

To Study the Prevalence of Anxiety and Depression in Undergraduate Physiotherapy Students Between Age Group 18-25 Years: A Cross Sectional Survey

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ABSTRACT

Introduction - The number of students being influenced with mental wellbeing clutters is on a rise in our nation. Early discovery and administration can be effortlessly accomplished at the institution level. **Objectives** – The objectives of this study were to find the number of students that are affected and levels of anxiety and depression among them. **Methodology** – 500 students from various physiotherapy colleges were administered with two questionnaires, Hamilton Anxiety Scale and Hamilton Depression Rating Scale. Data was analyzed and descriptive statistics was obtained. **Result** – Out of the 500 students that participated in the study, 30% had anxiety and 23% had depression. **Conclusion** – A large number of students have their mental health normal and only few had moderate to severe anxiety and depression which requires clinical attention.

Keywords: Depression, Anxiety, Stress, Physiotherapy, Psychological Health

The World Health Organization (WHO) reported that of all illness depression is the leading cause of ill health and disability worldwide. WHO estimates that 260 million people were living with anxiety disorders and 300 million were suffering from depression globally in 2017. Anxiety and depression are prevalent problems in colleges across the country [1]. According to the American psychological association, anxiety and depression are both emotional responses leading to a set of symptoms like difficulty in sleeping, fatigue, muscle tension and irritability [2]

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Anxiety is a term used to describe a normal feeling people experience when faced with threat, danger or when they are stressed. The term anxiety comprises of panic disorder, phobia, social anxiety, obsessive compulsive disorder, post traumatic disorder and so on ^[1]

Depression is characterized by a set of symptoms like lack of interest in daily activities, significant weight loss or weight gain, sleep pattern alterations, lack of energy, loss of concentration, feeling of worthlessness, a feeling of guilt, loss of appetite, excessive-compulsive eating and seldom recurrent thoughts of death or suicide ^[2]

Mental health is still considered a stigma among the younger population which either goes unnoticed or untreated. Majority of them are still suffering through it without any external help or support. They go through critical transitory period in their life maturing from adolescence to adulthood making major life decisions ^[3 & 13]

Globally students represent a crucial part of pedagogy. These students will contribute their acquired knowledge in shaping our future. They are the investment we make building a shielded, intensifying and propitious future. While doing so, they face numerous challenges and pressure to excel themselves and to acquire the essential knowledge. Learning being a skillful process comes with graceful yet stannous privation which requires a calm and composed mind to conquer it.

Adolescents, especially college going students, suffer from both anxiety and depression at higher rates as the stressors are present in abundance. In addition to this the physical changes like growth and maturation as well as mental changes like emotional liabilities, behavioral alterations, sexual orientation are subtle factors that affect the young college going students personality ^[14]

Gender difference in psychological distress has long been a focus of relevant studies. Previous epidemiological research show that in general females tend to suffer more from mental ailment than males for two reasons being, the genetic vulnerability, cortisol levels, the concept of traditional masculinity, femininity can affect their attitudes and behaviors towards life experience ^[5]

The potential external factors responsible for intensifying the symptoms of anxiety and depression in the students is established to be economic uncertainty, workload, academic competitions, social interconnections, exploring one's identity, peer pressure and unsettled lifestyle ^[15]

Chronic use of certain drugs, cigarette smoking, intake of alcohol has been increasing in recent times among young students which can lead to both short term and longterm changes in brain, which can lead to mental health issues including depression, anxiety, aggression, hallucination, other problems and are known to affect an individual's academic performance greatly ^[3]

Failure to cope with aforementioned circumstances can lead to academic difficulties, drop outs, insomnia, relationship disturbance with friends-family members and lack of self-confidence. Past literature suggests the fact that young physiotherapy students are supposed to prepare for their professional careers along with the increased academic and social

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responsibilities which leads to a numerous factor resulting in depression, anxiety and stress [4]

Early recognition, mental health promotion, preventive care of mental health focusing on anxiety and depression can be effectively implemented at college level as they offer opportunities for early detection and intervention. Despite the interrelationship between anxiety and depression in physiotherapy students, not a lot of studies have explored the two factors as much as the studies have on stress as a whole [6]

Ahead in life these students aspire to become physiotherapists, who are in constant contact with the patients, more so than most of the health professionals, 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. Hence it is the need of an hour to study the prevalence of anxiety and depression in undergraduate physiotherapy students, by using the Hamilton Anxiety scale (HAM-A) and Hamilton Depression scale (HDRS).

Aim

To study the presence of anxiety and depression in undergraduate physiotherapy students of age group 18-25 years in Navi Mumbai.

Objectives

To study the levels of anxiety and depression in undergraduate physiotherapy students

METHODOLOGY

Sample

The sample comprised of five hundred undergraduate physiotherapy students using convenience sampling. The participants were between the ages of 18 and 25 years from various physiotherapy colleges across Navi Mumbai.

Instruments

Two measures were used in this study,

1. **HAMILTON ANXIETY SCALE (HAM-A):** [7] Gold standard scale for assessing severity and symptoms of anxiety. It has good reliability (Cronbach alpha = 0.921). For validity it was compared with clinical assessment and Covi anxiety scale. The scale consists of 14 items, each item is scored on a scale of 0 to 4, total 56.

Normal	Mild severity	Moderate severity	Severe anxiety
0-11	12-17	18-22	23-56

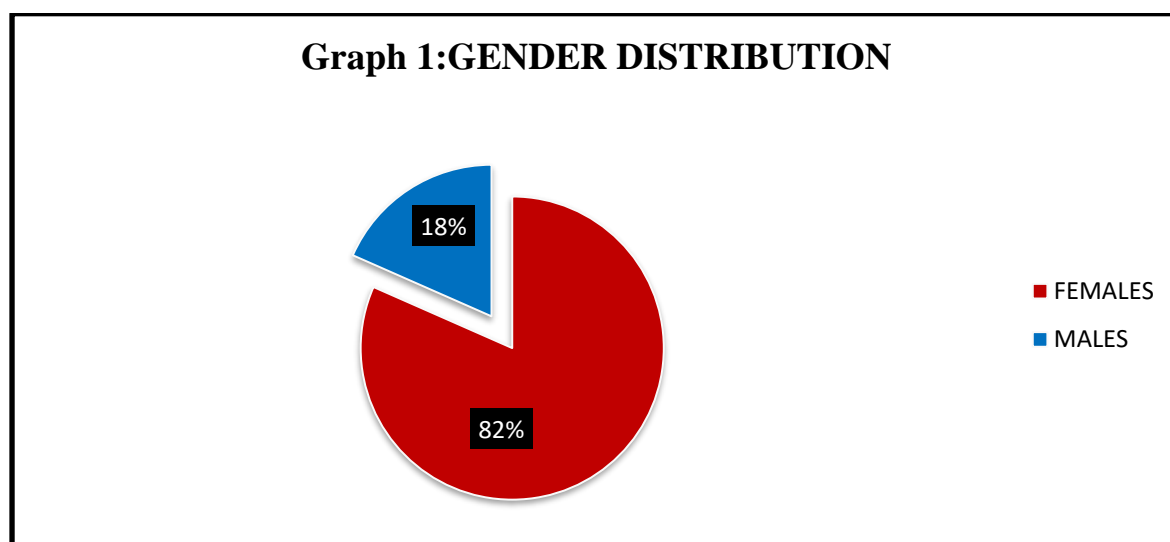
2. **HAMILTON DEPRESSION RATING SCALE (HDRS):**[8] It is gold standard scale for assessing severity and symptoms of depression with good reliability (Cronbach alpha = 0.86) and convergent validity and discriminant validity are adequate. The scale consists of 17 items pertaining to symptoms of depression.

Normal range	Mild	Moderate to severe depression
0-7	8-20	20 and above

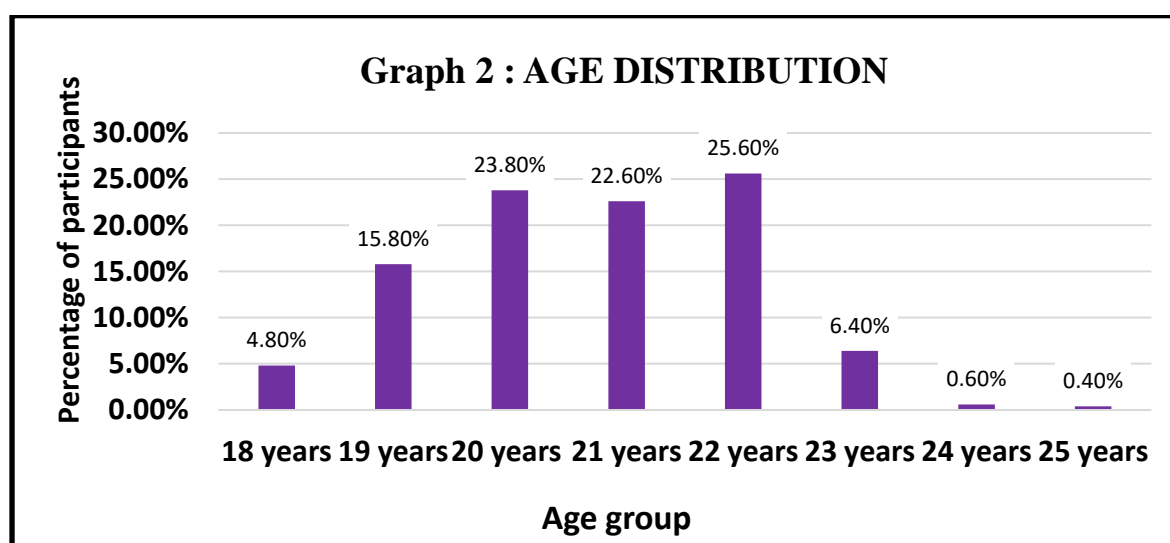
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Procedure

A cross sectional survey, to study the presence of anxiety and depression in undergraduate physiotherapy students of age group 18-25 years in Navi Mumbai, was conducted. Ethical approval was taken from institutional ethical committee. Based on the inclusion criteria, a sample of (n=500) was selected from various physiotherapy colleges in Navi Mumbai. The objectives of the survey study were explained to the subjects with the help of information sheet and the subjects were asked to fill the consent form before the start of the study. Demographics including information such as name, age, gender, college name, contact number and current year of BPT h were taken. Hamilton anxiety scale (HAM-A) and Hamilton depression rating scale (HDRS) was administered to the subjects. The data thus collected was statistically analyzed.



Interpretation: Out of 500 participants, 18% were males and 82% were females.

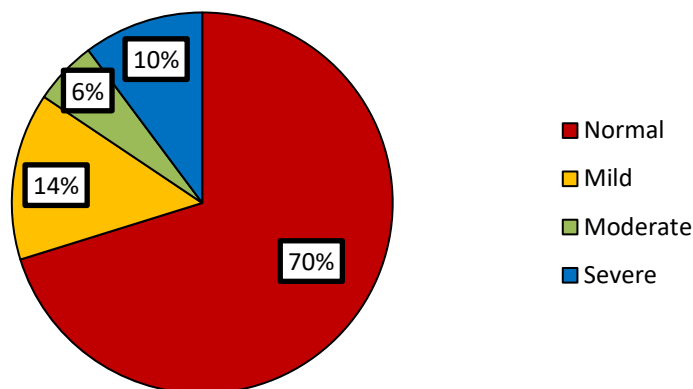


Interpretation: Out of 500 participants, 25.6% were of age 22 and 0.4% were of age 25

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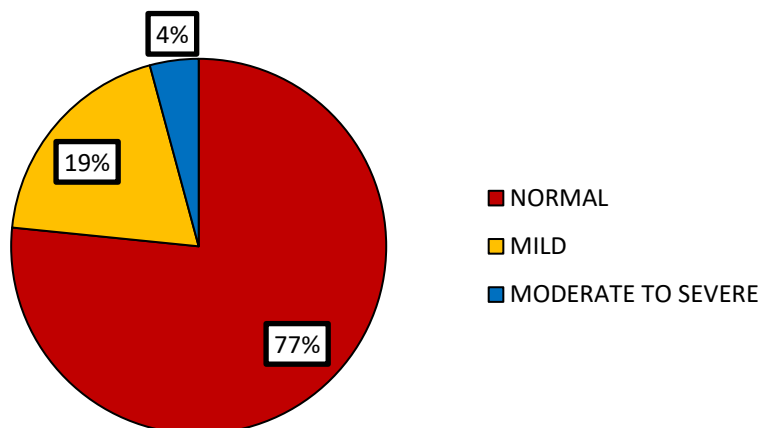
RESULTS

GRAPH 3 : LEVELS OF ANXIETY



Interpretation: Out of 500 participants, 70% were normal, 14% had mild anxiety, 6% had moderate anxiety and 10% had severe anxiety.

GRAPH 4 : LEVELS OF DEPRESSION



Interpretation: Out of 500 participants, 77% were normal, 19% had mild depression and 4% had moderate to severe depression.

DISCUSSION

In the past there have been various studies on anxiety and depression, but this study focuses on undergraduate students of Navi Mumbai.

Results show that 30% students have anxiety out of which 16% have moderate to severe levels which needs to be catered and 23% students have depression out of which 4% have clinically alarming levels. These findings were considerably less than other significant studies. A study was conducted in D Y Patil University in 2020, it shows that overall prevalence of anxiety and depression to be 50% and 48% respectively which is more than the present study.^[3] Similarly a study conducted in Pakistan shows that 48% have depression and 67% have anxiety which is quite higher than out study.^[4]

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Students with mild levels had feelings of restlessness, subjective tension, insomnia, fear, feelings of guilt, fidgetiness and nervousness while very few had physical symptoms which require clinical attention.

A low percentage emphasize student wellbeing and also help to understand positive aspects like good parent-child relationship, teacher support and encouragement, interesting life on campus, an interest in learning as well as extra-curricular activities, camaraderie and high scope of growth and knowledge.

Percentage, although less, is of great importance in terms of the effect on a student's quality of life and its consequences in the future. This suggests the need to identify and treat depression as early as possible.

College students go through many changes in their personal, professional and extracurricular lives. This entails many stressful situations that they have to deal with as a part of growing up.

Few students have moderate to severe levels of depression and anxiety as in India, there are various important factors associated with depression in addition to normal stressors of daily life, medical students have to deal with a lot of extra stressors. These include long duty hours, ethical dilemmas, repeated exposure to traumatic patients, difficult cases, lack of leisure time, pressure of work and information overload along with this there is also lot of academic pressure due to competitive environment in which the examination is conducted^[2]

All of these factors, in one way or another, contribute to the increased stress faced by these students. Some students need help with these problems but are not diagnosed until they become extremely serious. This can often cause a potentially dangerous outcome.

The drawback of this is that the current study being descriptive in design could not elicit the association and causation of depression and related disorders among the study subjects. Also, a sample including other streams of education and urban settings of colleges could also be explored for a better comparison and filling the gap in current literature.

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Conflict of Interest

The author declared no conflict of interest.

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