

Education and Research in Physical Therapy and Rehabilitation in Libya

W. Astiata and A. Wasif

Abstract—In this paper, an overview is made on the educational and research activities in the field of physical medicine and rehabilitation in Libya, including development in rehabilitation science, research, training, occupational therapy, physiotherapy and physiatrist, which are mainly concerned with the patients in Libya[3] [13].

Keywords—Physiotherapy, Rehabilitation, Libya, Graduates, Institutions, Universities, Research, Education, Courses.

I. INTRODUCTION

PHYSICAL therapy and rehabilitation domain started in 1962 with the establishment of Italian orthopedic hospital “institute Rizzoli” at the beginning of the eighties (the exact date is not known) Libyan ministry of education established the opening of some institutes at post-preparatory school level. a 3years long program aimed at qualifying students with the knowledge and skills of physical therapy and rehabilitation and to get them to know and use the latest development in this field [6], [10], [12], [13].

In 1992, the first physical therapy department at the faculty of medical technology, Misurata was established under the supervision of the ministry of higher education and began accepting students with secondary school certificates in four years program leading to a bachelor degree in physiotherapy [3], [4], [5].

In 1994, the physical therapy department at the faculty of medical technology, Tripoli was established. This appeared to acknowledge the need for highly educated graduate to fulfill the increasing demands for a professional physical therapy and rehabilitation service [6].

The four years bachelor degree program in both departments comprises of number of modules thought theoretically and clinically. These modules include but not limited to: *biology, English language, Arabic language, statistics and computer, medicinal physics, medicinal chemistry, histology, pathology, biomechanics, tests and measurements, physiology, therapeutic exercises, biochemistry, anatomy, electrotherapy and hydrotherapy, pharmacology, gynecology and obstetrics, p.t for gynecology and obstetrics, internal medicine and geriatrics, p.t for internal medicine and geriatrics, psychology and ethics, p.t for orthopedics and orthopedic surgery, orthopedics and*

orthopedic surgery, pediatrics and pediatric surgery, p.t for pediatrics and pediatric surgery. rehabilitation, research methods, neurology and neurosurgery, p.t for neurology and neurosurgery, surgery, burns and plastic surgery and p.t for surgery, burns and plastic surgery [6]

The bachelor degree program is designed to prepare students for careers in the disciplines of physical therapy science. Thus, graduates of the program will be able to: demonstrate an overall understanding of the theoretical bases of physical therapy science, demonstrate an in depth knowledge of their areas of specialization, identify major research issues and questions in physical therapy science.

Graduates could work in physical therapy or in different medical departments in an interdisciplinary team, in public and private hospitalize and also in sports society as supervisor of the sports teams.

II. MATERIALS AND METHODS

A. Aims

In this overview, the focus is made on the educational and research activities in the field of physical therapy and rehabilitation in Libya. Analysis has been done for: development in physical therapy and rehabilitation science, research, training, occupational therapy and physiatrists that is mainly concerned with the patients in Libya.

B. Methods

All tables and figures you insert in your document are only to help you gauge the size of your paper, for the convenience of the referees, and to make it easy for you to distribute preprints.

A number of 10 universities have been visited as subjects to this study, namely:

1. Tripoli University
2. Benghazi University
3. Academy of Graduate Studies
4. Omar Almokhtar University
5. Sebha University
6. Zaytuna University
7. Musrata University
8. Almergheb University
9. Jadu Institute of Medical Technologyipoli
10. University Of Aljablalzawia

III. RESULTS

Through our survey, it was found there only few graduate programs in both Master's and even PhD level in physical therapy or rehabilitation in only two locations in Libya, namely Tripoli and Benghazi [7], [8], [9], [12].

W. Astiata is with Department of Physical Therapy, Tripoli University, Tripoli, Libya (phone: +218-92-542-8325; fax: +218-21-715-1598; e-mail: astiata@yahoo.it).

A. Wasif, is with Department of Physical Therapy, Tripoli University, Tripoli, Libya (phone: +218-92-647-7805; fax: +218-21-715-1598; e-mail: amjwasif@yahoo.com).

There is no scientific research in any physical therapy or rehabilitation disciplines [1], [2], [10].

The number of master and PhD degree holders in Libya has increased from twenty one in the last ten years, into almost totally 42 (Forty -Two) in these institutions, in addition to many others pursuing their graduate studies overseas [11], [13].

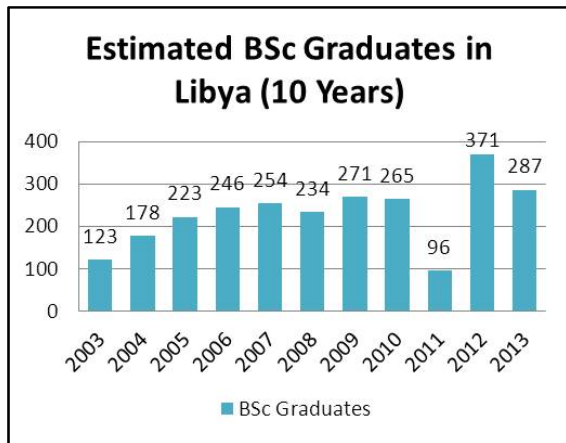


Fig. 1 Estimated BSc. Graduates in Libya (10 Years)

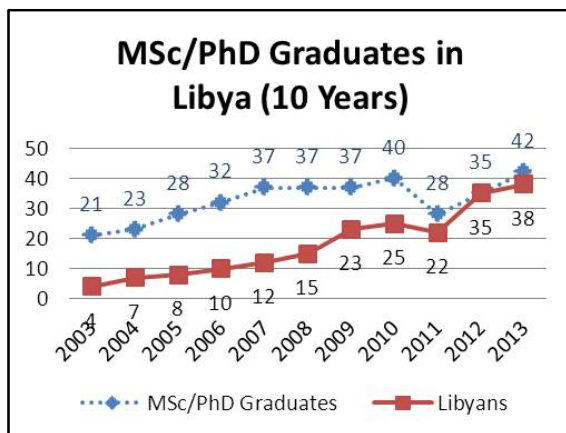


Fig. 2 MSc/PhD Graduates in Libya (10 Years)

TABLE I
ESTIMATED NUMBER OF PHYSICAL THERAPY BSC. GRADUATES

Year	BSc Graduates
2003	123
2004	178
2005	223
2006	246
2007	254
2008	234
2009	271
2010	265
2011	96
2012	371
2013	287

TABLE II
PERCENTAGE OF LIBYANS AMONG MSc/PhD GRADUATES

Year	MSc/PhD Graduates	Libyans	Percentage Libyans
2003	21	4	19.05%
2004	23	7	30.43%
2005	28	8	28.57%
2006	32	10	31.25%
2007	37	12	32.43%
2008	37	15	40.54%
2009	37	23	62.16%
2010	40	25	62.50%
2011	28	22	78.57%
2012	35	35	100.00%
2013	42	38	90.48%

TABLE III
LOCATIONS OF PHYSICAL THERAPY TEACHING INSTITUTIONS

Year	Locations of undergraduate programs
2003	4
2006	5
2009	6
2010	8
2013	8

IV. CONCLUSION/DISCUSSION

1. Initiation of different training courses and workshops to graduate groups or trainees that coming for scientific research, reasoning skills and innovation is strongly recommendable.
2. Go step by step in thinking and creativeness.
3. Set-up an e-mail domain specifically for research in physical therapy and rehabilitation area.
4. Create a group of specialists who have an ability to engage in the scientific research.
5. Develop research in any physical therapy or rehabilitation disciplines.
6. Borrowing the experiences in scientific research area to help the trainees.
7. Welcome universities students to engage in scientific research during and after completion of their studies.
8. Advance the physical therapy departments in all colleges into independent faculties for the sake of improving and developing the profession and gaining autonomy.
9. Supporting and offering scholarships to those who want to pursue further education to gain masters and doctorates degrees.
10. Cooperate with the international scientific community to develop in the near future a correct and strong physical therapy and rehabilitation domain in Libya.
11. Commencement of an international medical conferences and activities in Libya.

ACKNOWLEDGMENT

The authors would like to thank Dr Abdolmenem Edeeb for his efforts in providing the necessary data included in this paper and to Dr Ahmed Jebri for his help in formulating the curves, and finally to everyone helped in preparing this paper.

REFERENCES

- [1] Academy Of Graduate Studies, (www.alacademia.edu.ly).
- [2] Almergheb University, (www.elmergib.university.ly).
- [3] Research and Education in Physical & Rehabilitation Medicine in Libya", 6th Mediterranean Congress of PM&R October 18-21, 2006 Vilamoura Portugal.
- [4] University Bulletin Issue No. (8), 2006.
- [5] Journal of Education No (5), autumn 2010.
- [6] Tripoli University, (www.uot.edu.ly).
- [7] Benghazi University, (www.benghazi.edu.ly).
- [8] Jamahiriya Medical Journal Jmj.
- [9] Omar-Almokhtar University, (www.omu.edu.ly).
- [10] Sebha University, (www.sebhau.edu.ly/ar).
- [11] The Libyan Board of Medical Specialties.
- [12] Tripoli Medical Center, (www.tmc.ly).
- [13] Libyan Physical Therapy Syndicate, (email: Pt_Syndicate@Yahoo.Com)

W. Astiata was born in Derna-Libya 1972, received his BSc in Physiotherapy from the University of Tripoli in 1998.

Between 2002 and 2006, he joined the University Policlinic of Rome -Tor Vergata pursuing his graduate studies, where he received his PhD in Physical medicine and Rehabilitation in 2006, during which he published three papers in his research area of Rehabilitation from 2006 till now, he is a faculty member at the University of Tripoli, and also The Libyan Academy of Graduate Studies since 2009, in addition to part time lecturing at the Faculty of Biomedical Engineering in Sabratah, and the High institute of Medical Technology in Mesallatah.

In 2011, after the Libyan conflict, he participated in the establishment of the dept. of Physiotherapy, the High Institute of Medical Technology-Jadu, where prepared course contents and syllabus for the aforesaid institution.