



Original Research Article

Prevalence of Anxiety in Medical Students

Parita Dave¹, Megha Sheth², Neeta Vyas³

¹Post Graduate Student, ²Lecturer, ³Principal,
SBB College of Physiotherapy, VS Hospital Campus Ellisbridge, Ahmedabad.

Corresponding Author: Parita Dave

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ABSTRACT

Background: Anxiety level and its sources change in medical education as student progress. Some factors found to increase stress and anxiety were related to curriculum, medical school environment, amount of material to be learned, and examinations and/or grades among early medical students.

Aims: To determine Anxiety using Taylor Manifest Anxiety Scale (TMAS) and Stress level in medical students using General Health Questionnaire 12 (GHQ12)

Method: 100 Medical students of Gujarat University were recruited in the study. General health questionnaire 12 and Taylor Manifest Anxiety Scale were explained in brief to the students and after obtaining their written consent, they were asked to fill up the questionnaire.

Results: Anxiety according to Taylor Manifest Anxiety Scale shows that 57% students had intermediate and 43% students had higher anxiety scores. According to General Health Questionnaire 20% students had scores <15 (no stress), 75% >15 (mild stress) and 5% > 20 (greater stress levels).

Conclusion: Study shows that there is high level of anxiety and mild stress among medical students.

Key Words: Medical students, Anxiety, Stress, General Health Questionnaire, Taylor Manifest Anxiety Scale.

INTRODUCTION

Anxiety level and its sources change in medical education as student progress. Some factors found to increase stress and anxiety have been related to the curriculum, medical school environment, the amount of material to be learnt, and examinations and/or grades among early medical students. [1]

Anxiety has been defined by Freud as “something felt,” an emotional state that included feelings of apprehension, tension, nervousness, and worry accompanied by physiological arousal. [2]

Consistent with Darwin's evolutionary perspective, Freud observed that anxiety was adaptive in motivating behavior that helped individuals cope with threatening situations and that intense anxiety was prevalent in most psychiatric disorders. [2] Many studies have been done to evaluate Anxiety level. [3]

Medical students and practicing physicians, in comparison with the general population and that of other professions, are exposed to academic and professional stress

and therefore are vulnerable to psychosocial health problems.

While medical students train to improve the health of others, they often lose sight of their own. Besides having little time for sleep, meals, and recreation, studies have shown that students are prone to neglect their mental and physical health.

Studies suggest that mental health worsens after students begin medical school and remains poor throughout training. It is not just the undergraduate study period, which brings about these changes; it may continue later in internship, postgraduate study, and in physicians' practical life, and it may reach burnout level. [4] So there is a need to study the prevalence of anxiety and stress level in medical students.

Purpose of the study was to determine the Anxiety level using Taylor Manifest Anxiety Scale (TMAS) and to determine stress level using General Health Questionnaire (GHQ12) among medical students.

MATERIALS AND METHODS

Cross Sectional Study was conducted with a sample size 100. Medical students from N.H.L MMC were included and students with known physical impairment and case of psychiatric illness and who were on anti-anxiety or anti-depressants drugs were excluded. Students of other universities, other fields and those who were unwilling to participate were also excluded.

Outcome Measures

1. Taylor Manifest Anxiety Scale contains 38 questions the students were asked to consider each statement carefully. Then they had to indicate whether the statements were generally true or false. Reliability coefficients of the questionnaire have ranged from 0.72 to 0.75. [5, 6]

2. General Health questionnaire (GHQ12) is a measure of current mental health. It focuses on two major areas – the inability to

carry out normal functions and the appearance of new and distressing experiences.

The questionnaire asks whether the respondent has experienced a particular symptom or behavior recently.

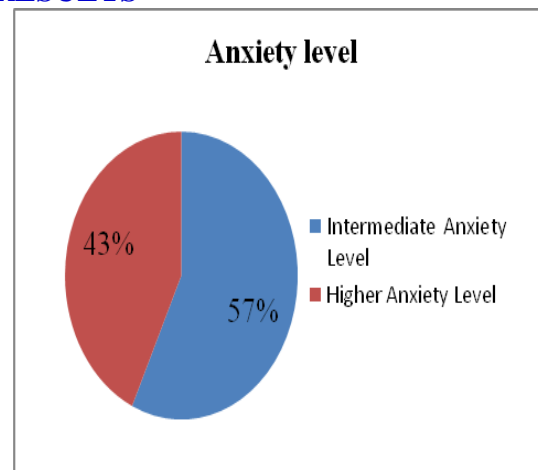
Each item is rated on a four-point scale. The GHQ-12 is a well-validated instrument used to measure overall emotional wellbeing and commonly used in studies looking into distress in populations. It is one of the most widely used measurement tool to measure stress level. Reliability coefficients of the questionnaire have ranged from 0.78 to 0.95. [7]

Procedure

A survey study was carried out among medical students from NHL MM college of V.S. hospital were recruited in the study by convenience sampling. Students were explained about the purpose of the study. Written informed consent form was taken.

General health questionnaire 12 and Taylor Manifest Anxiety Scale were explained in brief to the students and after their written consent; they were asked to fill up the questionnaire. It took 10-15mins to fill it up. Ethics clearance for the study was obtained from Review Board.

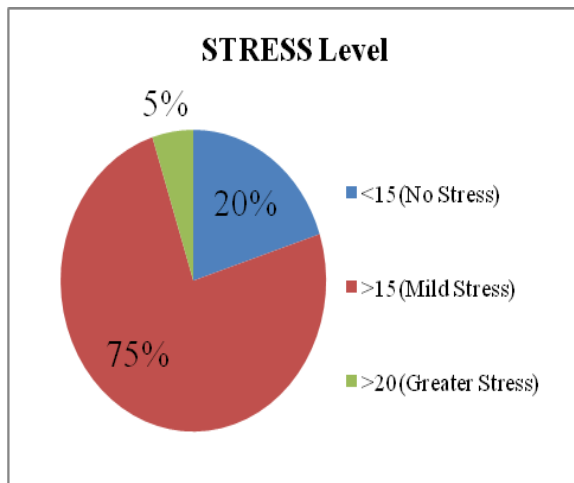
RESULTS



Graph 1. Level of Anxiety from TMAS

100 students completed the questionnaire. Anxiety according Taylor Manifest Anxiety Scale shows that 57% students had intermediate anxiety level and 43% students had higher anxiety scores as shown in graph 1.

According to General Health Questionnaire 12 20% students had scores <15 (no stress), 75% >15 (mild stress) and 5% > 20 (greater stress levels) as shown in graph 2.



Graph 2. Level of Stress from GHQ1

DISCUSSION

The present study aimed to show prevalence of anxiety and stress level in medical students. According to this study largest number of students had intermediate level of anxiety as they fell under intermediate range of anxiety and least number of medical students had high level. Moderate number of the population had mild stress.

Previous studies have shown that anxiety and depression can be taken as reliable indicator for assessment of mental illness in a community.^[8]

In measuring anxiety, Cattell (1966) emphasized the importance of distinguishing between anxiety as an emotional state and individual differences in anxiety as a personality trait.^[9]

The emotional status of students during medical school training has been a source of concern, reported as early as 1956.^[10, 11] It may affect the overall performance of students and lead to a cascade of consequences at both personal and professional levels several studies have reported significant distress among medical students.^[10, 11] In a study done by Inam SNB 60% students had anxiety and depression.^[12] Kortum E et al (2012) have studied psychological risks and work related stress in developing countries and concluded that work related stress has detrimental impact on the health of professionals.

There are two types of stressors- Eustress and Distress. Dr. Lazarus (building on Dr. Selye's work) suggested that there is a difference between eustress which is a term for positive stress, and distress which refers to negative stress.^[13]

Eustress is like motivation, focuses energy short-term perceived as within our coping abilities. Distress causes anxiety leads to mental and physical problems, short/long term but perceived outside of our coping abilities. Mild stress may be motivational but higher level of stress may affect physical and mental health.^[13]

An Australian study dealing with work stress among physicians revealed the same order of sources of work stress as shown in medical students in previous studies. Work concern was the most common source of stress followed by financial and family concerns.^[14] Physicians are exposed to multiple factors that might explain the high weight of work concerns. Several studies showed that physicians face long work hours, long working days, high job demands and high emotional demands.^[15,16] Physicians are also expected to suffer from work-life conflicts due to the nature of their job.^[15,16] Stress in student life may continue later on.

Anxiety and stress induced can be greatly reduced by:

1. Relaxation techniques:
Diaphragmatic breathing, meditation and yoga ^[17]
2. Physical fitness improves mental health and functional capacity of heart and lungs (running, walking, cycling and swimming). ^[18]

CONCLUSION

Study has shown that there is high level of anxiety among medical students. Studies using larger number of populations from other colleges could be done to determine level of stress and anxiety among medical students.

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Ethical clearance: This study was approved by Institutional Review Board of SBB College of Physiotherapy.

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