Level of Work Related Depression among Physiotherapists due to COVID-19: An Observational Study

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Abstract

Introduction: The COVID-19 pandemic has created global crisis & drastic change in living conditions, social life, professional life and economic activity. There is lack of study done yet which examined the presence of work related depression among the physiotherapist due to COVID 19. So the aim of the study is to evaluate the presence or absence of the work relate related depression among physiotherapist due to COVID 19.

Purpose of the Study: To evaluate the level of work related depression and categorize it into mild, moderate, severe levels among physiotherapist due to COVID 19.

Material and Methodology: Between 10/10/2020 to 26/10/2020, 94 Physiotherapist were recruited by online survey through a Google form. 88 Participants completed measures of depression (PHQ9) Questionnaire.

Settings and Design: Pravara Institute of Medical Sciences, Dr. APJ Abdul Kalam College of Physiotherapy, Loni.

Type of study- Observational Study with Survey Approach.

Sampling method- A web-based cross-sectional survey

Result: The present study had a targeted sample size of 88 Physiotherapist in which 24 were having no depression, 40 were having mild depression, 18 were having moderate depression and 6 were having moderately severe and no one had severe depression. Meeting the criteria for depression was predicted by clinical practitioners. Work related depression symptoms were also predicted by low income, loss of income, and pre-existing health conditions in self and other.

Conclusion: 88 Physiotherapist responded to the survey based study from all parts of Maharashtra. However, specific COVID-related variables which is associated with psychological distress due to loss of income because of the pandemic & exposure to the virus and high estimates of personal risk, most of physiotherapist from responses were mildly depressed.

Key words: Depression, Patient health questionnaire, physiotherapist.
and social disruption caused due to pandemic is devastating. Around 10 million of people are at risk of falling into extreme poverty, while the number of work related problems due to which people are having various psychological issues. Same has impacted on clinical physiotherapist and academic physiotherapist as their duties are also affected because of same it has also increased the stress and anxiety among physiotherapists. This situation eventually led to socio-economic crisis and profound psychological distress. From all of those psychological distresses depression is a common disorder which is affecting an individual’s ability to perform life activities. These major stressors can be expected to cause an increased risk of anxiety, stress and depression.

Hence, people around the world are trying to take the safety measures in order to avoid getting exposed to infections related to COVID 19 such as avoiding travelling, closing down public spaces, and shutting down the entire transportation services like trains, buses and all public transportation. During these period only emergency medical services will be provided was the rule passed by government of India. And as physiotherapists were approaching in a close contact with patients for every treatment sitting more than hour and as there were no definite methods to diagnose the infected cases and to treat them for the same. Thus, many of the physiotherapist were preferring to shut down their OPD’s. Due to which we can assume that they may not able to work efficiently and due to OPD shut down may be depressed and worried about their future. This pandemic has brought about crises due to reduced job opportunities among people which is resulting in high pressure around the globe. Many studies has also concluded that same is impacting on clinical and academic physiotherapist as their jobs manner and working strategies are also changed. Which are leading to varied psychological pathologies which includes depression, anxiety, stress.

The experience of lockdown with the uncertainty of unlocking of all those services for academic and professional career has impacts on the mental health and physical health as well. For example, a study was carried out in which was focusing on the effects of quarantine after the severe acute respiratory syndrome (SARS) pandemic found an association between duration of lockdown with a high prevalence of psychological pathologies among people.

The ongoing COVID-19 pandemic is creating a stressful situation and the countries is therefore reporting significant rise in physical and mental problems including anxiety, depression, stress, sleep disorder as well as fear among all the people and is impacting on physiotherapists. All eventually increased the abusive substance uses and sometimes suicidal behavior. Researchers in China observed that the greater exposure to ‘misinformation’ through social media are more likely contributing to the development of anxiety, depression, and other mental health problems among its population of different socioeconomic background.

Studies before the COVID-19 pandemic also suggested an inverse relationship between media exposure and mental health. On the contrary, a study in South Korea during the Middle East respiratory syndrome (MERS) reported a positive relationship between risk perception and media exposure. Given the unexpected circumstances, it is crucial to explore the psycho-social experience of university students in Bangladesh, especially during the COVID-19 pandemic. Such a study is expected to measure the psychological impacts of an unforeseen emergency on students, as well as to formulate and execute effective interventions and strategies to mitigate the mental health of people at large. This study was designed to address the psychological problems experienced by university students in Bangladesh. Considering the current pandemic, which has been characterized by unpredictability, lack of control, and increased responsibilities to provide daily perceived stress specific to COVID-19 may be centrally important to study in the context of mental health outcomes. So, the aim of the study is to investigate the presence or absence of work related depression and to categorize among the physiotherapist due to COVID 19.

Need of The Study:

To understanding the psychological outcomes caused by an outbreak on physiotherapist & study mechanism underneath. So that effective intervention
& treatment can be developed & provided to them to improve their psychological wellbeing.

**Objectives**

1. To evaluate level of work related depression among physiotherapist due to COVID 19 Pandemic.

2. To categorize work related level of depression into mild, moderate, severe among physiotherapist due to COVID 19 Pandemic.

**Material and Methodology**

A cross sectional online survey was open for all physiotherapist all over India from them 94 responded to it in expected period of time and out of them 88 were included as they were fulfilling the inclusion criteria. Clinical and academicals staff with different range of years of experience in this region were invited to fill the questionnaire. They filled out an online self-administered questionnaire from 10th October 2020 the 26th October 2020. Consent was taken from each one of them in 1st section itself. Demographic data was collected from each of the participant and the google form was filled by each one of them in 2nd section. In 3rd section PHQ-9 questionnaire was given which was easy to administer, cost-effective, time saving and practically feasible during COVID 19 lockdown period. The questionnaire was sent through the e-mail, WhatsApp messenger, Facebook messenger and the responses were collected from each one of them as they were submitting it back.

**Inclusion Criteria**

1. Working Academic and Clinical Physiotherapist willing to participate

2. Any age group and open for all genders.

3. Physiotherapist using social media.

**Exclusion Criteria**

1. Physiotherapist already under psychotherapy.
Measurements:

Survey questions included questions to collect data like (email, occupation, gender, experience (years), state, country) and variables related to the COVID 19 (changes they are experiencing for 2 weeks) to evaluate the level of work-related depression among Physiotherapist. Scale used to evaluate the level of depression was patient health questionnaire-9). It is a quick depression assessment scale. This questionnaire consists of 9 questions, each question has an answer range from 0-3 (0- not at all and 3-nearly every day).

Data Extraction:

A pre-designed data extraction form was used to extract information on the following variables: state, country, gender, average years of experiences, profession. Instrument used to assess depression, response rate and sampling methods.

Statistical Analysis

Descriptive statistics were calculated for sociodemographic characteristics and variables related to depression during COVID 19 pandemic.

Results

100 physiotherapists were invited to the study, 88 completed the questionnaire survey with 1 to 25 years of experience (response rate = 88), from them (66) 75.9% were female and (22) 24.1% were male and (57) 64.4% were clinicians and (32) 35.6% were academicals staff. When descriptive statistics were calculated it revealed the responses for every question as follow:

From them: i) 42% were not at all, 23.9% several days, 22.5% nearly every day and 11.4% more than half of day were having little interest or pleasure in doing things. ii) 46.6% were not at all, 40.9% were several days, 10.2% were nearly every day and 4% were feeling more than half of day depressed and hopeless. iii) 36.4% were not at all, 36.1% were several days, 19.3% were nearly every day and 10.2% were more than half of day facing trouble in falling asleep, or sleeping too much. iv) 52.3% were not at all, 23.9% several days, 20.5% nearly every day and 3.3% more than half of day were feeling tired or having little energy. v) 45.5% were not at all, 30.7% several days, 18.2% nearly every day and 5.6% were having more than half of day poor appetite or overeating. vi) 54.5% were not at all, 29.5% several days, 9.1% nearly every day and 6.9% more than half of day were having trouble in concentrating on things such as reading books and watching TV. vii) 52.3% were not at all, 33% several days, 11.4% nearly every day and 3.3% more than half of day were having trouble in concentrating on things such as reading books and watching TV. viii) 67% were not at all, 25% several days, 4% nearly every day and 4% more than half of day were moving or speaking so slow that other people could have noticed. Or the opposite being so fidgety or restless that you have been moving around a lot more than usual. ix) 73.9% were not at all, 22.7% several days, 1.7% nearly every day and 1.7% were more than half of day having a thought that they would be better off dead, or to hurting yourself.

Last question was to check for any problems about work and taking care of things at home, or get along with other people for that 35.2% of physiotherapist were facing no difficulty, 54.5% were having somewhat difficulty, for 9.1% it was very difficult and for 1.2% it was extremely difficult. It is also marked according to descriptive data analysis that male physiotherapist have more depression than female physiotherapists.

Discussion

A web-based open E-survey was designed with reference to previous online survey. This research paper describes a sample of physiotherapist to report the impact of COVID 19 on their mental health. Web-based open E-survey are easy to implement, are less time consuming
method used for gathering information. Convenient sampling was performed in the study, and a reminder related to survey was sent to the various groups of physiotherapy professionals WhatsApp group, Facebook messenger. The survey took hardly 5-10 minutes for completing it. 88 physiotherapist professionals willingly participated in the study through a link sent on email, WhatsApp group, Facebook messenger. This type of study helped us to gather large amount of data from different areas in short period of time.

In present study 88 physiotherapists were screened with the questionnaire and their experiences in the COVID pandemic was analyzed & the study revealed that there is presence of work related depression among physiotherapists, from the gathered responses the level of depression is as follow: (27%) have minimal depression, (44.9%) have mild depression, (20%) have moderate depression and (6.7%) have moderately severe depression. Lack of knowledge & insufficient psychological coping strategies to disease were very obvious under overwhelming circumstances. Secondly, since infrastructure & capability of healthcare systems varies in different countries, psychological reaction of physiotherapist may differ during an outbreak of COVID 19 pandemic. The applicability of lockdown due to COVID19 pandemic not only affects people’s physical health but also affecting their mental health of physiotherapist. Depression is a normal reaction to a sudden worsening in living circumstances, involving separation & uncertainty. Our study supports the need for integration of mental health consideration into COVID 19 care, including the monitoring of psychological symptoms and social needs within the physiotherapists.

**Conclusion**

When the lockdown began, self-isolation, social distancing and quarantine have affected the mental as well as physical health of the population worldwide. As physiotherapist comes in close contact with every patient there was fear and uncertainty among all physiotherapist especially clinicians. From the available data of this study we conclude that 44.9% of physiotherapists are suffering from mild depression due to COVID 19 pandemic We also conclude that the level of depression is higher among the clinical physiotherapist. Adverse psychological symptoms were prevalent among physiotherapist and screening of same would be beneficial in decreasing psychological impact of COVID 19 pandemic among physiotherapist. Because of which most of physiotherapist shut their OPD for all most two to three months which ultimately landed them up in significant financial pressure which might increase unhealthy conflicts among families which is the reason of depression.

The psychological impact of COVID -19 lockdown is a challenge for an indefinite time, hence at this point it was very important to evaluate the level of work related depression and address the coping strategies and mental health awareness can be spread by means of social media so that one can develop the capacity to cope with stress which will ultimately reduce the major psychological issues. It will be helpful for all to defeat the long term battle with coronavirus.

**Limitation**

In further studies large sample size can be included to increase the accuracy of the results. More particular variables can be included in further study. Particular age group can be focused.

**Conflicting Interest** (If present, give more details): No conflicts

**Funding**: None.

**Ethical Clearance**: Taken

**References**


