

REFERRAL PATTERN AND SATISFACTION LEVEL OF PATIENTS WITH MUSCULOSKELETAL DISORDERS TOWARDS PHYSIOTHERAPY

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ABSTRACT

Objective: The objective of this study was to determine referral pattern and satisfaction level of patients with musculoskeletal disorders towards physiotherapy.

Methods: Cross sectional study with a consecutive series of participants was conducted in Peshawar, Pakistan in 2017. Data was collected from 300 participants who visited physiotherapy departments with musculoskeletal complaints. A Structured Questionnaire comprised of questions related to demographic information, referral mode and satisfaction with physiotherapy was used for data collection.

Results: The Percentage of participants that were referred to physiotherapy for the treatment was 64% while 36% of them availed direct access to physical therapy. Most of participants i.e. 50% were referred by Orthopedics. Most of the musculoskeletal disorder cases were back pain i.e. 38% followed by shoulder pain i.e. 19.7%. Regarding satisfaction level 83% of the participants were satisfied from physiotherapy.

Conclusion: This study concluded that most of the participants are referred for physiotherapy instead of direct access. Orthopedics and general physicians played an important role in referral of the patients to physical therapy. This study showed that there was great cooperation of specialist in referral and sufficient awareness of physical therapy among participants which led to high level of satisfaction.

Key Words: Musculoskeletal disorders, Physiotherapy, Referral, Satisfaction level

This article may be cited as: Fatimah I, Khattak S, Sultan M, Ibrahim M, Noor A. Referral pattern and satisfaction level of patients with musculoskeletal disorders towards physiotherapy. *Ann Allied Health Sci.* 2019; 5(1): 10-13

INTRODUCTION

Physiotherapists and their professional organizations are striving to attain professional autonomy.¹ According to World Confederation for Physical Therapy (WCPT), physical therapists are working as contact practitioners from mid of 1990.¹ However, majority of patients visiting to physiotherapy clinics are refereed by other health care professional. Physical therapists are the leading care providers for the patients with musculoskeletal disorders (MSDs) such as back, shoulder, knee pain etc.²

A recent statistical report showed that movement related disorders are the most common conditions accounting 2.06 million to 1.08 million visits seen at hospitals outpatient departments.³ The

survey of health information reported the prevalence of sedentary life style and physical inactivity over 60% of total population.³ Physical inactivity burdens the national health care system.³ In 2004 to 2009 the Globally reported percentage of patients treated by a physical therapist increased from 17% to 21%.⁴ High proportion of self-referrers was reported in the year 2006 to 2010 to be 28.9% to 46.2% respectively.⁴ In 2006 in Netherland, 28% patients were reported to come for physical therapy through self-access, referred by GP were 90% and by medical doctor 10%.⁵ In state of Ohio direct access was 6% to 10%.⁶ While a study conducted in Pakistan reported that 61% of the participants were referred by their physicians while rest used direct access to Physiotherapists (PT).⁷ Voluminous studies reported high level of

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artery disease.⁹⁻¹³ Furthermore, a change in mean platelet volume can potentially contribute significantly to the pathogenesis of several diseases such as myocardial ischemia, stroke, coronary atherosclerosis, diabetes mellitus, hypertension, obesity and endometriosis.¹³⁻¹⁹

satisfaction among participants while receiving physical therapy intervention.^{8,9}

To the authors knowledge limited studies are available regarding referral pattern and satisfaction of patients with physical therapy interventions. Physiotherapy is an emerging field in Pakistan but no specific research studies are conducted that reports access to physical therapy. Therefore, there was a dire need to conduct this study in order to determine the frequency of direct access and referred musculoskeletal disorder patients to physical therapy department and their satisfaction level from physical therapy interventions and from the physiotherapist in health care centers.

METHODS

This cross-sectional study was conducted in Peshawar, Pakistan from May 2017 to November 2017. Data was collected from 300 consecutive participants who visited physiotherapy departments of three different tertiary care hospitals of Peshawar with musculoskeletal complaints. A Structured Questionnaire comprised of questions related to demographic information, referral mode and satisfaction with physiotherapy was used for data collection.

A total of 500 questionnaires along with consent forms were distributed among the participants. About 450 filled questionnaires were returned by the participants. Out of 450 only 300 were completely filled by the participants. Questionnaires consisted of two portions, 1st portion contained demographic data while 2nd portion contained basic questions about musculoskeletal disorders, referral pattern to physiotherapy and their satisfaction level.

The inclusion criteria included patient's age range 20 to 60 years with musculoskeletal disorders (MSDs). The exclusion criteria of this study was acute traumatic, children, congenital problem and patients other than musculoskeletal disorders. Data was analyzed through SPSS version 23. Descriptive statistics were expressed as frequency,

percentage, mean and standard deviation. All results were displayed through tables, pie chart, bar charts and cross tabulation were done for co-relating two variables.

RESULTS

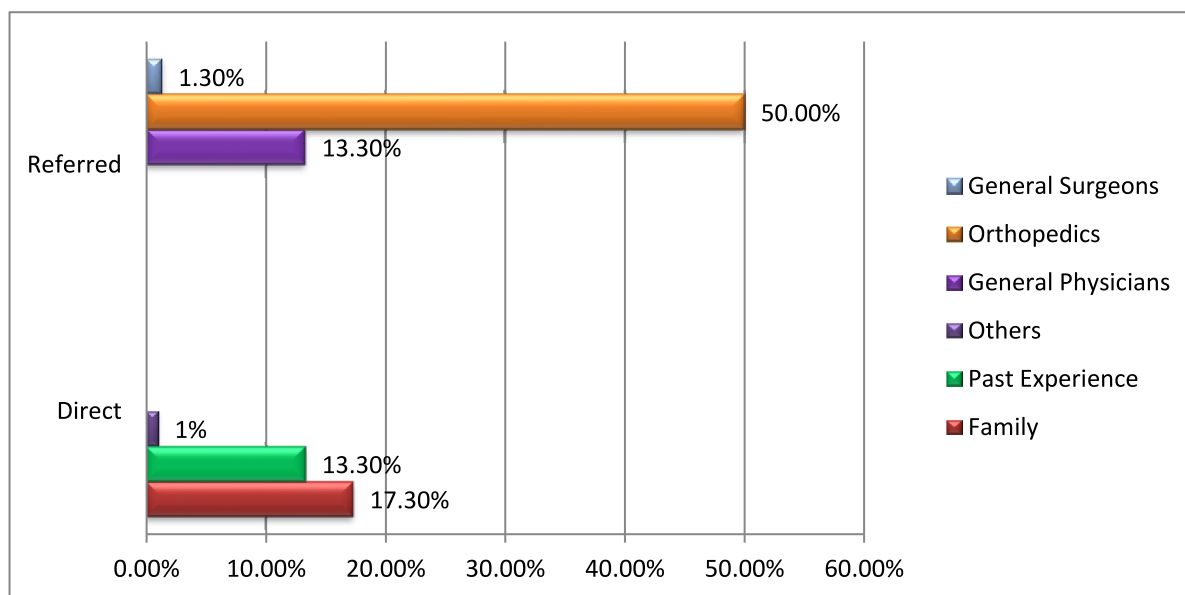
The mean age of participants was 37.28±12.43. There were 78 (24%) males and 222 (76%) females. This study reported that most of the participants were referred i.e. 192 (64%) as compared to direct access i.e. 108 (36%). Regarding age, most of the participants i.e. 100 (33.33%) that presented with musculoskeletal disorders were in the 3rd decade (30-39 y) of their life followed by young adults (20-29 y) n=77 (25.6%). Most common MSDs reported in this study are back pain followed by shoulder, knee and neck pain respectively (Table 1).

Most of the MSD patients were referred by orthopedic (50%) in contrast to general physicians (13.3%) and general surgeons (1.3%). This study also showed that participants that came to physical therapy services directly were because of their past experience (13.3%). Secondly participants availed physiotherapy services through their family members (17.3%) (Figure 1).

This study also reported the satisfaction level of participants from physiotherapy intervention/services and treating physiotherapist. Most of the participants reported their satisfaction from physiotherapy services. On the other hand, some of the participants were not satisfied from treating physiotherapist (Figure 2).

Table 1: Chief Complaint of Participants vs Referral Pattern

Come for Physical therapy	Neck Pain	Back Pain	Shoulder Pain	Knee Pain	Others	Total
Direct	8(2.6%)	43(14.3%)	21 (7%)	19(6.3%)	17 (5.6 %)	108(36%)
Referred	28(9.3%)	71(23.6%)	38(12.6%)	30 (10%)	25(8.33%)	192(64%)
Total	36(12%)	114(38%)	59(19.6%)	40(13.3%)	42 (14 %)	300(100%)



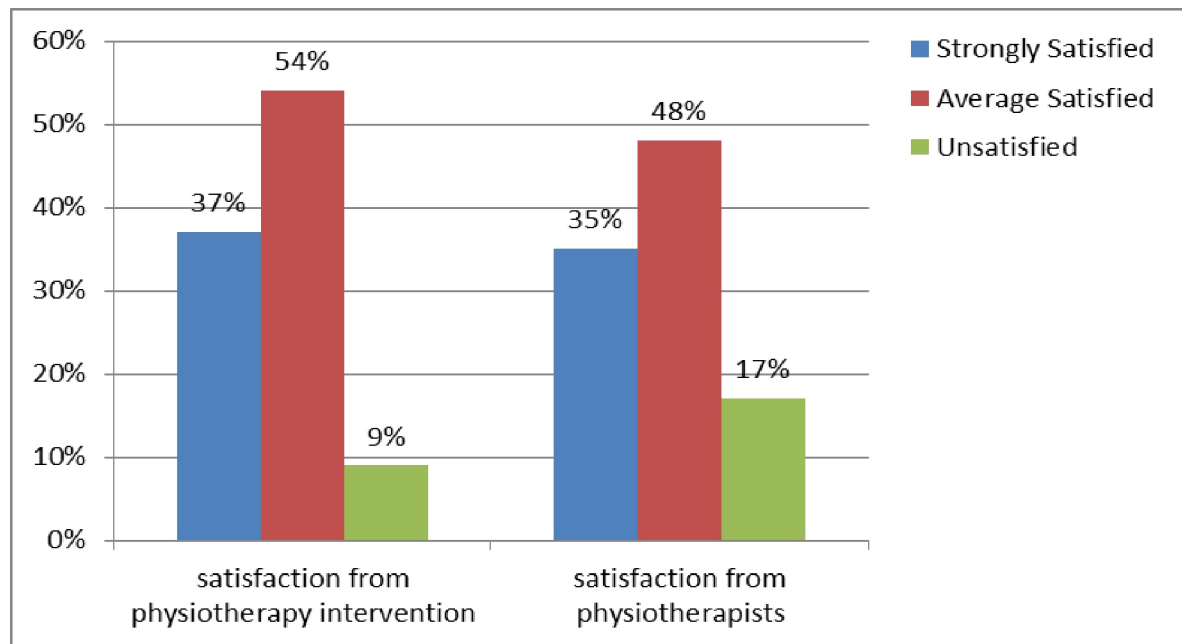


Figure 2: Showing Satisfactory Level of Participants from Intervention and Physiotherapist

DISCUSSION

It is generally accepted that physical therapy is an effective treatment for musculoskeletal conditions. The primary aim of this study was to figure out the frequency of direct and referred cases of physical therapy in hospital. This study included participants having MSD's either direct or referred cases to PT departments of hospitals. Physical therapy plays a key role in reduction of absence from work due to MSDs through timely assessment and intervention.¹

In the current study most of the patients were referred to physiotherapy indirectly through other specialties whereas, only some of the patients availed physiotherapy services through direct access. This was in accordance with other studies reported in the literature. One of the study reported that less than 40 % of the patient's access physiotherapy through direct access whereas, more than 60% of patients through indirect access.⁶Jean and his fellow also reported the same result in their research i.e. Direct access 41.6%and referred participants 58.34%.¹⁰

Present study reported that most of the participants were referred (>60%) for treatment to physical therapy department by other health care practitioners. A study

conducted by Bury et al (2013) also reported the same results that is most of the survey participants were referred (67%) to physical therapy as compared to the patients that came for physical therapy services by their own.¹

According to the results of the study conducted in 2006, approximately 1/3rd(28%) of the patients, seen by a physical therapist came through direct access.^{5,11} This was in similarity to this study i.e. approximately 1/3rdof the participants came for physical therapy through direct access.

In this study it was reported that most of the participants were referred (64%) instead of direct access (36%). This was similar to the study held in north central state of US (Wisconsin) i.e. 42% of participant came to PT directly while 58% were referred by other medical specialists.¹²

Present study reported higher satisfaction level of patients/participants that availed physiotherapy services through direct access versus physician referral. This was in accordance with the study in which similar results were found.¹³

In this study mostly younger patients were found to use self-referral which was similar to the findings of three year ago research held in Netherlands.^{4,14}As similar

to the current study the physical therapy has been growing for decades and since 2006 it has gain popularity especially among old age people.⁴ Younger participants were reported as a self-referral to physiotherapy services.⁵

According to this study if we rank the chief complain of patients on the basis of anatomical regions, the most commonly effected area were the back (38%) followed by shoulder (19.7%), knee (16.3%) and neck (12%) respectively. This observation was similar to the previous study of K Addley in 2010 i.e. most commonly effected anatomical regions were the back (56%), shoulder (14%) and neck (10%).¹⁵Present study reported that most common MSD was back pain (38%) while similar result was reported in previous literatures i.e. back pain (50%) in Saudi Arabia, back pain (47%), in Canada i.e. back pain (59%).¹⁶⁻¹⁸

In 19th century research showed that most of the patients approximately 71.5% indicated that they would seek physical therapy intervention directly if they would experience any musculoskeletal problem again in future and this coincide to the outcome of the current study that patients came for physical therapy directly due to past experience.¹⁹

The current study observed that more than 60 percent were referral patients. Partridge et al. observed great increase in the number of physiotherapy services in the past five years offering direct access to general practitioners. The people with acute problems get more benefit by direct access to physiotherapy as compared to indirect access. It was also reported that more than 60% participants approach directly to physical therapy with acute cases.²⁰

CONCLUSION

This study concluded that most of the participants are referred to physiotherapy instead of direct access. However, study reported a remarkable increase in direct access to physical therapy as compared to the past. Orthopedics and general physicians referred most of the patients to physical therapy. Most of participants were satisfied from physiotherapy services while few of them reported their dissatisfaction on the part of the therapist on duty. As in public sectors mostly one therapist deals with a number of patients so quality of treatment may compromise which resulted in dissatisfaction of the patients.

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