# Education In Physiotherapy Department In The University Of Zawia In Libya

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Abstract: Physiotherapy is a specialist branch of medicine that helps remediate impairments in movement and promote patients' quality of life. Furthermore, Physiotherapy plays a crucial role in helping people who have lost their mobility or suffer from movement disorders. Educational criteria for physiotherapy providers vary from state to state and from country to country, and among various levels of professional responsibility. The purpose of the study to assess the impact and effectiveness of the educational process in physiotherapy in Libya, and to provide an overview of education and training at the University of Zawia in Libya including the graduate students, staff members, and demonstrators from 2002-2012. The data was conducted from the department documents and from the staff in the Physiotherapy Department at the University of Zawia. As a result, during 2002-2009, the mean number of graduate students was 5.43. While from 2009-2012 a visible increase in the number of graduate students was reported and the mean reached 18, owing to the rise in the knowledge of physiotherapy importance and the raise of awareness that has been shown that between the society and association of students. On the other hand, the percentage of the national and foreign teachers' members was reported 46% and 36% respectively, while the assistant staff members were 18%. In addition, during 2002-2010, the demonstrators were 5 while in 2010-2012 there were 12, this increase was associated with the rising number of graduate students.

Keywords: University of Zawia, Education, Libya, Physiotherapy.

#### 1. INTRODUCTION:

Physiotherapy is a health care profession that assists people to restore, maintain, and maximize their strength, function, movement, and overall well-being [1]. Furthermore, Physiotherapy includes rehabilitation, as well as prevention of injury, and promotion of health and fitness. Physiotherapists often work in teams with other health professionals to meet an individual's health care needs [2].

The knowledge of physiotherapy is considerable, and therefore students may specialize in a specific clinical area. Whereas there are numerous physiotherapy specialists, Physiotherapy degree holders play a significant role in many fields, including healthcare centers, educational centers, and sports centers [3]. In addition to clinical practice, other activities encompassed in the physical therapy profession include research, education, consultation, and administration. Physical therapy is provided as a primary care treatment or alongside, or in conjunction with, other medical services [4].

Educational criteria for physiotherapy providers vary from state to state and from country to country, and among various levels of professional responsibility. Worldwide, physiotherapy training ranges from basic work site education in hospitals and outpatient clinics to a

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professional doctoral degree and master's programs [5].

The faculty of medical technology at the University of Zawia was first established in 2001/2002, and at that time it was a part of medical sciences colleges, the number of students was (58). There are four departments in the faculty (physiotherapy, dental technology, medical laboratory, anaesthesia). And there was cooperation with other medical colleges [6]. The physiotherapy department provides training in various specialties such as Neurological, Cardiopulmonary, Musculoskeletal, Pediatrics, Geriatrics, and Surgery. The Program's overall aims of the physiotherapy department to Provide Educational hygienic sectors with qualified technicians for better assisting medical service.

The programs in the physiotherapy department are to contained a Bachelor degree in the physiotherapy specialist. The duration of this program is four-year [7]. In the 1st and 2nd year, the study is general and the subjects in those years are as following: Chemistry, Medical Physics, Biology, Medical Terminology, Arabic Language, Statistics, Biochemistry, Physiology, Anatomy, Histology, Public health, First Aids, and culture. While, in the 3rd year the subjects are as following Pathology, Microbiology, Pharmacology, Electro-Hydrotherapy, Essential of physiotherapy, Medical Investigations, General medical, Paediatric, Tests and scales, and culture. Whereas, in the 4th year there are: Exercise physiotherapy, Neurosurgery, Orthopedic, Gynecology and Obstetrics, Orthopedic physiotherapy, Neurosurgical physiotherapy, Health Administration, Medical Ethics, Psychology, Medical physiotherapy, Surgery physiotherapy, and culture [8].

There has been a study that has carried out an overview that included 10 Universities to focus on the educational and research activities in the field of physical therapy 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. As a result, it was found there only a few graduate programs in both Masters and even Ph.D. levels in physical therapy and rehabilitation in only two locations in Libya, namely Tripoli and Benghazi [9]. Furthermore, there were another study conducted in the Tripoli university in Libya to provide an insight and overview to the education and training in the physiotherapy department. Therefore, this study was conducted in line with previous studies to support the education research in Libya and expand of education, training, and overview of physiotherapy department education at the university of zawia.

This study aims to provide an overview of education and training at the University of Zawia, support the Educational research in Libya, and to assess the impact and effectiveness of the educational process in the physiotherapy in Libya.

## 2. MATERIAL AND METHODS:

This study is a quantitative approach, a non-experimental research design prospective cohort study to explore the education in the Physiotherapy Department at the university of zawia in Libya: including the graduate students, staff members, and demonstrators from 2002-2012. In addition to assessing the impact and effectiveness of the educational process to support educational research in Libya [10]. Descriptive method was used for this study and the study was conducted in the Physiotherapy department at the University of Zawia and conducting the data from the department and to the physiotherapy staff including the teacher's members and demonstrated. The design was adopted due to being the aim of statistically providing the numbers of graduate students, staff members, and demonstrators. Besides, the quantitative study has good reliability and validity [11].

The data analysis has been carried out for the graduate students, staff members and

demonstrators from 2002-2012, obtained data were illustrated by using tables and figures (Figure1, Figure2, Figure3 Table1, Table2, and Table3). The data analysis was performed using SPSS software version 21 was used in the analysis of data [12].

### 3. RESULTS:

Through our study, we found that there was a significant increase in the member of graduate students from 2009-2011 comparing it the past years while in 2012 the member of the graduate students was less than it was in the period from 2009-2011, and the total number of graduate students through the last ten years was just 90 students as stated in table 1 and figure 1. The demonstrators in the department in the period from 2002-2010 were 5 while in the period from 2010-2012 were 12 as illustrated in the table 2 and figure 2.

THE YEAR	GRADUATE STUDENTS		
2002-2003	5		
2003-2004	5		
2004-2005	9		
2005-2006	9		
2006-2007	4		
2007-2008	3		
2008-2009	3		
2009-2010	22		
2010-2011	20		
2011-2012	13		
TOTAL	90		

Table 1: BSC GRADUATE STUDENTS IN UNIVERSITY

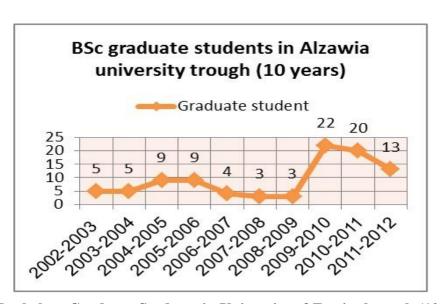


Figure 1: Bachelors Graduate Students in University of Zawia through (10 years)

**Table 2: THE NUMBER OF THE DEMONSTRATORS** 

THE YEAR	DEMONSTRATORS
2002-2010	5
2010-2012	12
TOTAL	17

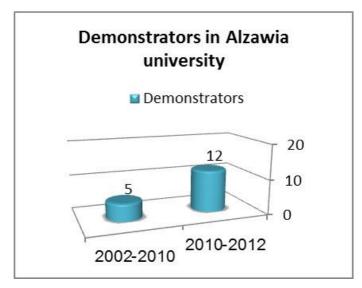


Figure 2: Demonstrators in University of Zawia

The percentage of the national teachers' members as illustrated in the table 3 and figure 3, (46%) were close to the percentage of Foreign teachers' members (36%) while the percentage of the assistant staff members were (18%).

Table 3: THE PERCENTAGE AND NUMBER OF STAFF MEMBERS THROUGH TEN YEAR

FACULTY	NUMBER	THE PERCENTAGE
NATIONAL TEACHERS	5	46%
FOREIGN TEACHERS	4	36%
AID TEACHERS	2	18%

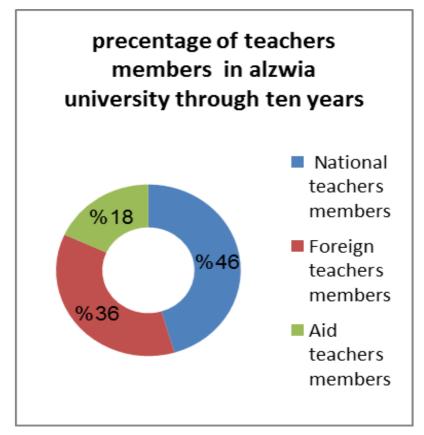


Figure 3: The percentage and number OF STAFF members through ten year

#### 4. DISCUSSION AND CONCLUSIONS:

We concluded from the results and based on our knowledge that there was no previous Educational research was conducted and data in the physiotherapy department at the University of Zawia. Hence, it is difficult to collecting the data and there are also various issues such as the college of medical technology had been shifted from the Medicine college to another place and the new place was not big enough and there were no enough offices and that was one of the causes that affected the work of the physiotherapy department.

In the academic year 2002-2003 to 2008-2009, the medium number of graduate students was (5.43), owing the lack of awareness of the physiotherapy, specialists in the society, and the Libyan people have no idea about the importance of physiotherapy. so that they forced their children to choose another medical specialist.

In the academic years, 2009-2010 to 2011-2012 was a visible increase in the number of graduate students, the medium was (18), owing to the rise in the knowledge of physiotherapy importance and the raise of awareness that has been shown that between the society and association of students, and Foreign teachers increase and the quality of the Education.

On the other hand, from the year 2002 to 2010, the number of the demonstrators was just 5, because the number of graduates was little, whereas, in the year 2010 to 2012 there were more demonstrators than the past two years, the number was about 12, that's due to increasing of the graduate students and decrease of foreign teachers so the policy of physiotherapy department was to compensate the needs of the future and cover all classes and lectures and development of the physiotherapy department at University of Zawia and to challenge the other physiotherapy departments in other Universities in Libya [13]. The percentage of the national staff members was very close to the percentage of foreign teachers because there were not enough demonstrators in 2002-2010.

Besides, based on the study conducted an overview that included 10 Universities to focus on the educational and research activities in the field of physical therapy and rehabilitation in Libya. As a consequence, there is no scientific research in any physical therapy or rehabilitation disciplines. In addition, the number of master and Ph.D. degree holders in Libya has increased from twenty-one in the last ten years, into almost a total of 42 (Forty-Two) in these institutions, in addition to many others pursuing their graduate studies overseas.

In future work, the university alumni feedback can be instrumental in defending the objective of this study.

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#### Conflict of interest:

The authors declare that there is no conflict of interest in this study.

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