

Career preferences and attitude of first year Doctor of Pharmacy students toward pharmacy profession

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ABSTRACT

Objectives: To evaluate first year Doctor of Pharmacy (PharmD) students' career preferences, factors involved in this selection, and attitude toward pharmacy profession.

Materials and Methods: First year PharmD students enrolled at University of Peshawar were surveyed through administration of predesigned questionnaire. The anonymous questionnaire sought students' opinions on the factors influencing their career preferences, attitude and knowledge of pharmacy profession, and importance of pharmacy profession in healthcare system.

Results: Overall response rate was 93.5%. Of the total 73 respondents, 38 (54.9%) were males and 35 (45.1%) were females. Only 12 (16.4%) students were aware of the scope of pharmacy before admission to the pharmacy program. A majority of the students (82%) believed that pharmacy education and practice affect the healthcare system. Very limited numbers of the students (16.4%) were interested in research, while the remaining students were either uninterested (69.8%) or unsure about their decision (13.6%). A significant number of students (61.6%) were unaware of different postgraduate prospects of pharmacy education. More than half of the students (58.9%) wished to undertake nonpharmacy career areas upon graduation. Drug regulation was opted as preferred career choice by 21 (28.7%) students, clinical pharmacy by 18 (24.6%), hospital pharmacy by 11 (15%), and teaching by 8 (10.5%). Factors involved in such selection were family influence (34.2%), anticipated income (24.6%), and personal interest (21.9%).

Conclusions: First year PharmD students showed keen interest to choose drug regulation, clinical pharmacy, and hospital pharmacy as a career upon graduation. Family influence was the most important factor involved in this selection. Few of them were interested in pharmacy-related research activities while most of the students believed that pharmacy education and practice affect the healthcare system.

Key words: Doctor of Pharmacy, pharmacy education, profession, pharmacy students

INTRODUCTION

Pharmacy profession has undergone a significant paradigm shift with movement away from a

traditional distributive role toward a clinical and patient-oriented practice, which has intensified the focus on teamwork and the importance of inter-professional relationships.^[1] Due to the public's growing awareness of the complexities of the healthcare delivery system, rapid developments in technology, constantly increasing health-related issues, and cost of the therapy changed the roles and functions of pharmacists.^[2] Career planning for the future helps to accomplish goals in a successful manner. Therefore, pharmacy students should know about such wide range of specialties. They are the

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future pharmaceutical care provider who will provide services to promote rational use of medications with capabilities to engage in public health-related services, such as smoking cessation, disease management, and prevention. It is often assumed that students do not make preferences until they have been graduated.^[2,3] Pharmacists, being the third largest group of healthcare providers, are pivotal part of healthcare system with patient-oriented services, patient education, and counseling about medication use, adherence and quality of life elevation.^[4-7] A study from USA showed that pharmacy students' career goals upon graduation were to work in retail pharmacies. However, 5 years after graduation, their preferences were retail and clinical settings.^[8] A Malaysian study found that most of the pharmacy students were interested in hospital pharmacy and community pharmacy.^[9] Our previous study conducted in fourth year pharmacy students showed that the preferred career areas were clinical pharmacy, industrial pharmacy, and hospital pharmacy.^[10] Through literature review, it has been identified that no particular study yet has been published regarding the attitude and career preferences of first year Doctor of Pharmacy (PharmD) students in Pakistan. Therefore, the purpose of this work was to evaluate first year PharmD students' career preferences, factors involved in this selection, and attitude toward pharmacy profession.

MATERIALS AND METHODS

This study was conducted at the Department of Pharmacy, University of Peshawar, Khyber Pakhtunkhwa, Pakistan. The students enrolled in the first year PharmD were surveyed through a structured questionnaire previously validated through a detailed review of literature. A total of 78 students participated in the study. Information was collected regarding career preferences, factors influencing their selection, attitude about the scope of pharmacy, impact of pharmacy profession on healthcare system, and postgraduate studies and research. The students were handed over the questionnaires by the study team and were asked to return the completed questionnaires to the first two authors. To compile and evaluate the data, SPSS for Windows version 17 (SPSS, Inc., Chicago, IL, USA) was used.

RESULTS

Of the total 78 questionnaires, 73 were returned at a response rate of 93.5%. Among the 73 respondents, 38 (54.9%) were males and 35 (45.1%) were females.

Their mean age was 19.2 ± 0.9 years. Drug regulation was opted as preferred career choice by 21 (28.7%) students, clinical pharmacy by 18 (24.6%), hospital pharmacy by 11 (15%), and teaching by 8 (10.5%). Factors involved in such selection were family influence (34.2%), anticipated income (24.6%), and personal interest (21.9%) [Table 1].

Table 2 shows knowledge and attitude of the students of the fourth year PharmD regarding the scope of pharmacy. Only 12 (16.4%) students were aware of the scope of pharmacy before admission to PharmD. A majority of the students (60, 82.1%) thought that pharmacy education and practice affect the healthcare system. Moreover, most of the respondents (54, 73.9%) stated that they were discouraged by their senior pharmacy students regarding future career selection.

Few students (16.4%) were interested in research, while the remaining students were either uninterested (69.8%) or unsure about their decision (13.6%). A noteworthy number of students (61.6%) were unaware of different postgraduate prospects of pharmacy education.

Table 1: Preferred career areas and impelling factors

Variable	n (%)
Preference	
Drug regulation	21 (28.7)
Clinical pharmacy	18 (24.6)
Hospital pharmacy	11 (15.06)
Teaching	8 (10.5)
Retail/community pharmacy	7 (9.5)
Industrial pharmacy	4 (5.4)
Other	4 (5.4)
Influencing factors	
Family influence	25 (34.2)
Anticipated income	18 (24.6)
Personal interest	16 (21.9)
Reputation	5 (6.8)
Other	9 (12.3)

Table 2: Knowledge and perception of pharmacy students regarding the scope of pharmacy and behavior of senior students

Items	Response: n (%)		
	Yes	No	Do not know
Awareness of scope of pharmacy	12 (16.4)	53 (72.6)	8 (10.9)
Pharmacy education and practice affect the health care system	60 (82.1)	4 (5.4)	9 (12.3)
	Encouraging	Discouraging	Neutral
Behavior of senior pharmacy students	9 (12.3)	54 (73.9)	10 (13.6)

A substantial number of students (43, 58.9%) were of the opinion that they will join nonpharmacy career areas upon graduation [Table 3].

DISCUSSION

Pharmacists are the most accessible and trusted healthcare professionals, but due to lack of awareness, pharmacy is considered the least active healthcare profession in terms of contribution toward health services in Pakistan. This significantly decreases the inclination of an intermediate student to choose pharmacy as a career. Therefore, almost all of the premedical students prefer to get admission in medical colleges after passing their intermediate examinations.^[11] Thus majority of the students were unaware of the scope of pharmacy before admission to PharmD.

A majority of the students believed that pharmacy education and practice affect the healthcare system. It is an established fact that pharmaceutical care is an integral component of any healthcare process.^[12,13]

In this study, different career areas (drug regulation, clinical pharmacy, and hospital pharmacy) were selected at nearly similar ratios and family influence was the most important factor involved in this selection. In a study from the United States, chain community pharmacy (33.1%), hospital pharmacy (27.6%), and independent community pharmacy (12.4%) were reported to be the most preferred areas to work.^[14] In a Malaysian study, hospital pharmacy and community pharmacy were the preferred options among the students.^[9] Maintenance of skills, abilities, and knowledge after graduation is very important. In pharmacy, this has conventionally been achieved by the way of continuing education. But many students were unaware about the postgraduate prospects of pharmacy education. A very few numbers of students were interested in research while few were unsure about their decision. It has been reported that uncertainty has been found among pharmacy students about research-related careers and postgraduate studies.^[15,16]

Table 3: Responses of students to some other career-related questions

Items	Response: n (%)		
	Yes	No	Not sure
Nonpharmacy career	43 (58.9)	20 (27.3)	10 (13.6)
Research	12 (16.4)	51 (69.8)	10 (13.6)
Postgraduate education	11 (15.06)	45 (61.6)	17 (23.2)

CONCLUSION

First year PharmD students showed keen interest to choose drug regulation, clinical pharmacy, and hospital pharmacy as career upon graduation. Family influence was the most important factor involved in this selection. Few of them were interested in pharmacy-related research activities while most of the students believed that pharmacy education and practice affect the healthcare system.

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