

Availability and Perceived Value of Bachelor of Science Programs in Pharmaceutical Marketing and Management in the United States

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Abstract

Several academic institutions across the United States offer Bachelor of Science degree programs in Pharmaceutical Marketing and/or Management. In general, these programs are designed to provide students with stronger foundations and a broader understanding of the business side of pharmacy. The purpose of this study was to explore the availability of the Bachelor of Science programs in pharmaceutical marketing and management in the United States. Internet search was conducted in order to collect information about the programs of interest. Results showed that a total of 8 schools and colleges offer the Bachelor of Science degree programs. The total number of credit hours for each program ranged from 122 to 130. All these schools/colleges were located in only 3 States, namely Pennsylvania, Ohio, and Massachusetts. Tuition and fees were markedly different across these programs. Additionally, salient differences between these programs were evident with regard to career paths expected for their graduates. These programs have gained more attention over the past few years as fewer numbers of pharmacists work in pharmaceutical sales jobs, leaving such jobs almost exclusively undertaken by graduates of Pharmaceutical Marketing and/or Management programs. In the future, we expect changes to take place in these programs' curricula in order to equip students with more skills to assume certain jobs, such as insurance management, industry, or sales.

Keywords: Pharmacy education; Pharmaceutical marketing; Pharmaceutical industry

Introduction

Several academic institutions across the United States offer Bachelor of Science degree programs in Pharmaceutical Business. This field of study incorporates topics that focus on pharmaceutical marketing, pharmaceutical management, pharmacy administration, or a mixture of these three fields. These programs are designed to provide students with stronger foundations and a broader understanding of the business side of pharmacy while allowing students to pursue their interest in health care related studies. These programs are intended to help students excel in the marketing of pharmaceutical products and to gain experience in pharmacy and health related management and administration. The purpose of this study was to explore the availability of the Bachelor of Science programs in pharmaceutical marketing and management in the United States.

Methods Procedures

Internet search was conducted in order to collect information about the programs of interest. Key words utilized in the Internet search included pharmaceutical business, pharmaceutical marketing, pharmaceutical management, and pharmacy administration. This study was conducted in October of 2014. Several web search engines and internet browser software applications were utilized. The programs of interest were compared and contrasted across different academic institutions in order to show the properties of each program and clarify how different these programs are from each other. Points of contrast and comparison included the number of credit hours, estimated tuition and fees, and physical location of the campus.

Inclusion and exclusion criteria

The web search criteria included websites displayed in English language. Academic institutions that offer the programs of interest were included in the analysis only if they are located in the United States. Additionally, included programs were those that grant their

graduates only the Bachelor of Science degrees in Pharmaceutical Business, Pharmaceutical Marketing, Pharmaceutical Management, Pharmacy Management, or any related field upon the completion of the requirements of the program. Master's degree programs (M.S.) and dual degree (e.g., BS and MBA) programs were excluded from the study.

Results and Discussion

A total of 8 schools and colleges met the inclusion criteria, hence included in the study. Basic characteristics of the programs offered are shown in Table 1. Despite the similarities across these programs with regard to courses offered and knowledge outcomes anticipated, these programs have evolved into highly distinct curricula of study across many schools and colleges, which resulted in different topics covered, different total number of credit hours required for graduation, and different career paths anticipated for the graduates of each of these programs.

It was notable that all these schools/university were located in only 3 States, grouped in the Northeastern and the Midwestern United States. However, these programs were markedly different from each other. Differences were most noticeable when comparing the curricula from different programs as they are available online for

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The Name of the School/University	Type of School or Department	Name of program	Credit Hours	Annual Tuitions and Fees ^a	State
Saint Joseph's University	Haub School of Business	Pharmaceutical and Healthcare Marketing [1]	(NA) ^b	\$40,420	PA
University of the Sciences in Philadelphia	Philadelphia College of Pharmacy	Bachelor of science in pharmaceutical marketing and management [2]	130	\$25,618	PA
Massachusetts College of Pharmacy and Health Sciences	School of Pharmacy - Boston	Pharmaceutical and Healthcare Business [3]	122	\$29,500	MA
DeSales University	jointly by the Division of Business and the Department of Natural Science	Pharmaceutical Marketing [4]	(NA) ^b	\$32,350	PA
Ohio Northern University	The James F. Dicke College of Business Administration	Pharmaceutical business [5]	(NA) ^b	\$28,050	OH
Western New England University	College of Business	Pharmaceutical Business [6]	122	\$31,200	MA
Cleveland State University	College of Sciences and Health Professions	Bachelor of Science in Pharmaceutical Science - Pharmacy Administration Track [7]	128	In-state: \$9,636 ^c Out-of-State: \$15,308 ^c	OH
The University of Toledo	College of Pharmacy and Pharmaceutical Sciences	BS in Pharmaceutical Sciences, Pharmacy Administration Major [8]	126	In-state: \$9,242 ^c Out-of-State: \$18,580 ^c	OH

a Estimated tuition and fees excluding lodging, housing, meals, books, or living expenses.

b Information was not available online when the study was conducted.

c Based on typical 12-hour semesters assuming a student to register for only two semesters: Fall and Spring.

Table 1: Comparisons of the Bachelor of Science in Pharmaceutical Marketing & Management programs at USA institutions.

some of them. Economics (i.e., Macroeconomics Microeconomics, and Pharmacoeconomics), Statistics, Business, Health Care Management, and Marketing of Pharmaceutical Products were the most commonly covered topics across different programs. Salient differences between these programs were evident with regard to career paths after graduation. Although most of these programs focus on preparing their graduates for sales jobs, marketing, projects management, and business administration, some programs focus on accounting, finance, organizational behavior, and insurance industry as well.

These programs have gained more attention over the past few years as fewer numbers of pharmacists work in pharmaceutical sales jobs. Additionally, with the spread of PharmD programs and discontinuing of Bachelor of Pharmacy programs, an increasing number of registered pharmacists work in community pharmacies setting and focus on the direct provision of health care and clinical practice such as in hospitals, therefore, leaving the pharmaceutical sales jobs almost exclusively undertaken by graduates of Pharmaceutical Business programs.

Conclusions

Schools and colleges that offer such programs are trying to equip the graduates of these programs with more knowledge and skills pertaining to the business, marketing, administrative, and management sides of pharmacy. In the future, we expect changes to take place in these programs' curricula in order to equip students with more skills to assume certain jobs, such as insurance management, industry, or

sales. This may come about by focusing more on relevant courses that prepare students for assuming such careers by including more pertinent topics such as business, economics, and marketing-related topics in the curricula. These programs will did not qualify their graduate to work as a licensed pharmacists, but serves as the most relative degree that prepares students to work in the marketing of pharmaceutical products.

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4. DeSales University. Pharmaceutical Marketing Program.
5. Ohio Northern University. The James F. Dicke College of Business Administration. Pharmaceutical Business Program.
6. Western New England University. College of Business. Pharmaceutical Business Major.
7. Cleveland State University. College of Sciences and Health Professions. Bachelor of Science in Pharmaceutical Science - Pharmacy Administration Track.
8. The University of Toledo. College of Pharmacy and Pharmaceutical Sciences. BS in Pharmaceutical Sciences, Pharmacy Administration Major.