Educating Pharmacy Students to Improve Quality (EPIQ): A Multi-School Program Evaluation

Adrienne M. Gilligan, MS1, Jaclyn Myers, PharmD Candidate2, James D. Nash, PharmD3, Jill E. Lavigne, PhD4, Leticia R. Moczyczka, PharmD, PhD5, Kimberly S. Plake2, PhD, Ana C. Quiñones-Boex, PhD6, David Holdford5, PhD, Donna West-Strum, PhD7, Terri L. Warholak, PhD2

2. Warholak TL, Noureldin M, West D, Holdford D. Faculty perceptions of the educating pharmacy students to improve quality (EPIQ) program.
4. Rasch analysis. Rasch analysis allows the evaluation of individual person measurement; 4) quality-based interventions and incentives; and 5) application of quality improvement to the pharmacy practice setting.
5. The objectives of this study were to: 1) evaluate the EPIQ program implementation in several doctoral pharmacy curricula; and 2) assess the instructors’ and students’ perceptions of the effectiveness of the EPIQ program.

Methods

Sample population: Convenience sample of colleges/schools of pharmacy who had implemented the EPIQ program in their doctor of pharmacy curricula (n = 19). Of the 19 colleges of pharmacy, 7 agreed to participate in the evaluation of faculty and student perceptions.

Faculty questionnaire data were collected from the 7 participating institutions. Due to IRB constraints, student data (e.g., student questionnaire results and project) were not collected at all schools due to IRB restrictions. The majority of respondents were female (approximately 65%). Mean age for students ranged from 26-29 years (depending on the university), and the majority of respondents were female (approximately 65%).

Limitations: 1) data were not collected from the 66% of students who responded; and 2) student data were not reported that the quality of the EPIQ program was good or excellent and agreed or strongly agreed that EPIQ helped meet intended course goals. Overall, the EPIQ program was well received by faculty members. The majority of respondents were female (approximately 65%).

Discussion and Conclusions

In general, respondents perceived that the EPIQ program positively impacted their ability, knowledge, motivation, and awareness of QI and medication error reduction.

Faculty Questionnaire: Contained both qualitative and quantitative questions regarding pharmacy education.

Statistical Analysis: Analysis of student outcomes was conducted using Rasch analysis. Rasch analysis allows the evaluation of individual person measures and each item’s contribution to the overall instrument.

Main outcome of interest was the change in the measure score for each student (pre to post).

Multiple linear regression was conducted to determine if demographic characteristics (independent variables) impacted respondents’ change scores.

Independent variables of interest included: gender, previous QI experience, university attended, length of class coverage, and completion of a class QI project.

Qualitative coding approach was used to categorise comments for faculty questionnaire data as recommended by Richards including: descriptive coding, topic coding, and analytical coding.

Results

A total of 347 out of 530 students (66%) across five universities responded to the EPIQ questionnaire.

Mean age for students ranged from 26-29 years (depending on the university), and the majority of respondents were female (approximately 65%).

Faculty opinions of the EPIQ program are displayed in Figure 1. Faculty members indicated that the quality of the EPIQ program was good or excellent and agreed or strongly agreed that EPIQ helped meet intended course goals.

Discussion and Conclusions

In general, respondents perceived that the EPIQ program positively impacted their ability, knowledge, motivation, and awareness of QI and medication error reduction.

Overall, the EPIQ program was well received by faculty members. The majority reported that the quality of the EPIQ program was good or excellent and agreed or strongly agreed that EPIQ helped meet intended course goals.

Limitations: 1) data were not collected from the 66% of students who responded; and 2) student data were not collected at all schools due to IRB restrictions. The EPIQ program is a viable turn-key class that can be used to help student pharmacists build their knowledge of key quality improvement and patient safety concepts.

References

2. Warholak TL, Noureldin M, West D, Holdford D. Faculty perceptions of the educating pharmacy students to improve quality (EPIQ) program.
4. Rasch analysis. Rasch analysis allows the evaluation of individual person measurement; 4) quality-based interventions and incentives; and 5) application of quality improvement to the pharmacy practice setting.
5. The objectives of this study were to: 1) evaluate the EPIQ program implementation in several doctoral pharmacy curricula; and 2) assess the instructors’ and students’ perceptions of the effectiveness of the EPIQ program.