Pharmacy Residents' Involvement with Teaching Over-the-counter/Self-care (OTC) Therapeutics

Tiffany R. Shin, PharmD, BCACP1; Bella Mehta, PharmD, FAPhA2; Kristin Casper, PharmD2

¹The University of Kansas, Wichita, KS; ²The Ohio State University, Columbus, OH





Background

- Many pharmacy residency programs include a teaching component where residents teach pharmacy students in didactic or skills lab settings.
- Over-the-counter/Self-Care therapeutics is an important subject in pharmacy education with many schools including these topics in required didactic and skills lab courses.
- When serving as facilitators, residents may help to decrease faculty workload and can provide small group or one-on-one interactions with students.
- The use of pharmacy residents in teaching is common at many schools or colleges of pharmacy, however the specific frequency and extent of resident involvement in teaching selfcare therapeutics topics is unknown.
- By surveying faculty members about the involvement of pharmacy residents in teaching self-care therapeutics topics, valuable data can be gathered to inform curriculum development, instructional strategies, and the integration of residents into the educational process.

Objective

Describe the extent of involvement and effectiveness of pharmacy residents teaching over-the-counter/self-care (OTC) therapeutic topics at schools/colleges of pharmacy.

Methods

- In February 2024, an electronic survey was distributed on listservs with the American Association of Colleges of Pharmacy (AACP) and American Pharmacists Association (APhA).
- · The institutional review board (IRB) from both participating institutions determined the study to be IRB exempt.
- Specific listservs included the AACP Connect Self-care Therapeutics/Nonprescription Medicines Special Interest Group (SCT/NM SIG) listserv, the Lab Faculty listserv, and the Pharmacy Practice list serve and the APhA Preceptor listserv.
- The anonymous survey was open for 12 days and a reminder message was sent out after 6 days.
- The survey was intended for pharmacy faculty or preceptors who teach OTC therapeutics in the didactic or skills lab
- Questions were asked about respondent demographics and pharmacy residents' training and involvement with OTC therapeutics at their institutions.
- Data were analyzed in aggregate, using descriptive statistics.
- Reponses from institutions with multiple respondents were reviewed and a composite result for each institution was determined.

- A total of 56 responses from 49 different pharmacy schools/colleges in the United States were included in the study.
- 96.4% of respondents were full-time pharmacy faculty.
- 67.7% of respondents had been teaching OTC therapeutics for 7 or more years and 53.2% had been precepting or teaching residents for 7 or more years.
- Pharmacy residents were involved in teaching OTC therapeutics in 87.8% (43/49) of institutions with a median of 3 (IQR 3-4) residents per institution.
- Of the institutions that utilized pharmacy residents for teaching OTC therapeutics, 88.4% had them teach in a required didactics course and 65.1% had them teach in a skills lab course.

Figure 1: Pharmacy Residents Teaching in OTC/Self-Care Therapeutics (n = 49 institutions)

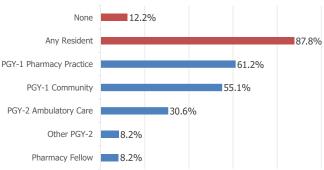


Table 1: Residents' Teaching Roles in OTC (n=43 institutions with residents teaching OTC therapeutics)

	n (%)
Write assessment questions (e.g. quiz or exam questions)	35 (81.4)
Create and deliver a didactic lecture	31 (72.1)
Deliver/Facilitate a small group activity, case activity, or lab session (resident did not create the activity)	27 (62.8)
Create and deliver/facilitate a small group activity, case activity, or lab session	22 (51.2)
Provide formative (ungraded) feedback, including for activities, presentations, and standardized patient encounters	18 (41.9)
Provide summative (graded) feedback, including for activities, presentations, standardized patient encounters, quizzes, & exams	18 (41.9)
Act as a patient in standardized patient encounters (e.g. TOSCEs/OSCEs)	17 (39.5)
Deliver a didactic lecture (resident did not create the lecture material)	10 (23.3)
Create rubrics	3 (7)
TOSCE: Teaching objective structured clinical examination: OSLE: Objective structured	

TOSCE: Teaching objective structured clinical examination; OSLE: Objective structured learning experience; OSCE: Objective structured clinical examination

Results





Respondents rated the effectiveness of pharmacy residents teaching as very effective 30.6%, somewhat effective 65.3%, and neither effective nor ineffective 4.1%.

Figure 3: Select Open-Ended Responses Regarding Pharmacv Residents Teaching in OTC/Self-care Therapeutics

Benefits

- "It is a great opportunity for the resident to provide a formal lecture on something they often have a lot of experience with as we incorporate community residents. The residents can provide innovation to their lectures and often engage students in different ways than the faculty
- Challenges
- "Resident interest and dedication to teaching can be less than desirable, as can be the quality of instruction. Creates a more choppy experience for students to have additional faculty in and out of the course."
- "Time commitment from [faculty] to review the objectives and lecture content in advance and proof exam questions."

How to improve

- "More standardized on-boarding, need to provide opportunity (requirement) for the resident to observe class before teaching.
- "The residents involved in the course are directly precepted by faculty that regularly teach or coordinate in the course."

Limitations

- Not all pharmacy schools/colleges were represented in the survey.
- Individual respondents may not have been aware of all resident teaching activities in OTC therapeutics at their institution.

Conclusions

• Pharmacy residents contribute to teaching OTC therapeutics through a variety of activities. Most faculty consider pharmacy residents effective teachers, however not all pharmacy programs utilize pharmacy residents in teaching OTC therapeutics.