

“Throwing in the Spatula”: A qualitative study examining pharmacists’ decisions to become physicians

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Abstract

Objectives: To describe and examine the experiences of pharmacists who had become physicians.

Method: A key informant approach was utilized to identify potential participants in this study, which involved a semi-structured interview. Field notes and transcripts were produced, coded and categorized, and an inductive analysis method was used to generate themes that were confirmed with subsequent interviews.

Results: A total of 32 pharmacist-physicians participated in this study. All participants had practiced as pharmacists prior to beginning medical school. For most participants, intrinsic motivational factors to study medicine were very strong, while extrinsic motivational factors were cited as reasons to study pharmacy. The experience of medical school, and approaches to medical education were compared and contrasted with pharmacy; while pharmacy was described as more collegial, friendly and supportive, medical (particularly practice-based) education was described as more relevant and focused. Striking differences emerged between male and female participants regarding satisfaction with the decision to pursue medicine as a career; male participants were generally positive about their decision, while female participants were somewhat more nuanced or ambivalent regarding change in their profession.

Conclusions: Examining the experiences of individuals who are both physicians and pharmacists provides an informative vehicle for examining differences and similarities in professional education, training and culture. While further work is necessary to more clearly examine these issues, this study provides an important insight into the ways in which pharmacists and physicians relate to one another and their own professional cultures.

Keywords: *Interprofessional education, professional culture, professional education, pharmacy education*

Introduction

Throughout the world, pharmacy is recognized as a respected, honourable profession with historical roots. For example, in Canada, pharmacists have consistently ranked as the most trusted professional (higher than physicians, teachers, or the clergy) for over a decade (Ipsos-Reid, 2003). In most parts of the world, pharmacy is considered a prestigious profession, and a worthy field of study for motivated, intelligent and caring students.

In North America, there has been an increase in applicants to accredited pharmacy programs, and currently demand for seats outpaces supply in many parts of the world (Taylor, Bates, & Harding, 2004).

In part, this may be a function of ongoing strong demand for pharmacists (particularly in the community sector) and a commensurate rise in salaries and improvements in benefits packages. In addition, pharmacists in many parts of the world today enjoy unprecedented mobility, and can work in other countries on a permanent or temporary basis. Finally, the opportunities for itinerant or part-time work in pharmacy appear to be expanding, and this may be an attractive option for those who would prefer flexibility in scheduling. As a result, entry into pharmacy programs is a competitive process, arguably resulting in an increase in the overall quality of the student body. As scopes of practice for pharmacists continue

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to evolve, and the work of pharmacists gains greater prominence within the health care system, interest in becoming a pharmacist continues to grow. Of interest, applications to medical schools in the US have actually decreased over the past five years (Di Piro, 2004).

Despite this, pharmacy academics anecdotally comment on the migration of pharmacists into other professional fields, notably medicine. While some may applaud the initiative and ambition of those pharmacists who seek to continue their education through medical studies, others express concern that some of the best and brightest pharmacists “vote with their feet” and leave the profession. If opportunities for pharmacists are so attractive, why should these pharmacists want to leave the profession? And why should valuable spaces in any health professions program be occupied by individuals who are simply using the profession as a “stepping stone” to medicine (Weis & Schank, 1997)?

The literature on professional migration (i.e. the movement of individuals from one profession to another) is scant despite anecdotal comments that this is a problem for the profession of pharmacy. There is no published data tracking the number of pharmacists who have become physicians; the “problem” (if indeed there is one) may not be one of large numbers of individuals choosing to leave the profession, but instead may be the perception that those who have the greatest potential in pharmacy are leaving it, thereby diminishing future prospects for the profession as a whole. Interestingly, this migration appears to be strikingly uni-directional; there are no reports (published or anecdotal) of physicians who become pharmacists.

Clearly, admission to medical school is a highly competitive process. Recent research suggests that university students believe there to be a hierarchy of professions, with medicine being ranked more highly than pharmacy, nursing or other professions (Hall, 2005; Rudland & Mires, 2005). Again, anecdotal reports suggest some students may select pharmacy precisely because they are unable to enter medical school, where admission standards/requirements may be higher.

The lack of significant data, and the abundance of anecdotes suggest the field of professional migration is an area that warrants further study. If indeed there is a “problem” associated with pharmacists who become physicians, it is important to understand what motivates individuals to change professions, and whether there are alternatives in education or practice that might function as incentives to retain promising pharmacists within the profession of pharmacy.

Research objective

The purpose of this study was to describe and examine the experiences of pharmacists who became physicians. For this study, only individuals who had actually

graduated and become licensed as a pharmacist, and who had practiced pharmacy for at least one year were included. Individuals who moved to medical school without qualifying and working as a pharmacist for at least one year were not included in this study.

Methods

Given the paucity of literature and scholarship in this area, a qualitative approach was utilized in an attempt to frame the research objective. Semi-structured, audio-taped interviews were undertaken with participants, and extensive field notes were maintained by the interviewer. Data storage and analysis was undertaken using the Web Knowledge Forum v.3 software package.

Participants for this research were recruited through a key informant approach. The investigators identified key pharmacy faculty members who were aware of individuals who had applied to and who had been accepted to medical schools. In general, these faculty members had been asked by these students to write letters of reference as part of the application process, or were aware of pharmacists who had become physicians through word of mouth. Those physicians so identified were contacted, informed about the study, and invited to participate. Those who elected to participate were interviewed; all those contacted were asked to provide names of other physician-pharmacists they knew, and in this way the list of potential participants was built.

Following each interview, field notes and audio tapes were transcribed, coded and categorized to establish relevant themes for analysis and discussion and to identify possible commonalities and differences. An inductive data analysis method was utilized in order to establish themes and correspondences between participants comments. Iterative data analysis resulted in themes being consolidated and categorized.

Results

A total of 42 potential study participants were identified who met the inclusion criteria of having qualified and worked as a pharmacist for at least one year. Of these, 32 agreed to be interviewed. All those who agreed to participate in this study were interviewed. A demographic profile of study participants is presented in Table I.

Table I. Demographic profile of participants ($n = 32$).

Age at time of interview (mean)	35.2 \pm 3.3
Age when entered pharmacy school (mean)	20.2 \pm 1.0
Age when entered medical school (mean)	27.6 \pm 2.3
Years in practice as a pharmacist (mean)	3.1 \pm 2.2
Years in practice as a physician (mean)	2.3 \pm 2.2
Percentage male participants	59.4% (19/32)

As part of the study protocol, participants were asked to describe their original motivation to study pharmacy. Approximately half the study participants cited the potential “stepping stone” to medicine as a key factor informing their decision to enter pharmacy school initially:

Well, you have to get a degree—some sort of a degree—any, right? A pharmacy degree seemed like a good enough one.

When I was looking at different programs, I thought pharmacy was interesting and, at least related to what I wanted to do anyway. I mean, instead of just taking a general science degree and taking a lot of useless courses, at least a pharmacy degree would give me background some ways in pharmacology, physiology and other things I'd need in medicine.

Most of the other participants in the study indicated their primary motivation for studying pharmacy was related to the need for security, and an alternative professional career pathway should their application to medicine not be successful.

It's a pretty good Plan B, I thought. If I couldn't get into medicine, well, at least I could be a pharmacist, and I thought that wasn't all that bad.

It wouldn't have been my first choice, but at least when you graduate as pharmacist you're guaranteed a job, a decent salary and some pretty good perks, so it seemed liked a good back-up plan if medicine didn't work out.

Participants were next asked about their experience in pharmacy school, and in particular whether there were any specific incidents or instances that would have served to alienate them from the profession of pharmacy:

No, not really. I mean some of the courses were pretty useless, some of them were kinda bogus I guess, but overall, I thought it was a pretty good program.

It was a pretty demanding program actually. I didn't know—I don't think many people know—how intense a pharmacy degree really is. The courses are pretty substantial, and I had to work pretty hard at it.

I guess I secretly found it a bit amusing at times. I mean, well, I knew I really wanted to go into medicine, and by [4th year] I figured I was getting really good grades so it should be okay. But I found it funny how [the professors] kept ramming down our throats this pharmaceutical care thing over and over, like they were trying to maybe convince us?

Of interest, in this study was the experience participants had as practicing pharmacists. As indicated in Table I the majority worked in community

pharmacy practice prior to enrolling in medical school.

One word—boring! I mean, well, I had it figured out by 2nd year that this was a pretty repetitive job, and that I really had to do something to get outta there.

No, I actually thought it was interesting. I mean, the part that I found frustrating actually was the lack of, well, the pharmacist's inability to actually do everything that we learned in school. You're so tied to the doctor, you never have any individuality, autonomy. That's what really made me decide to go in for medicine.

It's a pretty tough job. It's like anything else I guess—you get out of it what you put into it. I mean, there's loads of doctors I know who are really fed up of medicine and think it's boring too.

The experience of medical school, and how it contrasted with pharmacy education were discussed:

Medical school was a breeze compared to pharmacy. I know that sounds strange but it really was. The course load in pharmacy was insane, and the courses were really tough. I mean, well, it was, for some people...you know, they might actually fail you!

The biggest difference I'd say were my classmates. In pharmacy, well, you kinda feel like one big family. Everyone knows everyone else, everyone tries to help each other. And the professors, it's like they're really interested in you and really want to help. It's not like that in medicine at all. Everything is so competitive, no one ever shares anything, and if you are lost or can't keep up, well, you're really on your own. Totally like survival of the fittest.

Even though I knew I always wanted to be a doctor, yeah, I'd say I like pharmacy much better. It was tough, but it was fair, you know? I mean you usually knew what was expected, and could get the material. But medicine seemed really different, competitive and you're always guessing.

I can sum it up in one word. Money. What was weird for me—all right, see I came from [a rural northern community], and most of my classmates [in medicine] were like rich kids from [large urban centres] who went to private schools, and had fancy cars and lived in big houses and things. In pharmacy, well everyone was more down to earth. There wasn't the same kind of competitiveness and showing off.

Socialization into professional practice has been described as an integral component of professional education. While not necessarily explicitly acknowledged or discussed, the socialization process encountered during the educational period may play an

important formative experience. Participants were asked to reflect and comment upon how they experienced this socialization process, and in particular how the socialization process in medicine differed or compared with that in pharmacy.

That's an easy question. You see, I've spent a lot of time thinking about it, trying to figure it out. You know what it comes down to? In pharmacy, we're always taught to comply. Every course it's about patients complying with their medications, patient compliance, right? In medicine it's not like that. It's always about doing something, even when you don't know what to do, you have to do something.

I'm not sure what to say, but I will say this. The hardest part about medicine, it's not the material or anything. Honestly, I think now, especially after I've gone through it, that well, pharmacy students are just as smart as medical students. The difference is well, in attitude. It's a difference in how you deal with things. Pharmacists can always say 'I don't know, go see the doctor'. [Doctors] don't have that luxury.

When I was in pharmacy, you know, you're always kinda thinking or wondering if you're gonna fail a test or something, that's what kinda freaks you out. [In medical school] they basically tell you on the first day, well, you made it this far, you're not gonna fail, so the pressure is off. But it's not really because there's this whole other pressure you feel that you have to be always "on", you always have to be in charge and know what to do.

While both pharmacy and medicine utilize practical training as part of the educational and licensure processes, the nature and emphasis of this training may differ significantly. Participants were asked to comment on these differences:

That's where it really all comes together, you know? When you're on the wards for your first rotation [as a medical student] you think, wow, I'm going to be a doctor this is serious stuff, and it really, really is an amazing experience.

I think pharmacy education would be so much better and so much more relevant if they followed what happens in medicine. You don't need so much time in school, you gotta spend more time in the clinics, with patients. That's where medicine is learned, and where pharmacy should be learned.

I can say this honestly—I don't know how the people who weren't like me, who weren't pharmacists, or nurses, or something else before they [went on their first clinical rotation], I really don't know how they survived it. I was totally freaked out by everything I had to do, what was expected, and I had a huge head start on everyone else being a pharmacist.

As indicated in Table I, participants in this study were at various stages of their medical careers; while most of those in family medicine (general practice) were already fully qualified and working as independent practitioners, some of those who elected specialty and sub-specialty training were still in residency or fellowship programs. However, all participants had experience functioning in real-world clinical settings and were asked to comment on the nature of medical practice:

Well, it was always my dream, and it is really, a privilege. I know that sounds corny, but I can't imagine doing anything else but this. I'm really so happy for the way things worked out.

It's nothing like anyone thinks it's going to be. I had a lot of pressure from my family to do this—they, well, it wasn't really good enough being just a pharmacist, you know? It's hard work, a lot of hard work. Pressure.

You know, when I was a pharmacist I used to get really pissed off at some doctors—you know the stereotype, they're rude, they're arrogant think they're god. Well, now I kinda see why. You just don't have time to waste. You're pushed and pulled in a million different directions, you just want to get to the point and move on to the next thing.

Finally, participants were asked to comment on their overall satisfaction with their professional migration experience, and whether, knowing what they know now, they would have pursued the same career path.

In a minute. I mean, this is... if you had the chance to [be a doctor] why would you ever think about doing anything else?

I don't know. Sometimes I think yes, sometimes no. I guess I really didn't understand how much sacrifice there'd be. How much pressure, and the time and... it's really good, but it is tough.

Usually yes. God, I wish you hadn't asked me that today! Yesterday, well, I saw some of my friends from when I was in pharmacy. And they're all married, and they have houses and kids and all that. Most of them are only working part time. You know, you can do that when you're a pharmacist. It's like I'm 10 years behind all of them. Behind where I wanted to be right now.

As indicated in Table I, approximately 40% of participants were female. Gender-related differences in response patterns were identified in several questions, particularly those related to initial motivation to study pharmacy, experience as a pharmacist, and the question of satisfaction with the professional migration experience. While most male participants indicated the ambition or dream of being a doctor

was a life long experience, and that consequently, pharmacy was a "stepping stone", most female participants indicated they were interested in pharmacy initially due to the stability, security, salary and flexible scheduling associated with the profession. The decision to pursue medicine appeared to emerge later for female participants than it did for males, and in general, as a result of identified deficiencies in pharmacy practice (in particular, the lack of ability to actually enact much of what was learned in school). While female participants appeared to genuinely attempt to make the most of the pharmacist's role and ultimately found it unsatisfactory, male participants reported a pattern of holding fast to their ambition of entering medicine. For these male participants, issues of status, money and power were mentioned more frequently, while for female participants, optimization of professional role and professional satisfaction were identified more frequently.

In response to the final question related to satisfaction with the professional migration, male participants appeared ambivalent to positive in their assessment, with no male participant indicating any regret regarding the transition. Amongst female participants, there was more ambivalence, some negativity (particularly as it related to potential problems with respect to childbearing and starting a family), and no categorically positive responses.

Discussion

This study has illuminated the oft-discussed but rarely investigated phenomenon of professional migration in the context of pharmacy and medicine. Findings from this study provide a unique perspective on these professions from the vantage point of individuals who had the opportunity to experience both.

Striking by its absence is the lack of discussion by participants around intrinsic motivation to study pharmacy in the first instance. No participants indicated any desire to become a pharmacist for the key elements of the profession—caring for patients, educating patients, collaboration with other health care providers, etc. Instead, all participants indicated extrinsic motivators as their primary reason for choosing pharmacy; for male participants, the possibility of "stepping stone" to medicine, for female participants, the security/stability/flexibility of the profession. While this may not be uncommon amongst pharmacy students, it does raise concerns that, if students are entering the profession due to extrinsic motivators, their allegiance to it may be limited, and this potentially has implications for recruitment and retention of pharmacists in the future. In contrast, participants spoke eloquently about intrinsic features of medical practice, particularly the opportunity to engage in patient care, opportunities for life-long

learning, and a leadership role in patient care and the health care system.

Participants in this study were consistent in their relatively positive characterization of pharmacy education, particularly the culture of the classroom. Participants repeatedly noted that they felt more connected to their pharmacy classmates, enjoyed their professors more, and felt a sense of community and belongingness rather than a constant need to compete. While it may be argued that competition provides an opportunity for individuals to grow and excel, most participants (even those who were most strongly motivated to study medicine) felt the environment of medical school itself was somewhat more hostile than that of pharmacy. Of interest, several participants framed this issue in socio-economic terms, indicating their discomfort in coming from lower-middle class or middle class backgrounds. While this background appeared to be more commonplace in pharmacy, and more readily accepted, for some participants, this background lead to perceptions of ostracism from the mainstream culture of the medical school class. Traditionally, pharmacy has been a profession of social mobility, allowing those from more humble socio-economic roots to transcend their background and move to the upper middle classes. However, as reported by some participants, this transition may not be a part of the medical school experience and for some this was quite a painful experience.

An important finding of this study relates to the professional socialization experience. Though they did not utilize the terminology explicitly, most participants reported difficulty in assuming the cloak of competence that has been characterized as an important—and frequently problematic—part of medical socialization (Irvine & Kerridge, 2002). As described by one student, the transition from having to comply, follow orders and ensure rules are obeyed in pharmacy, to the world of having to act—"do something, anything"—with confidence and certainty was difficult. Most participants commented upon this, and how previous training as a pharmacist may have actually been a barrier to assuming this cloak of competence. An interesting corollary to this may be the "reflective practitioner" (Schon, 1983): some participants commented upon the lack of value placed on reflection-in-action, or reflection-on-action within medical education, and that as practitioners, this was a major handicap in improving medical practice. In pharmacy education and practice, within the context of "compliance", there are built-in opportunities and expectations to engage in reflection-in-action or reflection-on-action, and this benefits pharmacists and the profession alike.

Striking gender differences emerged in this study, particularly with respect to the final questions related to satisfaction with the decision to become a physician. Male participants expressed no dissatisfaction with

their decisions, although a few were somewhat ambivalent and noted that, as opportunities for pharmacists advanced (and in particular as pharmacists' salaries continued to rise), the "gap" between physicians and pharmacists appeared to lessen and the need to select medicine as a career appeared to diminish. In contrast, the majority of female participants indicated a "sacrifice" had to be made in order to pursue the path to medicine, and most frequently that sacrifice entailed a personal life, in particular opportunities to date, meet potential mates, and become a mother. No female participant expressed outright satisfaction with her decision to pursue medicine, only qualified satisfaction, particularly with the expectation that once academic preparation and qualification were complete, and once the task of establishing oneself as a practitioner was complete, then it would be possible to achieve her remaining life goals particularly those related to quality of life, family, and motherhood.

This study raises important questions as to whether pharmacy curricula or professional practice are alienating students and driving them towards medicine, or whether these individuals were simply utilizing pharmacy as a "stepping stone" towards medicine. While further research is required to determine whether structural changes in educational programs or professional practice may encourage pharmacists to remain in the profession, results from this study suggests that the day-to-day practice of pharmacy (rather than the curriculum) was a greater factor in motivating change in profession.

Limitations

As a qualitative study, this research has provided some interesting and important insights into an under-researched area; however, it does not purport to draw general conclusions related to the professional migration experience of pharmacists who become physicians. Of necessity, this study was limited both temporally and geographically to one particular area at one particular time. Clearly, there may be significant regional variations related to local cultural differences as well as the nature of pharmacy education and practice and medical education and practice in a particular area. Results of a similar qualitative study undertaken in the UK, the northeastern US, or the southwestern US may yield similar or different results; in large part, these differences may be dependent upon the unique environment and culture of each region.

A study such as this must, of necessity, assume some form of distinct culture of pharmacy and culture of medicine, and that the differences between these cultures is in general greater than the variation within each culture. Such a position can be challenged; for example, Hong (2001) has cautioned against over-reliance on the notion of cultures of professions to

explain differences in observed behaviour, as this may lead to inaccurate and inappropriate stereotyping. In this study, no specific conclusions related to distinct cultures of professions have been drawn; while these may be implicit in the coding structure for the data and the presentation of results and discussion in this paper, we have resisted the temptation to utilize this data as a vehicle for making sweeping generalizations regarding culture. Instead, the words of each participant reflects a unique, individual story and experience that may be valued on its own terms.

Conclusions

The significance of the "brain drain" from pharmacy to medicine is debatable, and no real data has been published describing the extent of this phenomenon. Nonetheless, pharmacy academics do recognize this as an "issue", and for some it may even be a "problem", particularly since candidates who are competitive for medical schools admission are typically amongst the most academically strong and professionally promising potential pharmacists.

This study has attempted to provide insight into the actual experience of these pharmacists who have selected to become physicians. As illustrated, for these participants, there is considerably more ambivalence regarding this decision than may have initially been suspected. For some, this ambivalence may be rooted in a sense of being "left behind" vis-à-vis peers who are pharmacists who appear to have moved ahead of them in terms of lifestyle, family choices, and quality of life. For others, there is a greater sense of some loss of idealism related to medicine and medical practice; having experienced both medicine and pharmacy, some participants noted that the substantive differences between the two (particularly family medicine) was really not as different as they had expected or thought.

The methodology utilized in this study provides a unique opportunity to study this phenomenon. The use of insiders' perspectives—the experiences of those who had been both pharmacists and physicians—provides us all with an opportunity to examine important issues of interprofessionalism through the unique lens of individuals who are in essence professionally bi-cultural. Such an approach has yielded a rich data set, and points to the value of this method for subsequent research.

Both pharmacy and medicine have much to learn about each other, particularly as the importance of interprofessional practice and education continue to grow. The experience of individuals who are versed in both educational systems, both practices, and both cultures is an area of on-going interest, and provides educators, regulators and practitioners with an opportunity to reflect upon differences—and similarities—between these two important health professions.

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