Peer feedback activity on critical appraisal of a RCT in a postgraduate-level online unit of study in introductory clinical epidemiology

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Background

• Critical appraisal is a key skill in evidence-based healthcare practice.
• A peer feedback activity was developed where students critique each other’s attempt at critical appraisal

Aim

• To improve student capability to perform critical appraisal of a RCT
Methods 1: “Introduction to Clinical Epidemiology” unit of study

• Postgraduate level unit of study at the University of Sydney, Australia
• Designed for healthcare professionals and clinical researchers
• Most students are medical doctors who study online and part-time
• 420-460 enrolments each year
Methods 2: Process of providing peer-feedback

1. Students attempted critical appraisal of a RCT
2. Their responses were randomly exchanged with other students
3. Students reviewed the model answer (video and document) and “critical appraisal exemplars”
4. Students provided written feedback comments to a peer

*Students remained anonymous
Methods 3: Marking of peer feedback activity

• Teachers graded quality of student peer feedback comments. Students DID NOT grade each other’s responses

• Grading rubrics disclosed
  o Judgement on quality of peer responses
  o Specific feedback comments
  o Marker’s depth of understanding

• Teacher feedback comments on student feedback comments returned to students.
Results 1: Mark distribution of critical appraisal of a different RCT in final assignment

“Before” (Semester 2 2020) vs. “After” (Semester 1 2021)
Results 2: Benefit of peer feedback activity

• “It forced me to analyse the answers and understand the exercise better.”
• “It forced me to think more deeply about the critical appraisal process.”
• “Very helpful with consolidating my knowledge.”
Results 3: Why did you feel comfortable/uncomfortable providing negative feedback?

• “Because I am also unsure whether my assessment of this person’s article review is right or not. I’m afraid to say this is wrong when I could be wrong myself.”

• “I felt slightly uncomfortable as I did not think I was the best person suited to be providing feedback, and did not want to provide inappropriate feedback. Anonymity of feedback made me feel more comfortable.”

• Emphasise that the entire process is anonymous.

• Reassure that peer will review teacher feedback.

• Teach them importance of correcting colleagues’ misunderstandings.
Limitation

• 30 minutes per student to provide feedback on student peer feedback comments

• Lack of human resources to mark peer feedback of critical appraisal of other study types

• Students are encouraged to find a partner to continue providing and receiving peer feedback informally
Conclusion

• The peer feedback activity improved student capability to critically appraise RCTs
• The activity was received well by students as an excellent scaffolding activity.

Thank you and I would love to be contacted on naomi.noguchi@sydney.edu.au 😊