

## Masters in Business Administration in Pharmaceutical Marketing and Management: Where to Find Them and What They're Worth.

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### Abstract

**Objectives.** To examine pharmacist-targeted master of business administration (MBA) degree programs and investigate pharmacists' perceptions regarding them.

**Methods.** Specialized MBA programs in pharmaceutical marketing and management offered at US colleges and schools of pharmacy were identified in the literature and compared. Pharmacists' perceptions of MBA programs were evaluated through a survey of clinical preceptors affiliated with a school of pharmacy.

**Results.** Seven US universities that offer an MBA program in pharmaceutical marketing and management were identified. Thirty-three percent of the 57 pharmacist preceptors who responded to the survey reported plans to pursue an MBA degree program. Respondents preferred MBA programs related to healthcare or pharmacy (66%) over general MBA programs (33%).

**Conclusion.** An MBA in pharmaceutical marketing and management could provide pharmacists with advanced knowledge of the operational and strategic business aspects of pharmacy practice and give pharmacy graduates an advantage in an increasingly competitive job market.

**Keywords:** master of business administration (MBA), marketing, management, business, pharmaceutical industry, dual PharmD/MBA degree program

### INTRODUCTION

The pharmacist supply-and-demand equation is changing in the United States.<sup>1</sup> Whereas pharmacy manpower studies of the early 2000s projected a significant shortfall of pharmacists during the coming decades, the reality is that supply has grown much faster than anticipated.<sup>2</sup> Because of economic conditions stemming from the recession of 2008, many pharmacists are delaying retirement and continuing to work.<sup>3</sup> In addition, the pace of new chain drugstore development has been slower than anticipated.<sup>4</sup> The major reason for the significant increase in the supply of pharmacists, however, is the increase in the number of US pharmacy colleges and schools from 75 in 1995 to 124 today (115 fully accredited or in candidate status and 9 in pre-candidate status).<sup>2</sup> Exacerbating this is the increase in enrollments by many existing state colleges and schools of pharmacy during the past several years. This changing professional landscape for pharmacists may result in a concomitant increase in pursuit of additional education

opportunities by doctor of pharmacy (PharmD) graduates, such as residencies, fellowships, and additional degrees, to distinguish themselves in an increasingly competitive environment.<sup>5</sup>

One degree that many pharmacists are choosing to pursue is an MBA, either as part of a dual PharmD/MBA degree program or as a standalone degree program completed after graduation.<sup>6</sup> Some student pharmacists pursue the joint PharmD/MBA degree because they can typically complete the MBA concurrently (or shortly after receiving their PharmD degree) and do so at significant cost savings.<sup>7</sup> The increase in advanced management training, coupled with the PharmD or BS in pharmacy degree, affords graduates additional opportunities in middle and upper management that might not be possible without the MBA.<sup>8</sup> There are also degree programs that allow enough flexibility for practicing pharmacists to obtain an MBA degree, ranging from regular full-time programs to part-time ("executive") programs and online programs.<sup>9</sup> An MBA degree offers pharmacists the skills needed to excel in the business, management, and/or marketing aspects of pharmacy, and provides these pharmacists with an advantage over others when seeking

employment in these areas.

According to the American Association of Colleges of Pharmacy, approximately a third (n = 47) of US colleges and schools of pharmacy offer a PharmD/MBA dual degree.<sup>10</sup> The one study that exists pertaining to pharmacy and MBAs revealed that graduates with an MBA in addition to their PharmD degree are presented with more career opportunities and earn significantly more money than those pharmacists without an MBA degree (\$111,090 vs. \$101,965, respectively).<sup>11</sup> However, the study focused on students who received their MBA at the same time as their PharmD degree, which implied that the salaries being compared were first-year salaries. Pharmacists who complete an MBA will likely continue to earn higher incomes in later years as well.<sup>12</sup> These studies provide limited information as they did not compare salaries and years of experience after being awarded the MBA degree. Doing so would provide metrics with which to compare and assess the value of the MBA degree. Students also reported that, in many cases, when interviewing for employment, the MBA degree attracted the interest of their interviewers and seemed to help them obtain the employment they were seeking.<sup>11</sup> In other situations, an MBA is a minimal pre-requisite for specific career tracks in pharmacy (eg, industrial, corporate, and executive positions).

In the past decade, specialized MBA programs offering a concentration in pharmacy/pharmaceutical industry or healthcare have increased.<sup>13</sup> The specialized MBA in pharmaceutical marketing and management programs focus exclusively on the pharmaceutical industry. These MBA programs offer the same analytical and financial skills as a general/traditional MBA program, but also promise the knowledge and skills needed to understand the economic, financial, organizational, and political structure that is unique to the pharmaceutical industry. Thus, not only pharmacists are attracted to pursuing an MBA in pharmaceutical marketing and management. The candidate for the MBA in pharmaceutical marketing and management has a more specific career focus than someone seeking a general MBA. The literature that exists regarding MBA degrees in pharmacy focuses primarily on dual degree programs and even then the literature is limited.<sup>11,14,15</sup> Our study examined the postgraduate MBA programs that specialize in pharmaceutical marketing and management. The candidates in these programs have already obtained their undergraduate and/or doctoral degree in pharmacy. The first objective for this investigation was to review the literature related to MBA programs that emphasize pharmaceutical marketing and management. The second objective was to investigate pharmacists' perceptions and expectations related to pursuit of an MBA degree. Specifically, we assessed pharmacists' perceptions related to program focus, program type, and program setting.

## METHODS

The authors submitted this study proposal to and received approval from the University of Charleston Institutional Review Board. Articles were identified via searches of PubMed and International Pharmaceutical Abstracts from inception to June 2011 related to MBA programs for pharmacists. Search terms included: MBA programs, MBA in pharmaceutical marketing, MBA in pharmaceutical management, pharmacy education, dual PharmD/MBA, and MBA in healthcare specialization. An Internet search was performed to identify articles in the lay press related to this topic. Programs at US colleges and universities were compared regarding curriculum, duration/flexibility, pharmacy-related coursework, and hands-on training.

We then conducted a survey to evaluate pharmacists' perceptions and expectations regarding obtaining the MBA. A 12-item survey instrument was developed by the authors based on a thorough literature review.<sup>11,15</sup> (The complete survey instrument is available from the corresponding author upon request). An e-mail invitation with link to the online survey instrument was sent to all preceptors (n = 150) who were affiliated with the University of Charleston School of Pharmacy and practiced in West Virginia. The list of preceptor e-mail addresses was obtained from the database of clinical preceptors maintained by the University of Charleston School of Pharmacy Office of Experiential Education. Each preceptor was invited up to 2 times via e-mail. As an incentive for participation, those preceptors who completed the survey instrument were entered into a drawing to win a \$50 gift certificate.

Chi-square tests were used to test each of the hypotheses at a *p* value of 0.05. SPSS 16 (SPSS Inc, Chicago, IL) was used as the software for the analysis.

## RESULTS

### Findings From the Literature Review

Overview of MBA in PMM Programs in the United States. While most business schools offer general MBA standalone programs, only 7 were identified that offered an MBA specialized in pharmaceutical marketing and management: University of Sciences at Philadelphia (MBA in Pharmaceutical and Healthcare Business), University of Colorado (Executive MBA in Pharmaceutical Management), Drexel University (MBA in Pharmaceutical Management), Aspen University (MBA in Pharmaceutical Marketing and Management), Saint Joseph University (MBA in Executive Pharmaceutical Marketing), Fairleigh Dickinson University (MBA in Pharmaceutical

Management), and Rutgers University School of Business (MBA in Pharmaceutical Management).



The MBA in pharmaceutical marketing and management allows students to graduate with requisite knowledge, skills, and abilities to pursue a management position in either pharmacy or the pharmaceutical industry.<sup>13,16</sup> The MBA in pharmaceutical marketing and management may offer an advantage over a pharmacist who obtains a general MBA because the pharmaceutical marketing and management is much more specific to the healthcare industry. The courses in this degree program generally cover areas specific to pharmaceutical marketing, management, ethics, regulation, managed care, and sales force management (Appendix 1). Additionally, the MBA in pharmaceutical marketing and management program includes core MBA courses in finance, accounting, and organizational behavior.<sup>13,16,17</sup> Furthermore, an MBA in pharmaceutical marketing and management is highly sought after by people desiring a career in the institutional practice setting, pharmaceutical industry, pharmacy benefit management, corporate management jobs, and even academia.<sup>13,16,18</sup> While core components may be similar, each university is unique with respect to how it integrates the pharmacy/pharmaceutical focus into its program. We provide a brief description of the notable factors of the MBA programs in pharmaceutical marketing and management and a table summarizing the differences between the 7 programs. (Table 1)

**Pharmacists Options for an MBA.** Several differences exist in the types of programs available to pharmacist students wishing to earn an MBA. With a dual PharmD/MBA degree, the student pursues an MBA while concurrently earning a PharmD degree. Most likely, students will earn both degrees concurrently.<sup>15</sup> Dual degree programs typically offer MBA courses either online or in the evenings to avoid scheduling conflicts with PharmD courses.<sup>5</sup> However, with a standalone general MBA or MBA in pharmaceutical marketing and management program, students are able to focus more intently on the material because they do not have to struggle with the challenges of concurrently completing a pharmacy curriculum.

Because of the additional coursework and the rigor of a combined program, some colleges and schools require students wishing to enroll in a dual PharmD/MBA to complete the first year of PharmD courses and earn a cumulative GPA that is above a set minimum before beginning MBA courses in the second year.<sup>15</sup> Due to the challenges of a dual degree program,<sup>15</sup> a postgraduate, standalone MBA in pharmaceutical marketing and management may have an advantage by enabling the individual to concentrate on a single program's curriculum and to gain experience in the pharmacy field before beginning the MBA program. Because of these differences, a standalone MBA in pharmaceutical marketing and management may be a better fit for most pharmacists.

Standalone MBA programs specializing in pharmaceutical marketing and management vary in length, but generally can be completed in less than 3 years.<sup>16</sup> Many of these programs also offer online and evening courses. This allows the pharmacist seeking an MBA to maintain full-time employment while completing this educational program. In fact, work-related experience within the pharmaceutical industry or health related field is required in many of these MBA programs.<sup>13,16,19</sup> All of the MBA pharmaceutical marketing and management programs require submission of an application, official transcripts from an approved institution indicating possession of a bachelor's degree, a resume, letter of recommendation, and an essay or candidate's statement of goals. Few programs require interview and Graduate Admission Record Examination (GRE) or Graduate Management Admission Test (GMAT) scores.

MBA programs in pharmaceutical marketing and management are limited in number, admissions can be very competitive, and other than Aspen and Fairleigh Dickinson University, require prior work-related experience within the pharmaceutical industry or health-related field.<sup>19</sup> Based on this last prerequisite alone, few PharmD students would be eligible to concurrently seek an MBA in pharmaceutical marketing and management in most programs. Although the cost to obtain this degree is around \$60,000 (cost range for all schools but Aspen University, \$50,000 - \$80,000), the potential salary enhancement may make it worth pursuing. According to the Graduate Management Admission Council, which compiled salaries of first-year MBA graduates in different career fields, in 2006 graduates with an MBA in healthcare/pharmaceutical earned a base salary of approximately \$111,500 annually, plus additional compensations.<sup>20</sup>

**Notable Factors of MBA in PMM Programs.** Individuals have many options when choosing which MBA in pharmaceutical marketing and management program is the best fit for them. One area to consider is the flexibility that the program offers. Many programs are offered online, which is appealing to students who may not be able to attend traditionally scheduled daytime courses or relocate to find a suitable program.

Another factor to consider is the amount of coursework actually focused on the pharmacy/healthcare industry. Some MBA programs include only a few healthcare-related courses. An exception is The University of Colorado's MBA program, which has a healthcare emphasis across the core and elective components of the program.<sup>21</sup> While the emphasis in healthcare is strong, this degree program appears to have less of a pharmaceutical

Table 1. Comparison of Master of Business Administration Programs in Pharmaceutical Marketing and Management at US Institutions

University Program Name	Name: Total Average Cost	Total Credit Hours: Curriculum Description	Special Project	Mode Instruction	Partnership With of Pharmaceutical Industry	Accreditation
Saint Joseph's University: MBA in Pharmaceutical Marketing	\$60,000	48: SJU requires that a student complete 24, two credit courses (totaling 48 credits).	Capstone Project	Online and campus EMBA	Yes	AACSB
Drexel University: MBA Pharmaceutical Management	\$54,000	51: Twelve of the fifty-one credit hours are specifically designed for pharmaceutical industry.	3 Residencies "face to face sessions"	Mixed: Mostly online: 14 courses are offered online and 3 are on campus	Yes	AACSB
University of Colorado: Executive MBA in Health Administration with Pharmaceutical Management option.	\$48,000	48: 12 courses related to healthcare business and 4 courses are pharmaceutical industry.	None	Mixed: The courses are held in six month sessions and consist of an on-campus portion for thirty days and on-line portion.	No	ACEHSA
Rutgers University: MBA in Pharmaceutical Management	\$ 75,000	60: Rutgers requires the completion of six courses related to pharmaceutical industry	Capstone Project	Campus	Yes	AACSB
Fairleigh Dickinson University: MBA in Pharmaceutical Management	\$78,000	51: Nine credit hours are focused in the pharmaceutical industry	Capstone Project (3 credit hrs)	Campus (weeknights and Saturdays)	Yes	AACSB
Aspen University: MBA in Pharmaceutical Management & Marketing	\$8,000	36: Six classes focused strictly towards business (Aspen University, 2011) while the remaining five courses are focused on pharmaceutical industry	Capstone Project (3 credit hrs)	Online	No	DETC
University of Sciences in Philadelphia (USP): MBA in Pharmaceutical & healthcare Business	\$60,000	40: Nineteen courses over a twenty-two month period (6 hours in Pharmaceutical industry and another 6 in healthcare)	Capstone project (2 credit hrs)	Online & Mixed: (16 online courses, while three are on campus)	Yes	MSCHE

AACSB: Association to Advance Collegiate Schools of Business

ACEHSA: Commission on Education for Health Services Administration

DETC: Accrediting Commission of the Distance Education and Training Council

MSCHE: Middle States Commission on Higher Education

focus than other MBA in pharmaceutical marketing and management programs. The program at The University of Colorado draws its students from a variety of health care

Table 2. Characteristics of Pharmacy Preceptors<sup>a</sup> Who Responded to a Survey Regarding Desire to Pursue a Master of Business Administration Degree (N = 57)<sup>b</sup>

respect to the pharmaceutical industry itself, Rutgers appears to offer the most extensive hands-on coursework pertinent to the pharmaceutical industry. Rutgers requires the completion of 6 courses focused in this area, with Aspen University and Saint Joseph's University requiring 5, and Fairleigh Dickinson University requiring only 3. Despite requiring completion of a large number of credit hours, Fairleigh Dickinson University only requires 1 course that is related to the pharmaceutical industry. Students are also required to select 2 elective courses that are related to pharmaceutical industry.<sup>22</sup> More detailed information about these MBA programs is provided in Table 1. Of the researched schools offering the MBA in pharmaceutical marketing and management, only 4 have the Association to Advance Collegiate Schools of Business (AACSB) accreditation. Less than 5% of more than 11,000 business schools worldwide have AACSB accreditation.<sup>23</sup> The colleges and schools offering the MBA in pharmaceutical marketing and management that do not have AACSB accreditation have regional or other accreditation.

### Findings From the Survey

Of the 150 e-mail invitations sent, 30 were returned as undeliverable. Thus, the adjusted sample size was 120. Fifty-seven responses were received for a response rate of 47.5%. Of the 57 respondents, a third (n = 19) reported that they did not have an MBA but were planning to seek one in the future. Another 65.0% (n = 37) reported that they did not have an MBA degree, nor were they planning to pursue one. The respondents' demographics and characteristics are presented in Table 2. Respondents were predominantly full-time pharmacists (98.2%) and male (55.6%). Fifty percent of the respondents worked in community (chain or independent) pharmacies, while 46.9% were the pharmacy manager or director, or the pharmacist in charge. Most respondents preferred MBA programs related to the healthcare or pharmacy area (66%) over general MBA programs (33%). No respondent indicated the pharmaceutical marketing area as a preferred specialization. Possible reimbursement by employer for MBA tuition and fees<sup>c</sup>

<sup>a</sup> All respondents were clinical preceptors affiliated with the University of Charleston and practicing in West Virginia at the time of the study.

<sup>b</sup> N varies due to item non-response.

<sup>c</sup> Chi-square test significant at  $p < 0.05$ .

While all of the respondents expressed their interest in evening and weekend MBA programs, 10 out of 11 who responded to the open-ended survey question stated that they could pursue an MBA program only if it were partially online. Respondents also were more interested in MBA programs focused on management and finance courses than those featuring marketing and pharmacoeconomic topics (Table 3). Pharmacists who pursue management positions are more likely to pursue MBA programs than pharmacists who are working as a pharmacist in charge or staff pharmacist. Similarly, pharmacists who reported that their employers would partially reimburse tuition and fees incurred in earning an MBA were more likely to express an interest in pursuing an MBA program than pharmacists who reported that their employers would not reimburse expenses (Table 2).

Approximately 20% of the respondents provided comments in response to the free-text survey item. A few

### Specialization

<sup>a</sup> All respondents were clinical preceptors affiliated with the University of Charleston and practicing in West Virginia at the time of the study.

respondents (5%) expressed concern that their age and family responsibilities could hinder their ability to meet the requirements of an MBA program. Regarding the MBA curriculum, some respondents (10%) stated they were particularly interested in a program focused directly on community pharmacy and the operation of small businesses. Others (5%) stated that pursuing an MBA degree would be a good idea for those wishing to obtain administrative positions. Several (18%) expressed concern that the required classes would conflict with their work schedule and stated that they would be interested in pursuing online or hybrid education, which combines the use of online coursework with traditional in-class education.

## DISCUSSION

The first goal of this investigation was to review the literature related to MBA programs in the United States that emphasize pharmaceutical marketing and management. Rutgers University may have a marketing advantage over other programs based on the school's close proximity to numerous pharmaceutical companies.<sup>13</sup> However, regarding the cost

factor, Aspen University's program is the least expensive program (less than \$8,000) compared to the other programs that offer an MBA in pharmaceutical marketing and management.<sup>24</sup> One perceived advantage to obtaining an MBA in pharmaceutical marketing and management is the belief that it will help pharmacists become more competitive for positions in management and similar opportunities. Another potential benefit of these programs is the promise of a higher salary.<sup>12</sup> However, these programs do represent an expensive investment and require sacrifices to complete. Also, some pharmacists will remain uninterested as an MBA in pharmaceutical marketing and management is not a requirement for many middle and upper management positions. In addition, some pharmacists may prefer to pursue a more general MBA degree depending on their career goals. Because the MBA in pharmaceutical marketing targets the pharmaceutical industry, holders of this degree may have a competitive advantage over someone with a general MBA because the holder has the general requisite knowledge found in general MBA programs, as well as business training specific to the pharmaceutical industry. In contrast to the general MBA degree, the graduate with an MBA in pharmaceutical marketing and management will have more specialized skills relevant to those needed in the pharmaceutical industry. As suggested by the tuition for the programs identified and described in this investigation, many find the attainment of an MBA in pharmaceutical marketing and management to be a worthwhile undertaking.<sup>13,16</sup>

From an administrative perspective, offering an MBA program in pharmaceutical marketing and management offers potential benefits to the institution as well. Development of such a program in concert with an affiliated business school may represent a way for a college or school of pharmacy to strengthen relationships with area industry and/or other units within the university system, distinguish itself among pharmacy colleges and schools, better prepare its graduates, and better serve its alumni and the profession. The second goal of this study was to examine pharmacists' perceptions and expectations related to pursuit of an MBA degree, with particular attention to program focus, program type, and program setting. Three key points can be gleaned from the data gathered. First, the majority of respondents, all of whom were practicing pharmacists, stated a preference for MBA programs that specialized in pharmaceutical marketing and management versus general MBA programs, similar to the joint PharmD/MBA programs offered at colleges and schools of pharmacy. This is relevant because a third of the respondent pharmacists stated they wished to pursue an MBA in the future. A second finding was the need that working professionals have for flexibility in obtaining the MBA in pharmaceutical marketing and management. Specifically, weekend, nights, and especially online work is required to enable working pharmacists to pursue an MBA degree. A third key point of this investigation is the propensity for the respondent pharmacists to prefer management and finance to marketing and pharmacoeconomics as an area of emphasis. Perhaps there is a perception that management and finance offer better career opportunities than marketing and pharmacoeconomics. As might be expected, those respondents who had an interest in obtaining a managerial position were more likely to pursue the pharmaceutical marketing and management than pharmacists in charge or staff pharmacists.

This study also provides insight for academic programs that offer the MBA in pharmaceutical marketing and management, or dual PharmD/MBA programs regarding useful parameters for evaluating their students' educational and professional capabilities. It also may help guide curricular revisions, leading to a more broadly educated pharmacist who is better prepared for the management positions in the pharmaceutical and healthcare industries. For example, if employer survey tools state that student pharmacists are not as proficient as they should be in management and finance, additional curricular space could be given to these areas. Ensuring that students have these qualifications may become even more important if pharmacist supply and demand becomes more balanced, i.e., job competition continues to increase.

This study has several limitations. We attempted to maximize response rates by sending (number) reminders to the sample. In addition, we offered a financial incentive to those who agreed to fill out the survey. Despite these attempts, it is possible that those who did not respond to our survey were systematically different than those who did respond to it regarding pharmacists' perceptions of an MBA in pharmaceutical marketing and management. Also, while a response rate of 47.5% is acceptable for an e-mail survey tool, it remains a limitation. Response to the study was voluntary; therefore, the survey was prone to self-selection bias, meaning only those pharmacists interested in the topic responded. Only pharmacists who were practicing in a specific region (i.e., West Virginia) and serving as preceptors were surveyed; thus, the results may not be generalizable to all pharmacists.

The results of this study uncovered several areas where additional research would be valuable. While the findings of this study apply only to pharmacists, the generalizability of these outcomes to other professionals who are pursuing an MBA in pharmacy or pharmaceutical industry (e.g., physicians, nurses, and other business major graduates) remains to be determined. Future research could address this. Equally important, future research is needed to compare pharmacists who graduated with a dual PharmD/MBA degree with pharmacists who finished their MBA degree after practicing pharmacy (either general MBA or MBA in pharmaceutical marketing and management) in order to obtain a

nationwide perspective.

## CONCLUSIONS

There are only 7 universities at which a pharmacist may pursue an MBA in pharmaceutical marketing and management. Because most programs require prior work-related experience as a prerequisite for admission, many are structured to allow pharmacists to maintain full-time employment by offering evening and online classes. Because programs vary by weighted emphasis on healthcare components, number of credit hours, and provision of hands-on experience, prospective students need to factor in these elements when selecting a program.

Pharmacist respondents in the survey indicated that their determinants for program selection also included employer reimbursement of tuition, intended pursuit of management positions, and focus on management and finance. Ultimately, the advanced knowledge of operational and strategic business aspects of pharmacy practice gained in this type of MBA program could confer a competitive advantage to pharmacists seeking career advancement. Additionally, from an institutional perspective, developing this type of MBA program in conjunction with a business school may offer a means to further distinguish its pharmacy program in an increasingly competitive market for the best student applicants.

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