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Perception of Pharmacy Graduates on Pharmacy Degree Programmes Conducted by Three Sri Lankan Universities and Their Job Satisfaction:

A Survey-based Pilot Study

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Abstract

Sri Lankan pharmacy education consists of two undergraduate degree programs: Bachelor of Science in Pharmacy (BSc Pharmacy) and Bachelor of Pharmacy (BPharm). This study aimed to evaluate the perception of pharmacy graduates on pharmacy degree programmes in Sri Lanka and their job satisfaction. A cross-sectional online survey was conducted from 15 June to 15 July 2021 among pharmacy graduates from three selected Sri Lankan universities using a content and face validated and pretested online questionnaire. Among the total number of participants (n = 101), 55% were between 26-30 years and the majority (72%) were females. Of the participants, 46% have either completed or are pursuing a postgraduate degree. More than 95% agreed that it is important to have pharmacy degrees in Sri Lanka while 70% agreed that the quality of pharmacy degree is at a satisfactory level. Almost all the participants believed that the academic standards of the degree, international collaboration with foreign universities, clinical training and industrial training should be improved. Approximately 50% of participants were satisfied with the number of academic staff, library and laboratory facilities, while 61% reported that the number of lecture halls were not sufficient. Studying a pharmacy degree helped 64% of the participants to obtain their desired job. However, only 53% of the participants were satisfied with their current job, and 46% were satisfied with the salary scale. The general perception about pharmacy degree programmes in Sri Lanka is high, however, the satisfaction with facilities available is low.

Keywords: Pharmacy Graduates, Job Satisfaction, Sri Lankan Universities

Introduction

Pharmacy profession ensures the provision of safe and effective drug therapy to patients (Abrahamsen et al., 2020; Jacobi et al., 2016). The role of the pharmacist spreads in various settings including pharmaceutical industry, hospital pharmacy, community pharmacy, drug information services, marketing, drug regulatory, academia and research (Abu-Gharbieh et al., 2010; Merlin, 2011). Recently, pharmacy education and profession have taken significant steps globally where they stretched out in a more patient-centered manner. In the last four decades, the pharmacy profession has evolved substantially, leading to changes in its role. This urged the necessity for expanding pharmacy education. There are different types of pharmacy education programmes conducted in Sri Lanka which include BPharm, BSc Pharmacy, Diploma in Pharmacy and Certificate Course in Pharmacy. Seven universities offer bachelor's degree or Bachelor of Science degrees in Pharmacy in Sri Lanka. Currently, the basic qualification to practice as a pharmacist is a diploma in pharmacy. Internationally, pharmacy education is developing according to the requirements of the society and studies were conducted investigating the success of them (Davies et al., 2013). It has been nearly two decades since pharmacy degree programmes have commenced in Sri Lanka. However, none of these universities have commenced a postgraduate pharmacy degree yet. Even though there are a considerable number graduating each year, no published data was found on investigating the perception of graduates of these degree programs. Thus, there is an urgency for this type of study in Sri Lanka for the development and standardization of pharmacy education and the profession. Therefore, the objective of this study was to evaluate the perception of pharmacy graduates on pharmacy degree programs conducted by three Sri Lankan universities and their job satisfaction following the completion of the pharmacy degree.

Methodology

Study Design and Setting

This study was a part of an ongoing cross-sectional, questionnaire-based study conducted among all the pharmacy graduates from Sri Lankan universities where pharmacy degree programmes are conducted. There are seven universities offering pharmacy degree in Sri Lanka namely University of Peradeniya (UoP), University of Ruhuna (UoR), University of Sri Jayewardenepura, University of Colombo, University of Jaffna, Open University of Sri Lanka and Kotelawala Defence University (KDU). The curricula of all four-year pharmacy degree programs are more or less similar and include the areas in pharmaceutics, pharmacy practice, pharmacology, pharmacognocy, clinical pharmacy, pharmacotherapeutics, medicinal chemistry, anatomy, physiology, biochemistry, microbiology,

pharmacy law and ethics, pharmaceutical technology and quality control, pharmaceutical marketing and management.

Study Sample

All the pharmacy graduates passed out to date from University of Peradeniya, University of Ruhuna and Kotelawala Defence University were taken as the sample.

Data Collection and Analysis

The questionnaire was content, and face validated by the experts in the field and pre-tested on content, design, readability and comprehension using 10 pharmacy graduates from all the three universities, and modifications were made as necessary and shared to all the graduates of the three universities as a Google document using their personal email addresses. Subsequently, the responses received within a period of month (15 June to 15 July 2021) were collected. The questionnaire consisted of 26 questions to retrieve information on demographic data, details of the employment, evaluation of overall perception, evaluation of the perception of shortcomings and extent of contribution towards career opportunities. In this tool participants' perception was assessed using a 5-point Likert scale (strongly agree, agree, disagree, strongly disagree and no opinion) and categorical variables were presented as numbers (percentages).

Ethical Considerations

The study protocol was reviewed and approved by the Ethics Review Committee of the Faculty of Allied Health Sciences, University of Ruhuna. All the study-related procedures and data collection were performed after obtaining informed consent from participants. Data were collected using a Google form and all answers were kept anonymous even to the research team.

Results

Total of 271 graduates of three different universities (UoP-138, UoR-79 and KDU-54) were approached and 101 completed the questionnaire during the one-month study period. The response rates for UoP, UoR and KDU were 41% (57/138), 38% (30/79) and 26% (14/54) respectively. Among the total number of participants (n=101), 55% were between 26-30 years of age and the majority (72%) were females. More than 95% agreed that it is important to have pharmacy degrees in Sri Lanka while 70% were satisfied with the quality of pharmacy degree. Almost all the participants believed that academic standards of the degree, international collaborations, clinical training, laboratory practical and industrial training should be improved. Approximately 65% believed that the

number of academic staff was not adequate but, academic supportive staff was adequate. More than 50% of the participants were satisfied with the multimedia facility, but not with the number of lecture halls. Approximately 50% of the participants were satisfied with pharmacy textbooks and the e-library facilities. Only 29% of participants were satisfied with the journal accessing facilities in the library. According to the perception of the study participants, studying pharmacy degree helped 64% of the pharmacy graduates to obtain their desired job. Seventeen percent of participants have completed at least one postgraduate degree to date, while 25% of participants were pursuing postgraduate degrees. Only 60% believed that their degrees kept pace with the recent trends and development in the pharmacy field and 55% stated that the quality of pharmacy degrees meets international standards. Seventy eight percent of participants agreed that "Pharmacy degree programmes in Sri Lanka address societal education needs" and 82% liked to recommend the pharmacy degree to others. From the total, 89% are currently employed in the field of pharmacy. Majority work in the government sector (46%) while the private sector made 31%. Of the total participants, 53% claimed that they were satisfied with their current job, and only 46% were satisfied with their salary scale.

Discussion and Conclusions

Results of this study show that 70% students expressed high overall satisfaction regarding the quality of pharmacy degrees in Sri Lanka. Approximately 50% of participants were satisfied with the number of academic staff, library and laboratory facilities, while 61% reported that the number of lecture halls was not sufficient. There are few reasons for these observations. The faculties where the pharmacy degrees are conducted are the youngest faculties of the respective universities. With the increased number of undergraduates enrolled to the relevant faculties, the academic cadre positions are increasing, and it will enable achieving sufficient student/teacher ratio. Furthermore, the relevant universities and the health care authorities should develop strategies to bridge the existing gaps between the clinical and industrial training.

Studying pharmacy degree has helped majority of the participants to obtain their desired job, however, they were not satisfied with the salary scale. The fact that the government of Sri Lanka does not absorb the pharmacy graduates into a considerably different salary scale in the government health sector, might have caused this highlighted dissatisfaction for the salary scales. Possible variations in human and physical resources available in the three universities are a limitation of this study.

In conclusion, pharmacy graduates were satisfied with the quality of the pharmacy degree programmes conducted in Sri Lanka and with the current job, however, they were not satisfied with the facilities available such as journal-access facilities in libraries.

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