

## Challenges faced during lockdown in exam going Physiotherapy undergraduate students

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### Abstract:

**Background:** The COVID-19 pandemic was causing enormous uncertainty among the young students studying for university exams. This study was done to reveal the impact of this lockdown on their mental makeup/mindset. The focus of the study was to address the gaps in understanding the student perception from their shared experiences using qualitative analysis using structured questionnaire. This study was conducted during the lockdown period to gain the new insights of experiences of university students during emergencies. It was important to understand the psycho-social impact of the pandemic on their thought process. This understanding was necessary for the teachers to provide them adequate support for preparation of the forthcoming examinations.

**Materials and Methods:** All undergraduate physiotherapy students belonging to the age group of 18-21 years were included in this cross-sectional study. A pre-designed, pre-validated, questionnaire - The Depression, Anxiety and Stress Scale - 21 Items (DASS 21) was sent to them via online mode. An open ended question was asked to mention what coping strategies they used during the lockdown period.

**Results:** In undergraduate physiotherapy students, depression was found in 65.11% students. Anxiety and stress were present in around 52.71% and 39.53% students respectively.

**Conclusion:** The study shows that the mental state of the exam going students was affected during lockdown due to COVID-19 pandemic. Thus, there is an urgent need to incorporate psychological health promotion for physiotherapy undergraduate students.

**Key Word:** Depression, Anxiety, Stress, physiotherapy students

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### I. INTRODUCTION

A nation wise lockdown was ordered as a preventive measure against the COVID-19 pandemic in India.<sup>1-4</sup> This has a multifactorial impact on different age groups of population. Youngsters especially students have stifling loss of independence. Staying indoors with hazy academic futures and uncertainty brings in feelings of stress and anxiety.

Stress is a real or perceived imbalance between environmental demands required for survival and an individual's capacity to adapt to these requirements.<sup>5-7</sup> For the exam going students the stress may be huge.<sup>8</sup> Many researchers revealed that the stress of the perceived exam is the main reason for numerous emotional disorders.<sup>9</sup> The other important factors include extensive curriculum, voluminous textbooks, enormous content, competitive environment. Similar pressures are subjected to the undergraduate students of allied health. There is a substantial amount of literature which suggests that Physiotherapy education is demanding.

The uncertainty about future, academic demands and pressures are the stressors affecting the student's learning capacity. This in- turn affects the academic output as well as their day to day adjustment process. These stressors would affect academic performance as well as threaten their physical and psychological well being.<sup>10-12</sup> Therefore this study was conducted to unfold the challenges faced by the exam going students of Physiotherapy course.

### II. MATERIAL AND METHODS

This cross- sectional study was carried out in undergraduate students who are pursuing physiotherapy course. The total duration of this study was 3 months

**Study Design:** Cross sectional study

**Study Duration:** April 2020 to June 2020

**Sample size:** 280 students

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**Sample size calculation:** The sample size obtained using universal sampling method for this online based survey was 280. Out of 280 students only 258 students responded.

**Sampling method:** Convenience sampling

**Inclusion criteria:**

1. Age: 18- 21 years
2. All exam going undergraduate students from K J Somaiya college of Physiotherapy

**Exclusion criteria:**

1. Students who were not willing to participate and did not respond to the questionnaire

### Procedure methodology

The approval was taken from the Institutional review board of K J Somaiya college of Physiotherapy. The questionnaire was sent using google form via email among all undergraduate students in K J Somaiya College of Physiotherapy. The informed consent was taken prior from the participants to answer the online questionnaire to confirm their willingness to participate voluntarily. After confirmation, the participants were directed to complete the outcome measure. An open ended question was also asked to mention coping strategies they used during this period. Confidentiality was ensured of all participants enrolled in this study.

The Depression, Anxiety and Stress Scale - 21 Items (DASS-21)<sup>13</sup> was used as an outcome measure in this study. This questionnaire consists of 21 questions divided into 3 parts: 7 on each side on depression, anxiety, and stress. The depression scale assesses dysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest / involvement, anhedonia and inertia. The anxiety scale assesses autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious affect. The stress scale is sensitive to levels of chronic non-specific arousal. It assesses difficulty relaxing, nervous arousal, and being easily upset / agitated, irritable /over-reactive and impatient. Scores for depression, anxiety and stress are calculated by summing the scores for the relevant items.<sup>13</sup>

### Statistical analysis

Data collected was analysed using descriptive statistics with Microsoft Excel version 2010.

## III. RESULT

**Table 1: Demographic characteristics of undergraduate physiotherapy students**

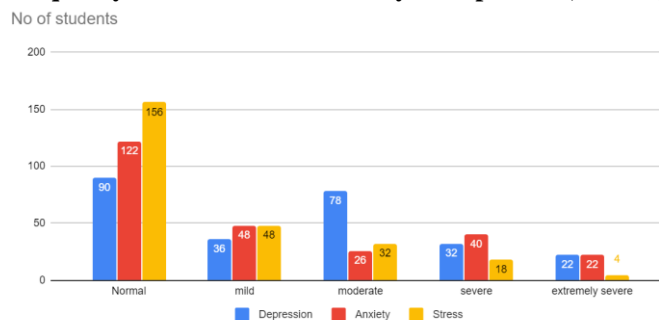
Variable	Mean	Standard Deviation
Age	19.3 ± 1.19	1.18
Gender	Number	%
Females	240	93.02
Males	18	6.97

**Table 2: Frequency of students with severity of Depression, Anxiety and Stress**

DASS Depression					
	Score	Number of students	%	Mean	Standard Deviation
Normal	0-4	90	34.88	2.31	1.51
mild	5-6	36	13.95	5.72	0.45
moderate	7-10	78	30.23	8.21	1.17
severe	11-13	32	12.40	11.93	0.76
extremely severe	14+	22	8.53	15.73	1.91
Number of students with depression		168	65.11		
DASS Anxiety					
	Score	Number of students	%	Mean	Standard Deviation
Normal	≤3	122	47.29	1.88	1.18
mild	4-5	48	18.60	4.458	0.50
moderate	6-7	26	10.08	6.23	0.43
severe	8-9	40	15.50	8.6	0.50
extremely severe	10+	22	8.53	12	2.86
Number of students with anxiety		136	52.71		

DASS Stress					
	Score	Number of students	%	Mean	Standard Deviation
Normal	0-7	156	60.47	4.41	2.07
mild	8-9	48	18.60	8.45	0.50
moderate	10-12	32	12.40	10.5	0.62
severe	13-16	18	6.98	14.11	1.13
extremely severe	17+	4	1.55	17	0.00
Number of students with stress		102	39.53		

Figure1: Frequency of students with severity of Depression, Anxiety and Stress



A total of 258 students responded to the online survey. Mean age of participants was  $19.3 \pm 1.19$  years. Out of them 240 were females and 18 were males. Data interpreted that 65.11% undergraduate students had depression. (Table 1) Anxiety was found in 52.71% whereas 39.53% had stress. (Table 2)

It was found that depression was absent in 90 (34.88%) students. 36 (13.95%) students had mild, 78 (30.23%) had moderate, 32 (12.40%) had severe and 22 (8.53%) had extremely severe levels of depression. (Table 2, Figure 1)

122 (47.29%) undergraduate students had no anxiety. Students who had anxiety were categorised. 48 (18.60%) had mild and 26 (10.08%) had moderate levels of anxiety. Severe and extremely severe levels were found in 40 (15.50%) and 22 (8.53%) students respectively. (Table 2, Figure 1)

According to DASS -21 ranking criteria 156 (60.47%) had no stress. 48 (18.60%) had mild stress. Moderate stress was found in 32 (12.40%). Severely affected were 18 (6.98%) and extremely severe were 4 (1.55%). (Table 2, Figure 1)

#### IV. DISCUSSION

The study was conducted to find out the challenges faced by the physiotherapy students during COVID-19 pandemic. Google form link was sent to all undergraduate students via e-mail. 258 (92.14%) students responded.

Khetan MS and Jaiswal KM et al <sup>14</sup> conducted a study on pre- medical students of Maharashtra and found that the students of age group less than 20 years were more depressed in the lockdown crisis. <sup>14</sup> Exam going students face various intrinsic as well as extrinsic pressures. <sup>8</sup> The competition to score well creates high amount of stress. The intrinsic pressure results from self motivation, hard work, perfectionism and determination. <sup>8</sup> These are the traits admired in a physiotherapist. These stressors may become hindrances to an individual's well being. The additional unexpected stress was added on by COVID-19 pandemic lockdown. The current context of social distancing, stay home mandates, uncertainty of exam schedule and exam pattern added to student's distress.

This study was conducted to understand student's perspective due to the impact of an exceptional situation on their psychological status. DASS-21 <sup>13</sup> gives multifactorial analysis of depression, anxiety and stress. The study data revealed that COVID-19 pandemic lockdown is creating distress among the exam going physiotherapy students. Psychological morbidities are common among young adults leading to major psychiatric health problem worldwide. <sup>15</sup> Decrease in social connectivity, inability to meet friends or participate in extracurricular activities makes them prone to feel lonely and sad. <sup>7</sup> The constant fear of their own health, the health of their family and friends is the major cause of unhappiness. Symptoms of extremely severe depression

and anxiety were seen in 8.53%. Severe depression and anxiety could result due to loss of family members or friends. The crisis situation is creating a feeling of lack of control on their life, the imposed restrictions and sudden demises.

The symptoms of depression were moderate in 30.23%, mild among 13.95% undergraduate students. Mild range of anxiety and stress symptoms were seen in 18.60% while 10.08% and 12.40% students were in the moderate range of anxiety and stress levels. Zhai Y and Du X<sup>16</sup> have conducted a study to address mental health among college students and COVID-19 pandemic. They have recommended that universities should continue to work on the mental health issues caused due to disruptions in education and the career trajectory of the exam going students.<sup>16</sup>

The respondents were worrying and feeling depressed regarding the academic year and future career. Students generally have some amount of anxiety to face theory exams as well as viva. Non availability of study material, inability to use library facilities could be attributed to the cause of the anxiety and stress in this confinement period. During lockdown their study schedules were changed. Adjusting to new routines disturbed their exam preparations this added to their anxiety and stress.

The anticipated drastic change in the exam pattern from offline to online created a panic situation in many students. Failure of electricity, difficulty in uploading the exam matter could have been a major cause of anxiety in many students especially residing in rural areas.

The students residing in urban areas can avail better facilities and educational resources as compared to the students in residing in rural areas. Another important socio-economic aspect of the impact of pandemic on economical status and limited income sources might have created a fair amount of stress and anxiety among some respondents. Academic anxiety and exam related stress in low levels is seen in normal circumstances. These normal levels were reported by 47.29% and 60.47% respectively. These scores could be attributed to coping strategies incorporated during the difficult times. Good parental support, communication with dear ones, engagement in hobbies, following healthy eating habits, household chores, exercises, yoga, meditation, breathing techniques work to have positive attitudes and decrease the stress levels.

The analysis of psychological aspects would definitely help the students as well as faculty to understand the three main subsets of mental health in exam going students during these challenging times and to prepare for examinations with due considerations.

Regarding the limitations, firstly, the long term impact on the psychological state was not analysed. Secondly, detailed analysis of causes of their mental status was not carried out. Thirdly, comparison with the non- medical students was not done to generalise the results.

## **V. CONCLUSION**

The data of this study shows that lockdown caused by COVID-19 pandemic affected the mental state of exam going undergraduate physiotherapy students. More than half of the students reported depression and anxiety. There was also a considerable amount of stress among students. Therefore psychological health promotion should be incorporated for physiotherapy undergraduate students. At the same time, the help should be provided to get them accustomed to the new learning environment.

## **VI. RECOMMENDATION**

The results of the study indicate the need of further and recurrent analysis of all the aspects affecting the mental health of young minds and develop effective strategies to maintain good mental health.

## **REFERENCES**

- [1]. IJMR Research Articles on Coronavirus India & COVID-19. Special Issue on Coronavirus India & COVID-19. Available from: <https://icmr.nic.in/content/covid-19>. Accessed on 2020 Apr 11.
- [2]. Gettleman, Jeffrey; Schultz, Kai (24 March 2020). "Modi Orders 3-Week Total Lockdown for All 1.3 Billion Indians". The New York Times. ISSN 0362-4331.
- [3]. "Close schools, all religious activities, extend lockdown: States tell Centre". India Today. 7 April 2020.
- [4]. Sharma, Neeta (30 May 2020). Ghosh, Deepshikha (ed.). ""Unlock1": Malls, Restaurants, Places of Worship to Reopen June 8". NDTV. Retrieved 30 May 2020.
- [5]. Lazarus, R. S. & Folkman, S. Stress, Appraisal and Coping. New York: Springer.1984
- [6]. Chrousos, G. P. & Gold, et al. The concepts of stress and stress system disorders: overview of physical and behavioral homeostasis. JAMA, 1992; 268(2): 267.
- [7]. Lovallo, W.R. et al. Stress and health: Biological and psychological interactions. Newbury Park, CA: Sage. 1997
- [8]. Lee, M. & Larson, R. The Korean "Examination Hell": Long hours of studying, distress and depression. Journal of Youth and Adolescence. 2000; 29(2): 249-271.

- [9]. Fairbrother, K. & Warn, J. Workplace dimensions, stress & job satisfaction. *Journal of Managerial Psychology*. 2003; 18(1): 8-21.
- [10]. De Pablo J, Subira S, Martin MJ, de Flores T, Valdes M. Examination associated anxiety in students of medicine. *Acad Med*. 1990; 65(11): 706-7.
- [11]. Kharche JS, Pranita A, Phadke AV, Joshi AR. Evaluation of examination stress in 1st year M.B.B.S. students. *NJIRM*. 2012; 3(5): 27-31.
- [12]. Golmirzaei J, Paknahad A, Sharafi M. Prevalance of exam related anxiety of medical students among basic sciences. *Comprehensive Journal of Science and medicine*. 2014; 1(1): 30-36.
- [13]. Lovibond PF, Lovibond SH. The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behav Res Ther*. 1995; 33: 335-43.
- [14]. Khetan MS, Jaiswal KM, Vaishnao LS, Kewalramani M, Shah RJ. Effect of lockdown due to COVID-19 pandemic on mental health of pre-medical students of Maharashtra. *Int J Community Med Public Health* 2020;7:3524-30.
- [15]. Depression: A global Crisis: World Federation For Mental Health; 2012
- [16]. Zhai Y, Du X. Addressing collegiate mental health amid COVID-19 pandemic. *Psychiatry Research*. 2020 Jun 1;288.

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