Prevalence of Depression, Anxiety and Stress among Clinical Physiotherapist during COVID-19 Pandemic - A Cross Sectional Study

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ABSTRACT

Background: In year of 2020, The Covid 19 epidemic caused by SARS Cov 2 disturbed normal ways of living globally. Epidemic affects emotional, physical and economical issues among the various populations. Physiotherapist as a professional, it is impacting professionally and personally. Due to job instability and job viability especially for private practitioners which affecting psychological status. Essential role of physiotherapist during this Covid 19 epidemic. So this study is to Find out the Prevalence of Depression, Anxiety and Stress among Clinical Physiotherapist during Covid 19 Pandemic.

Aims and Objectives: To find out the Prevalence of the Depression, Anxiety and Stress among Clinical Physiotherapist during Covid 19 Pandemic.

Methodology: The cross sectional study was carried out among 130 physiotherapists. In which 107 female and 23 male who had willingness to participate in the study according to inclusion and exclusion criteria. Written consent was taken by individuals. Outcome measure was DASS-21 Questionnaire and result was prepared.

Result: Mean age of participants was 28.38 with involvement of 82% female and 18% male. This study showed that prevalence of Depression is 7% mild, 9% moderate, 2% Severe, Prevalence of anxiety is 4% mild, 16% moderate, 5% Severe and Prevalence of Stress is 12% mild. Study showed that epidemic affects Depression, Anxiety and Stress among clinical physiotherapist.

Conclusion: Study concluded that pandemic has affected mild to moderate level of Depression & Anxiety and mild level of Stress among clinical Physiotherapist.

Keywords: Stress, Anxiety, Depression, Physiotherapist, Covid-19.

INTRODUCTION

On 31st December 2019, China reported an acute pneumonia outbreak that had started from Wuhan. In a short time, the disease caused by corona virus (Covid 19) spread from china to other countries around the world, and caused several health, socio economical and political changes around the world. On date of 30 th January 2020, the WHO (world health organization) announce the corona virus as a public health emergency of international concern (PHEIC). On February 11, 2020, WHO declared a global pandemic, and officially named as COVID-19. International Committee on Virus Classification (ICTV) modified the name to SARS-CoV-2. June 25, 2020, the WHO reported further 8.5 million infections worldwide. Nonetheless, the number of the infected people is still
adding. Also, the lack of a definitive treatment has led to more fatality during this period.\(^{(1)}\)

The spread of the disease has put a lot of psychological stress on different communities and key workers, especially Hospital staff who are in a direct contact with the patients.\(^{(1)}\)

Stress, anxiety, and depression are crucial challenges for psychologists, psychiatrists, and behavioral scientists around the world. Among mental illness, depression is common mental disorder according to the World health organization, is one of the most common behavior disorder related with low mood, loss of interest, guilt and worthlessness, sleep and appetite disorders, low energy and less concentration. Depression and anxiety are the most common psychiatric diseases with a frequency of 10 to 20% in the general population. Stress is an intact part of human life and is perhaps one of the most common issues in modern societies. Anxiety is a disease often associated with fear and unease and is accompanied by symptoms such as fatigue, restlessness and palpitations. In etiology of anxiety, genetic, hereditary, environmental, psychological, social and biological factors are considered. Constant anxiety led to loss of self confidence and becomes depressed while feeling humiliated, and these result in increase workplace stress and performance reduction. The latter itself intensifies anxiety, and the continuity of this cycle can ultimately erode people’s mental and physical capacities and, after a while, lead to unstable neuropsychiatric diseases.\(^{(1)}\)

Healthcare workers are involved with infected cases’ care so faced with an unknown trouble to their own life. Excess workload, fear of contagion, feeling of being under pressure, lack of specific medicines, and isolation of community were the major issues faced by healthcare workers during the time of the COVID-19 outbreak. Healthcare workers aiding patients infected with the COVID-19 may face further stress due to the stigma. On the other side, fear of Covid 19 seems to be related to depression and job instability. There is still lack of studies probing mental health among healthcare workers.\(^{(2)}\)

Physiotherapy is an established profession throughout the world.\(^{(3)}\) In our health care profession, this is impacting our personal and professional life. In personal aspects we experiencing economical, mental, social, and physical health as including concerns about re household job security and business viability (for private practitioners), others like cancelation of marriage and travelling plans. In Professional aspect, also being challenged during this epidemic as we’re moving under pressure in new model which involves reskilling and redeploying staff for intensive care units. In outpatient and private practice, treatment giving through tele health technology and we’re needed to work within control of new confines of infection, also review of standard approaches for assessment and treatment of patients.\(^{(4)}\)

Physiotherapists frequently work in acute hospital wards and ICUs. Physiotherapists who work in primary healthcare facilities will play a part in the management of cases admitted to hospital with verified or suspected COVID-19.\(^{(3)}\) Excessive workload, fear of contagion, feeling of being under pressure, lack of specific medicines, and isolation of community were the major issues faced by physiotherapist during the time of the COVID-19 outbreak. On the other side, fear of COVID 19 seems to be related to depression and job instability.\(^{(2)}\)

The mental health problems of physiotherapist would negatively affect their attention, cognitive functioning and clinical decision- making, leading to a subsequent increase in the incidence of medical errors and incidents, and thus putting patients at risk. It was also known that acute stress in disasters can have a long term effect on overall well being of individual. Therefore, the mental health problems of physiotherapists in the COVID-19 pandemic
have become an urgent public health concern. (5)

So, this study aimed to find out prevalence of depression, anxiety and stress among clinical physiotherapist during Covid 19 pandemic.

MATERIALS AND METHODOLOGY

Study design: Cross sectional survey
Sample selection: According to inclusion & exclusion criteria
Sample design: Convenience sampling
Study duration: 4 weeks
Sample size: 130 Physiotherapist
Source: Clinical therapist working in different setups
An online cross sectional study was done. Online data collection tool was google form.

INCLUSION CRITERIA: Participants who willingly wants to participate, Age between 25 to 35 years, Both gender, Clinical physiotherapist, Employed during lockdown with full time contract

EXCLUSION CRITERIA: Severe medical condition, who have suffering from previous depression symptoms, who have suffering from previous anxiety symptoms, who have suffering from previous stress symptoms.

PROCEDURE: A google survey form was generated and circulated through online mode via mail, WhatsApp, FB messenger, telegram among the physiotherapist. Informed consent was taken from the physiotherapist in the beginning of the questionnaire. The form was self generated from with the questions regarding their demographic, qualification, work as, working sector, working hour. 130 Physiotherapist included into the study according to inclusion and exclusion criteria. Depression, anxiety & stress was evaluated by the help of short form of DASS 21 questionnaire. The data was collected in 4 weeks of time period and prevalence has been find out.

OUTCOME MEASURE:
Short form of DASS 21 questionnaire

It is a psychological testing tool able to measuring negative emotional states of depression, anxiety and stress. The depression subscale evaluates hopelessness, self- deprecation, devaluation of life and lack of interest. The anxiety subscale evaluates autonomic arousal, skeletal muscle effect and subjective experience of anxious effect. The stress subscale evaluates relaxing difficulty, nervous arousal, and being easily agitated, impatient and over-reactive. The DASS-21 has show adequate reliability (ranging from 0.81 to 0.97) and construct validity. Each of the three sector comprises seven items scored on a Likert scale from 0 to 3 (0: did not apply to me at all, 1: applied to me to some degree, 2: applied to me to a considerable degree, 3: applied to me very much). The final score for each subscale was multiplied by 2 and used to evaluate the negative emotional status. Individual scores ranging from 0 to 9 for depression, 0–7 for anxiety and 0–14 for stress represented the normal category. Higher scores indicated higher depression, anxiety or stress, which ranged from mild to extremely severe disorder. Mild scores were: 10–13 for depression, 8–9 for anxiety and 15–18 for stress. Moderate scores were: 14–20 for depression, 10–14 for anxiety and 19–25 for stress. Severe scores were: 21–27 for depression, 15–19 for anxiety and 26–33 for stress. Scores above 27 for depression, above 19 for anxiety and above 33 for stress were considered extremely severe. (6)

RESULT

<table>
<thead>
<tr>
<th>Table: 1 Shows Gender distribution in Clinical Physiotherapist.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MALE</strong></td>
</tr>
<tr>
<td><strong>FEMALE</strong></td>
</tr>
<tr>
<td><strong>TOTAL PHYSIOTHERAPIST(130)</strong></td>
</tr>
</tbody>
</table>
Figure no. 1 Shows gender distribution in Clinical Physiotherapist.

Table 2: Shows mean scores of Age, Depression, Anxiety and Stress for Clinical Physiotherapist.

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>MEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE</td>
<td>28.38</td>
</tr>
<tr>
<td>DASS-21 DEPRESSION</td>
<td>4.93</td>
</tr>
<tr>
<td>DASS-21 ANXIETY</td>
<td>4.98</td>
</tr>
<tr>
<td>DASS-21 STRESS</td>
<td>6.21</td>
</tr>
</tbody>
</table>

Table 3: Shows the percentage of clinical physiotherapist falling into each of the five category such as Normal, Mild, Moderate, Severe and Extremely Severe based levbend and levbend’s percentile cut offs.(1995)

<table>
<thead>
<tr>
<th>DASS 21 CATEGORY</th>
<th>DASS-21 DEPRESSION</th>
<th>DASS-21 ANXITY</th>
<th>DASS-21 STRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORMAL</td>
<td>81.53%</td>
<td>74.61%</td>
<td>88.46%</td>
</tr>
<tr>
<td>MILD</td>
<td>6.92%</td>
<td>4.61%</td>
<td>11.53%</td>
</tr>
<tr>
<td>MODERATE</td>
<td>9.23%</td>
<td>16.15%</td>
<td>0%</td>
</tr>
<tr>
<td>SEVERE</td>
<td>2.30%</td>
<td>4.61%</td>
<td>0%</td>
</tr>
<tr>
<td>EXTREMELY SEVERE</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

DEPRESSION:

Figure no.2 Shows that out of 130 respondents, 0% Extremely Severe, 2% Severe, 9% Moderate, 7% Mild Depression
ANXIETY:

Figure no.3 Shows that out of 130 respondents, 0% Extremely Severe, 5% Severe, 16% Moderate, 4% Mild Anxiety

STRESS:

Figure no.4 Shows that out of 130 respondents, 0% Extremely Severe, 0% Severe, 0% Moderate, 12% Mild Stress.

DISCUSSION

The result of the present study provides lights into clinical physiotherapist psychological status during the covid 19 pandemic. The present study analyzed psychological status of clinical physiotherapist age between 25 to 35 years during COVID 19 pandemic.

In this study it is seem that clinical physiotherapist had mild to moderate level of depression, anxiety and mild level of stress. This may be due to re household job instability and business viability (in case of private practitioners), others like abatement of marriage and travelling plans. In Professional aspect, also being challenged during this epidemic as we are moving under pressure in new model which involves re-skilling and redevelop staff for intensive care units. In outpatient and private practice, treatment giving through tele health technology and we are required to work within control of new confines of infection, also reconsider of standard approaches for
Physiotherapists who work in primary healthcare setting play a role in treatment of patients admitted to hospital with confirmed or suspected COVID-19. Excessive workload, fear of contagion, feeling of being under pressure, lack of specific drugs, and isolation of community were the major problems faced by healthcare workers during the COVID-19 outbreak. On the other side, fear of COVID-19 seems to be related to depression and job instability etc.

Studies conducted by B Shivananda Nayak et al, on healthcare workers of Trinidad and Tobago to find prevalence and factors associated with depression, anxiety and stress during covid 19 pandemic. Result of the study found 42.28%, 56.2%, and 17.97% healthcare worker have depression, anxiety and stress respectively.

Result shows that mild to moderate level of depression, anxiety and mild level of stress as compare to study (2) (V.lenzo et al) on healthcare workers in which 25% of the respondents were nurses, 24% were physicians, 16% were physiotherapists, 14% were healthcare assistants, 7% were clinical psychologists, 5% were speech therapists, 3% were social workers, 5% were other health professions. Also, 20% of the healthcare workers assisted COVID-19 patients. They found prevalence of moderate-to-extremely severe depression, anxiety, and stress among participants was 8, 9.8, and 8.9%, respectively. Healthcare workers obtained higher score than other participants on the three DASS-21 scales. Prevalence is moderate-to-extremely severe in which 21.5% for anxiety and 33.4% for stress. (2)

Studies conducted by Eman Alnazly et al on Jordanian healthcare workers to find anxiety, depression, stress, fear and social support during Covid 19 pandemic. In which majority of participants are nurses. Result shows that depression (21.30 ± 10.86), anxiety (20.37 ± 10.80), stress (23.33 ± 10.87) was also high. (7)

In this study mild to moderate level of depression, anxiety and mild level of stress are observed in clinical physiotherapist.

CONCLUSION
Study conclude that pandemic affect mild to moderate level of depression and anxiety and mild level of stress among clinical physiotherapist.

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Conflict of Interest
No conflicts of interest

Source of Funding: None

Ethical Approval: Approved

REFERENCES
5. Aly HM, Nemr NA, Kishk RM, Elsaid NMA bakr. Stress, anxiety and depression


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