SURGERY GEUH 2024 JAUNDICE **BREAST LUMP** GI BLEED \$: 72 year old women right side breast lump presents to her GP A: Right 2cm craggy fixed breast lump in RUO. No system one stop breast clinic for imaging ALTERED BOWEL ABDOMINAL PAIN **LEG PAIN** HABIT \$: 54 year man with acute left leg pain presents to A&E A: cold, pulseless, pale left leg. R: urgent ref to vascular for CT angio +/- surgery POST-OP ARDOMINAL URINARY SYMPTOMS COMPLICATION SWELLING R: Patient consented for WHAT ARE THE SIGHS OF AN

Image 1: Top 9 Surgical Presentations Bingo Sheet

Results

Overall, median Likert confidence rating for each condition improved by at least 1 point in each group of students, alongside confidence with





Limitations

Completion rates

These fell over subsequent blocks. The activity was made optional. This could be due to students having other mandatory coursework and summative exams.

Other learning experiences

Students completed this while on placement and receiving other teaching. This may also have improved confidence in these topics. A future study focusing on solely the bingo may be useful.

Reported confidence

This is subjective and in future, formal assessment could be used to evaluate the teaching resource.

Conclusions

Overall, median Likert confidence rating for each condition improved by at least 1 point in each group of students, alongside confidence with SBAR.

This shows educational benefit in using the top 9 Bingo Card to improve students knowledge of common surgical conditions, through gamification.

This Bingo Card could be further employed within other disciplines of undergraduate medicine.

Jaaler Im, Homer E. The Saminacion of Legisland and Same Annual Same Impact (Library Spring Legisland) and Legisland Endown High Spring Legisland (Library Spring Legisland) and Legisland Spring Legisland (Library Spring Legisland) and Legisland Spring Legisland (Library Spring Legisland) and Legisland (Library Spring Legisland) and Legisland (Library Legisland) and Legisland (Library Library Lib

Lotakis DM, Wallack MK, Gadepalli SK. Bingo as a Novel Approach to Skill Building in the Initial Months of Surgical Internship: A Pilot nolementation. J Adv Med Educ Prof Internet). 2024 Apr 1 [cited 2024 Apr 23]:12(2):126. Available from: /pmc/articles/PMC1103632