



## PHYSIOTHERAPY STUDENT'S MENTAL HEALTH AND COPING STRATEGIES USED WHILE PERFORMING COVID 19 DUTIES

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**ABSTRACT** **BACKGROUND:** Coronavirus disease 2019 (COVID-19) – a global pandemic has severely affected humankind both socially and psychologically. Due to shortage of manpower and excessive load the physiotherapy students were also deputed for rendering their services in various departments ranging from screening to involvement in critical care. The study focuses on to investigate the mental health of students while performing the duties and also the coping strategies used by them to overcome the negative effects of the pressure of work.

**METHOD:** A Cross-sectional study was conducted by using an online, web-based questionnaire, which was distributed to physiotherapy students who worked during the pandemic from April 2020 to June 2021. The respondents were recruited by the non-random convenience sampling method.

**RESULTS:** A total of 448 responses were received in the survey and the majority (more than 40%) of students agreed that they were stressed and anxious while performing their duties. Moreover, more than 75% students relieved the stress by self motivation and family support as a coping strategy

**CONCLUSION:** This study indicated that physiotherapy students were experiencing psychological, emotional, and physical distress while performing the COVID-19 duties.

**KEYWORDS :** COVID 19, mental health, Relaxation techniques, Stress

### INTRODUCTION

Covid 19 is being considered as one of the most significant public health crisis which hasn't only impacted everyone but in particular affected the healthcare workers due to shortage of healthcare resources like absence of protective equipment or medical supplies, increased patient load and moreover the fear of risk to their own health as well as risk of exposure to their family. This has contributed to physical as well psychological burden on them<sup>1</sup>

India being a country with huge population required a manpower which could deal with the extreme loads which were put on the medical system during the pandemic.<sup>2</sup> The local government authorities due to shortage utilized various medical fraternity students also in team for the proper management of Covid crisis.<sup>3</sup> Hence physiotherapy students of third and final year and also the post graduate students were involved from various institutes of the city in variety of duties ranging from field work to ICU management.

Although the students were dedicatedly performing their duties, but the pandemic: its fear, anxiety and risk of self contacting and transmission to family and friends, extreme load as they were struggling to manage both education and duty which lead not only to a physical turmoil but also affected their mental well being.<sup>4</sup> There were times they had to miss online classes or attend late evening or night sessions after a long tiring day of work.<sup>5</sup> The severe conditions of patients and unavailability of medical equipments and medication also crept a feeling of helplessness amongst them for patients well being which further increased their stress levels.<sup>6</sup>

Previous literatures on other health workers similarly showed an increased mental burden among them. The mental well being is important factor for proper work, so coping strategies to release stress, anxiety and depression were also reviewed.<sup>7</sup>

The study aims at understanding the level of psychological disturbances occurring in physiotherapy students while caring for Covid patients and also what method or techniques they applied to reduce the stress and anxiety.

### METHODOLOGY:

Various previous literatures were referred on the basis of which a questionnaire was developed in consideration with all the triggering factors which could lead to stress, anxiety and depression. A cross sectional study was designed which included physiotherapy students of third, final year Bachelor of Physiotherapy and First- and Second-Year Master of Physiotherapy in age group from 19-25, who were delegating care to patients suffering from COVID 19 symptoms from

April 2020 to May 2021. A Google form was generated with questions including the basic demographic data, questions related to their concerns of self safety and others including family, friends and also patient's condition, managing online classes etc

The questions regarding coping strategy items were formulated on the basis of the previous literature and guidelines of WHO mental health. A few leading responses were added to the question on how they were managing the stress levels like family or peer support, self motivation, any kind of help from other counselors, social media, exercises or meditation etc and were also given an option for mentioning any other method.

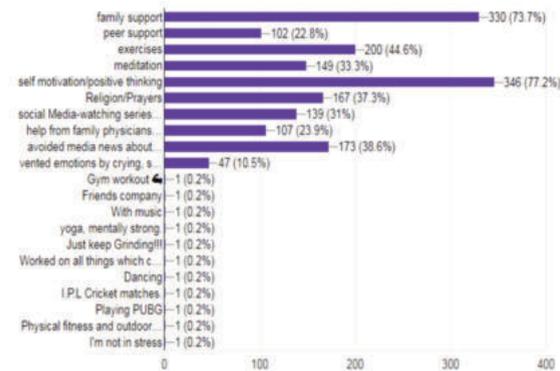
### ANALYSIS AND RESULTS:

All survey responses were collected using a Likert type scoring system based on 5 points: "strongly disagree", "disagree", "neutral", "agree" and "strongly agree", to indicate the extent to which their agreement on each item. 448 responses were received which included 81% females and 19% males.

**Table 1: Responses Received based on percentage**

Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree	Yes	No
I felt I had to do my duty as it is my professional and ethical duty.	3%	1%	5%	39%	52%		
I felt nervous and scared.	23%	3%	6%	40%	28%		
I thought of quitting my duty	22%	35%	18%	15%	10%		
I would not report duty if a COVID-19 outbreak occurred	44%	32%	16%	7%	1%		
I thought of calling in sick:	10%	2%	12%	23%	53%		
I called in sick at least once during the outbreak:						68%	32%
It stressed me to see my colleagues getting sick	5%	10%	12%	45%	28%		
It stressed me to think that I could transmit COVID-19 to my family and friends	17%	11%	1%	40%	31%		
It stressed me to see patients with COVID-19 dying in front of me	18%	15%	3%	39%	25%		
It was stressful not knowing when the COVID-19 pandemic will be under control	2%	8%	32%	41%	17%		
I was stressed because I was emotionally exhausted	13%	12%	10%	41%	24%		
I was stressed because I was physically stressed / fatigued	5%	15%	5%	50%	20%		
I was stressed because I experienced conflict between my duty and my own safety	8%	28%	27%	29%	8%		
I was stressed because I felt there were not adequate protective measures	16%	40%	23%	17%	4%		
I was stressed because I felt that I was unable to manage my online classes and duty	8%	12%	20%	35%	25%		
My stress reduced when I saw improvement in patient's condition	1%	1%	8%	46%	44%		
I followed strict personal protective measures (e.g. mask, face shield, gown, hand washing etc) as a personal coping strategy	0%	2%	2%	34%	62%		

The mental health effects of the working during the COVID-19 pandemic among Physiotherapy students have been well documented in the table no.1. Although 91% were strongly in view that it was their professional and humanitarian duty to serve the nation, but more than 60% to 65% were anxious and worried for self disease contraction or infection to their loved ones due to exposure. The 60% physiotherapy students found it equally difficult to manage online studies and duties simultaneously, but still more than 75% were willing to rejoin their duties if another pandemic wave hit the nation.



**Figure 2: Coping Strategies**

Fig. 2 represents the support systems and coping strategies used by physiotherapy students during the Covid duty in Pandemic. In this study physiotherapy students used many strategies which helped them to alleviate some of the symptoms of psychological distress. Amongst, all 77.2% of the students emphasized self motivation or positive thinking as successful coping technique, whereas 73.7% considered family support as the main stress reliever. 44.6% did exercises or fitness activities to vent out their stress. More than 35 % believed in praying and meditation as stress buster.

## DISCUSSION

Recent studies from all over the world reported healthcare workers suffering from increased stress to psychological distress, anxiety, depression and other mental health issues. There are several factors causing these high rates of mental illness. One of the stressors may be due to lack of energy, demoralization, dizziness, generalized anxiety, difficulty in sleeping, restless sleep, working under pressure, sadness, online classes, fear of affecting Covid 19, fear of their family suffered from Covid 19, and feeling over-whelmed by the demands of everyday life.<sup>8</sup>

Relief from the stress is the most effective method of treatment for symptoms, which was achieved by adopting different types of coping strategies includes moral support from their friends, family members, and their colleagues, listening music, meditation, exercise, morning walk, self motivation, etc.<sup>9</sup>

Study done by Wen-ruí Zhang in April 2020, on mental health and psychosocial problems of medical health workers, further supported the present study by concluding that psychological problems and risk factors for developing were present in medical health care workers, so they need proper attention and appropriate recovery program.<sup>10</sup>

A prospective cross sectional study conducted on six Jordanian school on total 553 medical students concluded that there was severe mental illness among the medical students which affected their physical fitness, exercise, and studying during pandemic, and proper measures need to be taken to alleviate students' stress.<sup>11</sup> The study supports the results deduced in the present research.

Limitation of the present study is that all the health care workers were not included and moreover age, gender distribution were not considered.

Further studies can compare the effects on mental health among the health workers between first and second wave, also all health care workers can be included and a comparison can be made among them. Moreover, the level of fatigue during covid duty can be assessed and appropriate measures can be advised.

## CONCLUSIONS

The current study was aimed to highlight the mental health and coping strategy of physiotherapy student during Covid 19 duties from April

2020 to May 2021 which shows that physiotherapy students were experiencing psychological, emotional, and physical distress while performing the COVID-19 duties, also & 70% of the students were using coping strategies to relieve their stress via self motivation and family support.

## REFERENCES:

- Xiong J, Lipsitz O, Nasri F, Lui LMW, Gill H, Phan L, et al. Impact of COVID-19 pandemic on mental health in the general population: A systematic review. *J Affect Disord.* 2020 Dec 1;277:55-64.
- Tahara M, Mashizume Y, Takahashi K. Coping mechanisms: Exploring strategies utilized by Japanese healthcare workers to reduce stress and improve mental health during the COVID-19 pandemic. *Int J Environ Res Public Health.* 2021;18(1).
- George CE, Inbaraj LR, Rajukutty S, De Witte LP. Challenges, experience and coping of health professionals in delivering healthcare in an urban slum in India during the first 40 days of COVID-19 crisis: A mixed method study. *BMJ Open.* 2020;10(11).
- Rose S, Hartnett J, Pillai S. Healthcare worker's emotions, perceived stressors and coping mechanisms during the COVID-19 pandemic. *PLoS One.* 2021;16(7 July 2021).
- Singh J, Sood M, Chadda RK, Singh V, Kattula D. Mental health issues and coping among health care workers during COVID-19 pandemic: Indian perspective. *Asian J Psychiatr.* 2021;61.
- Özgevik Subaşı D, Akça Sümengen A, Şimşek E, Ocaççı AF. Healthcare workers' anxieties and coping strategies during the COVID-19 pandemic in Turkey. *Perspect Psychiatr Care.* 2021;
- Htay MNN, Marzo RR, Bahari R, AIRifai A, Kamberi F, El-Abasiri RA, et al. How healthcare workers are coping with mental health challenges during COVID-19 pandemic? -A cross-sectional multi-countries study. *Clin Epidemiol Glob Heal.* 2021; 11.
- Asnakew S, Amha H, Kassaw T. Mental health adverse effects of COVID-19 pandemic on health care workers in north west Ethiopia: A multicenter cross-sectional study. *Neuropsychiatr Dis Treat.* 2021;17.
- Giorgi G, Lecca LI, Alessio F, Finstad GL, Bondanini G, Lulli LG, et al. COVID-19-related mental health effects in the workplace: A narrative review. *Vol. 17, International Journal of Environmental Research and Public Health.* 2020.
- Zhang WR, Wang K, Yin L, Zhao WF, Xue Q, Peng M, et al. Mental Health and Psychosocial Problems of Medical Health Workers during the COVID-19 Epidemic in China. *Psychother Psychosom.* 2020;89(4).
- Seetan K, Al-Zubi M, Rubbai Y, Athamneh M, Khamees A, Radaideh T. Impact of COVID-19 on medical students' mental wellbeing in Jordan. *PLoS One.* 2021;16(6 June).