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PERCEPTION AND ACCEPTANCE OF TELEREHABILITATION AMONG PATIENTS WITH MUSCULOSKELETAL PAIN AT A TERTIARY HOSPITAL IN BANGALORE, KARNATAKA

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Abstract :
Keywords:- Telerehabilitation, Musculoskeletal pain, Perception, Acceptance

AIM: To investigate the Perception and Acceptance of Telerehabilitation among patients with musculoskeletal pain at a Tertiary Hospital.

METHOD: In this descriptive study, with a sample size of 200, a set of question were prepared by the investigators and data is collected using structured interview method where a set of closed ended questions were asked to the patients.

RESULT: Out of 200 participants, 39.5% participants believed that telerehabilitation for musculoskeletal pain might be helpful. Although majority of patients didn`t have much idea about telerehabilitation, 81.5% patients were willing and interested to use telerehabilitation for musculoskeletal pain.

CONCLUSION: The conclusion of this survey was based on the responses received from the participants with musculoskeletal pain who came to the out patient department. Even though, majority of patients didn`t have much idea about telerehabilitation most of participants were interested to take telerehabilitation advice in future for pain management.

INTRODUCTION:-

Musculoskeletal pain is defined as an acute or chronic pain that affects bones, muscles, ligaments, tendons, and even nerves and the pain associated with musculoskeletal disorder is a common medical and socioeconomic problem worldwide[1,2]. Many adults with musculoskeletal disorders go undiagnosed, either as a result of inadequate knowledge of the conditions that contribute to them or as a result of inadequate possibilities for screening and treatment[3]. Telerehabilitation is the delivery of rehabilitation services at a distance using telecommunication technology to deliver health[4] .Physiotherapists continued to provide rehabilitation treatments to their patients throughout the COVID-19 pandemic while taking the necessary heath precautions and using telerehabilitation. Numerous studies also revealed that physiotherapists had favourable opinions on and were willing to use telerehabilitation[5,6]. Although it will never be able to fully replace an in-person evaluation, a virtual physical examination can aid in developing a functional diagnosis[7]. Several studies have shown that telerehabilitation-based consultation for musculoskeletal pain is feasible in terms of validity and reliability in the assessment of peripheral joints and the spine, with various clinical outcomes of pain, swelling, muscle strength, balance, gait, active and passive range of motion[8]. Musculoskeletal pain can be managed in telerehabilitation through patient tailored education on information about their specific condition, how to manage pain and the effect of activity on pain and disability, thermotherapy, advice on positioning, postural correction, modified exercises e.g. strengthening, stretching, aerobic training in supervision, instructional videos on how to perform exercises, etc[9,10].

NEED FOR THE STUDY:-

There are various studies which documented the perception of physiotherapists willingness and acceptance to use telerehabilitation. There are also studies which documented the patient`s satisfaction after telerehabilitation. But, there are hardly any studies which tries to know the readiness and acceptance of the patients to opt telerehabilitation for musculoskeletal pain management. This could be an important aspect of rehabilitation, as the patient`s willingness and judgement to adapt to a treatment method links with their compliance to treatment and also their values and beliefs.

METHODOLOGY

Study Design: Descriptive study

Criteria for sample collection

- INCLUSION CRITERIA
  - Patient who are receiving physiotherapy treatment for acute or chronic musculoskeletal pain whose pain complaint reduced by 50% after taking physiotherapy.
  - Age between 25–50 years.
- EXCLUSION CRITERIA
  - Patients who are not willing to participate.

Sample size: 200 Participants

Sampling Method: Convenience sampling

PROCEDURE:

In this descriptive study, with a sample size of 200, a set of questions were prepared by the investigators and the data was collected in stipulated period of 6 months using structured interview method where a set of questions were asked in the preferred language to the patients who visited out patient physiotherapy department at Dr. B. R. Ambedkar Medical College and Hospital. This survey consist of closed ended question framed by the investigators, consent was assured and their agreement was taken for participation prior to the main questions.

DATA ANALYSIS AND RESULTS

All 200 participants had given their consent to participate in this study, after which their demographic details, their perception and acceptance of telerehabilitation were obtained. The present study consisted of 200 patients with Musculoskeletal pain of age between 25 to 45 years at a tertiary hospital in Bangalore. Out of which 157(78.5%) were using smart phone and 43(21.5%) were not using smart phone. The majority of 164(82%) had not under gone telerehabilitation advice and 36(18%) had under gone telerehabilitation advice. Out of 200 patients, 79(39.5%) agreed that opting telerehabilitation for musculoskeletal pain may help in pain management and 121(60.5%) disagreed to this. Out of 200 Patients, 132(66%) patients reported that exercise and home advice in telerehabilitation may help in pain management and 68(34%) disagreed to this. A majority of 121(60.5%) of the patients stated that it may be easy to follow the commands in telerehabilitation and 79(39.5%) thought it may be difficult to follow commands in telerehabilitation. Out of 200 patients, 149(74.5%) reported that electrical modalities may be a missing component in telerehabilitation and 51(25.5%) reported that electrical modalities may not be a missing component in telerehabilitation. Out of 200, 142(71%) reported that telerehabilitation may be time effective with respect to waiting time139(97%), treatment time 7(4.9%), travel time 122(85%) and 58(29%) reported that it may not influence the time. Out of 200, 105(52.5%) participants felt that telerehabilitation may provide privacy and 95(47.5%) felt that telerehabilitation may not provide privacy. Out of 200 Participants, 161(80.5%) reported that absence of physiotherapist physically may impact on pain management. Out of 200 patients, 163(81.5%) are willing to participate in telerehabilitation for pain management and 37(18.55%) are not willing to participate in telerehabilitation for pain management.

CONCLUSION:-

The conclusion of this survey was based on the responses received from the participants with musculoskeletal pain who came to outpatient department.

Acceptance and Perception are the key factors that influence the provision of remote physiotherapy. Telerehabilitation can be provided through smart devices eg, smart phone, tablet and related applications like video calls, zoom, skype etc. Where patient education, tailored exercises, thermotherapy advice, postural correction, relaxation techniques for pain management can be administered by physiotherapist.

Even though, Majority of patients did not have much idea about telerehabilitation, most of the participants were interested to take telerehabilitation advice for musculoskeletal pain in future. Therefore, telerehabilitation might become an effective mean for health care delivery system.

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