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Research Article

### THE ROLE OF PHYSIOTHERAPY IN ORTHOPEDIC CLINICAL PRACTICE: A CROSS SECTIONAL SURVEY FROM ORTHOPEDIC SURGEONS OF HYDERABAD, SINDH, PAKISTAN.

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**Abstract:**

*Orthopedic doctors regard physical therapist as the second hand of treatment because physiotherapy is proving effectiveness in conservative and postsurgical rehabilitation especially in musculoskeletal conditions. Orthopedic Surgeons treat patient according to their recommended guide lines and procedures but often patients neglect to follow the surgeon's advises to mobilize the structure so resulting into the development of strictures. Such cases strongly need management through physiotherapy to overcome the problem so the patients may attain their normal life of routine activities. The current work was conducted to assess the role of physiotherapy in orthopedic practice and the co-ordination and relationship between the two inter-related professions. We surveyed 100 Doctors (Consultants, PG Trainees and medical officers working orthopedic units) from LUMHS Hospital 61 (61%) while 9(9%) from Isra University Hospital and 30(30%) from the Bone Care Private set up Hospital, with a male majority 60% and 40% of females. The response was found 100% in favor of physiotherapy to be used in variety of pre and post-surgical conditions.*

**Conclusion:** Majority of Orthopedic Surgeons agreed on the role of physiotherapy in many orthopedic conservative disorders as well as postsurgical conditions.

**Key Words:** Physiotherapy, Orthopedics, Post-Surgical, Strictures

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**INTRODUCTION:**

The ultimate goal of Physical therapy is maintaining balance and restoration of peak physical functions and improves quality of life through non-invasive techniques by reducing the pain, accelerating the healing process, restoring the range of movements at joints, preventing the fibrosis and contractures formation and disuse atrophy along with musculoskeletal insults[1]. Physical activity on regular basis is proved to benefit various illnesses including musculoskeletal disorders, obesity and cardiovascular diseases[2] An estimation shows more than 60% people are physically inactive worldwide while the WHO recommends at least 2.5 hours activity per week for adults[3,4]. Surgeons usually prescribe therapeutic exercises after surgery to achieve maximum functional benefits [5]. Physiotherapists are providing best therapeutic exercises as this profession was developed and improvement in functional performance as well as disability can clearly be observed as an outcome [6]. There were 75,000 total knee replacements surgeries performed England and Wales in 2013 out of which 97% were due osteoarthritis while 719000 replacement procedures were performed in USA in year 2010 which needs exercise and physiotherapy as a rehabilitation support [7]. Patients with Rheumatoid Arthritis maintaining regular physiotherapy exercises can better manage their symptoms and functional compromise and avoid health dependence [8]. The profession of physiotherapy is growing in Pakistan at a greatest pace with many new colleges and universities awarding DPT (Doctor of Physiotherapy)

bachelor degrees and post graduate degrees. We managed this work to fill the gaps between the orthopedic surgeons and physiotherapists as their work is much interrelated with clearer boundaries in between. Hope this work will bridge the two professions leading to better a patient outcome that is the ultimate goal of all health care providers.

**METHODOLOGY:**

This cross-sectional work was performed in three big orthopedic services providing hospitals of Hyderabad, Liaquat University Hospital, Isra University Hospital and bone care hospital. Doctors related to orthopedic care with a count of 100 were interviewed on a self-designed proforma using non-probability technique of sampling. Orthopedic surgeons, other male and female doctors working in orthopedic wards, orthopedics trainee were included while non-willing doctors, other specialties, house officers and nursing staff were excluded. Statistical Package for Social Sciences (SPSS) Version 21 was used for data processing. Descriptive statistics frequencies and percentages were used.

**RESULTS:**

Doctors from LUMHS Hospital constituted the most of study participants 61% (61) followed by Bone Care Hospital 30% (30) and 9%(9) of participants were from Isra University Hospital Fig 1. Males were 60% (60) and females were 40%(40). Various levels about the role of physiotherapy in orthopedic care are summarized in table 1 and 2.

**Table1. Opinions of Orthopedic surgeons about physiotherapists to be fit for orthopedic practice**

S. No	Parameters	Strongly agree	Agree	Strongly Disagree	Uncertain
1.	Physiotherapist Availability	31	46	06	17
2.	Effective Practice	43	45	01	11
3.	Sound in Clinical Knowledge	41	44	06	09
4.	Scientifically Well Oriented	39	47	02	12
5.	High Level of patient care	47	37	08	08

**Table2. Attitude of orthopedic surgeons for Physiotherapist**

S. No	Parameters	Yes	No
1.	Friendly Relationship With Physiotherapist	98	02
2.	Physiotherapist as a team member	97	03
3.	Need of Physiotherapist in Practice	100	00

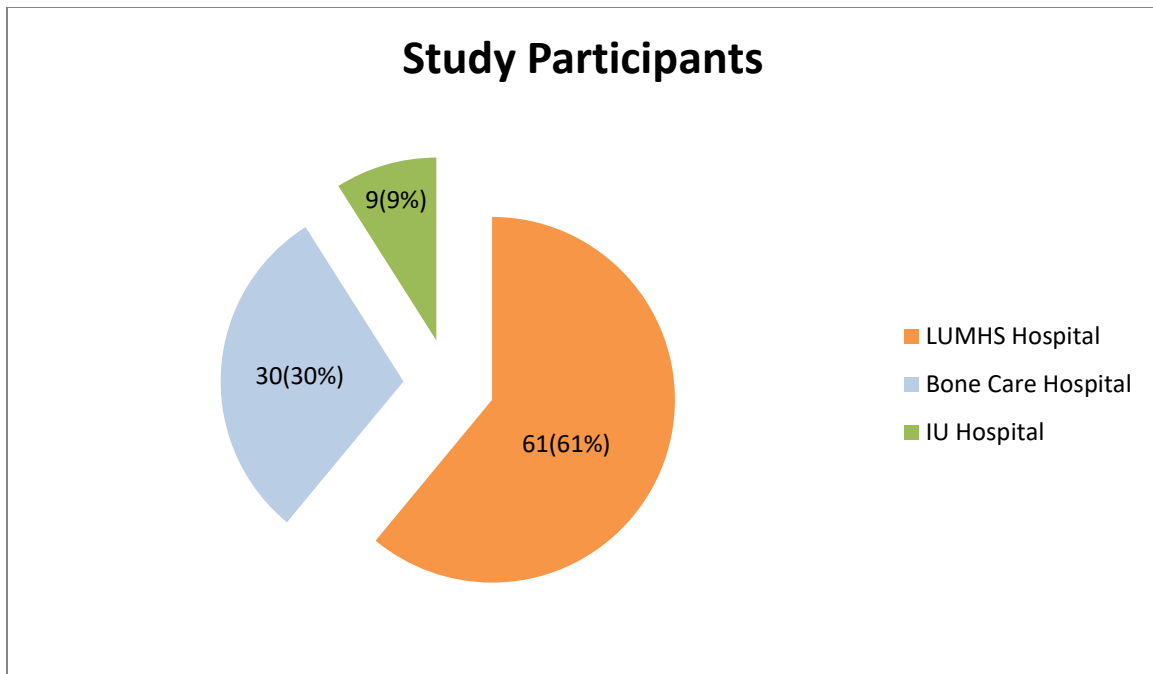


Figure 1. Pie chart of Study participants

#### DISCUSSION:

Physical therapy field is not as much popular in Pakistani culture so not given the due importance which it gained in the developed countries. It is observed in last 10 years the trend is getting changed and with the opening of various institutes for physiotherapy and rehabilitation sciences in Sindh. Further an integrated health services is being developed where the multi-dimensional approach to the disease has become a well understood fact, and the role of physiotherapy cannot be denied any more. But is also true and factual observation that few physiotherapists do misguide the illiterate patients and retain them under their treatment which further worsens the condition due to the lack of diagnostic medical knowledge and the disease process. A systems needs to be developed where the proper referral should be made to the required patients both by the general practitioners and the health care specialist from medical, surgical and allied disciplines. Physical therapy has been given sanctioned seats in public as well as private larger health care facilities. Rahul Krishna Kutty et al (2013) in his research which was mainly focused on Knowledge, attitude, practice and associated factors of physiotherapy among medical doctors in Tigre, Northern Ethiopia results showed that 221 medical doctors involved in this study, 50% response was negative, 67% response was positive as they had good knowledge of physical therapy, Specialist had more knowledge of physical therapy as compared to General practitioners. Physical therapy was

recommended to get included in syllabus so that medical doctors can acquire sufficient knowledge and skills of the concerned options [9]. Napier C et al (2013) in his research on Physiotherapy triage service for orthopedic surgery an effective triage strategy for reducing undue weight on orthopedic surgeons and waiting times for appointment for patients, there was substantial agreement among the two, the surgeon and the physiotherapist about the decision of the surgical management. Patients were satisfied and very satisfied as reported with the level of care provided by the physiotherapist. The SCR (surgical conversion rate) for patients that were referred by the physiotherapist to the surgeon stood 91% as compared to 22% for patients referred through a general or emergency physician. Majority of patients (almost three-fourths) that primary-care physicians referred to orthopedic surgeons actually did not need to visit and an expert orthopaedic physiotherapist would have been timely and conservatively managed saving surgeon's time, patients wait and unnecessary referrals [10]. Similar sort of the situation is seen in pediatric referrals to Paediatric orthopaedic surgeons where 1 out of every 8 a MSK (musculoskeletal) disorder but 50% of referred patients are declared normal variants wasting the time of patient and impeding the access of urgent surgical cases to the surgeon. APP (advanced practice physiotherapists) are introduced by the Adult MSK medicine to successfully manage the non-surgical patients with proven benefits for patients as well as services [11].

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