Peer-Led Case-Based Learning in Pulmonary Infections

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Background
• Case-based learning is an increasingly utilized method of teaching in health professions education.
• Case-based learning emphasizes the relevance of concepts to clinical care and aids in connecting knowledge to practice.
• Interactivity further enhances knowledge acquisition and impacts clinical practice.
• Opportunities exist to integrate more peer-led teaching and case-based learning in the pre-clinical MD curriculum to reinforce retention and application of clinical knowledge.

Objective
• Assess the effectiveness of peer-led didactics and case-based learning on medical students’ self-reported confidence and comprehension of pulmonary infectious disease topics.

Methods
Create video recorded lectures of pulmonary infection pathologies. Deliver a real-time case-based flipped classroom activity.

Target Audience: M2 students at Wake Forest School of Medicine.

Survey: Data collection consisted of emailed pre and post activity surveys with free text answer choices and numeric rating scores.

Effectiveness: defined by student satisfaction with the presented material and ability to apply it

Results

Discussion
This study demonstrates that peer-led case-based learning is beneficial and effective in conveying material to students. Peers are familiar with what material is being assessed on high-stakes exams and are useful resources in preparing lecture material. Peer-led case-based learning is effective and beneficial because it requires students to apply their knowledge to clinical cases.

Conclusion
• Students reported increased confidence in characterizing different pulmonary infections after completing an interactive case-based session on pulmonary infections.
• Students reported satisfaction with the clarity of information presented during the peer-led teaching lecture.
• Further investigations should explore the impact of peer-led and case-based learning sessions on student exam performance. Curriculum design committees should consider more peer-led teaching sessions in medical education curricula.

Reference