SYSTEMIC REVIEW

The challenges of physiotherapy discipline in the Iranian health system from the perspective of clinical faculties

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ABSTRACT

Purpose: This study aimed to gain insight into physical therapy clinician faculties' perspectives on the perceived challenges of physical therapy in Iranian health care systems.

Method: A qualitative descriptive approach consisting of semi-structured face-to-face or telephone interviews was used. Interviews were audio-recorded, transcribed verbatim, and checked by interviewers to ensure trustworthiness. Data were analyzed using thematic content analysis.

Results: Eight participants were interviewed, representing physiotherapists from diverse demographics and geographical regions in Iran. Our 3 key findings were (1) revision of physical therapists curriculum (2) promotion of physical therapists, authority (3) successful coordination of physical therapist in the Iranian health care system, especially primary health care.

Conclusions: Physical therapy and physical therapists in Iranian health care system faced many challenges ranging from individual to policy levels. The success of physical therapy would be enhanced by a greater understanding of the role of physiotherapy in Iranian health care system by physiotherapists, other health care professionals, and policymakers.

Keywords: Interdisciplinary health team, physical therapy, Iranian health care system

INTRODUCTION

Chronic or noncommunicable diseases is the leading cause of morbidity and mortality in the United States. The burden of chronic disease goes beyond health and the health care system which may influence an individual's wellness, will impose costs on the patient and the health care system.

American Physical Therapy Association's (APTA) vision states that the future of physical therapy field is "transforming society by optimizing movement to improve the human experience"(1)

One important aspect of optimizing movement is the improvement of health and wellness.

Wellness is defined by APTA as "a multidimensional state of being describing the existence of positive health in an individual as exemplified by quality of life and a sense of well-being"(2).

Physical therapists can facilitate wellness by assisting patients in lifestyle changes, so helping patients to improving their health behaviors will be beneficial for society by decreasing healthcare costs. Ultimately, Patient's quality of life will also be positively impacted by minimizing their risk for delivering secondary health services(2).

Hence, Physical therapists are qualified and licensed health professional that specializes to play an instrumental role in all three levels of health care delivery system.

As health care systems attempt to achieve "health for all" considering more complex health needs, the selected strategy to meet goals is primary health care (PHC)(3). PHC has often been described as the "everyday care"(4)

However, PHC requires a multidisciplinary approach, integrating different types of health care professionals (HCPs), such as physicians, nurse practitioners, pharmacists, dieticians, social workers, and rehabilitation professionals(4, 5); but Iranian Physiotherapists work across the health care system including in hospitals, schools, private clinics, home care, long-term care facilities. They do not have a predominant role in primary health care.

Across the world, physiotherapists can assume several roles, in a PHC team: they can work one-on-one with patients with orthopedic and neurological conditions and educate patients about preventing and managing chronic conditions such as diabetes and so on.(6) Besides, physiotherapists in PHC teams also play an important role in group-based programmes focusing preventing and managing chronic conditions and promoting health and wellness within the community.(4)

In Iran, physical therapists work and experience a wide range of challenges in health care system. These challenges are related to community who referring to PT for secondary and tertiary health care.

Although Physical therapists are ideal for promoting and guarantee health and wellness in their patients and clients, they do not have this position in Iran according to physical therapist perception.

Background and Literature Review: American Physical Therapy Association (APTA) stated that Physical therapists could provide valuable contributions to the reform of the health care delivery system. They do this by improving

health care quality and outcomes through the prevention, treatment, and management of disorders and provide health care needs of patients (7).

APTA's goal in reform is "to ensure that the health care system is affordable, results in high-quality care, and eliminates unnecessary legal and regulatory barriers that limit access to services—providing patients with access to high- quality care provided by physical therapists"(7).

Evidence demonstrated the following examples of the roles and activities of physiotherapist in health care system:

- Assessment, diagnosis , treatment including orthopedic and musculoskeletal disorders, neurological conditions such as stroke and Parkinson's, counseling for increased activity for those with obesity, pre-diabetes, diabetes, arthritis and other chronic diseases , counseling for those with chronic cardiorespiratory conditions such as asthma, COPD and deconditioning after illness(7, 8).

Physical therapy clinical education has an interesting history. Like other health care professions, Physical therapist professional education has matured much. It improved from training dependent largely on an apprenticeship model of teaching..(9) No model of clinical education for physiotherapy students is superior to another.

The literature has identified the bold roles of the physical therapist in all levels of the delivery health care system. Even there are many models for incorporating PT into PHC were described in the literature(5, 10). (1) The integration model, in which physiotherapists can be directly employed and provide services in a PHC organization, and (2) the consultative model, in which physiotherapists can be employed and provide services outside the PHC organization (e.g., in a private clinic or outpatient clinic) and act as resources for primary care physicians.

Studies indicated that having strong communication with physicians is beneficial because they are often responsible for referring patients to other health care professionals(8, 10).

We aimed to explore the perspectives of physiotherapists about their challenges in the Iranian health care system.

METHODS

Study design: We used a qualitative descriptive method consisting of semi-structured face-to-face or telephone interviews with physiotherapists to explore their challenges in Iranian health care system.

Participants: Participants included were teachers of physiotherapy who had had experience in an administrative position in rehabilitation school, and who had worked in clinical enterprise 1398 (2020).

Data collection: Semi-structured face-to-face or telephone interviews were conducted by a researcher. The questions in the interview guide were designed to address the research objectives .Written field notes and audio recordings of the interviews were collected with the participants' consent. Each interview took place at a time and location convenient for the participant and lasted 30–45 minutes. Interviews wrote and crossed check with participants.

Research objectives	Interview questions
Learn about a physiotherapist's experience with the challenges of Iranian health care system	"Describe your experience with joining the health care organization from the time you were hired until now, do you have challenges for hiring , for working in health care system."
Identify facilitators of success of PT in health care system	"Reflecting on the time you've been working here so far, what made it easier for you to establish your role as a physiotherapist within this organization?" "What made it more difficult or challenging for you to establish your role as a physiotherapist within this organization?"
Identify strategies used by university to manage the challenges	"What are some of the strategies that you employed to address the barriers/challenges?" "What are some of the strategies that the organization has employed to address the barriers/challenges?"

Data analysis: The researcher transcribed the interviews verbatim; the interviewers verbally explained their field notes to the transcribers. Participant data checked for accuracy by the original interviewer. The data were categorized and coded using Graneheim & Lundman to thematic analysis. As Graneheim & Lundman (2003) explain, qualitative content analytical approaches focus on analyzing the explicit or manifest content of a text as well as interpretations of the 'latent content' of texts -- that which can be interpreted or interpolated from the text but is not explicitly stated in it.

Content analysis may be used in an inductive or deductive way. Which of these is used is determined by the purpose of study. If there is not enough former knowledge about the phenomenon or if this knowledge is fragmented, the inductive approach is recommended. The categories are derived from the data in inductive content analysis. Deductive content analysis is used when the structure of the analysis is operationalized based on previous knowledge, and the purpose of the study is theory testing. An approach based on inductive data moves from the specific to the general, so that particular instances are observed and then combined into a larger whole or general statement. A deductive approach is based on an earlier theory or model, and therefore it moves from the general to the specific. These approaches have similar preparation phases.

An example of how the categories were developed is as follows: The sub-category "recent curriculum" was created from the codes "traditional curriculum," misalignment of physical therapy education and clinical education," and so forth. These codes reflected the similarity of actions taken by the physiotherapy discipline.

After all interviews were coded, the researcher collectively formulated the themes. She discussed her analysis of codes and themes with the co-investigators but determined the content of final results herself. At no time did OPA co-investigators have access to the audio recordings or the transcripts.

RESULTS

Among 11 contacted participants, three potential participants did not respond to book an interview after two follow-up e-mails, so they were excluded from the study. 8 participants were interviewed. Three participants from the

southern cities of the country, one professor from the west of country, and four participants from Tehran. Because Tehran itself has 4 rehabilitation schools. 3 were female and 5 were male.

The main issue discussed by the participants was the challenges they encountered in establishing their role in the health care system in Iran. Three main themes were identified from the data: (1) revision of physical therapists curriculum (2) promotion of physical therapists, authority (3) successful coordination of physical therapist in the Iranian health care system, especially primary health care.

Curriculum revision of physiotherapy to develop an integrated and expert-based curriculum based on scientific evidence

Participants used different ways to express the theme of "Revision of physical therapists curriculum

For example, one professor said:

"Physiotherapy curriculum is full of faults. Students first read physiotherapy in orthopedic diseases, then they read orthopedic diseases, prerequisites, so the needs are all shifted."

Another professor commented on the differences between medicine and physiotherapy in relation to scientific evidence:

"All you have to do is do a little search on Google, just type in the title of your thesis, see how much work you do right in Persian, I say in medicine, now in relation to physiotherapy, we do not have a complete definition in Persian at all"

The other participant said that:

"the medicine curriculum revised to problem based, I think this transformation is so important to the clinical decision of physical therapist too."

Motivate physiotherapists by promoting the position and authority of the field of physiotherapy with proper policy-making and gaining the support of higher authorities

All professors believed that physiotherapy was a field that had lost its power and authority over the years, and each of them referred to this issue in a different way.

For example, a professor stated that:

"You see, we are a field that does not have a definite boundary of some fields, we completely overlap with some at all, now that some of them are medicine, and because our country is ruled by medicine, then there is nothing left to say."

All professors referred to the issue of the power of the Director of the orthopedic Department in the orthopedic group in different expressions.

Another professor stated that:

"Even in the hospital, we are under the supervision of a nursing supervisor which means that our Director of Physiotherapy Department does not even have the strength to decide on the number of students needed in the physiotherapy department."

5 professors believed that physiotherapy activities such as physicians' treatments, should be audited and evaluated. Furthermore, this in itself is a reason to increase the credibility of field and in a way increase the motivation and confidence of clinical teachers; also, they believed in the right policy in this area. For example, one of the professors said:

"As long as our efforts are not seen at all in the hospital, why should we go to see the patient at all?"

All professors believe in the support of the university and the faculty for any action;

Six professors believed that a coordinating interface was needed to coordinate the faculty and the hospital; moreover, they stated this with different statements.

One of the professors said:

"Oh, we are not just professors, everything is up to us for all the arrangements in the hospital.

Effective communication in the health care team at different levels and integration of the clinical field "

Physiotherapists are highly skilled...health professionals who provide safe, quality client-centered service via a commitment to service availability, accessibility, and excellence. The profession is shaped by scientific evidence and the education and competencies of physiotherapists delivering the services. Physiotherapy is grounded in community-based education and believe its services must respond to the changing needs of populations and our health system.

Physiotherapists have the skills and competencies to support individuals and populations across the continuum of care, including health promotion and illness prevention, selfmanagement, treatment, and rehabilitation(11). Physiotherapists can assess and treat individuals across lifespan who have the illness, injury or disability affecting the neuromusculoskeletal, cardiopulmonary, vascular, and neurological systems; they also promote wellness and increased quality of life through education, specialized programming, and a holistic approach to care(10).

Participants noticed physiotherapists' skill sets and individual characteristics that were important for integration and team working.

One of the participants stated that:

"It should be a good thing that we became part of the Ministry of Health. But we do not working in a team with other health professionals"

One participant stated that:

"team work will reduce the costs imposed on the patient and the health system".

DISCUSSION

We identified the participants' experiences of physiotherapists' challenges in the Iranian health care system. To our knowledge, our study is the first to explore challenges from the perspective of the physiotherapists themselves.

The first finding of this research indicates the need for scientific evidence in this field in Iran. The field of physiotherapy in Iran lacks the literature of field, and the texts published in this field are related to clinical experiences and clinical research. Another important issue in this finding is the curriculum of this field in Iran, is not in line with the expert curriculum in the world.

The texts stated that a physiotherapist is classified as an expert therapist who follows the patterns of clinical reasoning and improves the patient's abilities. Achieving this level of expertise requires prerequisites such as a curriculum(12). The revision of physical therapy curriculum is the first key findings of this study. The physiotherapy curriculum should be problem-based. In this situation, the

physiotherapist may be able to make the right clinical decision. Studies represent an expert curriculum. In this case, the lesson layout should be logical and integrated. In other words, the quality of education guarantees treatment.

The second finding of this study is the promotion of the authority of physiotherapists and physiotherapists. Evidence suggests that physiotherapists have a very important role in diagnosing, preventing, and treating patients in various fields. However, according to the participants in this study, physiotherapists in Iran do not have sufficient authority to perform the above roles.

In Iranian teaching hospitals, physiotherapists are not under the supervision of the director of physiotherapy department and are often under the supervision of nurses or specialists in other fields. This in itself is a factor to reduce the authority of the director of physiotherapy group as well as the clinical teachers of this field. Studies state that physiotherapists have a key and very important role in the health system, these specialists can be in contact with the patient in the first encounter, this in itself increases the authority and motivation of physiotherapists in more successful treatments.

The third finding of this study points Physiotherapy is very important in Primary Health Care, but in Iran, this issue is far away, and this lack cannot be ignored by the professors of this field. Moreover, it was raised in a range of statements. All participants in this field agreed to upgrade the level and strength of the field.

Numerous studies have pointed out the importance of integrating physiotherapy into the primary care team, and one of the salient benefits of this measure is the reduction of patient costs and the health system, which has many financial problems. It is clear that the entry of physiotherapists into this team will cause fundamental changes in the position of the field among professionals and the general public(13, 14)

In conclusion, physiotherapy and physiotherapists in the Iranian health system face different challenges at different levels. Further success in this field depends on a better understanding of the role of physiotherapy in the care of different levels of health by physiotherapists, other health professionals and health planners, and policymakers.

The major cause of morbidity and mortality in the world, is non-communicable diseases (NCDs), also called lifestyle or chronic diseases. Physical therapists can treat, reduce risk factors and prevent them by providing patient and client education; prescribing physical activity and exercise; and performing noninvasive, hands-on interventions consistent with a biopsychosocial paradigm(1).Patients and clients cannot understand the important role of the physical therapist in promoting health(7). To encourage patients and clients to view

physical therapists as promoters of health, the physical therapist should take a more active role in educating patients and clients about their role(1, 7). Also policy makers have a bold role in this path.

This study had several potential limitations. One of the limitations of this study is the limitations created by the corona epidemic; including the problem of coordination with professors due to their physical absence and forced closures,

The researcher had to conduct the interview by telephone if the participant did not agree, and consequently, the time limits of the professors could be mentioned.

REFERENCES

1. Vision statement for physical therapy profession and guiding principles to achieve the vision. American Physical Therapy Association Web site. <http://www.apta.org/Vision/>. Updated October6, 2019.
2. Reform ATRotPTiNHC.
3. Declaration of Alma-Ata, International Conference on Primary Health Care, Alma-Ata, September 1978.
4. Government of Saskatchewan. Patient centered cd, team delivered: Aframework for achieving a high performing primary health care system in Saskatchewan Government of Saskatchewan. 2012 May 8.
5. Bath B. Inclusion and integration of physiotherapists in primary health care models in Saskatchewan. Prepared for the Saskatchewan Physiotherapy Association's Government Relations Committee. 2012 Sep.
6. Therapists. SCoP, . 2006 and 2011 Annual Reports.
7. American Physical Therapy Association. The role of the physical therapist in national health care reform. 2011.
8. Alberta coPto. primary health care, a resource guide for physical therapist
9. Gwyer J, Odom C, Gandy J. History of clinical education in physical therapy in the United States. *Journal of Physical Therapy Education*. 2003 Dec 1;17(3):34-43.
10. Cott CA, Mandoda S, Landry MD. Models of integrating physical therapists into family health teams in Ontario, Canada: challenges and opportunities. *Physiotherapy Canada*. 2011 Jul;63(3):265-75.
11. Bezner JR. Promoting health and wellness: implications for physical therapist practice. *Physical Therapy*. 2015 Oct 1;95(10):1433-44.
12. Gwyer J, Odom C, Gandy J. History of clinical education in physical therapy in the United States. *Journal of Physical Therapy Education*. 2003 Dec 1;17(3):34-43.
13. Bath B. Inclusion and integration of physiotherapists in primary health care models in Saskatchewan. Prepared for the Saskatchewan Physiotherapy Association's Government Relations Committee. 2012 Sep.
14. Cott CA, Mandoda S, Landry MD. Models of integrating physical therapists into family health teams in Ontario, Canada: challenges and opportunities. *Physiotherapy Canada*. 2011 Jul;63(3):265-75.