

Psychological Distress and Anxiety among Physiotherapists Practicing in ICU

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ABSTRACT

Background: Fever, myalgia or fatigue, pneumonia, and complicated dyspnea are all signs of COVID-19. Chest physiotherapy can be utilized in these situations to minimize the time of stay on a mechanical ventilator and in the ICU, as well as to prevent ventilator-associated pneumonia.

Aim: To determine the psychological distress and anxiety among physiotherapists in intensive care unit while performing chest physiotherapy in covid-19 patients.

Methods: 176 physiotherapists were enrolled in this study, Data collected by purposive sampling technique through an online survey from physiotherapist in Lahore. The Scoring GAD-7 Anxiety Severity and Kessler Psychological Distress Scale(K10) were used. Data entered to SPSS for further statistical analysis.

Results: Among 176 participants, 143(81.25%) were males and 33 (18.75%) were females. mean age was 35.11±3.752 years. Psychological Distress, moderate disorder was among 26(14.6%), severe disorder was among 150(85.2%). Anxiety was mild among 9(5.1%) moderate 43(24.4%) and severe 124(70.5%). P value was <0.05.

Conclusion: Psychological distress and anxiety were present among physiotherapists in ICU while performing chest physiotherapy in covid-19 patients. Covid-19 affects their mental health. Most of the Physiotherapists were feeling severe anxiety and have a severe psychological Distress.

Keywords: Psychological distress, Anxiety, Physiotherapists, Intensive care unit, Chest physiotherapy, covid-19

INTRODUCTION

Corona virus 2019 (COVID-19) is a corona virus that is spread primarily by droplets and belongs to the β -corona cluster¹. Fever, myalgia or fatigue, cough, pneumonia, and dyspnea are among the COVID-19 disease symptoms. (2) In addition, if the respiratory symptoms were severe, they could progress to respiratory failure (acute respiratory distress syndrome), which could lead to death if not treated promptly with invasive ventilation³. For patients with mild to severe symptoms, non-invasive therapies such as chest physiotherapy might be used⁴.

Patients who are on mechanical ventilation may lose their ability to breathe on their own. This increases the risk of lung collapse and ventilator-associated pneumonia among the patients⁵. Chest physiotherapy can be performed in these situations to shorten the length of time spent on a mechanical ventilator and in the ICU, as well as to prevent ventilator-associated pneumonia⁶.

HCWs' mental health and overall well-being have recently received a lot of attention, with research revealing significant rates of burnout, psychological stress, and suicide among them⁷. Emotional tiredness affects physiotherapists, which can result in medical errors, a lack of empathy when treating patients, poorer productivity, and increased turnover rates. For their patients, their families, and themselves, physiotherapists' ability to cope with pressures was critical. Psychological resilience, or the ability to adjust constructively to adversity in order to shield oneself from stress, varies among providers⁸. Prior to COVID-19, extensive research had shown the multifaceted nature of health-care pressures, including electronic health-record responsibilities, insurance and billing concerns, patient discontent, and managing busy work-life schedules⁹.

COVID-19 was an impending global infectious disease epidemic caused by the corona virus that causes severe acute respiratory illness. COVID-19 severity can be divided into three groups based on the severity of the initial infection. Mild COVID-19, which accounts for the vast majority of cases, was marked by symptoms such as fever, shortness of breath, gastrointestinal trouble, tiredness, headaches, and a loss of smell and taste.⁽¹⁰⁾ Patients with mild COVID-19 may or may not seek medical attention, and minor pneumonia may be present. Because of pulmonary difficulties, severely ill patients require hospitalization

for infection treatment, and critical patients are a subset of severely ill patients who have respiratory arrest and require mechanical breathing assistance. The percentages of patients vary, but mild instances were reported to account for around 80%, severe cases for 14%, and critical cases for 6%¹¹.

Patients admitted to hospitals with confirmed or suspected COVID-19 were more likely to be managed by physiotherapists working in primary care settings. The goal is to improve physical recovery after an acute illness by treating respiratory problems¹².

Physiotherapists who practice in the ICU environment may also provide airway clearance techniques for ventilated patients who show signs of inadequate airway clearance and they can assist in positioning patients with severe respiratory failure associated with COVID-19, including the use of prone position to optimize oxygenation¹³.

The purpose of my study was to check the anxiety and psychological distress in physiotherapists while they were working in I.C.U. We have to check any psychological condition while performing chest physiotherapy of covid-19 patients. Previous researches shows that most of clinicians suffer from anxiety while performing chest physiotherapy in COVID-19 patients.

MATERIAL AND METHOD

After permission from ethical review board, a cross-sectional study was done among 176 physiotherapists working in hospitals including Central Park Teaching Hospital, University of Lahore Teaching Hospital, Jinnah Hospital, Mayo Hospital and Doctors Hospital. Non-probability purposive sampling technique was used to collect the data. Participants included in the study were those with age: 30-44 years. Male & female Physiotherapists working in I.C.U and perform chest physiotherapy in covid-19 patients and excluded were those who were working in academics only and Physiotherapy students Nurses, Physicians and Physiotherapists who had less than 1 year experience in ICU. Data was collected through an online survey from different hospitals of Lahore. Proper consent was taken from the study participants. The whole study was performed using online questionnaire and all the questions were validated through previous literature. Data entered to SPSS for statistical analysis, to show categorical variables (demographics (age, gender, occupations), frequency tables were employed, whilst mean and standard deviation were utilised to depict continuous variables.

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RESULTS

Among 176,143(81.25%) were males and 33(18.75%) were females. Physiotherapists' mean age was 35.11 ± 3.752 years, with minimum and maximum age of 30 and 44. Physiotherapists' mean height was 63.93 ± 3.029 cm, with minimum and maximum height of 59 and 72. Physiotherapists' mean weight was 58.58 ± 12.058 kg, with minimum and maximum weight of 40 and 97. The total number of Underweight Physiotherapists was 50, The total number of normal Weight Physiotherapists was 83, The total number of over Weight Physiotherapists was 39 and the total number of Obese Physiotherapists was 4. In the previous four weeks, how frequently did you feel fatigued for no apparent reason, the frequency of never was 149(8%), a little of the time 35(19.9%), sometime 39(22.2%), most of the time 48(27.3%), all of the time 40(22.7%). How frequently did you feel worried in the last four weeks? The frequency of none of the time was 30(17%) a little of the time 24(13.6%), sometime 53(30.1%), most of the time 35(19.9%), all of the time 34(19.3%). How Often Did You Feel Depressed in the Last 4 Weeks, The frequency of none of the time was 10(5.7%) a little of the time 27(15.3%), sometimes 76(43.2%), most of the time 52(29.5%), all of the time 11(6.3%).(Table 1)

Feeling nervous, anxious, the frequency of not at all was 12(6.8%), several days 28(15.9%), More than Half of the days 40(22.7%), Nearly Every day 96(54.5%) (Table 2). Among 176 participants Anxiety was mild among 9(5.1%), moderate among 43(24.4%) and severe among 124(70.5%). Among 176 participants moderate psychological disorder was among 26(14.6%) and severe psychological disorder was present among 150(85.2%). According to this study among 15(57.69%) participants with severe anxiety, Psychological disorder was moderate and among 109(72.66%) participants with severe anxiety, psychological distress was also severe. P Value was .029 which was < 0.05 , which means that there was significant association between the psychological distress and anxiety severity (Table 3).

Table 1: Statistical representation of "How Often Did You Feel Depressed In The Last 4 Weeks"

Depressed in Last 4 weeks	Frequency	%age
None of the time	10	5.7
A little of the time	27	15.3
Some of the time	76	43.2
Most of the time	52	29.5
All of the time	11	6.3
Total	176	100.0

Table 2: Statistical Data for Feeling Nervous, Anxious, Or On Edge

Feeling Nervous, Anxious, Or On Edge	Frequency	%age
Not at all	12	6.8
Several days	28	15.9
More than half of the days	40	22.7
Nearly every day	96	54.5
Total	176	100.0

Table 3: Association of psychological distress with anxiety severity cross tabulation (Chi Square)

Psychological distress	Mild Anxiety	Moderate Anxiety	Severe Anxiety	Total
Moderate	4(15.4)	7(26.9)	15(57.7)	26(14.3)
Severe	5(3.3)	36(24)	109(72.7%)	150(85.2)
Total	9(5.1)	43(24.4)	124(70.4)	176(100)

P value 0.029

DISCUSSION

Among 176 participants, 143 were male and 33 were female participants in the current study. The mean age of physiotherapists was 35.11 ± 3.752 years, with a lowest and highest age of 30 and 44, respectively. In the study of psychological distress, the likelihood of having a moderate condition was 26%, and the severe disorder was among 150%. The frequency of mild anxiety was 9, moderate anxiety was 43, and severe anxiety was 124. Because

the P value was less than 0.05, we concluded that there was a significant relationship between psychological distress and anxiety severity.

A study conducted by Yang Seoyon et.al, in 2020. Objective of the study was to evaluate the burden of covid 19 on mental health of physiotherapist working in ICU. According to this study 21 (32.3%) and 12(18.5%) of the 65 physical therapists who responded to our study reported having anxiety and depression symptoms, respectively. When a physical therapist lived with a 6-year-old infant or child, the likelihood of anxiousness was dramatically increased. The risk of depression was much higher in individuals in their 30s and 50s than in those in their 20s. Physical therapists who work with a 6-year-old infant or kid, as well as those in their 30s and 50s, require specific consideration. And according to our study How Often Did You Feel Depressed in the Last 4 Weeks, The frequency of none of the time was 10(5.7%) a little of the time 27(15.3%), sometimes 76(43.2%), most of the time 52(29.5%) all of the time 11(6.3%). Feeling nervous, anxious, or on edge, the frequency of not at all was 12(6.8%), several days 28(15.9%), More than Half of the days 40(22.7%), Nearly Every day 96(54.5%) Among 176 participants Anxiety was mild among 9(5.1%), moderate among 43(24.4%) and severe among 124(70.5%)¹⁴.

In this review, we incorporated 37 papers from the previous study. The present literature on COVID-19's influence on HCW wellbeing revealed many patterns. The bulk of research looked at COVID-19's psychological effects, such as stress and anxiety levels. Some researchers examined at stress and sleep quality. Only a tiny percentage of the studies employed qualitative research methods¹⁵.

The goal of this research is to determine the incidence of stress and psychopathy problems among members of the healthcare team in a Northern Italian health facility, as well as to determine cultural, employment, and psychosocial determinants of stress. During the COVID-19 disaster, health practitioners experienced significant levels of exhaustion and psychiatric disorders. These problems required to be monitored and treated as soon as possible¹⁶.

According to the current study, how often did you ever feel hopeless in the last four weeks? The frequency was none of the time 2, a little of the time 7, some of the time 70, most of the time 64, and all of the time 33. How often did you feel restless or fidgety over the last four weeks? None of the time, a little of the time 42, sometime 36, most of the time 41, and all of the time 31¹⁷.

CONCLUSION

Psychological distress and anxiety were present among physiotherapists in ICU while performing chest physiotherapy in covid-19 patients. Covid-19 affects their mental health. Most of the Physiotherapists were feeling severe anxiety and have a severe psychological Distress.

Limitations: The study was done on a small sample size; there should be a large sample size. Other things like Physiotherapists willingness to take an interest in the program and limited resources and education were principal impediments.

Conflict of interest: Nil

Recommendations:

- This study should be conducted on a large sample size.
- This study should be conducted in different cities in Pakistan.
- The experimental research should be conducted.
- A longitudinal design study would further elaborate.

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