



KNOWLEDGE, ATTITUDE AND BELIEF REGARDING USE OF TELEREHABILITATION IN PHYSIOTHERAPY PROFESSIONALS POST COVID19 LOCKDOWN : A SURVEY STUDY

¹Author Pallavi Kale, ²Author Dr Sheetal Bamhane, ³Author Dr Sucheta Golhar

¹Intern, ²Assistant Professor, ³Principal, Professor

¹Physiotherapy,

¹Modern College Of Physiotherapy, Pune Maharashtra, India

Abstract :

OBJECTIVES To assess the knowledge, attitude and belief regarding use of telerehabilitation in physiotherapy professional post covid-19 lockdown using questionnaire.

METHOD The study began with the synopsis presentation to an ethical committee of PES Modern College Of Physiotherapy and ethical clearance from committee was obtained. Various physiotherapy professionals were approached via online platform. The subjects were selected on the basis of inclusion and exclusion criteria. Online consent was taken from the subject before starting the survey. Questionnaire was send and data recorded.

RESULT The main barriers reported in this study were technical issues and skill issues involved with the introduction of telerehabilitation in the physiotherapy-based health care settings. Regardless of the above-mentioned limitations, This research provides valuable evidence regarding the knowledge and belief about telerehabilitations and its utilization.

CONCLUSION This study shows that Physiotherapy professionals have adequate knowledge, attitude and belief in telerehabilitation.

KEYWORD Telerehabilitation , Knowledge, Belief, Attitude ,Questionnaire.

1. INTRODUCTION

The WHO world health organisation has recommended running only essential rehabilitation services to ensure safety during the covid19 pandemic¹. Restricting clinical practice is mandatory to control the spread of infection and it is responsibility of every physical therapist. But this decision on for an extended period could stop the progress or may worsen the pain among patients and this also have financial effect on therapist who depend on clinical practise for their living¹.

To overcome this situation WCPT world confederation for physical therapy suggested the implementation of telerehabilitation. Telerehabilitation is a part of telemedicine involved in providing rehabilitation services to people in remote locations¹. Telerehabilitation is a medical service provided at a distance through digital media normally telerehabilitation is provided to individuals who are not able to reach rehab centre due to disability or financial Constraints². As per the current scenario, the mandatory social distancing due to covid 19 has made telerehabilitation the best method to deliver medical services and to avoid the spread of infection. Rapid development in telerehabilitation services stems from the desire to provide the best rehabilitation to beneficiaries irrespective of their locations².

2. NEED OF STUDY

The purpose of this study is to explore the current knowledge, attitude and belief towards the implementation of telerehabilitation based physical therapy of various hospitals and centres.

Telerehabilitation offer major benefits particularly in terms of improved communication and access to health care over distance.

Increased communication allows information and medical data sharing with consequent advantage for patients, family, caregivers and researchers.

Decreased missed visit rates, cost saving (generally through travel related expenses).

Can be performed in variety of locations (home, clinic etc).

3.AIM

To assess the knowledge, attitude and belief regarding use of telerehabilitation in physiotherapy professionals post Covid19 lockdown.

4.OBJECTIVES

To assess the knowledge, attitude and belief regarding use of telerehabilitation in physiotherapy professional post covid -19 lockdown using questionnaire.

5.HYPOTHESIS

Null Hypothesis(H0) – Physiotherapy professionals do not have adequate knowledge, attitude and belief in telerehabilitation .

Alternative Hypothesis(H1) – Physiotherapy professionals have adequate knowledge, attitude and belief in telerehabilitation.

6.METHODOLOGY

Sample size – 100

Study design– A survey study

Sampling method – Convenient

Study duration – Six month

Study Population – Physiotherapy professionals working in hospitals, private clinics and doing home visits.

Study place – In and around the cities.

7. MATERIAL USE

Smart Phones

Computers

Laptop

Questionnai

8.INCLUSION CRITERIA

Physiotherapy professionals working in hospitals, private clinic and doing home visits during lockdown .

9.EXCLUSION CRITERIA

Physiotherapy professionals who do not have email or who don't use their emails .

10.PROCEDURE

The study began with the presentation of synopsis to an ethical committee in PES MCOP and ethical clearance from committee was obtained . Various physiotherapy professionals were approached via online platform. The subjects were selected on the basis of inclusion and exclusion criteria. Online consent was taken from the subject before starting the survey. Questionnaire was send and data recorded.

11.OUTCOME MEASURE

QUESTIONNAIRE

Name _____

Gender

a] Male b] Female

E-mail _____

1. Place of work

a] Home b] Clinic

2. Do you know about telerehabilitation ?

a] Yes b] No

3. Do you have telerehabilitation experience ?

a] Yes b] No

4. Is the work place well equipped for telerehabilitation ?

a] Yes b] No

5. What type of telerehabilitation you use at work ?

a] Image based telerehabilitation

b] Sensor based telerehabilitation

c] Virtual reality telerehabilitation

d] Other _____

6. What do you use telerehabilitation for ?

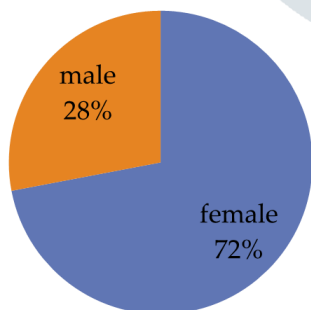
a] Assessment

- b] Diagnosis
 - c] Prognosis
 - d] Intervention
 - e] follow up
 - f] All of the above
7. Did it save the time ?
- a] Yes b] No
8. Do you think that telerehabilitation is valid tool for the current health care set up?
- a] Yes b] No
9. Do you think that patients can be benefited by telerehabilitation?
- a] Strongly Agree
 - b] Agree
 - c] Disagree
 - d] Strongly disagree
10. Would you prefer to use telerehabilitation again in future ?
- a] Yes b] No
11. What do you think, about the barriers of using telerehabilitation in India?
- a] Provide willingness
 - b] Technical issues
 - c] Skill issues
 - d] High Cost
 - e] Location of healthcare institute
 - f] other _____
12. Do you think that inclusion of telerehabilitation would improve the quality of patient care?
- A] Yes
 - B] No
13. What do you think about advantages of telerehabilitation?
- A] Save time
 - B] Easy follow up
 - C]None of these
14. What do you think about disadvantages of telerehabilitation?
- A] Assessment efficiency
 - B] Technical issues
 - C]Location of health care institute
 - D]Other

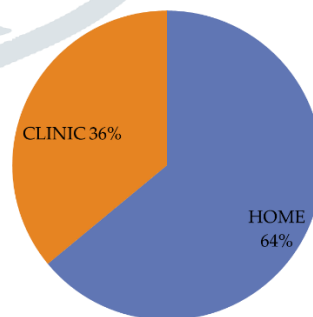


12.DATA ANALYSIS AND RESULTS

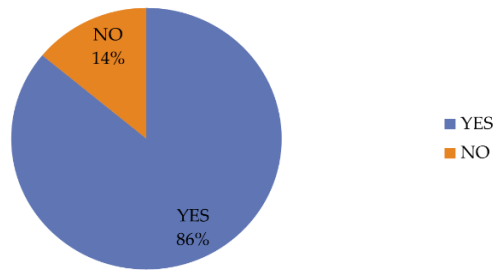
GENDER



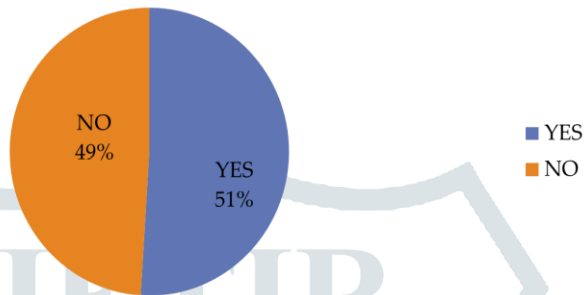
1. PLACE OF WORK



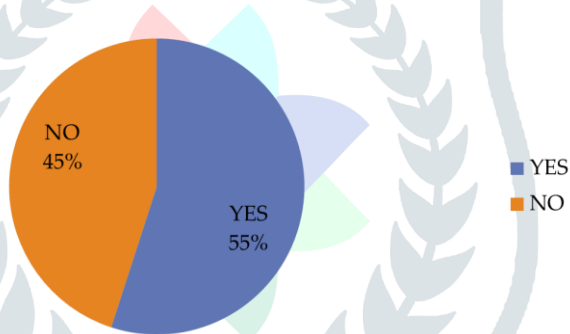
2. DO YOU KNOW ABOUT TELEREHABILITATION ?



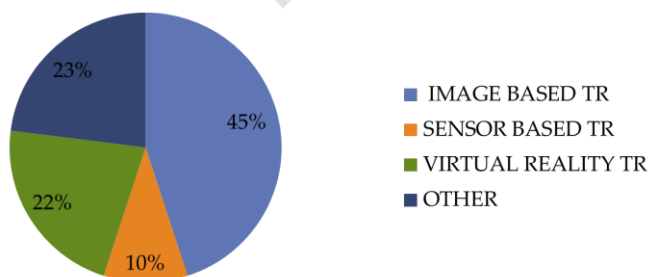
3. DO YOU HAVE TELEREHABILITATION EXPERIENCE ?



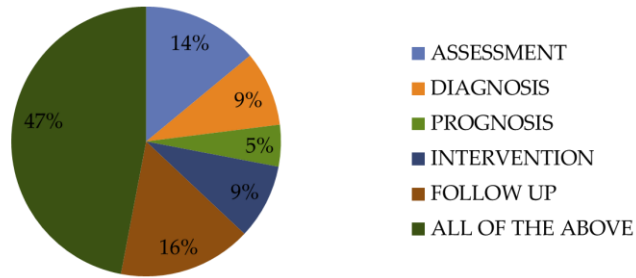
4. IS THE WORK PLACE WELL EQUIPPED ?



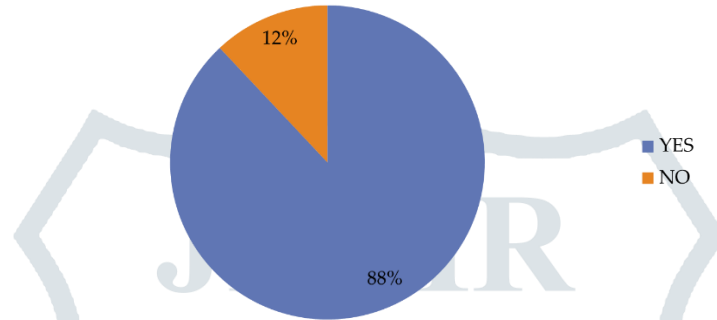
5. WHAT TYPE OF TELEREHABILITATION YOU USE AT WORK ?



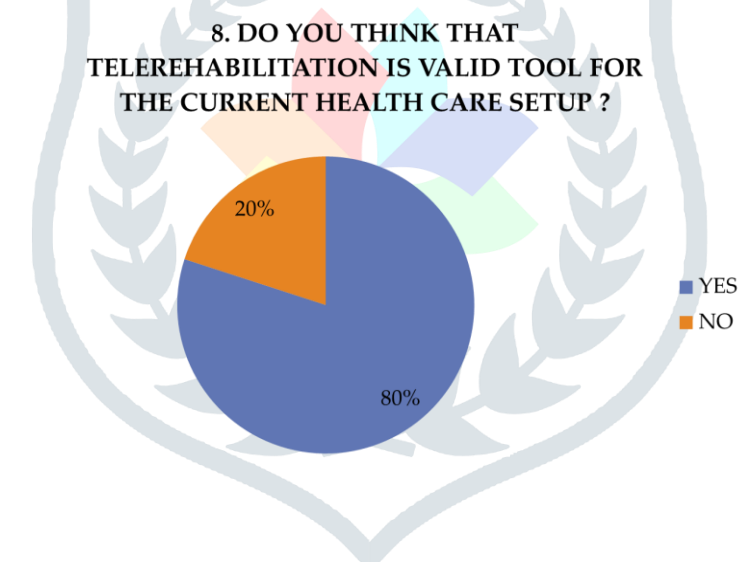
6 . WHAT DO YOU USE TELEREHABILITATION FOR ?



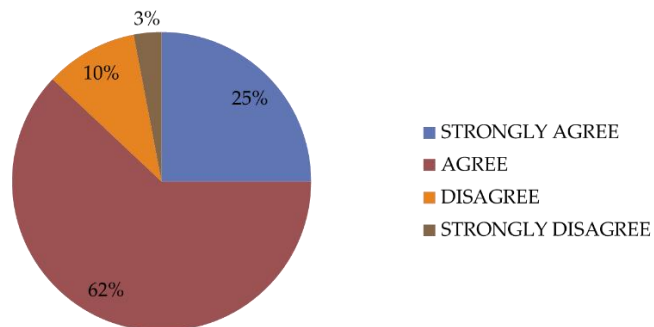
7. DID IT SAVE THE TIME ?



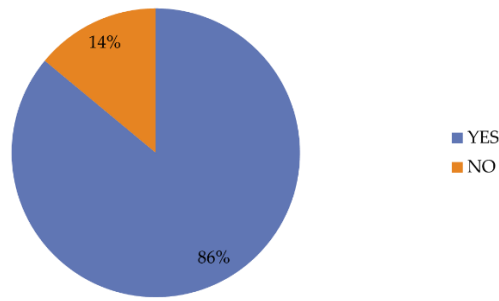
8. DO YOU THINK THAT TELEREHABILITATION IS VALID TOOL FOR THE CURRENT HEALTH CARE SETUP ?



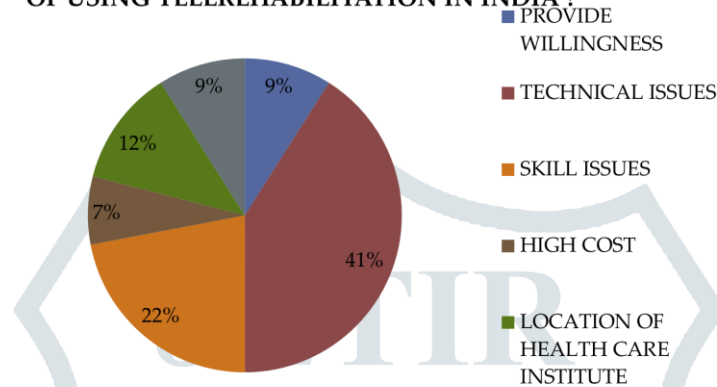
9. DO YOU THINK THAT PATIENTS CAN BE BENEFITED BY TELEREHABILITATION ?



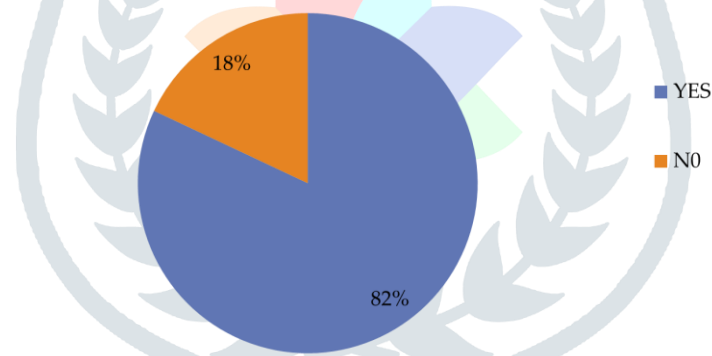
10. WOULD YOU PREFER TO USE TELEREHABILITATION AGAIN IN FUTURE ?



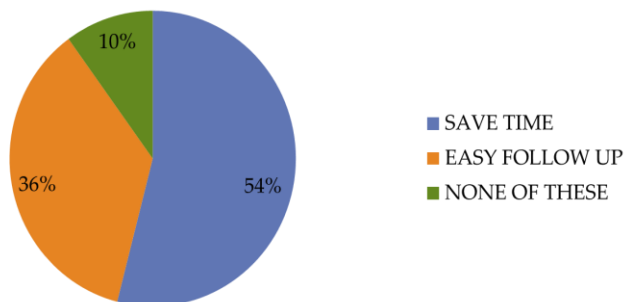
11. WHAT ACCORDING TO YOU ARE BARRIERS OF USING TELEREHABILITATION IN INDIA ?



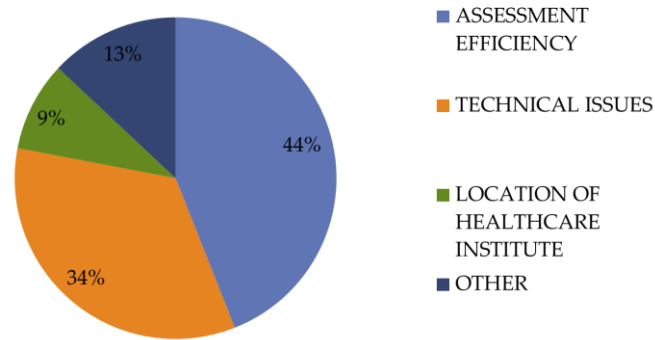
12. DO YOU THINK THAT INCLUSION OF TELEREHABILITATION WOULD IMPROVE THE QUALITY OF PATIENT CARE ?



13. WHAT DO YOU THINK ABOUT ADVANTAGES OF TELEREHABILITATION ?



14. WHAT DO YOU THINK ABOUT DISADVANTAGES OF TELEREHABILITATION ?



13.DISCUSSION

The study found that the majority of participants reported having sufficient knowledge about telerehabilitation. More than half of the respondents agreed that telerehabilitation will save the travelling time and money for obtaining an expert opinion. Telerehabilitation enables a disabled individual to receive health advice, assessment and treatment from distant expert

A vast number of researchers had evaluated the reliability and validity of using telerehabilitation for assessment and treatment of patient with various conditions and some of the recent researches have demonstrated the positive effect of video conferencing.

Similarly this study shows high percentage participants reporting telerehabilitation is valid tool for physiotherapy settings. And prefer to use telerehabilitation again in future.

14.CONCLUSION

The main barriers reported in this study were technical issues and skill issues involved with the introduction of telerehabilitation in the physiotherapy-based health care settings.

Regardless of the above-mentioned limitations, this research provides valuable evidence regarding the knowledge and belief about TR and its utilization.

Hence, we are accepting alternative hypothesis which states that Physiotherapy professionals have adequate knowledge, attitude and belief in telerehabilitation.

15.LIMITATION

The nature of a web-based survey in itself carries many limitations.

Respondent's bias may be involved in self-reporting knowledge, attitude and need for necessary equipment to implement TR in physical therapy settings.

The number of questions (n = 14) were relatively small to increase the response rate.

Data regarding the actual number of clinicians who received the e-mail could not be collected; hence, information regarding non-responders and response rate could not be determined.

16.FUTURE SCOPE OF STUDY

Further research is suggested using a large number of therapists worldwide.

The number of questions to increase the response.

Also, validity and reliability of questionnaire.

17.REFERENCE

1. Aloyuni S, Alharbi R, Kashoo F, Alqahtani M, Alanazi A, Alzhrani M, Ahmad M. Knowledge, Attitude, and Barriers to Telerehabilitation-Based Physical Therapy Practice in Saudi Arabia. *Healthcare (Basel)*. 2020 Nov 4;8(4):460. doi: 10.3390/healthcare8040460. PMID: 33158298; PMCID: PMC7711516.
2. Patient and health care professional perspectives on using telehealth to deliver pulmonary rehabilitation. J. A. Inskip, H. Novak Lauscher, L. C. Li, G. A. Dumont, A. Garde, K. Ho, A. M. Hoens, J. D. Road, C. J. Ryerson, P. G. Camp *Chron Respir Dis*. 2018 Feb; 15(1): 71–80. Published online 2017 Jun 1. doi: 10.1177/1479972317709643 PMCID: PMC5802656
3. Dicianno, B., Parmanto, B., Fairman, A., Crytzer, T., Yu, D., Pramana, G., Coughenour, D., Petrazzi, A. Perspectives on the evolution of mobile (mHealth) technologies and application to rehabilitation. *Physical Therapy*:2015:95:397-405

4. Aderonmu, J.A. Emerging challenges in meeting physiotherapy needs during COVID-19 through telerehabilitation. Bull Fac Phys Ther 25, 16 (2020). <https://doi.org/10.1186/s43161-020-00018-4>
5. eHealth Interventions to Support Self-Management in People With Musculoskeletal Disorders, “eHealth: It’s TIME”—A Scoping Review Marie Kelly, Brona Fullen, Denis Martin, Sinéad McMahon, Joseph G McVeigh Phys Ther. 2022 Apr; 102(4): pzab307. Published online 2022 Jan 13. doi: 10.1093/ptj/pzab307 PMID: PMC8994513
6. Barnes, C. A., Durham, J., & LaStayo, P. C. (2020). Using the Lessons of COVID-19 to Improve Access to Physical Therapists for People With Cancer. Rehabilitation Oncology (American Physical Therapy Association. Oncology Section), 10.1097/01.REO.0000000000000232. <https://doi.org/10.1097/01.REO.0000000000000232>
7. Hailey D, Roine R, Ohinmaa A, Dennett L. Evidence of benefit from telerehabilitation in routine care: a systematic review. J Telemed Telecare. 2011;17(6):281-7. doi: 10.1258/jtt.2011.101208. Epub 2011 Aug 15. PMID: 21844172.
8. Saaei F, Klappa SG. Rethinking Telerehabilitation: Attitudes of Physical Therapists and Patients. J Patient Exp. 2021 Jul 28;8:23743735211034335. doi: 10.1177/23743735211034335. PMID: 34377773; PMID: PMC8323409.

