



Contents lists available at ScienceDirect

Currents in Pharmacy Teaching and Learning

journal homepage: www.elsevier.com/locate/cptl

Research Note

Prevalence and characteristics of pharmacies owned and operated by schools of pharmacy in the United States

Joseph P. Nathan^{a,*}, Sara Grossman^a, Tina Zerilli^b, Adam Pace^c^a LIU Pharmacy, 75 DeKalb Avenue, Room LLC405, Brooklyn, NY 11201, United States^b LIU Pharmacy, 75 DeKalb Avenue, Room L306, Brooklyn, NY 11201, United States^c Belmont University College of Pharmacy, 1900 Belmont Boulevard, Nashville, TN 37212, United States

ARTICLE INFO

Keywords:

School-owned pharmacy
 School-operated pharmacy
 Dispensing pharmacy
 Community pharmacy
 Campus-based pharmacy

ABSTRACT

Introduction: To identify schools/colleges of pharmacy that own and operate a pharmacy and to gather key details about such pharmacies.

Methods: Schools of pharmacy (n = 134) in the United States were contacted to determine whether they own and operate a pharmacy. Schools identified as having a pharmacy were subsequently sent an online questionnaire to solicit information about school and pharmacy characteristics.

Results: Eighteen (13.4%) schools reported owning and operating at least one pharmacy; of these, 14 (77.8%) responded to the questionnaire. The provision of education was a goal for all pharmacies. Pharmacy services were provided to students, faculty/staff, and community members (85.7%, 78.6%, and 50%, respectively). Student pharmacists were regularly involved in the operations of 13 (92.9%) pharmacies, largely as part of their introductory and advanced pharmacy practice experiences and/or as paid employees.

Conclusion: Few schools of pharmacy in the United States own and operate a pharmacy. These pharmacies primarily serve as teaching and learning venues and provide services to the campus community and/or the community at large.

Introduction

Experiential education is a required element of the curricula of health professions programs. To fulfill this requirement, health professions students are placed in a variety of practice sites. While some of these practice sites maintain an affiliation agreement with the school, but are otherwise independent of it, others are owned and operated by the school or its parent organization. Within the context of medical, dental, and nursing education, practice sites often include healthcare clinics. Characteristics of such clinics that are a part of a school or its parent organization have been previously described.^{1–3}

As with the academic programs of other health professions, experiential education is an essential component of the pharmacy curriculum. A school/college-owned and operated pharmacy (SOP) may offer both academic and non-academic benefits to the school and/or its parent institution as well as to other stakeholders. Anecdotal evidence suggests that in the United States, a number of schools of pharmacy own and operate one or more pharmacies. Yet, a search of the literature using EMBASE, MEDLINE/PubMed, International Pharmaceutical Abstracts, and Google Scholar failed to identify published reports describing the prevalence and characteristics of SOPs in the United States. As such, the purpose of this study was to identify schools of pharmacy that own and

* Corresponding author.

E-mail addresses: Joseph.nathan@liu.edu (J.P. Nathan), Sara.grossman@liu.edu (S. Grossman), Tina.zerilli@liu.edu (T. Zerilli), Adam.pace@belmont.edu (A. Pace).

<http://dx.doi.org/10.1016/j.cptl.2017.10.010>

operate a pharmacy and to gather key details about these pharmacies. These data may be useful for schools interested in opening a pharmacy and may facilitate communication among institutions already engaged in such a venture.

Methods

Prior to initiating this study, an exempt status was received from Long Island University's Institutional Review Board. In October 2015, 134 schools of pharmacy located in the United States and Puerto Rico that were listed on the American Association of Colleges of Pharmacy (AACCP) website as enrolling students were contacted by phone to determine whether the school owns and operates a pharmacy.⁴ For the purpose of this study, a pharmacy was defined as an operation that currently provides pharmaceutical services to clients (patients, hospitals, long-term care facilities, etc.). Pharmacies owned by a health system (of which the university may be a part) but not operated by the school of pharmacy were excluded from this study. For each of the schools, the Dean's office was contacted to ascertain whether the school owns and operates such a pharmacy. When the individual communicated with was unable to provide a conclusive response, the investigators asked to be referred to others within the school who could provide assistance. Subsequently, for those schools that reported owning and operating a pharmacy, the person responsible for the pharmacy was identified either through direct communication with personnel at the school or through a search of the school's website. In December 2015, an online questionnaire was sent through Campus Labs[®] Baseline (Buffalo, New York) to those individuals previously identified as responsible for the SOP and a reminder email was sent one week later. Non-responders were subsequently contacted by phone in early January 2016 to verify that they had received the email and to request their participation in the study.

The survey instrument was developed by the investigators, pre-tested on a manager of an SOP, and underwent an external review by an administrator at a school of pharmacy with expertise in assessment and survey research. As a result of the feedback, several questions were removed or edited. The resultant questionnaire contained 43 questions, including both multiple choice and constructed response items; however, as the instrument utilized skip logic, each respondent would need to answer no more than 23 questions. Based on the pre-test, it was estimated that completing the questionnaire would take approximately 10 min. The instrument included questions concerning school demographics as well as questions related to the following: (1) the number of pharmacies owned and operated by the school; (2) pharmacy ownership (sole vs. partnership with others); (3) goal(s) of the SOP(s); (4) years in existence of the SOP(s); and (5) location of the pharmacy/pharmacies (on-campus vs. off-campus). Additionally, the instrument requested information regarding services offered, staffing, the role of student pharmacists, and the profitability of the SOP(s). The instrument also included several questions intended to capture unique features of the SOP(s) and the respondents' perception of the value of such a pharmacy. Campus Labs[®] Baseline was the platform used to collect and collate the data as well as to generate descriptive statistics.

Results

During the initial telephone screening, 18 (13.4%) of the 134 schools reported that they owned and operated at least one pharmacy, while 116 (86.6%) reported that they did not. Fourteen (77.8%) of the 18 schools with at least one pharmacy responded to the electronic questionnaire. Eight (57.1%) of the 14 responding schools reported owning and operating one pharmacy and six (42.9%) reported owning and operating two or more pharmacies. Additional characteristics of the 14 responding schools are listed in [Table 1](#). Of note, a majority were public institutions, located in an urban setting, and in existence for more than 20 years (eight; 57.1% were in existence for at least 90 years). Eleven schools provided information about the percentage of students entering community practice upon graduation, with the majority (nine; 81.8%) indicating that at least half of their students do so. The names

Table 1
Characteristics of schools reporting to own and operate at least one pharmacy (n = 14).

Characteristic	Number (%)
Public vs. private	
Public	9 (64.3)
Private	5 (35.7)
Urban vs. rural	
Urban	11 (78.6)
Rural	3 (21.4)
Part of an academic medical center	
Yes	6 (42.9)
No	8 (57.1)
Years in existence	
> 20 years	11 (78.6)
≤ 20 years	3 (21.4)
Average class size^a	
51–100	6 (46.2)
101–150	4 (30.8)
151–200	3 (23.1)

^a n = 13.

Download English Version:

<https://daneshyari.com/en/article/6840062>

Download Persian Version:

<https://daneshyari.com/article/6840062>

[Daneshyari.com](https://daneshyari.com)