

Assessment of Professional Year Three Pharmacy Students' Performance in a Journal Club

Milestone to Improve Curriculum Design

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BACKGROUND

Literature evaluation is a necessary skill for pharmacists to stay up to date on guideline-directed therapies to provide optimized care for patients. Pharmacy schools must incorporate some form of literature evaluation for students to be accredited with ACPE^{1,2}. Pharmacy schools across the U.S. develop these skills in students through group journal club presentations or multiple choice examinations². However, a standardized assessment format for individual testing of multiple students' literature evaluation skills is lacking in the currently published literature.

OBJECTIVES

To develop a journal club milestone in which professional year three (P3) pharmacy students' journal evaluation and presentation skills can be individually assessed in order to improve curriculum design.

METHODS

Two articles from the New England Journal of Medicine (EMPEROR-Reduced Trial NEJM 2020 and COMPASS trial NEJM 2017) were selected for the milestone. Grading rubrics were developed, and faculty evaluators were trained for consistency. Students were allotted one week to review the articles and prepare for the presentation. The day of their milestone, students were randomly assigned 1 of the 2 articles to present to their assigned faculty evaluator. Following the presentation, students were asked questions pertinent to the article followed by immediate feedback. Students were assessed on their ability to organize the information logically, analyze the data within the article, and form a conclusion about the article's impact on clinical practice. Students received a pass or fail grade, with passing defined as a score >70%. A post-milestone survey was administered to obtain students' perspective of preparedness for the experience on a scale of 1 to 5, 1 being the least prepared and 5 being the most prepared.

RESULTS

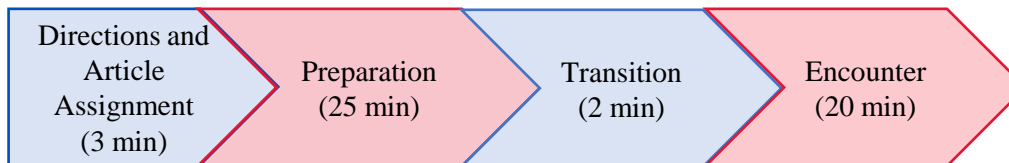


Figure 1: Student milestone schedule.

A total of 110 students completed the milestone.

- Average score: 90%
- Min score: 64%; Max score: 100%
- 4 students fell below passing cut point of 70%
- All 4 received >70% after second evaluation

| Background and Overview | Methods |
|--|---|
| <ul style="list-style-type: none"> • Article Title • Purpose/Background • Study Objective | <ul style="list-style-type: none"> • Study Design • Study Period • Funding • Population/Sample Size • Inclusion/Exclusion Criteria • Interventions or Study Procedures • Primary Efficacy and Safety Endpoint(s) • Secondary Efficacy Endpoint(s) • Statistical Analysis |
| Results | Discussion and Conclusion |
| <ul style="list-style-type: none"> • Results • Summary | <ul style="list-style-type: none"> • Evaluation of Study Quality (Strengths and Limitations) • Author Conclusion/Clinical Relevance • Personal Conclusion/Clinical Relevance • Application to Patient Care |

Table 1: Journal club presentation template.

Student Ranking of Preparedness for Journal Club Milestone

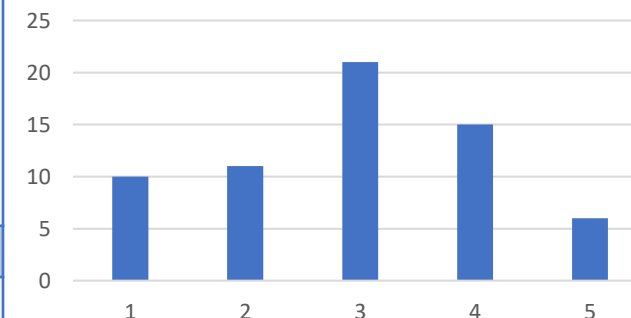


Figure 2: Students ranked how they felt the past 3 years of didactic coursework in pharmacy school prepared them for the milestone on a scale of 1-5.

CONFLICT OF INTEREST

The authors have nothing to disclose.

REFERENCES

1. O'Sullivan, Teresa A., et al. "Medical Literature Evaluation Education at US Schools of Pharmacy." *American Journal of Pharmaceutical Education*, vol. 80, no. 1, 25 Feb. 2016, p. 5, <https://doi.org/10.5688/ajpe8015>.
2. Jones, Emily P., et al. "Use of journal clubs and book clubs in Pharmacy Education: A scoping review." *Currents in Pharmacy Teaching and Learning*, vol. 14, no. 1, 2022, pp. 110-119, <https://doi.org/10.1016/j.cptl.2021.11.029>.

CONCLUSIONS

We successfully developed an efficient method to assess over 100 students individually on their journal evaluation and presentation skills, but based on student survey responses, curriculum improvements are needed to increase students' perceptions of their preparedness for journal article presentations.