Abstract

**Introduction:** Performance-Based Assessments (PBAs) are used as a tool to measure the skill level of students related to certain tasks. The purpose of this study was to gauge the confidence levels of first-year student pharmacists before and after select skill examinations, in order to improve outcomes for later students, in addition to impacting patient care.

**Methods:** First-year student pharmacists from Southern Illinois University in Edwardsville (SIUe) were eligible for this study if they were enrolled in both Fall 2020 and Spring 2021 Pharmacy Skills Laboratory courses. Using Qualtrics, all participants were given a pre-survey and two-post surveys after the completion of each PBA. Students included in the Fall 2020 statistical analysis must have completed the initial pre-survey and both post-surveys. Survey scores were evaluated on a 4-point Likert-scale with numerical values attached to each question. Pre- and post-survey mean confidence scores were calculated for each of the 7 individual assessments.

**Results:** Based on student responses, the data collected could help shape the future curriculum. Students expressing low confidence would indicate to program coordinators that improvements in course delivery needed to be made. Forty students completed both surveys (56% response rate). Student confidence significantly increased for the majority of items from pre- to post-survey ($p < 0.0001$ for 6/7 items). The items with the highest mean increase in confidence scores were, using a systematic approach to identifying and prioritizing medication-related problems when performing a DUR (range 1.45-1.55 mean increase).

**Conclusion:** The current SIUe Fall 2020 Pharmacy Skills Laboratory I course was successful in significantly increasing baseline confidence scores of first-year student pharmacists with the use of PBAs as a form of skill evaluation.