

A SWOT Analysis of the Physiotherapy Profession in Iraq

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ABSTRACT

Background and Purpose: Decades of sanctions and violence have drastically eroded the formerly proud and well-functioning health system. Physiotherapy may play a significant role in resolving these issues, given the ongoing population expansion and the high rates of disease and disability. This study aimed to examine the present state of physiotherapy in Iraq and offer suggestions for furthering its growth and development. **Method:** This study employed a qualitative study design in the form of an online questionnaire (with the participation of 17 key informants among physiotherapists in Iraq). The profession's strategic direction was based on a framework of strengths, weaknesses, opportunities, and threats to categorize emergent themes. **Results:** Informants stated that professional motivation and an increase in colleges were strengths. Among the weaknesses were education, practice organization, societal awareness, and equipment limitations. The association and legal organization, continuous education, and multidisciplinary collaboration were opportunities that were explored. Intruders, quacks, and the continuation of the current situation were all threats that were handled. **Conclusions:** Our research indicates that the status of the physiotherapy profession in Iraq is not at the required level. Policymakers should enhance the profession's strengths, capitalize on advancement opportunities, and work diligently to reduce weaknesses and threats.

Keywords: SWOT; Physiotherapy; Iraq; Weakness; Threats.

1. Introduction

The establishment of the modern state of Iraq from three cities that were part of the Ottoman Empire until 1917 (Baghdad, Mosul, and Basra) was one of the war's results [1]. The discovery of petroleum around the turn of the twentieth century helped to improve the country's economic status gradually. The true prosperity of contemporary Iraq came in the 1970s when the government could tap into massive petroleum reserves. In the 1970s, Iraq achieved middle-income status, with significant advances in most main indices, such as healthcare, education, economic development, and human resource development [2]. The successive wars, including the eight-year war between Iraq and Iran (1980-1988), the invasion of Kuwait (1990-1991), UN sanctions (1991-2003), and the US–British Coalition military invasion in 2003, and the subsequent comprehensive, systematic, and continuous destruction of the physical and moral infrastructures, did not allow Iraqis to enjoy prosperity for long. Iraq ceased to be a contemporary central state and became a decentralized state regarding planning, administration, and execution [3]. A once-proud and well-functioning health system has been severely weakened by decades of sanctions and conflict. Although it has the financial resources to restore itself, it lacks the necessary skills and plans [4].

Iraq's population doubles every 23-25 years, reaching 38 million in 2018, up from 7.28 million in 1960, and as the population grew, so did illiteracy and poverty rates, both of which were alarmingly high [5]. The health, educational, and social sectors were all influenced by these causes. Working with other government sectors and civil society is critical to addressing and remedying healthcare reform failures. According to the World Health Organization (WHO), cardiovascular diseases, cancers, diabetes, and chronic lung diseases are the leading causes of mortality and morbidity in Iraq [6]. Over 30% of Iraqis have high blood pressure, 14% have diabetes, and over 30% are obese, making the fight against these diseases a top priority for health system reform [7].

In addition to terrorist attacks, injuries caused mostly by traffic accidents are a significant source of death and disability in Iraq. According to Ministry of Planning surveys from 2016, people with disabilities now account for 5% of the population. However, some estimates show that the proportion of persons with disabilities may approach 10%, and there is no accurate census of the number of people with disabilities in Iraq, even though the overall number of disabled people is estimated at 1,357,000 [8]. Physiotherapy may play a particularly important role in rehabilitating the previously listed conditions, which are mainly avoidable or better rehabilitated and include both activity and disability. Physiotherapy research has expanded over the last several decades to gain

better scientific credibility and practical validation [9].

However, a literature review on the physiotherapy profession in Iraq showed few relevant studies, notably discussing their involvement in treating the country's higher disease burden. Due to the lack of research on physiotherapy in Iraq, decision-makers and policymakers may struggle to support or develop this profession. Furthermore, without some empirical support, it might be difficult for physiotherapy stakeholders to push the agenda to support such developments regarding funding, administration, or even human resources.

There is not imply that there is a strong link between the publication of research findings and the translation of that evidence into policy; indeed, others claim that policy formulation is not always driven solely by evidence and that ideas, interests, and institutions play a significant role as well [10-11]. The relationship between policy execution, decision-making, and research findings is difficult. Despite the seeming lack of a relationship between policy and research, there is still a need to study and create research to influence decision-making and policy development.

There is a definite need to analyze the condition of the physiotherapy profession in Iraq to sustain and develop it. The SWOT (strengths, weaknesses, opportunities, and threats) format was employed to attain this aim, which is a good instrument for assessment. Other researchers have utilized a similar technique to evaluate professional roles and healthcare programs using the SWOT framework as a research instrument [11-12-13]. Swot analysis is a method for obtaining an overview of a situation by examining the internal and external facts that impact the organization and showing the external threats and opportunities, internal strengths, and weaknesses in the situational environment. In other words, strengths and weaknesses are determined by the elements existing at a certain time and place. Still, threats and opportunities are determined by what the situation will be in the future [14].

2. Methodology

This study employed a qualitative study design as an online questionnaire survey to investigate the strengths, weaknesses, opportunities, and threats related to the physiotherapy profession in Iraq. The three phases of this qualitative research were: 1) identification of key participants, 2) collection of online survey data, and 3) data analysis. This study follows the principles

of the Declaration of Helsinki.

Phase 1. Identifying Key Participants: The researcher compiled a list of prospective participating physiotherapists. The survey comprised 17 individuals from several governorates asked to participate through email and social media. The research inclusion criteria were willingness to participate in the study and at least eight years of job.

Phase 2. Online survey data collection: The online survey was designed to include open and closed-ended questions to gather opinions and perceptions about the strengths, weaknesses, opportunities, and threats to the physiotherapy profession in Iraq. The questionnaire was sent to participants through email and social media. The data collection was completed after one week, from June 3 to June 9, 2022, and the data was analyzed.

Phase 3. Data analysis: The data were entered into NVivo (QSR), a qualitative data analysis software package for systematic coding. Before coding the data, content analysis was used to discover themes and categories. The topics included in the coding were based on the informants' cumulative knowledge, opinions, and experiences that answered the study goals. A SWOT framework was utilized to classify the data. Finally, the SWOT framework summarised which strengths and opportunities should be capitalized on and which weaknesses and threats should be reduced or avoided. The researcher generated operating definitions for the four SWOT components using a matrix produced by Houben et al. (1999) and collective knowledge and attitudes of the physiotherapy profession [15]. As a result, 'strength' has been acknowledged as a competitive advantage within the profession. Strength was defined in this research as any competence of the collective group of physiotherapists in Iraq that inspires professional growth and development.

In contrast, 'weakness' was described as an internal organizational restriction that hampered advancement. That translated to any limits shown by the group of physiotherapists that inhibited the profession's progress. 'Opportunity' was defined as any external environmental aspect that encouraged the profession's expansion; 'threat' was defined as any external environmental factor that may operate as a barrier to the profession. After sorting the data into SWOT categories, an open-ended coding procedure was started to investigate the intricacies inside each category.

3. Results

Seventeen Iraqi physiotherapists consented to participate in the online questionnaire survey (Table 1). The main themes gathered from key informants are articulated within the SWOT framework's structure (Table 2). The frequency of responses among the initial key informant answers is used to rank each item.

Table 1. Profile of key informants.

Study ID	Academic background	Professional role	Years since graduation	Global training or clinical experience outside of Iraq
A1	Bachelor's degree	Physiotherapist	10	India
A2	Bachelor's degree	Physiotherapist at the ICRC in Iraq	10	Jordan
A3	Diploma degree	Physiotherapist	36	N/A
A4	Diploma degree	Physiotherapist	10	N/A
A5	Master's degree	Director, PT Department	8	Turkey
A6	Bachelor's degree	Physiotherapist	20	Turkey, Iran, Egypt
A7	Bachelor's degree	Physiotherapist	8	N/A
A8	Bachelor's degree	Physiotherapist	15	N/A
A9	Diploma degree	Physiotherapist	15	Germany, Netherlands, Lebanon, UAE
A10	Diploma degree	Physiotherapist	23	N/A
A11	Diploma degree	Physiotherapist	8	N/A
A12	Bachelor's degree	Physiotherapist	10	N/A
A13	Diploma degree	Physiotherapist	8	N/A
A14	Diploma degree	Physiotherapist	13	N/A

A15	Master's degree	Director, PT Department	9	Turkey
A16	Diploma degree	Physiotherapist	13	N/A
A17	Bachelor's degree	Director, PT Department in Ministry of Health	21	N/A

Table 2. Results of the SWOT Framework.

SWOT	Rank	Item
Strengths	1	The professional motivation
	2	Increasing of colleges
Weaknesses	1	The education
	2	Practice organization
	3	The societal awareness
	4	Equipment limitation
Opportunities	1	Association and legal organization
	2	Continuous education
	3	Multidisciplinary collaboration
Threats	1	Intruders and quacks
	2	Continuing the current situation

3.1 Strengths

3.1.1. The professional motivation

Many informants noted that many physical therapists in Iraq, particularly the younger generations, are "looking for the best and working hard" and that this motivation is a significant factor in the profession's development. The current enthusiasm of therapists has been recognized as favorable for the profession, as it has been noticed that physiotherapists are willing to provide better treatment to the community, thereby enhancing the physiotherapy profession's reality. Most participants stated that the younger generation of therapists is more enthusiastic about their profession and desire to expand it.

3.1.2. Increasing of colleges

According to many informants, the growing number of universities with a physiotherapy department is a strength of the profession. One of the interviewees argues that the small number of specialists has a negative impact and allows non-specialists to practice the profession. According to another informant, before 2003, Iraq had only one college for physiotherapy, established in 1995, and one medical technical institute that includes the Department of Physiotherapy, established in 1967, both of which are located in the capital, Baghdad. In contrast, the number has increased in multiple governorates, making it easier for students to engage in Study physiotherapy.

3.2. Weaknesses

3.2.1. The education

According to most participants, physiotherapy education in Iraq is a major weakness. One of the informants points out that physiotherapy departments in technical and private institutions have insufficient curricula. Other informants mentioned the Iraqi Ministry of Higher Education and Scientific Research's lack of physiotherapy teaching staff, the lack of specialized teaching staff in the physiotherapy department within the colleges, and the weakness of college curricula since they are not constantly updated and do not meet international standards. Other informants believe that the lack of developmental courses that would enhance the physical therapist's level will limit his knowledge and keep him updated on current events in the outside world. One of the informants emphasizes the issue of the absence of postgraduate studies for physiotherapy in Iraq, which restricts advancement to higher career levels and makes it more difficult to include specialists in educational institutions.

3.2.2. Practice organization

Most informants identified a lack of professional practice regulation in Iraq as a major weakness. The failure to establish a professional association for physiotherapists in Iraq, which is concerned with organizing and implementing the laws of practice, is cited by most participants as the primary cause of these problems. An informant lists the problems of interfering with other disciplines (e.g., herbal medicine, physical education, physical sciences) in working as a physiotherapist for the same reasons. Other informants believe that the lack of cooperation, the absence of a professional

association, and the lack of a deterrent law allowed many non-specialists to denigrate the profession. Therefore, the Iraqi professional practice system, formed in 1961 at a time when no institute or college of physiotherapy, needs to be reformed.

3.2.3. The societal awareness

According to many informants, society's general lack of awareness about physiotherapy can impede the profession's progress. One of the informants noted the need to educate the community about the role of the physical therapist and the importance of this specialization to an individual's health. Many informants agree that the media has failed to raise public awareness. One of them also states that many working in the health sector are unaware of what a physical therapist does, which poses a significant risk to the profession's growth. According to some informants, many patients are confused regarding the nature and utility of physiotherapy services, as the prevalent belief is that physical therapists are merely massage therapists.

3.2.4. Equipment limitation

The lack of appropriate tools and devices in the physiotherapy and rehabilitation units is one of the most significant weaknesses factors acknowledged by the informants. One of them remarked that there was a major lack of the equipment required in the rehabilitation centers for cerebral palsy, stroke, and sports injuries. Others claim that Iraq suffers from a general limitation of rehabilitation centers for the disabled because there is only one facility in the majority of the cities, and even then, this one facility is not entirely functional. Another informant indicated that the deficit leads patients to resort to private centers, where they are exposed to paying more money for inadequate services due to the large number of intruders in this field and the patient's lack of awareness about which facilities are reliable.

3.3. Opportunities

3.3.1. Association and legal organization

According to all the informants, establishing a physiotherapy association in Iraq is the best and most significant opportunity to develop the physiotherapy profession. Most respondents feel closed off from the evolution of their profession. They cannot connect it to the regional and global

environment to share experiences and skills through annual conferences because there is no formally registered association like in other nations, which prevents them from keeping up with developments.

Through the association, the physiotherapist's scope of practice and role can be publicly known to dispel misconceptions and encourage the best possible use of their services. To stay up with the changes in the profession and satisfy societal needs, some informants emphasized the significance of routinely revising the laws that govern it.

3.3.2. Continuous education

The individuals responsible for administering the profession do not show enough interest in assisting physical therapists in upgrading or acquiring new skills. Administrators need to recognize that by updating the physiotherapist's abilities, high-quality physiotherapy services may be offered to patients. According to some informants, continuing physiotherapy education is required for physiotherapists. Others contend that physical therapists must continue their education to treat patients using research-based practices and do away with old-fashioned, still-practiced therapeutic techniques.

3.3.3. Multidisciplinary collaboration

Many informants have reported conflicts between physical therapists and other medical specialists, particularly with physicians. According to one of the informants, we still view the physician as everything, and there is no effective collaboration between him and the therapists other than making the diagnosis and sending it to the therapist.

Others stated that they began to see increased cooperation with the physician due to some therapists' professional motivations and love of specialization. Many informants believe that striving to develop a cooperation foundation between different disciplines and addressing everything about treatment and what should and should not be done is a great opportunity to move the profession forward.

3.4. Threats

3.4.1. Intruders and quacks

More intruders and quacks are working with other healthcare professionals or certain physiotherapy assistants due to the lack of control over the practice of the physiotherapy profession, which the Association of Physiotherapy and General Legislation represents. The intruders into the profession, particularly the Faculty of Physical Education graduates, are mentioned by all informants as the greatest threat the profession faces. Quacks cannot be prevented since there is no centralized control or deterrent legislation, and those in the profession cannot stop them. One of the informants emphasized the importance of educating people about the necessity to demand professional registration or certification of their physiotherapist and work toward lawfully resolving these issues.

3.4.2. Continuing the current situation

According to some informants, the profession is still at threat if the current circumstances are continued, and the areas of weakness are not handled, which will worsen the profession's position. Some informants emphasized the importance of taking advantage of the opportunities and strengths they represent to advance the profession. As a result, according to one of the informants, they began to move toward establishing the association, demanding that the physical therapist be given his proper role and inspire others to cooperate for the common good.

4. Discussion

This study aimed to learn more about the factors influencing the situation of the physiotherapy profession in Iraq. This research's findings on internal and external factors may be valuable to decision-makers and policymakers in guiding and amplifying this profession. According to Palea (2012), professional associations worldwide promote professional standards and ethical principles to provide a framework for discussion, develop a universally recognized definition, and boost the profession's credibility. They also aim to improve professional competence and support the profession's and practitioners' development [16]. The authors feel the influence of the Physiotherapy Association's absence in Iraq and its impact on the replies of the study participants based on the data gathered through this research. Our demographic information also demonstrated how the participants' lack of access to other courses restricted their development and prevented them from learning about different experiences.

The authors focused on the three major issues extremely important to the physiotherapy

profession in Iraq. By resolving these challenges, we may capture opportunities, strengthen our positions, and minimize weaknesses and threats. SWOT analysis is the best technique to discover strategic ways to capitalize on opportunities and eliminate difficulties to protect the value of this field. Challenges to staying up with the worldwide level of physiotherapy include establishing a National Physiotherapy Association, promoting education, improving physiotherapy awareness, and deterring intruders into the field.

a) Establishing a National Physiotherapy Association

The authors notice that the informants in this study have concentrated on establishing an association concerned with the profession because there is now no professional association for physiotherapy in Iraq. According to Klinger (2000), professional associations are one means for academics and practitioners to continue their continuous learning [17]. Associations are interested in training courses, publications, online statements, and other member services. Associations for physiotherapy adopt a code of conduct to guide practice, communicate peer social rules for conduct, and set performance requirements that associations may expect fairly from physical therapists. Professional associations should sustain prevailing norms and values through routine processes for licensing, training, professional expansion, and behavior and disciplinary monitoring [18].

Professional associations also provide a mechanism for the collective hearing of voices, foster participation in interdisciplinary efforts to shape healthcare policy, and provide an opportunity to influence public opinions and growth (Levitt, 1996) [19]. Certainly, the association will greatly benefit the development of the physiotherapy profession in Iraq due to its many weaknesses, according to what the informants mentioned in this study. Through the association, the scope of practice and the role of the physiotherapist can be made public to break down misconceptions and promote the optimal use of their services. It is necessary to continue working on establishing the association and benefiting from existing development motives, given that the laws regulating the physiotherapy profession in Iraq are not commensurate with the current reality with many problems.

b) Promoting Education

Worldwide, physiotherapists obtain continuing education (i.e., non-formal, non-award-winning programming) through marketing courses run by professional associations and service

education in the workplace. The professional courses offered by the association range from local workshops and seminars to national conferences and the World Federation of Physiotherapy's quadrennial conference, which brings together physiotherapy educators, researchers, and clinicians worldwide to review and update professional knowledge and practice [20]. Continuing education programs are often required to maintain membership in professional societies. Other options for continuing education for physiotherapists include web-based learning, reading professional publications, and participating in case presentations with other physiotherapists (Accessing physiotherapy and medical sources for research purposes, for example, can help increase clinical knowledge). Employers in Iraq are less interested in physiotherapists learning new skills or upgrading their physiotherapy expertise. As a result, continuous physiotherapy education should be required for physiotherapists, and administrators should recognize that by upgrading the physiotherapist's abilities, high-quality physiotherapy services may be provided to clients. Physiotherapy education must be continuous and cost-effective, and physiotherapists must be educated on its importance.

c) Improve Physiotherapy Awareness

Physiotherapy is frequently questioned, but because the field takes a holistic approach, it is hard to define in a few words what a physiotherapist performs. "Physiotherapy is concerned with identifying and maximizing quality of life and movement potential within the spheres of promotion, prevention, treatment/intervention, habilitation, and rehabilitation," according to the World Confederation of Physiotherapy, in addition to emotional, social, psychological, and physical well-being. Physiotherapy involves interaction between the physical therapist, patients/clients, other healthcare professionals, families, caregivers, and communities in a process where movement potential is assessed and goals are agreed upon [21]. Doctors and nurses are well-known in the healthcare sector compared to other medical professions, such as physiotherapy [22]. According to WHO estimates, the number of elderly persons (those aged 65 and above) will rise from 600 million to 2 billion between 2000 and 2050 [23]. Because physiotherapy is important in rehabilitating the aged, global interest in this profession is projected to grow. Although physiotherapy plays a significant role in healthcare, it is still unclear how much of the general population knows it. Lack of knowledge about the extent of this profession among the general population and other healthcare team members may be one likely cause. There is a dearth of comprehensive understanding of physiotherapy, even in nations with extremely high and high human development indexes [24-25].

The profession has a bad reputation for dealing mostly with massage and exercise.

The general public in Iraq, as in many other countries, requires precise, concise, and constantly updated information about the scope of this profession. Public education regarding physiotherapy can employ the Internet, television, and newspapers. Also, physiotherapists must instruct resident physicians through continuing education programs about the numerous specialties of physiotherapy and their wide role in each of them, as well as treatment modalities and evaluation techniques. Medical practitioners have a crucial role in suggesting patients for physiotherapy and having direct contact with the patients. Therefore, knowing how physiotherapy is used to treat various illnesses and problems is crucial.

5. Conclusion

The SWOT analysis of the physiotherapy profession indicates that due mainly to a lack of regulation, the status of the physiotherapy profession in Iraq is not at the required level. Policymakers must work to enhance the profession's strengths and capitalize on opportunities for advancement while also working hard to decrease and eliminate weaknesses and threats.

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