University of Mississippi

eGrove

Honors Theses

Honors College (Sally McDonnell Barksdale Honors College)

Spring 5-10-2023

The Great Transition: A Qualitative Examination of the Transition from Pharmacy Student to Pharmacist

Jessica Marlee Wilson

Follow this and additional works at: https://egrove.olemiss.edu/hon_thesis



Part of the Pharmacy Administration, Policy and Regulation Commons

Recommended Citation

Wilson, Jessica Marlee, "The Great Transition: A Qualitative Examination of the Transition from Pharmacy Student to Pharmacist" (2023). Honors Theses. 2997. https://egrove.olemiss.edu/hon_thesis/2997

This Undergraduate Thesis is brought to you for free and open access by the Honors College (Sally McDonnell Barksdale Honors College) at eGrove. It has been accepted for inclusion in Honors Theses by an authorized administrator of eGrove. For more information, please contact egrove@olemiss.edu.

The Great Transition: A Qualitative Examination of the Transition from Pharmacy Student to Pharmacist

By:		
Iessica	Marlee	Wilson

A thesis submitted to the faculty of The University of Mississippi in partial fulfillment of the requirements of the Sally McDonnell Barksdale Honors College.

Oxford April 2023

	Approved by	
Advis	sor: Dr. Erin Holmes	
Read	er: Dr. Joseph Dikun	
Keau	er. Dr. Joseph Dikun	
Read	er: Dr. Kim Adcock	

© 2023 Jessica Marlee Wilson ALL RIGHTS RESERVED

ACKNOWLEDGEMENTS

I thank God for the very opportunity to not only further my education, but further it while being a part of the Sally Barksdale Honors College. He has blessed me with familial and friend support and has led me to an incredible thesis advisor, Dr. Erin Holmes. This has truly been an enriching experience, and I thank everyone who has helped guide me up until this point.

ABSTRACT

Background: Over the years, community pharmacy practice has expanded and increased the number of responsibilities pharmacists must manage. Tasks such as managing the pharmacy, counseling patients, and administering vaccines are among the duties that pharmacists must carry out. The recent Covid-19 pandemic placed a significant strain on the retail pharmacy work environment and acted as an obstacle to the jobs of community pharmacists. Recent pharmacy graduates are often thrown into this variable work environment, and it seems that there is limited literature regarding the preparedness that they feel in this area of pharmacy work.

Objectives: To uncover the level of preparedness recent University of Mississippi School of Pharmacy graduates brought into retail pharmacy and how much support they received from their respective companies.

Methods: This study utilized a cross-sectional, descriptive design by means of conducting in-depth interviews with recently graduated pharmacists.

Results: Many of the recent graduates felt equipped to handle the clinical aspects of retail pharmacy. A solid foundation in drug knowledge, counseling patients, and utilizing drug resources were among the skillsets that many of the pharmacists felt they were prepared for. Contrarily, many pharmacists felt that they were not prepared for the business side of the job and would have preferred less of a push toward clinical pharmacy. Resolving insurance complications and handling patient conflict were two areas of difficulty that several of the pharmacists brought to light. Regarding company support, the level of support the pharmacists received depended highly on the availability of store leadership.

Conclusion: There is an ongoing conversation on what should and can realistically be included in a pharmacy curriculum. Adjustments towards providing adequate resources for retail pharmacy have been applied under the current LandShaRx curriculum. But one of the best ways to prepare for retail pharmacy, as expressed by the pharmacists in both the previous and current curriculum, is by gaining real world exposure prior to graduation.

TABLE OF CONTENTS

INTRODUCTION	1
METHODS.	9
RESULTS	11
DISCUSSION	24
REFERENCES	29
APPENDIX	31

INTRODUCTION

Let us begin by painting a picture. The sun makes its ascent into the sky. Its rays peek through the window blinds as it settles into position. The St. Augustine grass outside is glazed with a fresh layer of sparkling dew and the silence of the morning is broken by the singing of birds. With the vanishing of the night, it seems that Mother Nature has brought forth yet another day. But this day is not like any other day. This day is the day - the first day you, the new pharmacy graduate, begin your duties as a pharmacist in your local pharmacy. You glide through your morning and look in the mirror one last time before heading out the door. A quick glance at the white coat in your hands brings forth a wave of confidence. Without any context, this simple blend of white cotton fibers means nothing, but to you, this coat symbolizes a sacrifice - a sacrifice of time, energy, and finances. To you, this coat carries with it a responsibility to promote and preserve the health of the members of your community. You arrive promptly at your pharmacy and the breeze that drifts out of the store awakens the blend of apprehension and exhilaration that lay dormant up until this point in time. This is the moment you have been waiting for. It is finally here.

You demonstrate professionalism by arriving early, very early in fact. It is an hour and a half before the pharmacy officially opens, but you take your keys and unlock the door that acts as a single portal between life as a student and the world behind the counter. You carry with you the awareness that while on salary pay, there is no compensation for coming in earlier, yet you want to commence your first day on good footing - getting an idea of how many scripts are waiting in the queue, familiarizing yourself with how many patients need to be contacted, mentally preparing for the

extensive list of vaccine appointments, and the list goes on. There is nervousness, sure, but you take comfort in knowing that you have the support of your colleagues – technicians who know the ins and outs of the retail pharmacy. *Today*, you say to yourself, it will be a good day. I am alive and well. I have trained for this moment, and when I need help, I have the aid of the technicians who know the pharmacy software like the back of their palms. As you continue to meditate and deliver positive thoughts to the subconscious mind, an hour flies by in the blink of an eye. You then are startled and pulled out of your meditative trance as your phone dings in your pocket. It dings again and again. The constant notifications were unexpected, but you pick up your phone nonchalantly only to be met with a series of text messages. "Good morning, I tested positive for COVID yesterday and I cannot come in today." You read the next message. "We had an emergency this morning. I had to rush my son to the hospital. I will not be able to make it today." You read two more messages about how life has without fail found a way to interrupt the lives of your co-workers and ultimately place you in an overwhelming position. As you try to not think of yourself, you send back messages that you hope convey some sense of empathy. You understand logically that there is no way to predict circumstances such as these and that there is no need to worry. But how could you escape the suffocating grasp of worry? The pharmacy will need to open its doors in the next thirty minutes and four out of five scheduled technicians have called in.

An agonizing thirty minutes pass and without anyone available to cover the other shifts, your first day as the registered pharmacist seems similar to a day in the life of a lone survivor stranded on a raft out in a sea of sharks. The cars in the drive-through have already lined up. Patients are beginning to approach the counter. At the strike of 10

o'clock am, patients seem to run to their phones to dial up the pharmacy as soon as it opens. The mechanical ringing of the blocky telephones continues without pause. Electronic prescriptions come over without hesitation. There are tasks outside patient care that need to be tended to, but the manpower is not present to accommodate those obligations. In a matter of moments, the domino has fallen and has struck the domino behind it, initiating a seemingly hopeless domino effect on your first day. And after a few hours of pure chaos, you decide to close the drive-through and limit the patient care to those who come inside the pharmacy. It seems nearly impossible for one pharmacist and one technician to handle the volume of tasks that occur with weekday pharmacy operations.

Such a painted picture of retail pharmacy seems *completely* fabricated and unreal, but unanticipated stressors like the one presented bury and corrode the world of retail pharmacy. This study seeks to unfold whether pharmacy schooling is preparing students for the transition into the real world with its real-world issues. But first, before we explore this topic further, let us turn the page back and gain an understanding of where community pharmacy began.

Taking a mental journey and going back a few hundred years, we find ourselves in the 18th century. During this time, the very idea of community pharmacy began to unfold and establish the roots of the modern pharmacies we see today. It was in the year 1792 that one fellow by the name of Christopher Marshall "opened one of the first apothecaries in colonial America". Apothecaries were essentially chemists who were trained in the practice of compounding. They would then dispense these medications to

the community. As the years progressed, however, the role of the apothecary shifted and eventually became what is known today as "pharmacist".

Thanks to the Industrial Revolution, medications that, at one time, only pharmacists could create were being mass-produced.² Further advancements in medicine began to expand beyond what could be extracted from the materia medica.² This caused the image of the pharmacist to change as technological advances replaced one of the main jobs that pharmacists performed - creating and selling their medicinal creations.

"Towards a Greater Professional Standing: Evolution of Pharmacy Practice and Education," states the effect of this transition superbly saying, "the erosion of traditional roles led to a crisis of professionalism within American community pharmacy, requiring the profession to rethink its role in society".²

In the early 20th century, there were efforts to create a more standardized curriculum concerning working as a pharmacist in the retail setting. There were, however, many disagreements as to the length of time it took to receive a professional license to practice pharmacy. In this era where the image of the conventional compounding pharmacist began to diminish, society continued to question what part the pharmacist plays in the healthcare sector.

As the decades progressed, compounding proceeded to dwindle, and pharmacy work took on a seemingly impersonal aura. There were policies set in place from the twenties

that prevented any form of patient counseling about prescriptions.² To not breach the "physician-patient relationship," many medications were sold without the name of the medicine on the bottle.² Naturally, the seemingly indifferent nature of the pharmacy

atmosphere bothered the conscience of pharmacists who were more interested in the patient-care side of their position. Eugene White was one of these disillusioned pharmacists. His disillusionment inspired him to make a change and by the late 1950s, he and others essentially revolutionized the retail pharmacy setting by emphasizing the needs of the patient.² The newfound patient-centered attitude provoked the emendation of the American Pharmacists Association's (APhA) Code of Ethics in 1969, stating that:

A pharmacist should hold the health and safety of patients to be of first consideration; he should render to each patient the full measure of his ability as an essential health practitioner. ²

Zooming through time and fast-forwarding to the present, we now find ourselves in the modern age of the 21st Century, a time when the pharmacy practice is well-respected and acclaimed. The role of the pharmacist has expanded and countless job titles can be claimed with the presentation of a Pharm D. All of these titles carry with them a tremendous responsibility. Pharmacists in the retail sector, specifically, are not only in charge of dispensing medications but also connecting with the community and establishing relationships through patient care. They are the last checkpoint before the patient begins medical treatment. They maintain quality control and ensure that the prescribed medications are indeed the best remedy for the patient. Retail pharmacists also step out from behind the counter and provide immunizations. It is duties like these that make retail pharmacy vital. Unfortunately, such a career whose sole purpose is to stabilize the health of the community is not without its challenges.

As pharmacy gained more recognition and found its place in the world of healthcare, it also picked up more duties to micromanage. And like *yang* accompanies

yin, an additional set of stress in this work setting has crept up and found a comfortable spot next to added tasks. In recent times, the focus of the medical domain has shifted to COVID, with an ever-going effort to treat and contain its presence in the community. Retail pharmacy was no stranger to this global pursuit as it stepped in and acted as one of the medical mediators for this virus. In the combat of the spread, it worked to distribute vaccines and medications to those who found themselves afflicted with this respiratory illness. The disappointing truth, however, is that these noble endeavors have placed a strain on the already stressful environment of retail pharmacy.³ Keywords like "pharmacist", "COVID", and "stress" typed in succession on a browser's search bar output a plethora of articles related to the challenges that have presented themselves in recent times. One particular article, "Retail Pharmacy Has Reached the Breaking Point," says "the lack of breaks, hiring of new staff, organization of staff schedules, and managerial support was a problem at the pharmacy even before the COVID-19 pandemic began". Such stressors distinguish chain pharmacy work. Are fresh pharmacy graduates prepared for the unpredictable nature of pharmacy work? Such an inquiry is the drive of this study.

As with any new experience in life, there is a transition to pharmacy practice that presents itself as a great bridge to be crossed. Existing literature has identified some of the barriers that coincide with such a transition, however many of them are not specific to the experiences of the student pharmacists who move on to practice in the retail setting. One particular study, though, has stood out among the rest. It sought to answer the questions presented in this thesis, with the only difference being the area of pharmacy practice. *Barriers and Strategies for Transition from Student to Successful Hospital*

Pharmacist, an article by Jasminder Mourh and Newby presents a study that provides a little insight into the seemingly gray zone between being a student and a registered pharmacist. The investigation was performed with 137 hospital pharmacists who work with the Lower Mainland Pharmacy Services.⁵ The data was collected via surveys that were sent out in emails and three of the pharmacists agreed to an in-person interview.⁵

The results of this study were analyzed by calculating a performance score that reflected their overall experience with the transition process.⁵ The transition experience as quantified by a "performance score" was found to be correlated with several factors such as the amount of time spent working as a hospital pharmacist, the highest level of pharmacy education achieved, and the amount of satisfaction with their role.⁵ Conclusions found in this study revealed that the primary barriers student pharmacists faced in their transition to hospital pharmacists revolved around limited university preparation and time working as a hospital pharmacist, lack of additional pharmacy education and knowledge, rotation among several areas, and uncertainty about role identity.⁵

On the topic of professional identity, a study in Australia sought to assess the transitional experience of pharmacy interns to the workforce and its effect on their pharmacist identities. The study found that the professional identities formed as a student pharmacist added to the challenge of adjusting to the workplace.⁶ Their students' pharmacy education focused on patient-centered care, while their job positions did not always provide such opportunities to engage in such personal care practices with patients.⁶ This misalignment between expectations formed in school and reality

experienced after school made it difficult to develop confidence and methods to overcome the barriers of transition.⁶

Moving out from underneath the protective blanket of being a student pharmacist and into the elements as an independent pharmacist is no new subject of interest. There are several articles dedicated to the encouragement and guidance of those who find themselves initiating work as staff pharmacists as soon as they pass the board exams. These articles are often written by pharmacists who draw upon their own experiences to help those who may find themselves on a similar career trajectory. They make suggestions such as keeping notes from pharmacy school⁷, knowing knowledgeable pharmacists⁸, and seeking employment that offers adequate training.⁹ Such pieces of advice serve as useful resources, however, they don't primarily rely upon skills that were acquired while in pharmacy school. What is the perspective of the former student pharmacist who, overnight, gained all of the responsibilities of a full-time retail pharmacist?

This study proposes to pull back the curtain and specifically understand the preparedness of recent pharmacy school graduates for work in the retail chain pharmacy setting, and to understand the level of organizational support they got in their retail chain pharmacy work.

METHODS

Study Design

This study incorporated the use of a cross-sectional, descriptive design by means of conducting in-depth interviews with recently graduated pharmacists. This study was exempted from IRB review under protocol number 22x-314 before data collection started.

Participants

Participants were recruited using convenience sampling via announcements on Facebook and LinkedIn. Participants had to have started their careers in retail chain pharmacy or be currently working in retail chain pharmacy and have graduated within the last five years.

Procedure

At the start of each interview, participants were read a disclosure statement that included a brief description of the topic of study, their rights as participants, any related costs, risks, or benefits, statements protecting the confidentiality of supplied information, and the status of IRB exemption. Participants were asked to give a verbal statement of their consent after this disclaimer before the continuation of the interview. Most participants took part in interviews that were conducted remotely via video chat through services such as Zoom and FaceTime. However, two of the interviews were hosted through phone calls using both cellular service and Zoom's call feature. With permission from the participants, responses captured through video chat were screen recorded and phone calls were audio recorded. The interviews were designed to last roughly 30 minutes. With a combination of both open and closed-ended questions, this collection of

conversations was intended to explore the perspectives of pharmacists who have completed the curriculum presented at the University of Mississippi School of Pharmacy and applied their schooling in a chain pharmacy. By gaining insight into this unique set of perspectives, the goal was to analyze the level of preparedness student pharmacists take with them as they disperse and put their degrees into practice. One interview template was used for each participant and each question was designed to allow the freedom to elaborate as much as desired. A sample of this interview template can be found in the Appendix.

Data Collection and Data Analysis

During interviews, notes were taken by the investigator. Additionally, recordings were transcribed by a Zoom feature that produces live captions. For analysis, responses to interview questions were grouped into themes and summarized.

RESULTS

Participant Demographics

Fourteen eligible participants completed interviews. Table 1 displays the demographic information of the pharmacists interviewed in this study. All of the pharmacists are graduates from the University of Mississippi School of Pharmacy and vary by gender, race, age, and amount of pre and post-graduate pharmacy chain experience. The highest level of education was obtained and recorded, however, all of the participating pharmacists obtained their PharmD. Only one participant expressed the possession of additional education- BCPS and PGY1. Twelve out of the fourteen pharmacists worked in a retail pharmacy environment before graduating from pharmacy school, while two of the pharmacists did not.

Table 1: Pharmacist Interviewee Demographics

Gender	Number of Respondents (%) (n=14)
Male Female	5 (35.7%) 9 (64.3%)
Race	Number of Respondents (%)
Asian Black White	1 (7.1%) 2 (14.3%) 11 (78.6%)
Age	Number of Respondents (%)
25-26 27-28 29-30 31-32	4 (28.6%) 5 (35.7%) 1 (7.1%) 4 (28.6%)
Highest Level of Education	Number of Respondents (%)
Pharm D Post Graduate Training	13 (92.9%) 1 (7.1%)
Length of Experience	Number of Respondents (%)
0-1 year 1-2 years 3-4 years 4-5 years	4 (28.6%) 4 (28.6%) 5 (35.7%) 1 (7.1%)
Experience As Pharmacy Intern/Technician At Retail Pharmacy	Number of Respondents (%)
Yes No	12 (85.7%) 2 (14.3%)

In what ways did your pharmacy education prepare you for retail pharmacy practice?

Though each of the pharmacists completed the PharmD program at various years and under various forms of the pharmacy curriculum, it appears that there were at least two areas that many of the pharmacists agreed the program taught well. That would be a thorough understanding of drug information and patient counseling. One of the more recent graduates went on to say that, on a scale of 1 to 10, the school achieved a 9 in these respective categories. Another pointed out that the school performs proficiently at teaching students how to locate information that they do not know offhand. Others also shared that the curriculum provides the opportunity to build skills in teamwork and communication as one has to use both abilities in interacting with other students and faculty.

In what ways did your pharmacy education NOT prepare your retail pharmacy practice?

"I was not prepared for the amount of decisions I would have to make...There are a million problems you have to solve every day and you really have to care about people and be good at working through issues." Statements like these echoed from pharmacists who did not share the same sentiment regarding the positive aforementioned attributes. Two of the participating pharmacists both felt that the school did not prepare them for the work they perform today as retail pharmacists. On another scale of 1 to 10, one of these participants felt that in terms of the ways the school prepares its students for retail, the school achieved a 6. And though not all the students felt the school inadequately prepared them for retail practice, many of the participants brought to light that the

curriculum emphasizes clinical pharmacy. They shared that this same push was not provided for retail pharmacy.

Besides the comments on the clinical focus of the curriculum, two major themes emerged, business tasks and communication. Under business, the most common mention was insurance. Insurance is one of the main obstacles that presents itself in the world of retail pharmacy. In many cases, insurance is an unavoidable variable that creates a barrier between the patient and their medication. With factors like changing formularies and various policies set in place, many of the interviewed pharmacists were united in their belief that they felt underprepared for resolving insurance issues.

Communication was another key area of pharmacy practice the interviewees mentioned they did not feel equipped for. More specifically, they referred to communication in regard to handling conflict and dealing with the public. In an ideal environment, patient encounters are a friendly exchange. Unfortunately, the real world happens to be deficient in this ideal nature, and in some cases, there is tension between pharmacist and patient. A few pharmacists shared that the school did not prepare them for how to handle such conflicts. One commented that the school lacks the realistic nature of retail pharmacy.

Other comments suggested that there is insufficient preparation for the pace of retail pharmacy. In reference to time restraints, one pharmacist mentioned that there is not enough time to thoroughly counsel patients. Others considered their responsibilities from behind the counter in a more general perspective and felt underprepared for the workflow. There is the responsibility of being proficient with the pharmacy software and engaging in customer relations while maintaining the status of being the team leader and

manager. Several commented on how they would have benefited from being introduced to more over-the-counter drugs and pediatrics. Others would have liked retail pharmacy-centered electives. And while some felt that there is "No way school can prepare you for everything," others believed that they could have benefited from preexposure to some of these elements.

What was the most challenging part of your transition into retail pharmacy practice after being a pharmacy student?

Though two pharmacists felt comfortable with their transition into staff pharmacists, due to their prior work experience, the majority of the participants without the same level of experience did not share this feeling of ease. When considering the challenging areas of transition, several pharmacists stated the same items they felt unequipped for. These were skills in resolving insurance rejections and interacting with difficult patients. Others pointed out that one of the main challenges in the transition away from being a student pharmacist is no longer being a student. When one is hired as the staff pharmacist or pharmacy manager, there is no longer the immediate supervision of someone more experienced - similar to the environment provided during rotations. It appeared that such a role change took time to come to terms with mentally. Pharmacists wear many hats and have responsibilities that go far beyond merely dispensing medications. While conversing with the interviewees, it appeared that shouldering such responsibilities added to the challenge of transition.

Others mentioned the holistic aspects of this present challenge and shared that it was tough to find the balance between work and personal life. For a few of the participants, personal life challenges involved finding time to study for the NAPLEX.

Others shared different stressors, with a few highlighting the demanding nature of being hired during the flu season and beginning work after the pandemic. There also seemed to be issues with other members of the pharmacy team in terms of gaining respect from older peers. Some mentioned that a major part of the transition involved on-the-job learning with the task of counseling patients and being skilled at sharing what is salient.

Having confidence was another major theme that emerged from the interviews.

Many participants felt that they struggled with having confidence in their judgment.

Some felt the overwhelming urge to double-check everything they do. Essentially, one of the toughest aspects of the transition is learning to stand on one's own feet and accept the authority and influence that accompanies a PharmD.

What was the easiest part of your transition into retail pharmacy practice after being a pharmacy student?

Patient counseling was an area of practice that many of the participants conveyed they felt was the least challenging. Because of the extensive training on drug knowledge, some expressed that simply being familiar with medications and sharing this understanding with patients did not pose the greatest challenge. As one pharmacist put it, "being able to immediately start helping people" was among the easiest parts of the transition into retail pharmacy post-graduation.

Several of the participants felt that carrying out the more basic tasks of being a pharmacist, like verifying and counseling, proved to be one of the easier roles to fill. On the other hand, some stated that performing tasks outside of pharmacists' duties were the easiest. These would be responsibilities such as scanning in prescriptions, typing prescriptions, and resolving insurance conflicts. Those with prior experience in the retail

pharmacy setting shared that there is an advantage to having previous exposure to insurance issues and learning how to solve them.

One brought out that communication with not only patients but with other coworkers (i.e. pharmacy technicians) appeared to be an element that did not add to the overall challenge of transition. Other comments suggested that pharmacist duties such as giving vaccines and using the pharmacy computer software lacked the same amount of difficulty as other aspects of the job. One mentioned that securing a position as a pharmacist was easy.

Perhaps the most distinctive comment was one that compared the full-time responsibility of being a pharmacist to the responsibility of being a full-time student. The participant stated that "the easiest part of the transition was just working my shift and going home. No more studying, tests, classes. Just do your job and go home and rest." *How comfortable do you feel in asking for help from other pharmacists?*

The resounding response to this question was that the majority of the participants felt a high level of comfort when needing to seek help from a fellow pharmacist. Several comments revealed that the school of pharmacy helped fortify the level of comfort the students took with them into practice. A couple shared that they had the support of multiple pharmacists and faced no challenge in requesting help. Some constantly reach out for help as they believe that it is better to ask than to guess and make a mistake.

Others brought out that it is important to have what they deemed a "phone-a-friend."

On the opposite end, some felt a sense of shyness in asking for assistance. They perceived that their asking for help was burdensome. Only after working in the field and

building relationships, did they gain the degree of confidence seen in the other participants.

How prepared did you feel to communicate with other healthcare professionals when you started?

The responses here were quite split. Several stated that they felt completely prepared as they believed the training they received, especially in the final year of pharmacy school, prepared them for this task. Others shared that they did not feel the same ease of communication that was present when speaking to another pharmacist. As one participant mentioned, there is a "Stigma around pharmacists - that we just fill scripts." It is apparent that many physicians may not know the full extent of the responsibilities of a pharmacist. Barriers such as these, presently add to the challenge of relaying information back and forth.

Regardless, it appeared that the reason behind the difficulty in communicating with members of other healthcare disciplines came from the lack of confidence. Several comments revealed that many of the participants felt that sense of shyness return when needing to communicate across disciplines. Those who question the suggestions of the new pharmacist instill a level of doubt in their ability to make decisions.

Those who did not experience this lack of confidence attributed it to the experiences they had prior to being a retail pharmacist; however, this attribution was not completely given to the Interprofessional Education courses that pharmacy students take each year. They felt that the physicians were easy to talk to. They believed that talking to a physician on behalf of a patient was relatively simple as long as they knew exactly what they needed to communicate.

Others brought to light that in the retail setting, it is not likely that a pharmacist will speak to a physician. It is more probable that they would leave a voicemail or speak to a nurse instead.

What additional things could your pharmacy program have done to help in your student-to-pharmacist transition?

Several items arose when prompting the participants to share what they felt would have benefited them had these things been offered in their pharmacy curriculum. The participants' responses organized themselves into the following themes: Insurance and business, making connections to stakeholders in retail pharmacy, less emphasis on clinical pharmacy, implementation of pharmacy career tracks, better NAPLEX preparation, and a more structured rotation experience. Within the theme of insurance and business, most respondents felt like they would have benefitted from more practice in adjudicating insurance as well as business management and law. Ways they suggested doing that was by offering more optional business electives, management rotations, or more required course emphasis on management. For making connections to stakeholders in retail pharmacy, pharmacists suggested having more mentors, advisors, and advocates who work in community pharmacy. For putting less of a focus on clinical pharmacy, pharmacists suggested engaging students with more emphasis on curriculum around retail pharmacy and opportunities to learn about how retail pharmacy works. For the implementation of pharmacy career tracks, they suggested having classes directed toward the job path they want to pursue, catering electives toward a career path, and encouraging students to choose a pharmacy path and participate in rotations focused on the career path of interest. In regards to the preparation for the NAPLEX exam, pharmacists felt that

High yield review was unhelpful toward their success on that examination. When considering rotation experiences, pharmacists suggested that retail rotations consist of activities that more reflect the duties of a retail pharmacist and not so much the retail pharmacy technician (i.e filling prescriptions). As one participant put it, "I think it's important to have us do more than count pills on our pharmacy rotations. We need to answer phones, call doctor's offices, speak to nurses, solve problems because when you get into a pharmacy you are hit with everything at once and have to sink or swim." Other comments suggested items such as more class time with "heavier material," and more preparation for real-world conflicts.

How much support did you receive from your manager and/or company during your transition as a pharmacist?

After asking the pharmacists to consider how much support their respective companies offered them, the responses created two poles - adequate support and inadequate support. There was no middle ground between these two areas. Those who felt their support was sufficient attributed this directly to the district managers and coordinators. Pharmacists who worked with accessible leadership experienced the most support when stepping into their role as full-time pharmacists. They received assistance in areas such as board exam preparation and were extended flexibility on the job. In these working environments, communication was heavily emphasized.

On the other end of the spectrum, pharmacists whose store leadership was not as reachable and helpful found that their store did not provide satisfactory support from their company. As one pharmacist put it, "I was tossed in alone and had to figure it out." On a scale from 1 to 10, with 10 being the most supportive, one pharmacist gave their

company a 4. Many of the pharmacists whose experiences fell in this category, collectively felt that how much support they received "depends on who your boss is at the time."

Did you receive a retail pharmacy orientation?

When asking the participants whether or not they underwent some form of retail pharmacy orientation, there were, overall, more that said "no" than "yes." For those who did receive an orientation, they shared items that involved items such as a low-level introduction to the community, networking, and going over policy. Some shared that the program's weaknesses revolved around limited training during the orientation and others commented that they were "thrown in after passing the boards."

Those who did not receive a pharmacy orientation shared ideas that echoed the same sentiments as this comment - "In general, it should be offered for new pharmacists. Pharmacists are thrown into the job and aren't taught how to use the computers." The absence of a pharmacy orientation proved to add to the difficulties already in place when beginning as a staff pharmacist. Several remarked that instead of a pharmacy orientation, they were tasked with completing training modules, but because they often found themselves working alone, they did not have time to complete the computerized training.

Besides some sort of orientation, what, if anything, kind of support did you receive during your transition?

It appears that the initial experiences of the pharmacists were primarily shaped by the availability and aid of the store manager. Those with more pleasant experiences remarked that their manager provided constant communication and was always within reach when questions or problems came about. They shared that their manager was responsible for establishing networks and connecting them with other "high-performing stores" and managers. Some store managers even took the initiative to provide hands-on learning for what needs to be done in the pharmacy during the opening shift. In short, the more involved the store manager, the more comfortable the new pharmacists felt when beginning in this new position.

Supplementary ways the store provided support to the pharmacist was by providing monetary incentives in the form of a sign-on bonus, providing a NAPLEX study course at no additional cost, access to online learning and computer courses, as well as a standard operating procedures handbook to reference.

What additional things could your employer have done to help in your student-topharmacist transition?

Pharmacists felt that additional support in the form of more training, more time or fewer things to micromanage, and opportunities to work alongside experienced pharmacists would have proved beneficial in their transition from student pharmacists to staff pharmacists. Incorporating these aspects into their job preparation would provide training on common problems that arise in retail pharmacy, training with the pharmacy software, and training experienced staff pharmacists to be more supportive. Additionally, pairing new pharmacy graduates with seasoned pharmacists could help ease the new pharmacist into their staff position. Other forms of support include either fewer work hours or less micromanaging with the goal of more time to focus on the patient.

Some of the pharmacists, on the other hand, felt that their job preparation was adequate and that there was nothing more their company could do to improve their transition. Others found that it would be beneficial to not hire previous interns as staff

pharmacists as it could unintentionally induce conflict among workers who now work under the "student."

What advice do you have for pharmacy students who will be transitioning into the pharmacist role in retail pharmacy?

The final question posed to the participants asked them to see their experience from a 30,000-foot view and share one piece of advice for future pharmacists who are interested in retail pharmacy. The overarching theme that arose out of this question was getting exposure to the job field as early as possible. Simply put, one of the participants shared that one of the most important things one can do is "make steps to prepare for the future you." Based on other participants' responses, this includes endeavors such as working a retail position while in school and taking that opportunity to be engaged with situational learning, as well as researching the retail company of interest before deciding to work there.

Other pieces of advice encouraged students to take advantage of community rotations, be open to opportunities, ask for help and find mentors, prioritize the gaining of the knowledge, get out from behind the counter, and take care of self. One of the pharmacists even took this change to suggest that the future pharmacist opt for independent over chain pharmacy due to high rates of burnout and lack of proper training.

DISCUSSION

Overview of findings

Literature in the profession of pharmacy has brought to light many of the challenges of retail pharmacy³⁻⁴, forcing us to question the readiness of new pharmacists for the retail pharmacy setting.

In this study, respondents were asked to consider their preparedness for their jobs in retail pharmacy. Common themes we identified were adequate scholarly preparation in the areas of drug knowledge, utilization of drug information resources, working in teams, and fostering communication; a wish to have gained more exposure to the business/management aspects of retail pharmacy; comfort in interpersonal communication with other pharmacists, but not always with other healthcare professionals; a preference for less of an academic push towards clinical pharmacy and more resources supplied for retail pharmacy; a desire to have had more structured IPPE/APPE experiences that center on allowing pharmacy students to practice pharmacist duties rather than those of a technician; an association between availability of retail store leadership and recent pharmacy graduate support; and finally, a push for future retail pharmacists to acquire experience in this career field prior to graduation.

Observations

Pharmacy schools are no doubt challenged by fitting many competencies into professional curricula, meant to prepare students for various types of career paths who are all practicing at the top of their practice. It was encouraging that responding pharmacists unanimously felt prepared to address clinical issues in the work environment, which can be argued to be the ultimate goal of a school of pharmacy.

That being said, retail pharmacists reported feeling less prepared for what could be argued are the business and personnel aspects of practicing pharmacy. This begs the question, do pharmacy schools have a responsibility to train students specifically for the practice of retail pharmacy? Can everything respondents mentioned feeling unprepared for be addressed in pharmacy school? Not likely, Admittedly, it may be difficult to realistically train students to run insurance and practice the other daily tasks of retail pharmacy. Potentially emphasizing some of these areas in community APPEs, electives, advising and mentoring, skills lab or skills lab alternative, or using extracurricular opportunities may be a realistic way to address some of these deficiencies.

Without the cushion of preceptor guidance, however, confidence in decision-making was another area of practice that retail pharmacists found difficulty in. Though confidence presents itself as an intrinsic ability, is it something that can be established before a student pharmacist no longer wears the title of *student*? Will the various practice scenarios presented in a learning environment be enough to fortify the students' trust in their ability to make clinical decisions? Literature has shown that pharmacists perceive that their role is not distinctly defined to the public or other healthcare professionals.¹⁰ Because of this public perception, some pharmacists feel that their educational experience is not fully appreciated or understood.¹⁰

When considering the societal factors that add to the challenges of transitioning into a retail pharmacist, it makes one wonder what skills should be instilled by a school of pharmacy versus what skills should be brought about by life experience. Many of the participants felt that the most proficient way for students to prepare for the realities of

retail pharmacy is to get out and work for a retail pharmacy, as this provides the most hands-on learning experience.

Some of the pharmacists suggested the incorporation of pharmacy tracks and allowing students to cater their education towards retail pharmacy should that be the path they want to pursue. After discussion with those who have seen the various phases of the pharmacy curriculum, it seems though, that there once was an option to choose a pharmacy career tract. This program was eventually discontinued. Perhaps it would be beneficial to recycle this past idea to cater to the interests of those who have some certainty about seeking to claim a position as a retail pharmacist. A fairly recent study revealed that in 2016, retail pharmacists represented 60.4 % of the pharmacy profession. With many pharmacy graduates filling retail pharmacy positions, providing an education that focuses on the responsibilities of retail pharmacists may prove to be beneficial.

It must not go unmentioned that some of the items that the participants suggested have already been addressed by the current LanshaRx curriculum. Replacing High-Yield Review with RxPrep was one of the more recent modifications that have proved to be advantageous for students. In regards to the incorporation of more retail pharmacy mentors and advocates, it seems that the school of pharmacy has provided more representation of community pharmacy practice.

Future research

It should be noted that most pharmacists interviewed were graduates of the previous legacy curriculum, not the current LandshaRx curriculum. Those that were part of the LandshaRx curriculum were graduates of the first iteration or offering of the

curriculum. The perceptions of pharmacists' preparedness may be very different, so replication of this study with new graduates is warranted. For example, newly developed courses like an enhanced emphasis on Interprofessional Education, Personal and Professional Development, and Pharmacy Patient Care Practice may be addressing some of these issues. As a result, similar studies should be conducted in the future to see how the LandshaRx curriculum shapes retail pharmacist preparation.

Additionally, re-evaluating the current data using a more robust thematic analysis conducted separately by two investigators is warranted per the recommendations of Austin and Sutton and Sutton and Austin. 12-13 Both investigators' analyses are compared, and overall themes are extrapolated in order to gain insight into the viewpoints of retail chain pharmacists. Disagreements on themes by the two investigators are resolved by reaching a consensus. Quotes from the interviews can be used as supporting evidence for the thematic analysis.

Limitations

Due to the exploratory and cross-sectional nature of this study, as well as the use of a convenience sample, the results of this study should be interpreted with caution.

Results cannot be extrapolated to all retail chain pharmacists in all areas. A study employing a more robust sample collecting additional qualitative and quantitative data may result in more generalizable data.

REFERENCES

- 1. The history of American pharmacies [Internet]. [cited 2023 Apr 11]. Available from: https://www.wellrx.com/news/the-history-of-american-pharmacies/
- Urick BY, Meggs EV. Towards a Greater Professional Standing: Evolution of Pharmacy Practice and Education, 1920-2020. Pharmacy (Basel). 2019 Jul 20;7(3):98. doi: 10.3390/pharmacy7030098. PMID: 31330761; PMCID: PMC6789879.
- 3. Carolina CMB PharmD, BCPS Clinical Pharmacist Womack Army Medical Center Ft Bragg, North. Challenges in community pharmacy during covid-19: the perfect storm for personnel burnout [Internet]. [cited 2023 Apr 11]. Available from: https://www.uspharmacist.com/article/challenges-in-community-pharmacyduring-covid19-the-perfect-storm-for-personnel-burnout
- 4. Blank C. Retail pharmacy has reached the breaking point. 2022 Feb 3 [cited 2023 Apr 11];166. Available from: https://www.drugtopics.com/view/retail-pharmacy-has-reached-the-breaking-point
- Mourh J, Newby B. Barriers and Strategies for Transition from Student to Successful Hospital Pharmacist. Can J Hosp Pharm. 2019 May-Jun;72(3):219-226. Epub 2018 Jun 30. PMID: 31258167; PMCID: PMC6592656.
- 6. Noble C, Coombes I, Nissen L, Shaw PN, Clavarino A. Making the transition from pharmacy student to pharmacist: Australian interns' perceptions of professional identity formation. Int J Pharm Pract. 2015 Aug;23(4):292-304. doi: 10.1111/ijpp.12155. Epub 2014 Nov 2. PMID: 25363500.

- 7. Transitioning from student to practitioner: advice for new pharmacists [Internet]. IDStewardship. 2016 [cited 2023 Apr 15]. Available from: https://www.idstewardship.com/transitioning-student-practitioner-advice-new-pharmacists/
- Poquette J. 10 tips for the brand new retail pharmacist [Internet]. The Honest Apothecary. 2014 [cited 2023 Apr 15]. Available from: https://www.thehonestapothecary.com/
 2014/10/15/10-tips-for-the-brand-new-retail-pharmacist/
- Tennessee CH PharmD Regional Support Pharmacist CVS Pharmacy
 Chattanooga. Making the transition [Internet]. [cited 2023 Apr 15]. Available
 from: https://www.uspharmacist.com/article/making-the-transition
- 10. Frankel GE, Austin Z. Responsibility and confidence: Identifying barriers to advanced pharmacy practice. Can Pharm J (Ott). 2013 May;146(3):155-61. doi: 10.1177/1715163513487309. PMID: 23795200; PMCID: PMC3676211.
- 11. Lebovitz L, Eddington ND. Trends in the Pharmacist Workforce and Pharmacy Education. Am J Pharm Educ. 2019 Feb;83(1):7051. doi: 10.5688/ajpe7051.PMID: 30894775; PMCID: PMC6418852.
- 12. Austin, Zubin, and Jane Sutton. "Qualitative Research: Getting Started."

 Canadian Journal of Hospital Pharmacy 67 (2014): 436-440.
- 13. Sutton, Jane, and Zubin Austin. "Qualitative Research: Data Collection, Analysis, and Management." Canadian Journal of Hospital Pharmacy 68 (2015): 226-231

APPENDIX

RECRUITMENT SCRIPT

Thank you so much for taking the time to speak with me today. My name is Jessica Wilson, and I am a first-year pharmacy student and Honors College student at the University of Mississippi. I am conducting a study to better understand new pharmacists' preparedness for working in the retail chain pharmacy setting. I am doing this study to fulfill research requirements for Honors College, but this is also a topic I am very passionate about. Thank you again for assisting me with this project!

The goal of this interview is to get insight from you on your preparedness for retail chain pharmacy practice. Specifically, I want to examine 1) different factors leading to your preparedness for practice and 2) how organizational support factors have affected your preparedness for practice.

This interview should take no more than 30 minutes to complete.

At this time, we will go over the consent form before you decide whether or not you would like to participate in this study.

INFORMATION SHEET

Study Title: New Pharmacist Preparedness for Retail Pharmacy Practice

Investigator: Jessica Wilson

The University of Mississippi

University, MS 38677 (901) 305-5894

Advisor: Erin Holmes, PharmD, PhD

Department of Pharmacy Administration

233 Faser Hall

The University of Mississippi

(662) 915-5914

Description

My name is Jessica Wilson, and I am a first-year pharmacy student at the University of Mississippi. I am asking for your participation in this research study which I am conducting as part of my honors thesis for the Sally Barksdale Honors College. This interview includes various questions about yourself, your preparedness for pharmacy practice, and the organizational support you receive. Your willingness to participate in this research will help me better understand the preparedness of new pharmacists for retail chain pharmacy practice.

Cost and Payments:

There are no costs or payments for study participants.

Risks and Benefits:

No risks or benefits are anticipated in the completion of this study.

Confidentiality:

Your responses will be confidential. Data will be reported in aggregate only, and no names (or company names, if shared) will be reported.

Right to Withdraw:

You do not have to take part in this study and you may stop participation at any time. If you start the interview and decide that you do not want to finish, you may simply request to stop the interview.

IRB Approval:

This study has been reviewed by The University of Mississippi's Institutional Review Board (IRB). If you have any questions, concerns, or reports regarding your rights as a participant in research, please contact the IRB at (662) 915-7482 or irb@olemiss.edu.

Statement of Consent:

By participating in this interview, I attest that I am 18 years of age or older and consent to participate in this study.

INTERVIEW GUIDE

Please tell me a little about yourself:

1. How old are you?

→ IF LESS THAN 18, STOP DATA COLLECTION

- 2. What gender do you identify as?
- 3. What is your race?
- 4. What is the highest level of pharmacy education you've completed?
- 5. How long have you been working as a licensed retail pharmacist?
- 6. Did you work as a pharmacy intern in school or tech in a retail pharmacy?

Please answer a few questions about your preparedness for retail pharmacy practice:

- 1. In what ways did your pharmacy education prepare you for retail pharmacy practice?
- 2. In what ways did your pharmacy education NOT prepare your retail pharmacy practice?
- 3. What was the most challenging part of your transition into retail pharmacy practice after being a pharmacy student?
- 4. What was the easiest part of your transition into retail pharmacy practice after being a pharmacy student?
- 5. How comfortable do you feel in asking for help from other pharmacists?
- 6. How prepared did you feel to communicate with other healthcare professionals when you started?
- 7. What additional things could your pharmacy program have done to help in your student-to-pharmacist transition?

Please answer a few questions about the types of organizational support your receive from your job:

1. How much support did you receive from your manager and/or company during your transition as a pharmacist?

- 2. Did you receive a retail pharmacy orientation?
 - a. Yes what were the program's strengths and weaknesses?
 - b. No how do you think you would have benefited from such a program?
- 3. Besides some sort of orientation, what, if anything, kind of support did you receive during your transition?
- 4. What other kind of support would you have liked to receive?
- 5. What additional things could your employer have done to help in your student-to-pharmacist transition?
- 6. What advice do you have for pharmacy students who will be transitioning into the pharmacist role in retail pharmacy?

I see our time is up. Thank you so much for sharing this useful information with us.