Research Papers/Extended Abstracts

# Satisfaction on the opportunities and employability skills received during the undergraduate period: A study of graduates of Allied Health Sciences Faculty in the University of Ruhuna, Sri Lanka

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## Abstract

Health science graduate programmes have recently been established to fill gaps in the health care system by producing health care professionals. These graduates are produced providing wide range of opportunities and inculcating the employability skills for them to find an appropriate job, engage in it effectively and proceed in the future careers effectively. To evaluate the satisfaction of Allied Health Science (AHS) graduates on the opportunities and employability skills they received during the undergraduate period. A descriptive cross-sectional survey was carried out after obtaining ethical clearance from the Ethics Review Committee of the Faculty of Allied Health Sciences. The satisfaction on opportunities and employability skills received during the undergraduate period were obtained using a pretested questionnaire set on a Google form with five-point Likert scale to answer. It was distributed among all the graduates of the 1<sup>st</sup> to 4<sup>th</sup> batches of each degree programme. The data were analyzed with descriptive statistics and Pearson's chi-square test using SPSS.25 version. Only 76 graduates responded. Of respondents, 12 (15.8%) were BSc Medical Laboratory Science (MLS) graduates, 48 (63.2%) were BSc Nursing graduates and 16 (21.1%) were B Pharmacy graduates. The majority (>70%) of the graduates highly satisfied about the knowledge and clinical/laboratory training they received. Majority of the graduates highly satisfied with all the skills while >90% satisfaction with the skills such as communication (90.8%), time management (90.8%), research (90.8%), teamwork (93.4%) and ethical awareness and responsibility (94.7%). Comparatively lower satisfaction (<60%) was observed for motivational, time management, and anger management skills. Furthermore, satisfaction on the skills; ethical awareness (p=0.005) (nursing; 100%, MLS; 75% and pharmacy 93.8%) and time management (p=0.005) (nursing; 93.8%, MLS; 75% and pharmacy 93.8%) were significantly associated with the degree programme demonstrating different satisfaction among the degree programmes. Majority of the AHS graduates of the University of Ruhuna highly satisfied with the opportunities and employability skills they received during their undergraduate period. The study findings will help to enhance the outcome of graduates of degree programmes and further investigation with serial graduates or alumni satisfaction surveys are recommended.

**Keywords:** Allied Health Sciences graduates, Employability skills, Opportunities, University of Ruhuna, Satisfaction

# Introduction

The Nursing and other allied health professionals, specially, pharmacist and medical laboratory scientists' (MLS) education are one of the most radically changing educational fields in nationally and internationally during the recent past. In Sri Lanka, undergraduate degrees for these nursing and allied health professions have commenced in Sri Lankan conventional universities in the year 2005 by the Ministry of Higher Education with the aim of producing intellectually and professionally competent nursing and allied health graduates to meet the emerging health needs of the national and international community with special emphasis on the social, economic and cultural needs of Sri Lanka (Jayasekara & McCutcheon, 2006).

University of Ruhuna (UoR) initiated the Allied Health Sciences (AHS) Degree programmes by becoming the 3<sup>rd</sup> conventional University in Sri Lanka, which started such degree programmes. The curricula of the degree programmes have been designed for four years, complying with Sri Lanka Qualification Framework (SLQF) guidelines with essential components including individual research projects and appropriate training programmes (hospital, clinical, community, and industrial) (University of Ruhuna, 2022).

These degree programmes make every effort to improve student learning and satisfaction within the clinical/laboratory setting. They are trained to deliver high-quality patient care. The expected outcomes of these trained nurses and allied health professionals are basically to provide patient-centered care, work in interdisciplinary teams, employ evidence-based practice, apply quality improvement and utilize informatics (Jayasekara & McCutcheon, 2006). Therefore, many opportunities, including receiving sound updated knowledge, training, and blended skills are provided to the students during the undergraduate period.

Up to now eight batches of BSc Hons Nursing and MLS and six batches of B Pharm Hons passed out successfully completing all the necessary theory and clinical components in these degree courses from UoR.

The tracer study reports of UoR stated that the employability of the AHS graduates of UoR is approximately 100% (University of Ruhuna, 2020; University of Ruhuna, 2021). Further, these graduates are in many key positions in the healthcare industry and research arena in Sri Lanka and internationally with a high rate of employability.

In any kind of profession, employability determines the probability of obtaining a new or upgraded job and the incorporation of job matching. When employees do not perform well in the workplace, the employer gets frustrated and pays a burden on the staff. To solve these types of issues, higher education institutions should pay focus on training, which can build employability skills in students' personalities and facilitate bright careers (Bala, 2021). It is a proven fact that employers give preference to those candidates who are a complete package of employability skills and avoid those candidates who lack skills in the recruitment process. Employability skills are identified as one of the valuable policy tools to upgrade mobility and earnings. The organization's employees are required to possess the knowledge and skills for increasing the organization's performance, competitiveness, and advancement (Sisodia & Agarwal, 2017; Messum et al., 2015).

When concerning healthcare even, the employees should possess sound knowledge and training that matched with all the requirements and certain employability skills apart from the knowledge and clinical competency they gained during the training period. Therefore, when training healthcare undergraduates, the educational institutions should also try to future healthcare professional enriched with employability skills while fulfilling education-related requirements such as knowledge and training (Crebert et al., 2004). Studies have identified some of the core skills such as communication skills, information communication, and technology skills, work psychology skills, teamwork skills, interpersonal skills, critical thinking and problem-solving skills, time management skills, self-management skills, planning and organizing skills and conceptual and analytical skills which are the backbone of a successful health care organization (Sisodia & Agarwal, 2017).

Since our graduates have nearly 100% employability and are working in a variety of healthcare institutions (national and international) and a few in education and research institutions, it is imperative to identify how satisfied they are with their already obtained opportunities and skills. Further, no study has been conducted to evaluate the graduates' satisfaction on the opportunities and skills they received during the undergraduate period in the Faculty or University level except the tracer studies. Therefore, the current study evaluated the satisfaction of AHS graduates on the opportunities and employability skills they received during the undergraduate period with the hypothesis that AHS graduates are satisfied with the opportunities and required employability skills received equally in all three-degree programme during the undergraduate period.

# Methodology

A descriptive cross-sectional survey was carried out after obtaining the ethical clearance from the Ethics Review Committee of the Faculty of Allied Health Sciences, UoR, Galle, Sri Lanka. A Google form was used to collect the relevant information and e-mailed to the Allied Health Sciences graduates

(from 1<sup>st</sup> to 4<sup>th</sup> batches of each degree programme) who passed out from the UoR using the e-mails available at the three Departments of the Faculty. Only 76 graduates responded to the form.

In the Google form, information sheet and consent form were included in the first part of the form while the relevant questions were in the second part. Basic information such as registered academic year, gender, degree programme, employment status, and the satisfaction on received opportunities and necessary employability skills during the undergraduate period (such as communication skills, information communication, technology skills, work psychology skills, teamwork skills, interpersonal skills, critical thinking and problem-solving skills, time management skills, self-management skills, planning and organizing skills and conceptual and analytical skills) were asked. The satisfaction was asked in a five-point Likert scale of "highly satisfied, satisfied, neutral, dissatisfied and highly dissatisfied". This questionnaire was developed guiding the existing literature while the content of the questionnaire was evaluated by three senior academics in the Faculty of Allied Health Sciences. Finalized questionnaire was pre-tested with 06 graduates of the University of Sri Jayewardenepura who followed the AHS Degree Programmes.

The data were analyzed using the descriptive statistics including frequencies and percentages and Pearson's Chi-square test was used to identify whether AHS graduates of all three-degree programmes have equally satisfied about the opportunities and employability skills they acquired. During the analysis, since there were only a few responses for some components of the Likert scale, both highly satisfied and satisfied components were combined together as "satisfied" and both dissatisfied and highly dissatisfied components were combined together as "dissatisfied". Statistical significance was set at p < 0.05. SPSS 20.0 version was used for data analysis.

#### Results

Among the 76 graduates responded to the questionnaire, 12 (15.8%) were BSc Hons MLS graduates, 48 (63.2%) were BSc Hons Nursing graduates and 16 (21.1%) were B Pharm Hons graduates. Only three (03) graduates were not employed at the moment of study mentioning that they are not employed due to family commitments.

The satisfaction of graduates on the opportunities mainly on the knowledge they received, clinical/laboratory training, internship/apprentice training, and opportunity to attend for additional professional development courses and explore higher education were asked (Table 1). The majority of the graduates satisfied about the knowledge and clinical/laboratory training while showing a comparatively less satisfaction for the opportunities to explore higher education opportunities and opportunities to follow professional development courses during the undergraduate period.

The satisfaction of the graduates on the employability skills they received from the undergraduate period is also shown in Table 1. The majority of the graduates satisfied with all the skills pointed out in the questionnaire while giving > 90% of satisfaction for the skills such as communication skills (90.8%), time management (90.8%), research skills (90.8%), teamwork (93.4%) and ethical awareness and responsibility (94.7%). Comparatively lower satisfaction was seen for motivation, time management, and anger management skills.

**Table 1:** Satisfaction of AHS Graduates on the Opportunities and Employability Skills they Received During the Undergraduate Period (n=76)

Opportunity/Skill	Satisfied Frequency (%)	No idea Frequency (%)	Dissatisfied Frequency (%)				
				Opportunities		1	
				Updated sound knowledge	64 (84.2)	7 (9.2)	5 (6.6)
Clinical/laboratory training	58 (76.3)	8 (10.5)	10 (13.5)				
Explore future higher education opportunities	47 (61.8)	9 (11.8)	20 (26.3)				
Follow additional professional development courses	46 (60.5)	12 (15.8)	18 (23.7)				
Employability skills							
Presentation skills/public speaking skills	65 (85.5)	3 (3.9)	8 (10.5)				
Academic writing skills	64 (84.2)	3 (3.9)	9 (11.8)				
Communication skills	69 (90.8)	2 (2.6)	5 (6.6)				
Leadership skills	63 (82.9)	4 (5.3)	9 (11.8)				
Emotional intelligence skills	57 (75.0)	8 (10.5)	11 (14.5)				
Interpersonal relationship skills	63 (82.9)	5 (6.6)	8 (10.5)				
Time management skills	69 (90.8)	4 (5.3)	3 (3.9)				
Stress management skills	56 (73.7)	5 (6.6)	15 (19.7)				
Decision making skills	66 (86.8)	7 (9.2)	3 (3.9)				
Research skills	69 (90.8)	0	7 (9.2)				
Data handling and management skills	66 (86.8)	5 (6.6)	5 (6.6)				
Information and computer literacy skills	67 (88.2)	6 (7.9)	3 (3.9)				
Team working skills	71 (93.4)	3 (3.9)	2 (2.6)				
Ethical awareness and application skills	72 (94.7)	4 (5.3)	0				
Ability to adapt to different situations in professional	63 (82.9)	8 (10.5)	5 (6.6)				
life/professional adjustment							
Planning and organizational skills	67 (88.2)	4 (5.3)	5 (6.6)				
Motivation and initiative skills	56 (73.7)	4 (5.3)	16 (21.1)				
Conflict resolution skills	54 (71.1)	13 (17.1)	9 (11.8)				
Anger management skills	52 (68.4)	12 (15.8)	12 (15.8)				

Furthermore, Chi-square test results indicated that the satisfaction on the skills; ethical awareness (p=0.005) (satisfied; nursing; 100%, MLS; 75% and pharmacy 93.8%) and time management (p=0.005) (satisfied; nursing; 93.8%, MLS; 75% and pharmacy 93.8%) were significantly associated with the degree programme demonstrating different satisfaction among the degree programmes.

Students' satisfaction on the opportunities and other employability skills had no significant association with the degree programme they followed (p>0.05).

# Discussion

This study found the AHS graduates of UoR are highly satisfied with the opportunities and skills they received during the undergraduate period.

UoR has started these programmes with the broad aim, to prepare a competent, caring, compassionate and reflective allied health graduate skilled in the delivery of patient care in collaboration with other healthcare professionals and capable of becoming potential care giving leaders, educators and researchers in the field of allied health sciences (University of Ruhuna, 2022). Therefore, based on the findings of this study, it is obvious that the aim has been achieved as many of the graduates have a high level of satisfaction with what they have received during the undergraduate period which strengthen their career paths.

Employability skills are the personal skills and attributes demonstrated by an individual that distinguish one job seeker from another in their field of specialization and help them to secure gainful employment, sustain them in that job and progress in their career to achieve their maximum potential and contribute towards their personal goals and that of their organization (Sarfraz et al., 2018). Since most of the graduates are satisfied with the received employability skills during the undergraduate life, they have acquired appropriate jobs, and will secure and progress well in their career for the betterment of both personal organizational goals.

The satisfaction on skills such as ethical awareness and time management have been shown interdegree programme difference. This might be related to that these aspects are not much addressed during the programme as a separate course unit or combined section in a course unit. Even though these aspects are addressed in the orientation programme at the very beginning of their undergraduate period, these aspects are necessary to be discussed and inculcated among the students later in their undergraduate life.

Even though the highest percentage of graduates satisfied about the opportunities and skills they received, the graduates who had dissatisfaction cannot be disregarded. It should be highly considered by the study programmes in future revisions of the curriculum and by introducing many programmes for them via career guidance unit of the UoR.

Further, some graduates may find an immense amount of gap in the skills they possess and the skills that employers' demand. This gap might be eradicated by improving the appropriate interaction between educational institutions and employers. Therefore, views of employers and policy makers can

be obtained in the curriculum revisions and even motivational speeches by the health care industries to the final year students might be more worthy. If the international employers can also be consulted focusing all aspects of our graduates are employed is also an appropriate strategy such as research, industry and clinical setting.

## Conclusion

This cross-sectional study found the majority of AHS graduates of UoR highly satisfied with the opportunities and employability skills they received during their undergraduate period. Despite the low response rate, this study provided important information about the outcomes of the entire Allied Health Sciences study programmes. The study findings will help for the academic and administrative authorities of these degree programmes to re-think to enhance the outcome of graduates of already available degree programmes and potential degree programmes to be initiated in future. Further investigation with serial graduates or alumni satisfaction surveys are highly important to identify how these opportunities and skills contributed them to proceed and survive in their careers.

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