Leveraging Technology-Enhanced Team-Based Learning in a Large-Classroom Setting: A Sri Lankan Medical School's Practical Innovation

Background:
Team-Based Learning (TBL) is an active learning strategy that encourages collaborative knowledge application, particularly effective in integrating pre- and para-clinical concepts into clinical reasoning. This session aimed to enhance applied clinical knowledge among third-year medical undergraduates using simulated case scenarios and multimodal tools, focusing on abnormal uterine bleeding (AUB).

Methods:
Over 200 third-year medical students, having completed their pre- and para-clinical subjects, were divided into eight groups. They participated in a TBL session using eight simulated clinical case scenarios of AUB. Students were not given any pre-session questions; only the cases were shared in advance. During the session, held in a lecture theatre, each case was displayed sequentially. One group was allocated a microphone to present their oral responses, while the other seven groups discussed and submitted their answers via the interactive platform "Pear Deck." The session fostered real-time group discussions, comparison of responses, and collaborative answer formulation, guided by a single instructor.

Results:
Over a two-hour session, students demonstrated the ability to integrate and apply pre- and para-clinical knowledge to real-life clinical situations through structured team discussions. The interactive nature of the activity and the use of multimodal tools enhanced student engagement, clinical reasoning, and understanding of diverse AUB presentations.

Conclusion:
TBL, combined with simulated case-based learning and digital tools, can effectively facilitate active learning among large groups of medical students with minimal instructor input. It supports deeper clinical reasoning and collaborative problem-solving in a time-efficient and resource-effective manner.

Take-awayMessage:
Team-Based Learning, when integrated with technology and case-based scenarios, is a scalable and impactful strategy for clinical teaching that promotes active participation, critical thinking, and collaborative learning even for large cohorts, with a minimal number of instructors or lecturers, within a given time frame.

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