

CHOOSE YOUR OWN PHYSICAL EXAMINATION: DEVELOPMENT OF INTERACTIVE CASES AND REVIEW OF LITERATURE ON TEACHING TARGETED PHYSICAL EXAMINATION SKILLS



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INTRODUCTION

- There is high comorbidity of physical illness in patients with severe mental illness^{4,8}, and physical exam (PE) findings are key diagnostic tools in certain psychiatric conditions.
- Conducting a targeted PE, including a neurologic exam, is a milestone per the ACGME in psychiatry.
- Despite this, literature reveals infrequent use of the PE in psychiatric practice among clinicians, little formal education on the PE in residency, and low confidence levels among trainees.

LITERATURE REVIEW

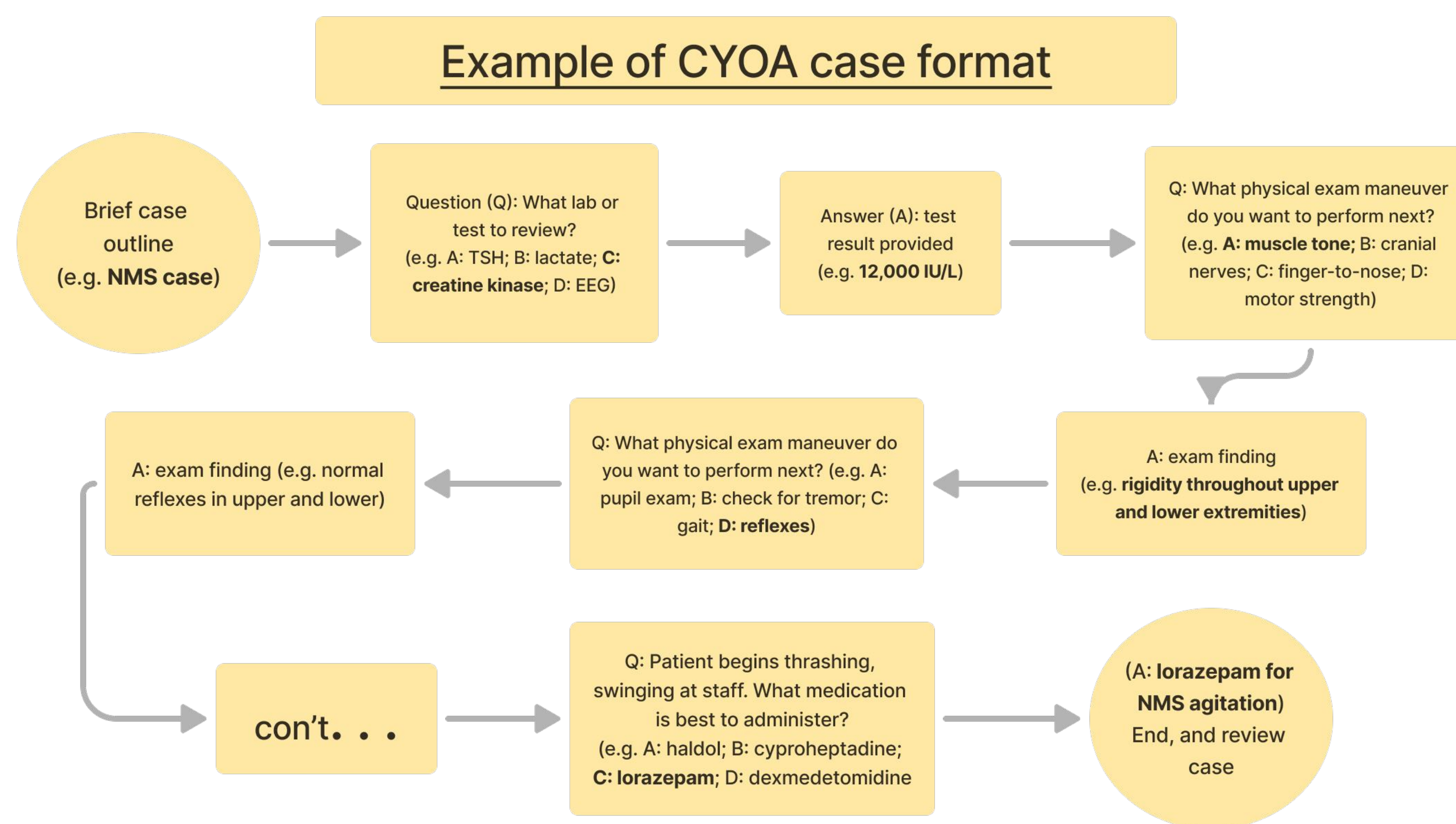
- General decline in PE proficiency and use across specialties¹⁰
- The PE is high-yield in psychiatric patients, more so than lab evaluations^{1,11}
- The PE is underutilized in psychiatric patients⁵
- Psychiatrists continue to view the physical exam as important, though report low confidence in their skills^{2,7}
- There are limited targeted educational interventions to address this gap in postgraduate training
- Expert opinion is that a cultural shift towards valuing the PE is needed in psychiatry⁶
- Case-based learning shown to be superior to other formats³
- Choose-your-own-adventure (CYOA) format found to be preferred among some other formats in medical education¹²

AIM AND RATIONALE

- This project's aim is to improve the education of MS4 students on the psychiatric PE to close the training gap.
- Highlighting the PE content early in training may help shift the culture, so that maintenance of this skill is a focus throughout one's career. Case-based and CYOA formats are effective and preferred.

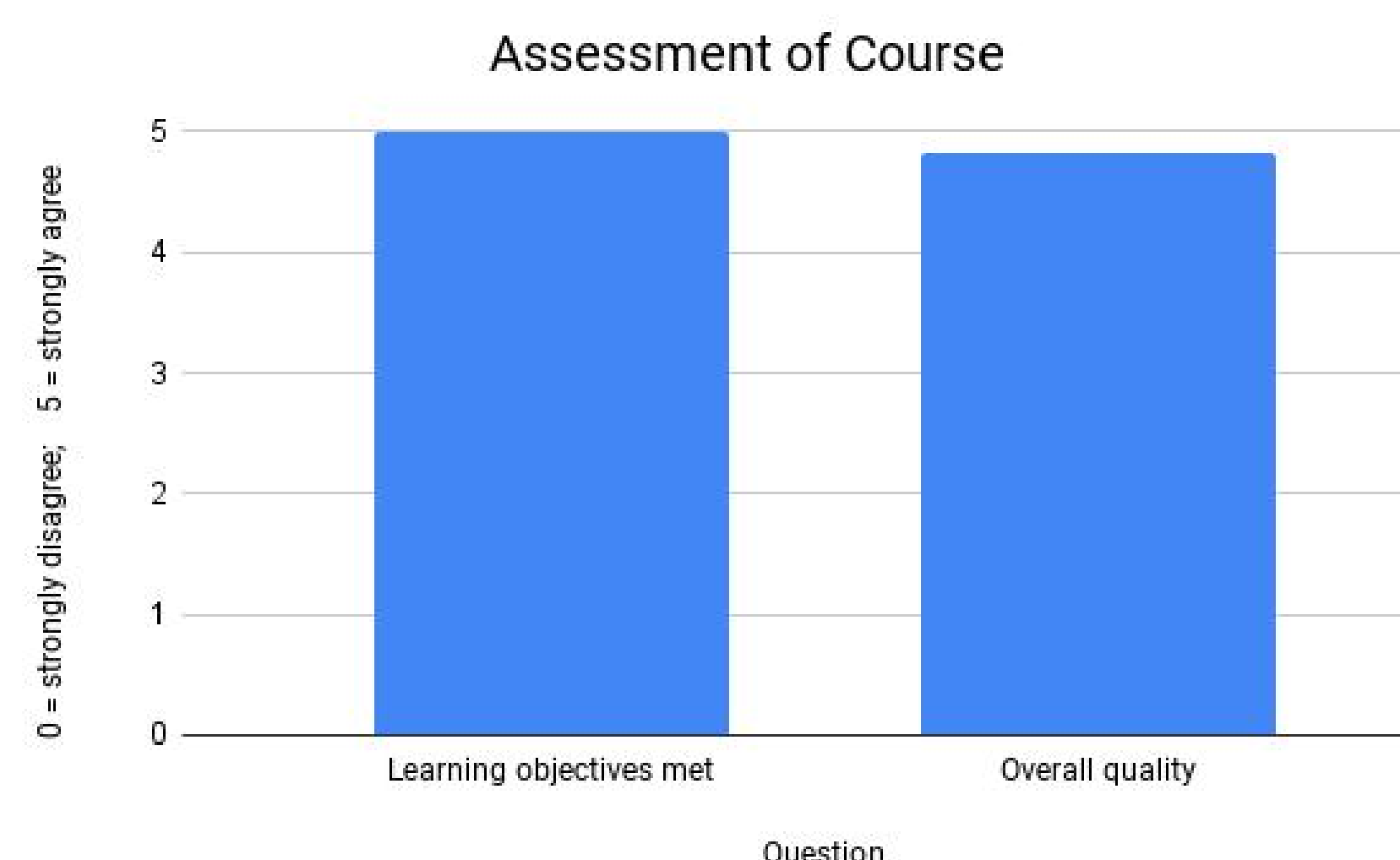
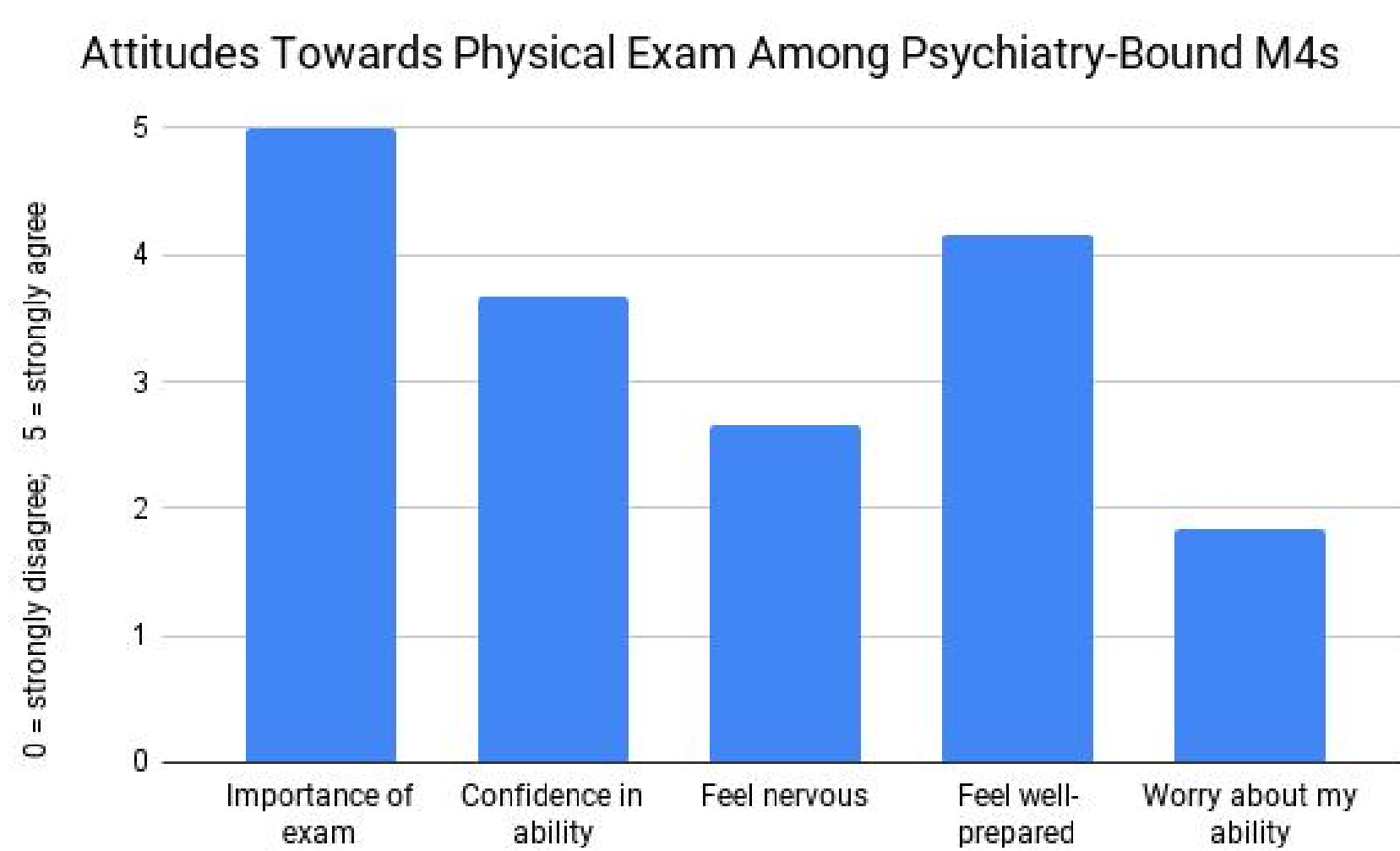
METHODS

1. Literature review (left)
2. Creation of a medical student session titled "Advanced Physical Exam," within a two-week internship preparatory course in psychiatry (April, 2024):
 - Target population: MS4 students matched into psychiatry
 - Content: psychiatric PE
 - **With a focus on the clinical scenarios of serotonin syndrome, NMS, catatonia, delirium, substance toxidrome/withdrawal**
 - Course format:
 - 1 hour in length
 - Interactive, case-based, "choose-your-own-adventure" (CYOA) format
3. Two presenters demonstrating key parts of exam to participants
4. Use of video to supplement demonstrations (University of Rochester)
5. Post-course survey for anonymous feedback and evaluation of course



RESULTS

- Class size: 6 MS4 students
- n = 6 post-course survey participants



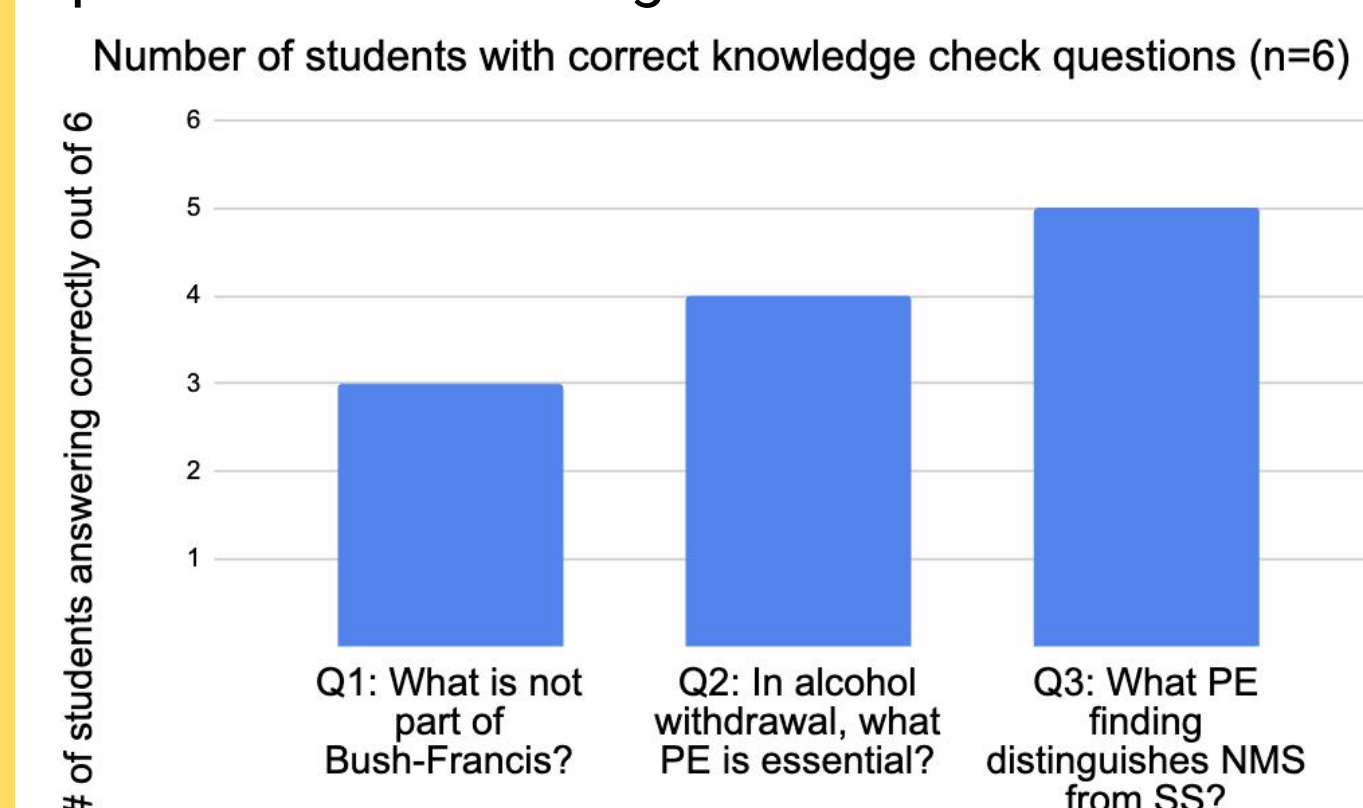
RESULTS CON'T...

Areas of strength

- "Great examples of catatonia"
- "Loved the interactive cases!"
- "Interactive"
- "Acting out of physical exam was exceptional"
- "Great clinical examples"
- "Engaging"
- "Demonstrations of the physical exam were great!"
- "Morning report style case presentations were great"

Areas of improvement

- "Whiteboard would have been helpful"
- "Shorten the details in the cases" to get through more content
- "Refining the slides"
- "More organized" Bush-Francis exam/scale review
- "More complete demonstration" of Bush-Francis exam"



Four out of six students listed the "Advanced Physical Exam" as one of the highest yield courses of the two-week elective, which consisted of 20 different sessions.

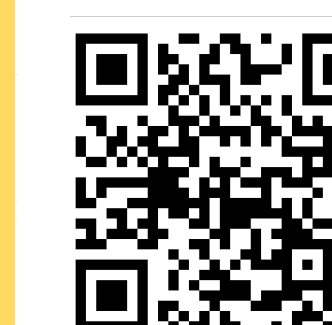
SUMMARY OF RESULTS

- The psychiatric PE is viewed as highly important content
- Students largely rated the session highly, and the format was seen as a strength
- Bush-Francis exam / catatonia content was viewed as most high-yield
- Not all students were able to correctly answer the knowledge checks, suggesting room for improvement in meeting learning objectives
- Areas of improvement include refinement of slides/organization of content
- Limitation: low n

DISCUSSION

An interactive course using a case-based, CYOA format is a feasible, enjoyable model to teach targeted PE skills to 4th-year medical students matched to psychiatry. This exposure may instill the importance of the PE and confidence in the skills early in their careers. Optimization of this course would involve refinement of slides, and future direction could involve use of simulation. Future studies on effective educational interventions to address this gap are needed.

REFERENCES



ACKNOWLEDGEMENTS

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