Pharmacy Faculty Perspectives About Implementing Competency-Based Education in Pharmacy Education

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INTRODUCTION

- According to the 2016 CAPE outcomes, students graduating from a pharmacy program are expected to be practice-ready.[1]
- Some pharmacy students who meet course objectives and outcomes under the traditional education system may not be competent in every domain due in part to a misalignment between the desired competencies and the educational/ curriculum objectives.[2]
- The International Competency Based Medical Education collaborators define competency-based education (CBE) as "an outcomes-based approach to the design, implementation, assessment and evaluation of a medical education program using an organizing framework of competencies."[3]
- In CBE, competencies drive the curricula and assessment, and only learners who are deemed competent graduate from an educational program. [4, 5, 6]
- Competencies are the "observable components of knowledge, skills, attitudes and values expressed as actual behavior that can be measured and assessed."[7]
- More programs are considering CBE as a means to improve pharmacy education.
- Implications of adopting CBE in pharmacy education are not fully understood. It is important to know pharmacy faculty's perspectives about CBE in pharmacy education.
- The purpose of this study is to investigate pharmacy faculty's perspectives about the benefits, challenges and appropriateness of adopting CBE in pharmacy education.

METHODOLOGY

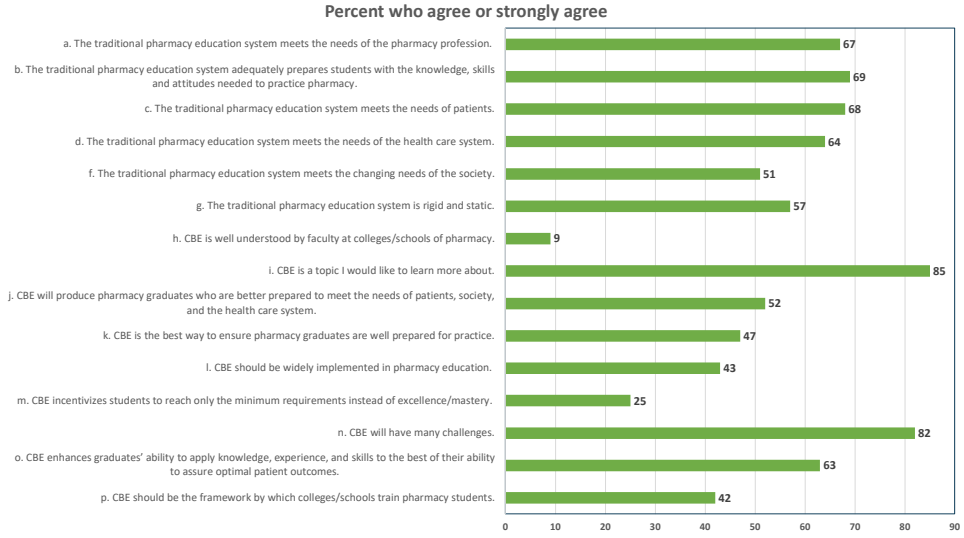
- An investigator (PG) sent a 52-item, web-based survey to query pharmacy faculty regarding their perspectives about the traditional education system and CBE.
- The survey contained questions regarding the benefits, challenges and appropriateness of adopting CBE in pharmacy education, as well as demographic factors (e.g., gender, ethnicity, discipline and current position).
- We posted a message on selected American Association of Colleges of Pharmacy (AACP) connect groups inviting members to participate in the online survey in Summer 2022.
- The survey was also distributed electronically to pharmacy faculty at 12 conveniently selected California schools of pharmacy.
- Participants were offered an aggregate summary of the study results and a chance to win 1 of the 10 Amazon gift cards worth $25.00 each.
- Data were collected over a span of 8 weeks and then downloaded to SPSS for analysis.

RESULTS

- A total of 174 usable responses were received.
- Most of the respondents were from private institutions (59.9%), pharmacy practice discipline (61.0%), female (60.1%), had a Doctor of Pharmacy degree (72.0%) and were Caucasian (80.0%).
- About 56.0% of the respondents had 11 or more years of experience working at a college/school of pharmacy.
- A majority had a favorable opinion about the traditional pharmacy education system (Fig. 1).

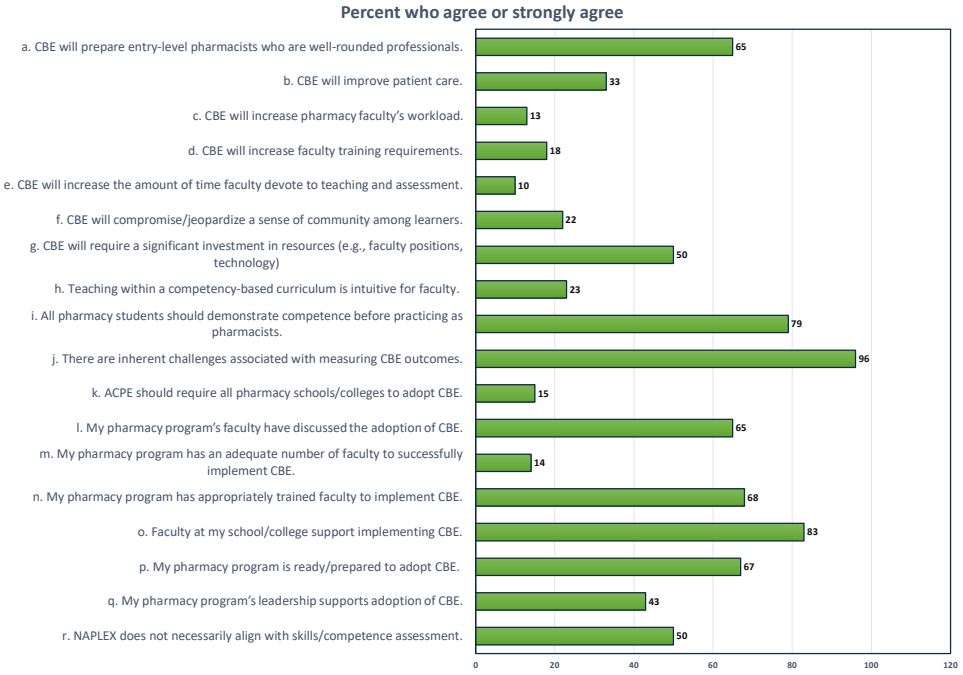
RESULTS

Figure 1. Respondents' Opinions About the Traditional Pharmacy Education System and CBE



- Most agreed/strongly agreed that CBE will increase pharmacy faculty's workload (67%); increase faculty training requirements (83%); and increase the amount of time faculty devote to teaching and assessment (68%, Fig. 2).

Figure 2. Respondents' Perspectives About CBE



DISCUSSION

- Most pharmacy faculty respondents had favorable opinions of the traditional educational framework and believed that it was meeting the needs of the pharmacy profession. Some pharmacy faculty may not perceive the need for the pharmacy profession to change its educational model.
- Respondents did not believe that pharmacy faculty had adequate knowledge of CBE. Lack of knowledge is a potential barrier to CBE implementation in pharmacy education.
- Most (53%) respondents believed that CBE would produce pharmacy graduates who are better prepared to meet the needs of patients and society.
- Respondents endorsed the potential positive aspects of CBE in pharmacy education (e.g., greater personalization and individualization for the learners, and flexibility to learn at the learners' own pace).
- Most respondents believed that the implementation of CBE would have many challenges (82%).
- Most of the respondents believed that moving to a CBE model would increase pharmacy faculty's workload (67%), increase faculty training requirements (83%), and increase the amount of time faculty devote to teaching and assessment (68%).
- Adoption of CBE necessitates use of more regular/frequent assessments, feedback to learners, record keeping and reporting, and supervision of learners than in the traditional education system.

LIMITATIONS

The limitations of the study are:

a) The study included a convenience sample of pharmacy faculty. The study findings may not be generalizable to all pharmacy faculty in the United States.
b) Causality cannot be inferred because this study utilized a cross-sectional design.
c) Social desirability response bias cannot be ruled out in this study. However, there was no incentive for respondents to be deceptive given that this study was confidential.

CONCLUSION

- Pharmacy faculty had positive opinions about the traditional education system as well as CBE.
- The respondents did not have an adequate knowledge of CBE and indicated that the adoption of CBE was associated with inherent challenges.
- Further studies should investigate faculty and students' perspectives about CBE.

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