

Perception of Physical Therapist Regarding the Role of Physical Therapy in Emergency Department

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Abstract

Background: The physical therapy profession is expanding day by day. They can practice as a primary contact healthcare provider, independently diagnosing and treating several conditions and disorders through comprehensive knowledge and expertise. Their role is also emerging in the emergency department setting but only hand full of physical therapist are found currently in emergency department.

Objective: The motive of this study is to determine the perception of physical therapist regarding the role of physical therapy in emergency department.

Method: It is a cross sectional study in which physical therapist of various hospitals of Hyderabad, Karachi and Nawabshah were distributed questionnaire extracted from research of on "physical therapists' perception of physiotherapy in emergency department" in 2011. Sampling was convenient. The analysis of data was carried out by using Statistical Package for Social Sciences (SPSS) version 21.

Results: 1172 subjects completed and returned questionnaires. Majority (1116 participants) believed that physical therapist was an invaluable strength to emergency department and 1115 participants believed that merging physical therapist in emergency department is feasible. 1117 participants were confident in assessing and treating patients in emergency department. Factors including commanding radiological imaging (1122 participants), instructing lab test (1106 participants) and advising NSAIDs (1109 participants) also represent the positive perception of physical therapist about their role in emergency department.

Conclusion: Positive perception is present among physical therapist regarding their role in emergency department but majority of them have not assessed or treated patient in emergency department.

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Introduction

Concept of emergency department

Historically the emergency department is defined as "the dedicated area in a public hospital that is organized and administered to provide emergency care to those in the community who perceive the need for or are in the need of acute or urgent care" [1-9]. The basic care is provided in emergency department, 24 hours a day, without any circumscription to the number of people presenting to emergency department and it is authorized and a moral responsibility to envision every patient [10]. For many individuals, emergency department draw the

image of life-or-death situations, in which the patient reaches the hospital in ambulance, rushed on stretcher for an urgent treatment for an extensive trauma [11]. In reality, most of the patients presented in emergency department are of minor conditions or lesser urgency.

Background of emergency department physiotherapy

Emergency department physiotherapy becomes apparent in United Kingdom, with the role subsequently permeating to Australia [12]. Before 1970's, the physiotherapist needs the physician referral to treat the patients, hence their practice was

supervised by their medical colleagues [13]. In 1976, in Australia, this profession starts to practice as primary contact health care providers, independently diagnosing and treating majorly the musculoskeletal conditions including joint sprains or mechanical spinal pain but remained consulted with medical practitioners [13]. Emerging evidences supports the advantages of early interventions of physical therapy in emergency department.

Physical therapy care in emergency department

In vision of American Physical Therapy Association 2020, physical therapist will be working efficiently in team of health who will be culpable for diagnosing and managing the patient disorders [14]. Emergency physiotherapy is considered as a viable option for the treatment of lower urgency conditions including minor fractures and mobility, soft tissue injuries and balance issues [15]. The emergency physiotherapy has been illustrated as a clinician rendering services, that is managing patient with acute and sub-acute musculoskeletal conditions autonomously or together with their medical staff in the emergency department of hospital [16].

The emergency physiotherapy emphasis on two essential roles which are composed of assessment, diagnosis and skills of the clinical reasoning, care-coordination and soft tissue injury specialization [17]. It also circumscribes the evaluation and treatment in different areas like cardio-respiratory, musculoskeletal, vestibular and neurologic conditions on their own. They also contribute to the diagnostic, management and discharge planning information [18]. This serves as an attempt to reduce waiting time for patients and also relieves the clinical loads upon medical staff [19]. The physiotherapists have the ability to screen patients to cognize the need of imaging, which assist in decreasing the exposure of patients to radiations [20]. Additional trainings are received by the physical therapist to advice NSAIDS and analgesic medications in many European countries [21] they are also qualified to order and analyze the X-rays [22]. Injection therapy, drug prescription and blood tests can be prescribed by the therapist as they fall under the umbrella of extended scope of practice. They can also aware the patients about the benefits of graded activities and early exercises by conveying information regarding the injuries of patient. The problem related to pain, decreased mobility especially in geriatrics can also be treated primarily by the emergency department physiotherapist. Providing written instructions for self-management of patients and advising structural support such as crutches can be incorporated in the roles of physiotherapist working in emergency department. Various interventions and techniques particular to discipline such as exercise prescription, strapping and taping, manual therapy and advice for mobility aids can be managed by emergency department physiotherapist by their extensive knowledge and skills.

Recent available literature supports the assimilation of

physiotherapist into current interdisciplinary team of emergency department. The perception and attitude of the therapist will determine whether a physical therapist would be seen commonly in emergency department as a valuable asset for the patients as the view point of therapist is unknown related to this topic. Thus, the principal objective of this current research is to identify the perception of physiotherapist regarding their role in emergency department.

Materials and Methods

Study design

The study is a cross-sectional research survey.

Participant recruitment

Physiotherapist of various hospitals of Hyderabad, Karachi and Nawabshah were selected.

Duration of study

Duration of study was six months.

Sampling technique

Convenient non-probability technique was used.

Sample size

Sample size of 1172 physiotherapists was selected.

Sample selection

Inclusion criteria: working in any department. Both male and female physiotherapists were included.

Exclusion criteria: Technicians were excluded. Physiotherapist presently not working in hospital setting or discontinued job in past two years were excluded.

Data collection method

The data was collected by questionnaire extracted from researched on "physical therapists' perception of physiotherapy in emergency department" in 2011. The questionnaire contains the close ended questions.

Data collection tool

The tool for collecting data was a questionnaire extracted from study. The questionnaire consists of 24 closed ended questions which aim to describe the views of physiotherapist regarding their practice in emergency department. Questions included knowledge of emergency department physical therapy practice, conception and level of education of therapist in emergency department on the advance skills including the prescription of NSAIDS, analyzing radiological imaging and prescribing lab test. Demographic data included education, years of experience, geographic regions and current practice setting will also be collected.

Data analysis method

The data was evaluated by using SPSS software, version 21.

Budget

The amount of budget for this study was around PRs 20000.

Ethical Considerations

The questionnaires were anonymously administered to the registered physiotherapist, with the permission of ethical review committee. Informed consent was taken from the participants before administering the questionnaires. They could refuse to join this study without any explanation of reason. Data was used for the research purpose only and their data will be kept confidential and anonymous.

Result

Demographic Data, Perception regarding integration of PT as part of ED team, Perception regarding integration of PT as part of ED team (Table 1 and Figures 1-3).

Discussion

It was noted that out of 1172 participants, 593 strongly agreed and 523 agreed that the physical therapist would be an invaluable strength to emergency department team and in other research of Ohio, US 92% believes that physiotherapy services would be beneficial in emergency department. These results are also consistent with the positive attitude of physical therapist in

emergency department by other professionals. This signifies that the physical therapist has a clear viewpoint regarding their role in emergency department.

In this study it was found that 510 of respondents strongly agreed and 610 of physiotherapist agreed for merging them as a component of an emergency department team would be feasible in recent healthcare model but as compare to study conducted in United States, only 67.5% of participants found feasibility in integrating physical therapist into emergency department. This indicates that the physiotherapist think that they can work efficiently in emergency department in current healthcare model.

It was observed that 504 respondents strongly agreed and 613 respondents agreed for having confident in evaluating and treating patients in emergency department setting whereas in contrast to other study carried out by 84% of respondents were confident in their potential to assess and treat patient in emergency department. It shows that most of the physical therapist can evaluate and manage patients in emergency department.

This study revealed that 518 participants strongly agreed and 604 of participants show positive response to the statement that the physical therapist should be able to command and interpret radiological imaging whereas 86% of respondents agreed to same statement in research conducted in Ohio. In relation with another study, 54% of physical therapist reported that the physical therapists can order and analyze X-rays. This shows that the physical therapist has knowledge related to radiological imaging required in emergency department.

It was observed that out of 1172, 496 participants strongly agreed and 610 of the physical therapist agreed to the point that physical

Table 1 Demographic data.

Variables	Bachelor's degree (n=473)	Master's degree (n=156)	Doctorate degree (n=543)	Total (n=1172)
Age (mean)	29.7	34.1	28.9	30.9
Gender	Male: 216 Female: 257	Male: 59 Female: 97	Male: 171 Female: 372	446 726
Years of practicing	Less than 1 year: 119 1-5 years: 141 6-10 years: 117 11-15 years: 49 16-20 years: 47	Less than 1 year: 44 1-5 years: 69 6-10 years: 19 11-15 years: 15 16-20 years: 09	Less than 1 year: 107 1-5 years: 227 6-10 years: 103 11-15 years: 61 16-20 years: 45	270 437 239 125 101
Current practice setting	Inpatient care: 102 Inpatient rehabilitation: 129 Outpatient Rehabilitation: 183 Outpatient Orthopedics: 32 Hospice Facility: 01 Acute Care Pediatrics: 07 Outpatient Pediatrics: 16 School System: 00 Emergency Medicine: 03	Inpatient care: 24 Inpatient rehabilitation: 30 Outpatient Rehabilitation: 69 Outpatient Orthopedics: 12 Hospice Facility: 03 Acute Care Pediatrics: 08 Outpatient Pediatrics: 06 School System: 00 Emergency Medicine: 04	Inpatient care: 105 Inpatient rehabilitation: 157 Outpatient Rehabilitation: 221 Outpatient Orthopedics: 30 Hospice Facility: 02 Acute Care Pediatrics: 06 Outpatient Pediatrics: 17 School System: 02 Emergency Medicine: 03	231 316 473 74 6 21 39 2 10
Most of the patients encountered for physiotherapy related to	Cardiopulmonary: 47 Musculoskeletal: 285 Neuromuscular: 141	Cardiopulmonary: 43 Musculoskeletal: 59 Neuromuscular: 54	Cardiopulmonary: 41 Musculoskeletal: 304 Neuromuscular: 198	150 703 319

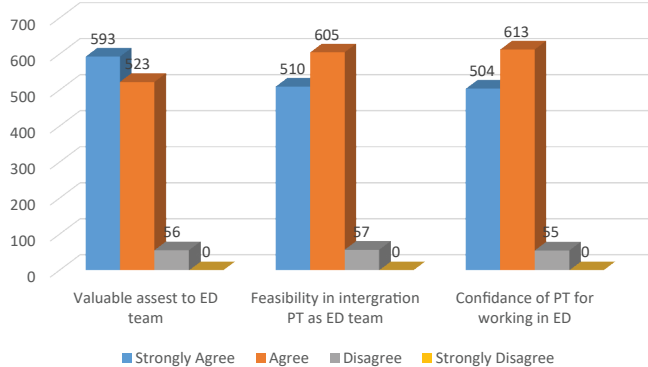


Figure 1 Perception regarding integration of PT as part of ED team.

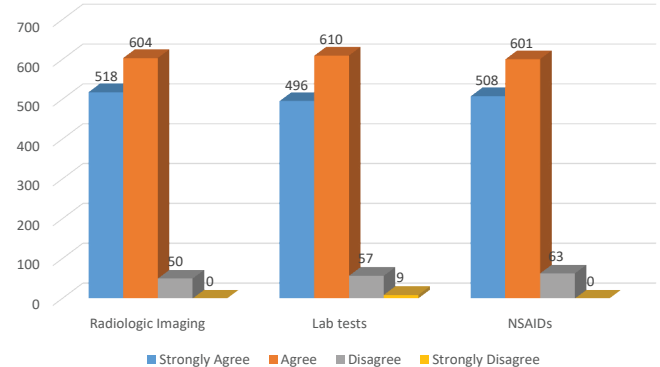


Figure 3 Perception of PT towards ordering and interpreting radiologic images, ordering lab tests and prescribing NSAIDs.

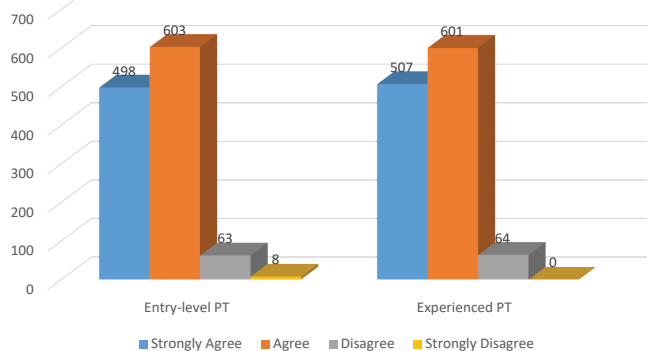


Figure 2 PT competency level; entry-level and experienced (greater than 5 years of practice), to work in ED.

therapist working in emergency department should be capable of instructing lab test on other hand in another study carried out by Marla, 62% of the respondents shows positive attitude towards recommending lab test. It represents that majority of physical therapist gives importance to directing lab test in emergency department.

In this study it was found that 508 strongly agreed and 601 of participants agreed on view the fact that the physical therapist should be able to advise NSAIDs to patients in emergency

department as compare to another study of United States, 53% only of respondents agreed to the above concept. According to a study conducted in Manchester, UK, 65% of patients were advised for NSAIDs and analgesics by the emergency department physical therapist. It emphasis that the physical therapist has a strong believe regarding the prescription of NSAIDs in emergency department.

Conclusion

Physical therapist has positive attitude regarding the role of physical therapist in emergency department. They believe that physical therapist would be an invaluable strength to emergency department. They also showed positive response on feasibility of merging physical therapist as a component of an emergency department team in recent healthcare model and had a level of confidence for evaluating and treating patients in emergency department. But most of them have not got exposure to evaluate and manage patients in emergency department.

Physical therapist shows positive response towards commanding and interpreting radiological imaging, instructing lab test and advising NSAIDs to patients in emergency department are the factors that show the positive viewpoint of the physical therapist role in emergency department.

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