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RESEARCH ARTICLE

AWARENESS OF PHYSIOTHERAPY AMONGST ORTHOPAEDIC SURGEONS IN SOUTH GUJARAT

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ABSTRACT

Background: Physiotherapy is a form of rehabilitation science which helps to make a difference in an individual's ability to live an active and healthy lifestyle. For many physiotherapist working in India, the main source of reference is a orthopaedic. Slowly and steadily physiotherapy did establish a firm base in India with lot of new developments, but still by large, physiotherapy remains a secondary referral profession. Hence this study was conducted to look at the orthopaedic perspective as to how much importance is given to the physiotherapy. **Methods:** A Sample size of 70 subjects were purposely choosen. The study was conducted in a questionnaire based interview format. A willing orthopaedic surgeons were included, whereas interns and unwilling practitioners were exclude. **Results:** From the study, it was learned that there is awareness regarding physiotherapy among orthopaedic surgeons. With regards to the different streams of physiotherapy, the Orthopaedic (100%) and Sports rehabilitation (98%) are the most popular, followed by Neurological field(94%), Cardio respiratory(88%) and 82.86% aware of community based rehabilitation. **Conclusion:** The study revealed that there is full awareness of physiotherapy among orthopaedic surgeons. Musculoskeletal physiotherapy and sports physiotherapy showed good awareness among the study subjects. This was followed by Neuro physiotherapy, Cardio respiratory and Community based rehabilitation.

INTRODUCTION

Apart from Allopathy, India is blessed with different indigenous systems of medicine where each system aims at encouraging good health. They are the Ayurveda, Siddha, Unani, Homeopathy, Yoga and Neuropathy. Our health care depends on all these systems and according to the National Health Bill introduced in 2015, health is a fundamental human right, making the medical management an important necessity for all. To dispatch a suitable and appropriate form of treatment, many of these systems go hand in hand with the physiotherapy care. With increase in the population and life expectancy, musculoskeletal disability is also increases. This emphasizes the need for the development and recognition of physiotherapy in multidisciplinary healthcare structures. For professional growth, it needs support from fellow healthcare practioners, who should be aware of role of physiotherapy professionals. Physiotherapy could be defined as a health care profession concerned with human function and movement and maximizing its potential. It uses physical approaches to promote, maintain and restore physical, psychological and social well-being, by taking account of variations in health status. Physical therapist or physiotherapist, as they are better known in the country, offers services that maintain, repair and expands people's maximum functional ability. It can be beneficial to people at any stage of life, i.e. it can be of use from womb to tomb. Today, the practice of physiotherapy in

developed countries is based on very sound scientific research evidence. Every living man or women either sick or apparently healthy either in hospitals or in their own homes is referred for physiotherapy. The practice of physiotherapy has gone beyond the hospital walls. That is, physiotherapy is now practised extensively in the community; in the urban, rural and remote rural areas; in industries; in sporting teams; in schools for children with disabilities; in rehabilitation centers; in private practice and in acute hospitals. Volumes of books now exist regarding physiotherapy practice. However, in India the situation of the physiotherapy profession is still very challenging. Today, physiotherapy is used in multitude of disease conditions which could be of musculoskeletal origin like joint pain, stiff shoulder, a fracture, any sports related injury or any other complaint. For neurological conditions like stroke, parkinsonism, cerebral palsies, spinal cord traumas and several other ailments, physiotherapy has proved beneficial not only by making patients independent but also by making them live their life with dignity and confidence. In community-based affections, physiotherapists are known to treat disease conditions affecting the geriatric population, antenatal and postnatal care for new mothers, stress incontinence, prolapsed and other concerns related to women's health and fitness among the people. Apart from this, it even helps individuals with cardio respiratory and general surgical conditions (like asthma, tuberculosis, post-surgical cases such as cholecystectomy, rehabilitation of patients with intensive care unit, burns and other conditions). A good awareness of the

entire health care system and not just the role of physiotherapy in healthcare delivery might create an impact by reducing hospital stay, providing prompt recovery and mostly in the rehabilitation journey for an improved lifestyle which is the ultimate goal of any healthcare employee. The stories with happy endings in medicine often begin with, "Early the detection, early the intervention". A orthopaedic aware of physiotherapy can immediately refer to the therapist and help plan an effective management without making the rehabilitation journey taxing. Thus, this article will serve us to know about the interest and acceptance of physiotherapy and will also determine the extent of awareness among the general practitioners.

Need for the study: There are several studies conducted to study the awareness of physiotherapy amongst the general practitioners till date but there are no studies performed to study the awareness of physiotherapy amongst the orthopaedic surgeons. Orthopaedic surgeons are known to be the main source for referral of patients to physiotherapists.

Aim: The aim of the study is to determine whether the orthopaedic surgeons are aware about the physiotherapy.

Objectives:

1. To know the academical knowledge of physiotherapy field among the orthopaedic surgeons.
2. To know orthopaedic surgeon's perception of the role of a physiotherapist in the health care facility.
3. To know the awareness among the orthopaedic surgeons about the interventions used by a physiotherapist.
4. To know idea of orthopaedic surgeon for practising first contact physiotherapy.
5. To know the knowledge of orthopaedic surgeons about various specializations in physiotherapy.

MATERIALS AND METHODS

This is an observational study with a sample size of 70 subjects. Method of sampling used was "purposive sampling". This study was performed on the orthopaedic surgeons practising in South Gujarat Study duration-16 weeks. The study was conducted in a questionnaire based interview format in all tertiary care hospitals and private setups in South Gujarat. In the study, all willing orthopaedic Surgeons M.S.Ortho/M.S.Ortho (DNB) were included whereas interns and unwilling orthopaedic surgeons were excluded. Subjects were briefed about the study. A validated questionnaire were personally given to fulfill the detail. The response thus obtained, was taken up for further analysis.

DATA ANALYSIS AND RESULTS

Descriptive statistics was conducted to evaluate the response obtained from the subjects. The percentage of response for each question was calculated.

DISCUSSION

The intent of the study, to determine the awareness of physiotherapy among orthopaedic surgeons, was based on the belief that insight of doctors on important aspects of health



Figure 1. Orthopaedic surgeon fill up the questionnaire

QUESTIONNAIRE
(Please fill in the appropriate box)
INFORMATION ABOUT THE RESPONDENT
NAME: _____
AGE: _____
GENDER: M/F _____
QUALIFICATION: _____
CLINICAL ADDRESS: Practicing Since ____ years
1. Are you aware about Physiotherapy?
 YES NO
IF YES,
a. How did you know about Physiotherapy?
 During Graduation
 Through Hospitals/ Medical centers
 Mass Media
 Colleagues
 Word of Mouth

2. What according to you is the job of a physiotherapist?

	YES	NO	DON'T KNOW
Manages Neuro rehabilitation			
Manages Pre/Post-Operative Ortho rehabilitation			
Manages ICU patients			
Prescribes Orthosis and Prosthesis			
Manages patients with Burns			
Gives on-field treatment for Sports injuries			
Manages Geriatric rehabilitation			
Manages Women's health			

3. Was physiotherapy introduced to you as a topic during graduation?
 YES NO

4. Do you think there should be a lecture on physiotherapy for medical students?
 YES NO

5. Are you aware of the course duration of B.Pth in India?
 YES NO
If yes, how many years?
____ years.

Figure 2. Form of questionnaire

care should be assessed at regular intervals. According to the analysis of the obtained data, it was observed that of the total interviewed sample of 70 subjects, 100% were aware of physiotherapy, the results of which were similar to the study conducted by Acharya *et al.*, (2011), Shimpi *et al.*, (2014), and Priti Agni (2017), in their survey had a similar finding in which it was noted that the referring medical professional had a good awareness of physiotherapy practices, apart from having some variations in the reference of patients.

Table 1 Frequency distribution of items examined in the questionnaire

TOPIC QUESTION	SUB QUESTION	Frequency distribution (Out of 70 subjects) Positive response
1.Source of information about physiotherapy	a. During Graduation	92.86% (65)
	b. Hospitals & Medical centers	80% (56)
	c. Mass Media	25.71% (18)
	d. Colleagues	51% (36)
	e. World of mouth	31.43% (22)
2.Job of physiotherapist	a. Ortho rehabilitation	100% (70)
	b. Neuro rehabilitation	100% (70)
	c. Intensive care rehabilitation	95.71% (67)
	d. Women's health	85.71% (60)
	e. Geriatric rehabilitation	87.14% (61)
	f. Sports injuries	100% (70)
	g. Burns	92.86% (65)
	h. Prescribing orthosis & prosthesis	100% (70)
3.Knowledge of various specializations	a. Neuro sciences	94% (66)
	b. Cardio respiratory	88.57% (62)
	c. Community-based rehabilitation	82.86% (58)
	d. Musculoskeletal rehabilitation	100% (70)
	e. Sports	98.57% (69)
4.Awareness of course duration	a. Bachelor's	100% (70)
	b. Masters	100% (70)
	c. PhD	92.86% (65)
5.Interventions used by a physiotherapist:according to orthopaedic surgeons	a. Exercises	100% (70)
	b. Massage	100% (70)
	c. Electrical Modalities	100% (70)
	d. Mobilization	100% (70)
	e. Heat therapy	100% (70)
	f. Cryotherapy	100% (70)
	g. Drugs	4.29% (3)
	h. Pressure points	54.29% (38)
6.Knowledge of physiotherapy centers in locality		100% (70)
7.Role of physiotherapy in health sector	a.Very important	11.43% (8)
	b.Important	88.57% (62)
	c.Not important	
	d.Don't know	
	e.No response	
8.Need for physiotherapy centers in hospitals		100% (70)
9.Need for lectures on physiotherapy		95.71% (67)
10.Should patients visit physiotherapy centers on references		91.43 (64)
11.Are patients referred for physiotherapy by the subjects?		100% (70)
12.Cases referred for physiotherapy	a.Orthopaedic	100% (70)
	b.Neurological	32.86% (23)
	c.Cardio respiratory	18.57% (13)
	d.Geriatrics	21.43% (15)
	e.Fitness	50% (35)
	f.Paediatrics	21.43% (15)
	g.Women's health	11.43% (8)
	h.Sports injury	81.43% (57)

Similarly, our study subjects' depth of physiotherapy remains an area to be addressed and shall be discussed separately. Through the response obtained, it was noted that 92.86% learned about the physiotherapy field while pursuing their graduation. This could be because many subjects had studied from institutions which offered multiple courses including physiotherapy. Followed by this, information gathered next was through hospitals and medical centers (80%), colleagues (51%), word of mouth (31.43%) and the least was to mass media(25.71%). Since most of the general public depends on mass media for acquiring information on health and illness and our study also sheds light on the least form of informational source (i.e. mass media), it makes us realize that to have a

better understanding of a physiotherapist job and to enlighten the masses, there is an acute need to encourage awareness through broadcasting, newspapers brochures among other forms of media. Regarding the field's academical knowledge among the subjects, the study held us to know that 100% were aware of the course duration of bachelor's degree and master's degree in physiotherapy. We found that 92.86% were aware of Ph.D. program offered in physiotherapy which shows a great awareness in orthopaedic surgeons. Additionally, when the subjects were asked to opine on what their perception of the role of a physiotherapist was in the health care facility, it was observed that majority(100%) felt that the job of a therapist is to treat pre/post operative orthopaedic patients.

In developed countries physiotherapy has a crucial part in the assessment and rehabilitation of patients in the ICUs, to manage cardio respiratory, neurological and musculoskeletal complications. According to our study, physiotherapist are popular in giving treatment to intensive care unit patients, 95.71% agree to therapist treating patients in intensive care unit. In our study we concluded that there is 100% orthopaedic surgeons agreed that physiotherapist plays a role in treating sports related injuries. Recently sports awareness is increase. Many people choose sports as career. So chances of sports injuries are increasing day by day. Previously sports injuries were treated only by orthopaedics but now physiotherapist play very important role to treat sports injuries and decrease the incidence of surgery. Among the others comparatively less known roles of physiotherapist, knowledge of therapist treating women's health issues like urinary incontinence or prolapsed is less known since 85.71% orthopaedic surgeons stated that to be one of the many job descriptions of physiotherapist. Similarly 92.86% subjects were familiar with the job of physiotherapist in treating patients with burns. The study revealed that 100% orthopaedic surgeons support the idea of therapist prescribing prosthesis and orthosis. A knowledgeable orthopaedic surgeons can give timely references and reduce the extent of damage, time and finances utilize for the health care, so that references can be given to their field of expertise, subjects were asked to comment on the fields of work they were aware of and it can be stated that majority are aware about musculoskeletal rehabilitation (100%) and sports rehabilitation (98.57%). Like other braches neuro sciences (94%), cardio respiratory (88.57%) and community based rehabilitation (82.86%) awareness found. Comparatively there is less awareness in community based rehabilitation. This puts forward the need for physiotherapist to take initiative to increase awareness in community based rehabilitation by conducting health camps for patients, seminars for orthopaedic surgeons and practical sessions. My project study also intended to know about the awareness in the interventions used by a physiotherapist. It was noted that orthopaedic surgeons were unaware of the fact that for treatment protocols iontophoresis, drugs 95.71% were used by the therapist. However 100% orthopaedic surgeons were aware about interventions used by the physiotherapist like exercises, massage, electrical modalities, mobilisation and application of heat therapy and cryotherapy. Though 54.29% orthopaedic surgeons aware about pressure point used by a physiotherapist.

Although physiotherapy as a topic was introduced to orthopaedic surgeons (92.86%) during their graduation and 95.71% were of the opinion that physiotherapy lecture should be conducted for medical students. In an another study done by Al-Eisa *et al.* (2016) it was reported that the concept and approach of administrating physiotherapy among the medical students are low as they head received little formal education about the field and this suggest that the future of our health system needs more information about the physiotherapy services. If early on in their academics, the young minds are given an idea about physiotherapy, in appropriate beliefs about physiotherapy career can be avoided. To know their personal opinion of the field, 65.71% were willing to encourage their family friends to become a physiotherapist. Whereas, 34.29% choose otherwise by mainly stating less pay scale, little knowledge among the patients, dependency on other doctors for referring patients and considering it as a female dominated profession as the reasons for not favouring the noble profession. Additionally subjects were asked to comment on

the perception of the role of a physiotherapist in the health sector, 11.43% graded physiotherapy as very important and 88.57% graded physiotherapy as important profession. The majority of subjects (100%) consider physiotherapy centers as a must in all hospitals and 100% subjects were aware about physiotherapy centers in their locality. Nevertheless, all subjects gave a common opinion that physiotherapist contribute to the well being of individuals. The idea of practicing first contact physiotherapy is only 8.57% subjects believe that direct practice must be allowed which was less than the study conducted on the general practitioners (36%) done by Priti Agni (2017). It was still debatable. Many orthopaedic surgeons still believe that physiotherapy consultation should be given only by reference. As to back this idea 100% of subjects claim that they recommend patients for physiotherapy, which is more significant than the clinical doctors of Nepal, where the referral rate was found to be 63% as study conducted by Acharya *et al.* (2011). In my study, the cases referred for orthopaedic rehabilitation (100%) was the highest. The results obtained is similar to studies conducted by Priti Agni (2017) and Acharya *et al.* (2011). The other cases referred for physiotherapy were sports injury (81.43%), fitness (50%), neurological (32.86%), geriatrics (21.43%), paediatrics (21.43%), cardio respiratory (18.57%) and women's health (11.43%). Based on the results we can conclude that poor referral system points towards knowledge deficit in evaluative procedures and modalities. Even with having an awareness of physiotherapy among the subjects, there is not just a contradiction, but also an inadequacy of referral systems. The study suggests that mutual understanding is established between the orthopaedic surgeons and physiotherapists so that timely references are given with effective marketing strategies. Regular survey should be done to know the extent of physiotherapy skill among the health care professions and communities so that the goal of maximum awareness is attained.

Limitation of the study: The limitation of this study was that it was conducted in a constrained geographical area and the experience of the subjects was not co-related to the awareness in the study subjects.

Conclusion

The study revealed that there is full awareness about physiotherapy among orthopaedic surgeons. Musculoskeletal and sports physiotherapy are popular among the subjects under study. Whereas community based rehabilitation, cardio respiratory and women's health were least known. Also it can be noted that there is less accuracy about the job of a physiotherapist especially in treating patients with burns. Subjects believe that prescribing exercise, massage, electrical modalities, mobilization and application of heat therapy and cryotherapy are the intervention used by a therapist and showed reduced awareness for the use of drugs. Even though there is a division of opinion, majority of orthopaedic surgeons still believe that patient should visit physiotherapy centers only on references.

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