

"MORTAR & PENCIL" CONCORDIA UNIVERSITY WISCONSIN SCHOOL OF PHARMACY STUDENT WRITING CLUB:

The Impact of Dual Degrees on a Career in Pharmacy

by Kevin Banse Jr., PharmD Candidate 2022, Patrick Begley, PharmD Candidate 2022, Vincent Rotunno, PharmD/MBA Candidate 2022

Dual degrees for Pharmacists, or pairing a PharmD with another professional degree, have gained interest in recent years. Schools of Pharmacy within the state of Wisconsin and nationwide have expanded the degrees offered concurrently with a Doctor of Pharmacy - and even practicing pharmacists have returned for further studies. The impetus to pursue another professional degree to partner with the PharmD varies widely but may be explained in part as a desire to gain new skills to pursue novel career opportunities, or to stand out in a competitive market.

Pharmacists can make themselves better candidates for residencies and jobs or promotions within their current role by gaining expertise in a different field of study. It also equips individuals with a new skill set, which may broaden their scope of practice while opening doors to other career paths. Healthcare is an ever-evolving field,

and this evolution brings new opportunities in the practice of pharmacy within a variety of domains such as clinical management, informatics, benefits management, and research.¹ These new roles may require new skills prompting pharmacists to pursue further development - perhaps in the form of a dual degree.

The amount of pharmacy school graduates has continued to rise every year since 2006 when the PharmD completely replaced the BS in Pharmacy as the sole degree offered by institutions for future pharmacists.^{2,3} The number of degrees conferred in 2006 was 9,040, and this number has increased to 14,905 in 2018. Additionally, the number of pharmacists pursuing a Post Graduate Year 1 and/or Year 2 (PGY1/PGY2) residency has increased every year since 2014.⁴ The number of applicants enrolling in the Match for PGY1 programs has risen

by over 38% in the last five years, and residents are becoming even more likely to specialize in a PGY2 program. This continuing trend has led students and current pharmacists to find ways to make themselves more marketable to potential residency programs or other employers. These efforts to stand out may include achieving board certification, gaining research experience, and completing an aforementioned residency. An additional option that is gaining more popularity across the profession is accompanying the PharmD with an additional degree.

Whether it is a student enrolling in a dual degree program to expand career opportunities, or a pharmacist aiming to advance their current position in the profession, additional degrees can serve as a valuable tool for many.

Considerations in Pursuing a Dual Degree

Before committing to the idea of additional schooling, there are some crucial factors to consider – including the opportunity cost of time, career plans, and financial costs. By allocating more time to focus on completing a degree, one may have less time to pursue other endeavors: less time to spend in other career pursuits, less time with family and friends, and perhaps increased stress introduced into daily life. Accepting the additional time constraints and commitment associated with an extra degree is also something that requires consideration. Students are expected to endure a heavier course load than their classmates, and pharmacists may be forced to work fewer hours while completing their degree. For this reason, organization and time management are two invaluable skills to possess when considering this option.

TABLE 1. Wisconsin PharmD Dual Degree Programs⁵

Focus	Degree	Career Opportunity
Management	Master of Business Administration (MBA) [†]	Pharmacy Administration Healthcare Administration Retail Pharmacy Academia
Public Health Health Policy Medication Safety	Master of Public Health (MPH) ^{††}	Governmental Agencies State and Local Health Departments Nonprofit Organizations Industry Insurance Academia
Science Drug Development Clinical Research Industrial Pharmacy	Master of Science in Pharmaceutical/Chemical Product Development (MPD) [†]	Pharmaceutical Industry Governmental Agencies Health-systems Academia

[†] Dual degree offered at Concordia University Wisconsin School of Pharmacy

^{††} Dual degree offered at University of Wisconsin School of Pharmacy

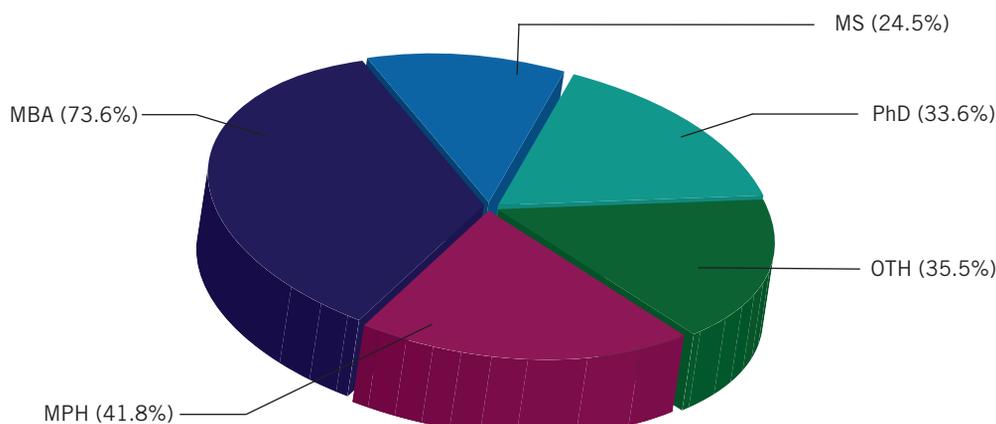
Careful consideration of one's career development plan is warranted before pursuing an additional degree. Ultimately, if there is a lack of application of the knowledge gained from the additional degree in the occupation being sought, it will not provide its maximal benefit. At the same time, pharmacists should consider a degree that will provide them with the best opportunity to expand their scope of practice in an area in which they are interested. Table 1 contains popular degree options given an area of focus and correlates common career paths for pharmacists with each degree.

Financial costs are another essential factor - whether it is taking out additional loans, or having the ability to cover expenses out-of-pocket or with the sponsorship of an employer. Many employers offer tuition reimbursement to foster professional development and may offer increased future salaries upon completion of a degree. While serving as an opportunity to develop and strengthen skills valued in the different areas of the pharmacy profession, an additional degree can provide career options to a pharmacist that had previously not been available.

Availability of Dual Degrees

The increasing popularity of dual degree programs is evident when looking at the number of pharmacy schools that are beginning to offer these opportunities. Nationwide, there are currently 110 PharmD dual degree programs available to prospective students, of which 81 programs (73.6%) offer a PharmD paired with a Master of Business Administration (MBA), 46 programs (41.8%) a Master of Public Health (MPH), and 37 programs (33.6%) a Ph.D. [Figure 1].⁶ In Wisconsin, PharmD dual degree programs are currently offered at Concordia University Wisconsin (CUW) and the University of Wisconsin - Madison (UW). There, students can complete their PharmD curriculum alongside an MPH (Mary Hayney, PharmD, MPH, e-mail communication, January 2020) with CUW offering a MPH dual degree as well as additional dual degree opportunities through their MBA and Master of Science in Pharmaceutical/Chemical Product Development (MPD) programs.⁷ Furthermore, while the Medical College of

FIGURE 1. National Prevalence of Dual Degrees Offered within PharmD Programs⁶



Master of Business Administration (MBA), Master of Public Health (MPH), Master of Science (MS), Doctor of Philosophy (PhD), Other (OTH): Master of Science in Pharmaceutical/Chemical Product Development, Master of Science in Health Informatics, Master of Science in Health Informatics and Information Management, Master of Science in Clinical Research, Master of Healthcare Administration, Master of Science in Leadership Development, Master of Science in Organizational Leadership, Master of Art, Juris Doctor, Doctor of Medicine

Wisconsin (MCW) does not currently offer any dual degree opportunities, this may be subject to change over the next few years, pending their anticipated accreditation in mid-2020 (Shaun Keating, Ph.D., e-mail communication, January 2020). There is not a shortage of options when looking at the availability of additional degrees for practicing pharmacists. Many universities throughout the state offer these degrees through either on-campus learning or utilizing an online platform. The often easily customizable class schedule provides various options for degree seekers, allowing for the most convenient program layout.

Potential Advantages of Dual Degree Programs

There are several potential advantages associated with additional degrees for current students as well as practicing pharmacists, including; lower tuition costs and reduced overall credits, increased salaries, and expanding the scope of practice with the ability to have an increased impact on the profession.

For current students, enrolling in a dual degree program may allow them to complete their education before entering the workforce. This is especially appealing for those who may find it challenging to attain the motivation to return to school post-graduation. Many institutions also offer discounted rates for the accompanying

degree in the dual degree program, which serves as an incentive to enroll in these programs. It is also not uncommon for courses to offer some overlap in the curriculum, which decreases the number of credits required to complete the additional degree.

Having an expanded skill set beyond that of a traditional PharmD uniquely equips individuals with the ability to make a positive impact on the pharmacy profession. This unique background provides an advantage regarding job placement, along with further and expedited career advancement. Dual degree graduates have reported receiving a higher number of job interviews following graduation, with their initial job placement being more likely to be in a leadership or administrative role when compared to students graduating solely with a PharmD.^{8,9} A higher initial salary, as well as a higher total compensation the first year out of pharmacy school, was also associated with PharmD dual degree graduates when compared to PharmD only graduates not pursuing a residency.

For current pharmacists, additional degrees are an excellent opportunity to expand their scope of practice while developing skills to promote and improve the profession. This holds especially true for pharmacists who, since graduating, have identified an area of pharmacy they wish to engage in more deeply. Whether it is a lack

of experience in a particular area, or a desire to gain more knowledge regarding a specific field of pharmacy, an additional degree can bolster one's ability to advance their career while promoting a positive change within the practice of pharmacy.

Challenges Related to Dual Degrees

When a student enrolls in a dual degree program, they need to understand potential financial and personal implications, and how to use their degree best. According to a study performed by the University of Buffalo School of Pharmacy and Pharmaceutical Sciences, students enrolled in the PharmD/MBA dual degree program indicated they expected to utilize their PharmD degree 59% of the time and their MBA degree 41% of the time within their entry-level positions.¹⁰ The percentage of each degree an individual is expected to utilize is highly variable based on the position, which is why individuals must do their due diligence before committing to a job. While some research has been conducted regarding the anticipated outcomes of dual degrees, there are several limitations regarding current literature on this topic. Authors of these publications are typically dual degree holders or students currently enrolled in these programs. Additionally, participants might have less incentive to respond to a survey if they did not enjoy or benefit from the program. If a career plan is not developed beforehand, the potential dual degree recipient could incur additional costs, while completing extra coursework for a degree that may not be used to its fullest potential.

The PharmD curriculum on its own is rigorous and may present challenges to students. The heavier course load of an additional degree will result in time constraints which limit opportunities for the student to pursue extracurricular or professional experiences, while potentially impacting one's personal life. A pharmacist interested in returning to school for an additional degree also has important considerations. Tuition for an advanced degree is expensive and is not eligible for the simultaneous dual degree discount or shared credit load. The pharmacist's work schedule should also be considered,

and the pharmacist should inquire with their employer regarding schedule accommodations. Going back to school can open new doors for a pharmacist; however, analysis of each individual's situation is necessary to ascertain if this is the right choice to advance in their career.

Conclusion

The prevalence of PharmD dual degree programs is increasing nationwide, offering those within the profession opportunities to learn new, marketable skills in an increasingly competitive profession. An additional degree can be critical in propelling pharmacists into specialized roles within the pharmacy profession and are accompanied by a multitude of benefits, including, optimization of education layout, enhanced compensation, and improvements in career development. In Wisconsin, both Concordia University Wisconsin and the University of Wisconsin – Madison offer dual degrees to their students, and the Medical College of Wisconsin may be incorporating dual degrees within their program shortly. Before enrolling in such programs, it is important to consider how this decision may advance one's career aspirations and the impact it will have on one's life.

Kevin Banse Jr., and Patrick Begley are 2nd Year Doctor of Pharmacy Candidates at Concordia University Wisconsin School of Pharmacy in Mequon, WI. Vincent Rotunno is a 2nd Year Doctor of Pharmacy Candidate and MBA Candidate at Concordia University Wisconsin School of Pharmacy in Mequon, WI.

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