

Physical therapy education in Saudi Arabia

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Abstract. [Purpose] To review the physical therapy educational program model, professional curriculum, and gender representation at major universities, as well as the quality and scope of physical therapy practice in Saudi Arabia. [Methods] Information regarding course curriculum, gender representation, and the quality and scope of physical therapy practice was collected from six universities in Saudi Arabia, the Saudi Physical Therapy Association, and the Saudi Health Commission. [Results] The first bachelor's degree course of physical therapy was started in Saudi Arabia more than 30 years ago. In the last 10 years, the number of universities offering a bachelor's degree in physical therapy has risen from 6 to 16, of which 14 are governmental and two are private. The 5- to 6 year bachelor's degree program in physiotherapy includes an internship and preparatory prerequisite courses. Postgraduate study in physical therapy was introduced in 2000. Most universities offer segregated physical therapy courses for male and female students. [Conclusion] The enrollment of students in physical therapy programs in Saudi Arabia is gradually increasing. There are many opportunities to extend the scope of practice and contribute to the health needs of the Arab population and international communities.

Key words: Physical therapy, Education, Curriculum

(This article was submitted Dec. 10, 2014, and was accepted Jan. 17, 2015)

INTRODUCTION

Physical therapy (PT) education programs were introduced later in Saudi Arabia (SA) than in other countries¹⁻³⁾. King Saud University introduced the first bachelor's program in PT about 30 years ago⁴⁾. In the last 10 years, the number of universities offering a bachelor's degree in PT in SA has increased from 6 to 16, of which 14 are governmental and two are private⁵⁾. The Saudi Health Commission conducts licensure examinations for native and foreign diplomates and foreign nationals before they may practice ensuring quality of care. In SA, PT is an important patient care profession⁶⁾. There are four consultant physical therapists, 327 physical therapists, 832 PT technicians, and 16 assistant PT technicians working in SA. Of these, 80% work for government hospitals⁵⁾. Physical therapists constitute most of the rehabilitation staff.

EDUCATION PROGRAM MODEL

Unlike in the United States and Sweden, for example,

they first introduced diploma program, PT in SA was first introduced at the bachelor's degree level. A diploma program was introduced later but was soon discontinued¹⁻³⁾. There is currently no PT diploma program in the country. PT has always been a popular program. The 5- to 6 year bachelor's program in PT includes an internship and preparatory prerequisite courses. The credit unit ranges for 92 to 140 in different universities in SA (Table 1).

Postgraduate study in PT was introduced in 2000 with pediatrics, geriatrics, orthopedics, neurology, and cardiothoracic studies as major subjects. In SA, this 2 year program is only offered at King Saud University⁴⁾. The postgraduate program focuses on research, with no student teaching responsibilities. Currently, there is no doctoral level program in SA; however, the Saudi Physical Therapy Association (SPTA) has called for restructuring of the entry-level PT program from a 5 year bachelor's program to a 6 year Doctor of Physical Therapy (DPT) program⁷⁾. Perceived differences among physical therapists regarding program content for the new entry-level DPT curriculum were studied in five geographical regions in SA⁸⁾. Opinions were generally positive in all regions.

PROFESSIONAL CURRICULUM DELIVERY

The entry requirement for the bachelor's program is a general certificate from a higher secondary school with a major in sciences⁴⁾. After high school, there is an entrance exam for admission in the preparatory school. Performance

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Table 1. Physical therapy courses run by various universities in Saudi Arabia

S. N.	Name of university	Course	Duration (years)	Number of students	Credit unit
1	King Saud University	B.Sc. (PT)	6	80	92
2	Umm al Qura University	B.Sc. (PT)	5	60	140
3	King Abdul Aziz University	B.Sc. (PT)	5	60	137
4	King Faisal University	B.Sc. (PT)	5	50	135
5	Najran University	B.Sc. (PT)	6	40	153
6	Majmaah University	B.Sc. (PT)	5	50	140

in this program determines the admission of students into one of the six health schools. PT is one of the six health schools. Others include medicine and dentistry.

Government universities are fully funded while students are either self-financed or on scholarship in private universities. The government also funds master's and doctoral-level education outside the country. Recently, there has been a considerable increase in the number of students undertaking PT master's and doctoral programs in foreign countries, especially the United Kingdom and United States.

The undergraduate PT program in SA includes first year courses in Islamic studies, language, humanities, and basic sciences. In addition to Islamic studies, second year courses are primarily basic medical sciences and introductory PT procedures. Third year courses are primarily clinical or medical, including internal medicine, orthopedics, radiology, and psychology along with PT.

In addition to clinical coursework such as neurology, infant diseases, and geriatrics, fourth year courses are primarily in clinical PT practice, with a PT research project. There is a one-year internship to enhance and integrate knowledge and skills in the examination, evaluation, and interventions for different types of patients, including those with orthopedic, neurologic, pediatric, geriatric, and cardiopulmonary disorders. Bindawas et al.⁹ evaluated the performance of PT interns as assessed by either academic or clinical physical therapists. They found no differences in their respective evaluations, but perceived some need for improvement in certain competencies and skills such as evaluation, clinical examination, diagnosis, prognosis, and intervention.

TEACHING AND LEARNING

Academic and clinical teaching faculties include demonstrators (bachelor's degree holders), lecturers (master's degree holders), and professors (PhD degree holders). Faculty members in the PT department are mostly from foreign countries⁴. Most health schools have permanent staff for the clinical subjects and visiting staff from different colleges of the university for non-clinical subjects.

Students are trained at a university hospital during the program, followed by 1 year of a compulsory rotating internship. There are internship supervisors at the universities and clinical tutors at the hospital. The hierarchy of hospital jobs begins with assistant physical therapists (diploma) (some of individuals who earned that degree when it was available and some are from foreign countries), specialist physical

therapists (bachelor's degree), senior specialist (master's degree), and consultant (doctoral degree).

GENDER REPRESENTATION IN MAJOR UNIVERSITIES

Most of the universities offer segregated PT programs for both male and female students. There were 162 bachelor's program students in the 2009–2010 session at the College of Applied Medicine, King Saud University, representing 9.6% of the total number of students of that university. Of these, 79 (4.7%) were male and 83 (4.9%) were female¹⁰. There were also 73 postgraduate bachelor's program students in the 2009–2010 session, representing 18.6% of the total number of students of King Saud University. Of these, 38 (9.7%) were male and 35 (9%) were female¹⁰.

There were 15 master's degree students in the 2009–2010 session at the College of Applied medicine, King Saud University, representing 19% of the total. Of these, six were male and nine were female. Seven were awarded degrees in the same year, including five male and two female¹⁰. There were 87 students in the Rehabilitation Department of Umm al Qura University in the first and second year of the 2010–2011 session¹¹. There is a similarly equal distribution of PT students among male and female students at other universities. The precise female-to-male student ratio is not known.

ENSURING QUALITY

In 1992, the inaugural Riyadh Physical Therapy Group, comprising Saudi and foreign specialists, was formed. In 1993, it worked under the direction of the Scientific Assembly for Higher Studies at King Saud University. In 1994, its name was changed to the Saudi Physical Therapy Group (SPTG), and in 2001, the SPTA was formally chartered with a board of directors established⁴.

Since its formation, the SPTA has had the goal of registering all physical therapists practicing in the country, with a primary focus on professional improvement. Research, continuing medical education, workshops, and conferences regularly update students and clinicians to improve patient care. Ongoing professional development training is required for continued membership in the SPTA.

The Saudi Health Commission conducts theoretical and practical exams for all diplomates and foreign nationals before they may practice¹², ensuring high quality patient care.

SCOPE OF PRACTICE

Unlike in countries such as the United Kingdom and United States, direct access to PT by a patient is not permitted in SA i.e. a patient cannot be seen at all for PT without a referral^{2, 13)}, and requires referral by another health professional. The standards of care are not known, but physical therapists follow the codes of conduct of regulatory/licensing/registration authorities such as the Saudi Health Commission and SPTA. Physical therapists are permitted to assess patients, make diagnoses, design plans of care, implement interventions, and offer preventive measures and advice.

FUTURE TRENDS AND RECOMMENDATIONS

SA has one of the fastest growing economies in the world. The government has a huge youth education budget. Research is also a primary focus. Chairs for different emerging trends have been established, including the Rehabilitation Research Chair, a center that focuses on specific PT topics. Trained physical therapists will be increasingly needed to fulfill the demands of the community. The lack of postgraduate courses is a major concern, with only one university offering these. Other universities should offer postgraduate courses, and some should introduce a doctoral course in PT. The government should establish a PT council to ensure high quality, standardized PT education. A strong professional society is needed to promote growth and guidance in both professional education and practice, with the primary purpose of serving both society and individual patients.

In conclusion, PT education and the number of students enrolled in PT programs are growing in SA. There are many opportunities to expand the scope of practice and contribute to the healthcare needs of the Arab population and international communities. The Saudi government provides financial support for high quality research in the field of PT. Currently, universities are also improving their research

programs, and progress is anticipated.

ACKNOWLEDGEMENT

The project was financially supported by King Saud University, Vice Deanship of Research Chairs, Rehabilitation Research Chair.

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