

Research Paper

Frequency of depression, anxiety and stress in physiotherapy students and their coping strategies

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ABSTRACT

Introduction – The number of students being affected with mental health disorders is on a rise in our country. Early detection and management can be easily achieved at the institutional level. **Objectives** – The objectives of this study were to find the number of students that are affected with depression, anxiety and or stress and to discern the methods used by them for coping with the same. **Methodology** – 412 students from various colleges across the city were administered with two questionnaires, a self-made questionnaire on coping strategies and DASS-21. Data was analysed and descriptive statistics was obtained. **Result** – Out of the 412 students that participated in the study, 53% were stressed 64% were anxious and 65% were depressed. When dealing with stress, maximum number of students claim to miss college as their go to method, while less than 7% take help from professionals or mentors. **Conclusion** – A large number of students have their mental health far from normal and the student's expectations from the institutes with regards to promotion of better mental health must be taken into consideration to correct the maladaptive coping.

Keywords: *depression, anxiety, stress, physiotherapy, psychological health.*

There is increasing concern about the stress in health, education and training especially in medical, dental, nursing and physiotherapy education. Stress during Physiotherapy Education is inevitable. Although stress is not necessarily a symptom of anxiety or depressive disorders it can be precursor to these problems. High level of depression, anxiety and stress may have a detrimental effect on the academic curriculum. (Khatri S, et al, 2009) Stress is a physical, mental, or emotional factor (which can be internal or external) that causes bodily or mental tension. Stress is your body's reaction to a challenge or demand. In short bursts, stress can be positive, such as when it helps you avoid danger or meet a deadline. But when stress lasts for a long time, it may harm your health. Stress also has been linked to suppression of the immune system, increasing your chances of becoming ill or altering the course of an illness if you already have one. Long-term stress has been linked to the development of other disorders. A study conducted in a Swedish population found an

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Received: March 4, 2020; Revision Received: June 8, 2020; Accepted: June 25, 2020

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association between different stress levels and mental health: high levels of stress were associated with depression, whereas low and moderate stress levels were associated with anxiety. (Bergdahl, J., & Bergdahl, M. 2002)

Anxiety is experienced as an emotion by everybody in day to day life and it is defined as a state of fearful expectation or apprehension. Anxiety disorders form a category of mental health diagnoses that lead to excessive nervousness, fear, apprehension, and worry. These disorders alter how a person processes emotion and behave, also causing physical symptoms. Ignorance of both stress and anxiety and failure to check them in time may lead to long term repercussions.

Depression (major depressive disorder) is a common and serious medical illness that negatively affects how one feels. It can lead to a variety of emotional and physical problems and can decrease a person's ability to function at work and at home. (American Psychiatric Association. 2013) India is home to an estimated 57 million people (18% of the global estimate) affected by depression. (World Health Organization, Let's talk depression. 2017)

Depression is largely preventable and treatable. Several cost-effective interventions have shown favourable recovery and positive outcomes in the care and management of depression. However, the stigma and treatment gap associated with depression in India is huge. Clinical depression among adults is more than extremes of normal mood, with early onset during young adulthood.

World Health Organization has projected that depressive disorder will be ranked as second most disabling disorders, unless appropriate measures are taken for early diagnosis, prompt and effective treatment and prevention of depression. According to the National Depressive and Manic-Depressive Association (NDMDA), depression is an undergraduate and undertreated disorder. (Hirschfeld, R. M. A., et al 1997) Untreated depression results in high morbidity and mortality. Proper diagnosis and treatment cannot be overemphasized. (Alan De Sousa, et al Vikas Medical Publishers, 2005)

Failure to recognize depression at an early stage is often associated with poor outcomes among affected persons. Effective management of depression includes: (i) early recognition of the condition across the life span; (ii) provision of appropriate and effective treatment, including pharmacological and non-pharmacological interventions.

Studies previously have been done on depression or stress independently, but not in combination of one another. Furthermore, there are very few studies that take into consideration the views of the students on their expectations from their universities and or institutions with respect to mental health.

Physiotherapists are in constant contact with the patients, more so than most of the health professionals, ergo, not only is it essential for us to understand the psychological domains of health for recognizing the same in patients, but correcting mental health in the students will lead for us to create a better work force that focuses on health as wholly as possible and essential.

Objectives

To calculate the number of students affected with either stress, depression or anxiety and to discern the methods of management of the same.

METHODOLOGY

Participants

412 undergraduate physiotherapy students from different colleges across Pune city participated in this cross-sectional study, which spanned across September 2019 to December 2019. (convenient sampling)

Procedure

Depression, Anxiety and Stress were then scaled on the DASS 21 (Depression, Anxiety and Stress Scoring). The scale has been used and validated in several studies. (Lovibond PF, Lovibond SH. 1995), (Nieuwenhuijsen K, et al 2003)

Descriptive statistics including the frequency of depression, anxiety, stress and demographic characteristic of the participant were collected and the data was analysed.

Table no. 1: Table showing demographic data.

	1 st year	2 nd year	3 rd year	Final year	Interns
AGE (mean)	18.18	19.06	20.13	21.08	21.86
SD	0.40	0.31	0.37	0.27	0.43
GENDER					
MALE	12	07	11	14	05
FEMALE	98	51	73	86	55

RESULTS

Table no. 2: frequency of depression.

DEPRESSION	No. of students	1 st year	2 nd year %	3 rd year %	Final year %	Interns %	% total
Normal	143	68%	58%	62%	39%	35%	35
Mild	62	10%	15%	12%	34%	32%	15
Moderate	97	08%	15%	10%	16%	19%	24
Severe	47	09%	07%	10%	06%	11%	11
Extremely severe	63	05%	05%	06%	05%	08%	15

Table no. 3: frequency of anxiety.

ANXIETY	No. of students	1 st year	2 nd year	3 rd year	4 th year	Interns	% total
Normal	147	31%	50%	43%	66%	46%	36
Mild	68	34%	20%	27%	18%	29%	17
Moderate	26	16%	17%	20%	07%	13%	30
Severe	48	13%	08%	07%	05%	08%	12
Extremely severe	123	06%	05%	03%	04%	04%	6

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Table no. 4 frequency of stress.

STRESS	Number	1 st year	2 nd year	3 rd year	Final year	Interns	% total
Normal	194	48%	54%	48%	44%	46%	47
Mild	68	17%	23%	21%	28%	25%	17
Moderate	59	12%	14%	19%	17%	11%	14
Severe	62	15%	06%	07%	08%	09%	15
Extremely severe	29	08%	03%	05%	03%	09%	7

Table no. 5: expectations from the institute

Expectations from the institute	%
Sessions from relatable personnel (someone who has dealt with similar problems)	40.29
Counsellors	37.03
Lectures on dealing with anxiety, stress and depression from professionals	34.9
Dedicated time for activities like meditation / mindful tasks	32.37
Group sessions for interested individuals	27.68
One to one mentorship (with members of the college / seniors)	21.8
Mental health awareness day / camps	21.35

Table no. 6: ways of dealing with overwhelm

Ways of dealing with overwhelm	%
Getting adequate (8+ hours) of sleep	56.55
Taking day/s off college	44.95
Sports / recreational activities post college hours	31.31
Obtain social support	24.01
Prioritize exercise	16.26
Guided imagery/ meditation	13.1
Yoga	10.43
Psychological counselling	6.31
Take help from counsellors/ mentors of your institute	4.61
Medications (Self-administered / prescribed)	4.36

DISCUSSION

Physiotherapy is a paramedical course with extensive syllabus of clinical and academic hours; with a variety of medical subjects. The competition persists throughout the course until completion as above average performance is expected as the norm. According to our results, more than half the students have suffered from either of the three (stress, anxiety and/or depression) The high levels of depression, anxiety and stress could be attributed to the pressure exerted on students during physiotherapy education by their workload, clinical requirements, examinations and grades. DASS used in the current study tends to account for the physical and psychological symptoms of stress, anxiety and depression.

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Rosal and colleagues noted that when medical students enter medical school, they exhibit depression levels comparable to those of the general population, but their levels of depression increase significantly during medical school. As per our results, there is a variability in the levels of depressive symptoms; highest being in the interns. Too much stress pooled with other psychological factors can be damaging and can disrupt normal functioning of the students. It may lead to further psychological complications causing psychological morbidity. Subjective experience of stressors in students can lead to poor quality of life, condensed self-esteem resulting in lower self-confidence, compromised ability to cope with daily life problems and may influence student's academic performance. (Silver HK, Glick AD, 1990), (Niemi, P.M. 2009, November 20) The highest amount of stress is experienced in the final year and internship. Exams, cases, research presentations as also, the direct contact with patients can be the probable causes for the same. Academic stress is consistently reported as being the highest stressor for physiotherapy students (Tucker, et al 2007)

The levels of anxiety are highest in the first years which can be explained by the new atmosphere and pressures; as also living away from family for many of the students. Studies have shown that the amount of anxiety and academic performance are two directly related phenomenon. Anxiety also causes inability to take decisions as well as lack of confidence which can be detrimental when dealing with patience or even academic performances.

Although there are differences in the year wise frequency of stress anxiety and depression, individual levels are rather high in each year. Our findings could indicate that all students experience tremendous pressure and stress regardless of their level of study. It also emphasises on the methods that the students currently use for dealing with overwhelm, in which most of the students claim to be missing college as their go to way for dealing with the same, approximately 45% of the students resort to skipping college, which could be one of the main reasons for poor academic performance. In our study, the majority of the students actively engaged in activities unrelated to the profession of physiotherapy to relieve stress. Despite more than half of the students having experienced depressive symptoms, less than 7% have ever consulted a psychologist, future enlightening the lack of our students seeking medical help. Less than half of the students believe in yoga, meditation or prioritising exercise as their method of dealing with stress, anxiety or depression. This enlightens the fact that students are adhering to maladaptive coping strategies when it comes to dealing with mental health issues.

It is extremely essential to take into consideration what the students feel is necessary for promoting ideal mental health. Stress and anxiety are inevitable during education, but most of the students do not know how to deal with the same, as is clear from the results. Maximum number of students feel they would benefit from lectures on dealing with mental health struggles, while a considerable number of students think there should be time dedicated for mindful activities. Students also believe that there is a need for counsellor who could help them throughout their educational journey.

According to previous studies, students have stated that their relationships with faculty or staff critically affect their academic performance and experience. (Sanders, A. 2002, January), (Al-Amri M, et al, 2012) (Atack L, et al, 2000) (Gerzina TM, et al, 2005)

Therefore, a humanistic learning environment is encouraged, in which students can learn freely without intimidation and through close professional relationships with faculty fostered

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by mentoring, advising, and group interaction. (Gerzina TM, et al, 2005), (Divaris K, et al 2008) Studies have found that the most common coping method is emotional support from others, specifically, talking to friends and family. (Haden NK, et al, 2006), (Ahmad MS, et al 2011), (Paudel S, et al, 2013)

Previous studies have also reported that the higher students' social support is, the lower their symptoms of stress. (Lee JS, et al, 2004) Furthermore, when peers act as mentors, stress and anxiety are significantly reduced.

Several strategies for stress management among undergraduate students have been introduced and discussed in the literature for example - relaxation strategies, interpersonal approaches such as counselling systems, programs designed to improve studying and test-taking skills and stress management workshops. Because stress in education is typically unavoidable, stress management strategies can be recommended as an early and integral part of the physiotherapy curriculum. These strategies could focus mainly on improving the perception of stressful situations, the development of coping skills and the avoidance of maladaptive coping. Also, managing mental health issues and maintaining a near idealistic mental attitude can be easily taught at the educational level as this would help in the production of a better work force.

Early recognition, mental health promotion, prevention and care of mental health can be effectively implemented at school and college level as they offer opportunities for early detection and intervention. Despite their interrelationship, anxiety and depression in physiotherapy students have not been explored as frequently as stress.

Medical students are exposed to a variety of stressors; including exposure to patients' suffering, higher academic loads, reduced hours of sleep to name a few, when compared to students of other fields. Students with Depression, anxiety and stress are prone to academic difficulties, drop outs, social disturbances, maladaptive coping with respect to anxious situations and it could advance to serious issues like panic disorders.

CONCLUSION

This study aimed at finding the number of students that were affected by depression anxiety and stress and found that the levels of these in undergraduate Physiotherapy students was considerably high. Students need clinical guidance with respect to depression and anxiety. Effective stress prevention and management techniques are a need of the hour. This will ensure better health, prevent drop-outs and help towards a better future workforce.

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Acknowledgements

The author appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author declared no conflict of interest.

How to cite this article: R Malani, R Nagarwala, A K. Shyam & P. K. Sancheti (2020). Frequency of depression, anxiety and stress in physiotherapy students and their coping strategies. *International Journal of Indian Psychology*, 8(2), 626-633. DIP:18.01.072/20200802, DOI:10.25215/0802.072