Coping ability to stress among Allied Health Sciences Students

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ABSTRACT

The vast medical syllabus along with patient interactions, clinical rotations and examinations can cause high levels of stress and anxiety among the medical students. Resilience is the coping ability to stress. Individuals who are more resilient are considered to be able to face stress and adversities with greater ease and thus produce better results academically. They function more optimally than less resilient individuals when faced with external stressors. Therefore, the objective of the study was to assess the resilience of physiotherapy and nursing students in order to understand their ability to handle stressors in life. A cross sectional study to assess resilience using a standard resilience questionnaire was conducted among the first year Physiotherapy and Nursing students of 18-25 years of age after obtaining informed consent and Institutional ethical clearance. All willing students fulfilling the inclusion and exclusion criteria were included in the study. The percentage of students having high, moderate and low resilience was assessed among the physiotherapy and nursing students. Among the 150 Nursing students and 141 Physiotherapy student participants, majority of the students had moderate resilience while only a significantly small percentage of students had high resilience score. Lack of resilience can lead to burnout and make a student vulnerable to mental health issues which in turn decrease the academic performance. Therefore, it is imperative that the students are taught stress coping strategies and resilient building measures across their entire curriculum in order to face adverse challenges successfully in their lives.

Key words: Allied health, Physiotherapy, nursing, students, resilience.
INTRODUCTION

Stress is a state of mental and emotional tension arising as a result of opposing situations in life. It is a psychological and physical response to everyday life’s demanding needs. The learning as well as practice of medicine is considered extremely stressful with respect to various aspects involving academic learning, communication with patients and several clinical facets. Students undergoing the medical course are known to suffer from sleep deprivation and are more burnt out when compared with their non-medical counterparts. If this stress is not regulated properly, it may lead to anxiety, depression, suicidal tendency, excessive drug and alcohol abuse ultimately affecting their academics and clinical performance. Thus, stress has a definite impact on the academic resilience and academic performance of an individual.

Association of stress, anxiety and depression in medical students can negatively influence the student academic performance often causing learning difficulties. Studies have shown that mental disturbances during early medical training may lead to personal suffering and later affect their patient care. People who are stressed are more prone to develop anxiety and depression when compared to genetic and behavioural influence. Stress arouses the feeling of fright, rage, guilt and psychologically decreases the resilience. Resilience is the ability to cope with stress. Academic resilience has been defined as an increased likelihood of (academic) success despite environmental adversities. It is the capacity of the students to gain good educational outcome in spite of difficult situations that they may face in life.

In a study focusing on the relationship between resilience and life satisfaction, positive emotions were associated with more resilience and negative emotions resulted in lesser resilience and lower life satisfaction when compared to the general population.

Striking the right balance between stress and resilience will ultimately help a person to succeed in career and academics bringing in stability to life. Therefore, the aim of the present study was to evaluate the coping ability to stress by assessing the resilience in paramedical students undergoing physiotherapy and nursing courses.

MATERIALS AND METHODS
A cross sectional study to assess resilience using a standard resilience questionnaire was conducted among the Physiotherapy and Nursing students of 18-25 years of age after obtaining informed consent and Institutional ethical clearance (SMC/IEC/2018/11/364). 150 Nursing students and 141 Physiotherapy first year students participated in the study. Informed consent was obtained from all the study participants and from their parents or guardian. The study was clearly explained to the participants and information sheet regarding the study was given to all the study participants. Demographic details regarding name, age, sex was collected. All the willing first year Physiotherapy and Nursing students in the age group 18-25 years studying in the medical college were included in the study. Students who were unwilling to participate in the study, having medical conditions, depression and undergoing therapy or treatment were excluded from the study.

**Administration of Resilience Questionnaire^7:**

Hard copies of the standardized resilience questionnaire were provided to the students during the break time without disturbing the class hours. Detailed instructions were provided to the students prior to the filling the questionnaires and all doubts were clarified. Complete confidentiality was maintained throughout the study. The filled questionnaires were collected back for grading. The answers were marked on a 7 point Likert scale ranging from “1” (Strongly Disagree), “4” (Neutral) to “7” (Strongly Agree). Based on the resilience score (Total=175), they were be allocated into 3 groups – low (25-115), moderate (116-145) and high levels of resilience (146-175).

**Data analysis**

Data was analysed by SPSS 20.0. The depression, anxiety and stress scores between the male and female students was analysed using Student’s t-test. P value less than 0.05 was considered as significant.

**RESULTS:**

Among the 150 Nursing students and 141 Physiotherapy student participants, nearly one third of them (32.67% and 22.85%) had low resilience score (Figure 1) of 104.57±8.44 and 111.26±5.23, half of them (53.33% and 62.87) had medium resilience score (Figure 2) of 131.69±8.61 and 139.72±6.49 while a minority 14% of them had high resilience score (Figure 3) of 150.19±4.46 and 156.26±7.22 respectively. Majority of the students had moderate resilience while only a significantly small percentage of students had high resilience score (P<0.001).
Fig 1: Graph showing Low Resilience in Physiotherapy and Nursing Students

Fig 2: Graph showing Medium Resilience in Physiotherapy and Nursing Students
DISCUSSION:

The reaction to stressor varies largely between individuals and the stress cycle is comprised of four phases: the resting ground phase, the tension phase, the response phase and the relief phase. The rigorous medical syllabus is found to be stressful by the Allied health sciences students with a difference in the handling of stress among students of public and private medical colleges. The academic stress faced by the students is associated with sleeping difficulties. Continuous stress is known to affect the cognitive function of the students in turn negatively influencing their academic performance.

Resilient students are described as those who maintain high motivational achievement and performance even when faced with stressful events and conditions that place them at risk of poor performance and also described as those who succeed at school despite the presence of adverse conditions.

In our study, majority of the students have moderate resilience while very few have high resilience. This is a disturbing trend as less resilience will make it difficult for them to face stressful situations in their life be it academic or personal, which in turn might easily lead to early burnout. Therefore, spending quality time in personal engagement, extracurricular activities, reinforcing positive reinterpretation and expression of emotion, regular conduct of student-led mentorship programs, proper feedback evaluation systems, career counselling and life coaching are the methods and strategies to be followed in order to effectively reduce burnout and stress and help in improving the academic performance.

Fig 3: Graph showing High Resilience in Physiotherapy and Nursing Students
CONCLUSION

Majority of the students had moderate resilience while only a significantly small percentage of students had high resilience score. Lack of resilience can lead to burnout and make a student vulnerable to mental health issues which in turn decrease the academic performance. Therefore, it is imperative that the students are taught stress coping strategies and resilient building measures across their entire curriculum in order to face adverse challenges successfully in their lives.

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