OBJECTIVES: In an era of expanding health sectors and rising costs, pharmacists are expected to have a working knowledge of pharmacoeconomics (PE) to use resources better and improve health outcomes and quality. Educational programs are expected to provide to pharmacy students in the United States (US). This study investigates the current status of PE education in the didactic and experiential curriculum of Doctor of Pharmacy (PharmD) programs in the US.

METHODS: The website and curriculum of all US-based colleges and schools of pharmacy with accredited professional degree programs were searched to identify relevant PE content and investigate the discrepancies in education.

RESULTS: 111 out of 141 pharmacy programs (~79%) had information about PE education on their websites. All programs provided some required level of PE education. The goals and descriptions of PE contents were broad, mainly covering introductory concepts and principles of PE. Among institutions offering PE instruction, PE was primarily included in the second professional year (n=53; 48%) and the third professional year (n=54; 49%) as private (Figure 1). The number of credit hours devoted to pharmacoeconomics education ranges from one to seven. While most programs offered a required core course in pharmacoeconomics at several institutions, some jointly taught it with related topics, such as pharmacoepidemiology, population health, and pharmacy administration. Teaching methods include didactic lectures, guest speakers, videos, research projects, problem-based learning, case studies, and article-critiquing assignments. Some syllabi listed unique assignments designed to promote students’ ownership of their learning and encourage productive. Such assignments include research projects, presentations, and group work.

CONCLUSION: While challenges remain in thoroughly integrating all its content into the PharmD curriculum, it is safe to argue that adequate PE knowledge can significantly expand the pharmacist’s scope of practice. Given that the Accreditation Council for Pharmacy Education has incorporated pharmacoeconomics as a required component of pharmacy curriculum, obtaining more specific recommendations concerning what topics should be included in the PharmD curriculum is essential. Curricula must also ensure that PharmD students are provided with opportunities to apply skills taught in PE to “real-world” problems.

Discussion

- Our evaluation of the curriculum and instructional methods for pharmacoeconomics indicate a shift toward more active learning, but the impact of this change has yet to be assessed.
- A comprehensive literature search uncovered two studies that evaluated application-based or active learning in a pharmacoeconomics course in the US PharmD curriculum.

References

3. Judgement competencies, best learned through field experience and direct observation.
4. Knowledge base, best learned through didactic instruction.
5. Behavioral skills, best learned through laboratory training.
7. Pharmacoeconomics courses are an essential part of the PharmD curriculum.
8. Despite the proven importance of pharmacoeconomics in evidence-based care and drug prescription processes, it remains uncertain that all pharmacy programs across the US dedicate sufficient credit hours to teaching pharmacoeconomics principles in their curriculum.
9. Because of its relevance to drug affordability and the prescription process, teaching pharmacoeconomics may allow one to answer many other issues related to drug affordability, such as drug access, poor medication adherence, poor patient outcomes, and widening health disparities.
10. Pharmacy programs that plan to prepare today’s pharmacy students for meeting tomorrow’s healthcare challenges to find the appropriate balance between pharmacoeconomics course content; contact hours, and delivery methods that meet the needs of students’ future career goals.

Table 1. Common learning objectives and outcomes for PharmD introductory PE courses.