

Stress Levels in Medical Students of Airlangga University Class of 2020

Nahdah Nabiilah^a, Azimatul Karimah^b, Nancy Margarita Rehatta^c

^a Nahdah.nabiilah-2019@fk.unair.ac.id

^aFaculty of Medicine, Universitas Airlangga, Surabaya, Indonesia

^bDepartment of Psychiatry, Faculty of Medicine, Universitas Airlangga, Surabaya, Indonesia

^cDepartment of Anesthesiology and Reanimation, Faculty of Medicine, Universitas Airlangga, Surabaya, Indonesia

Abstract

Background: Stress is very common in students life, especially among students of the Faculty of Medicine. **Aims:** To describe the stress level of Airlangga University Medical Students Class of 2020. **Methods:** This study was a quantitative descriptive study with a cross sectional design and consecutive sampling. This study was conducted on 74 medical students of Airlangga University Class of 2020 using online questionnaire containing DASS-21. **Results:** Majority of students were 20 years old (51,4%) and female (71,6%). The majority of students had stress in normal level with 40 people (54,1%), followed by severe level namely 11 people (14,9%), then a mild level namely 10 people (13,5%), moderate level with 9 people (12,2%), and last, very severe level, namely 4 people (4%). **Conclusions:** The most stress level in medical students of Airlangga University is at normal level.

Keywords: Stress Level; Medical Students

1. Introduction

Stress seems to be a very common part of being a student because of the pressure to maintain their academic record and get prepared for their next career. It is not unexpected that a large portion of the academic pressure students experience at the tertiary level is tied to their course topic and how they learn it (Yikealo et al., 2018). In research conducted by Niemi and Vainomäki (1999), more attention is needed to the challenges, successes, and coping mechanisms faced by medical students even in their first year of study.

Stress is an event caused by the relationship between humans and the environment. Without taking consideration of a person's personality, there is no objective way to predict psychological stress. Cognitive judgments, namely those that are burdensome, damaging, threatening, or challenging are what determine whether a certain person-environment connection is stressful (Lazarus & Folkman, 1984). Stress seems to be very common among students (Yikealo et al, 2018). According to D'Zurilla & Sheddy (1991, in Buló and Sanchez, 2014), students are more vulnerable to stress due to the nature of adjustment to higher education.

According to Vitaliano et al. (1984), there are three main categories of causes of stress in medical students:

1. Academic

Academic stressors include the quantity of material taught in class, worry about grades, insecurity about competence, and anxiety about making mistakes.

2. Social and personal

Medical students most frequently complain a lack of time for leisure activities, spending time with friends and family, and socializing as a result of the intense and time-consuming academic life.

3. Financial problems

Financial issues caused by reliance on family or a partner for support.

The three stages of the stress response are as follows, according to Ice & James (2012):

1. Behavioral responses

Stress can cause a person to react positively, negatively, or neutrally. Positive actions such as using social networks, working out, or attending religious events. Negative actions such drinking alcohol, smoking, or acting violently.

2. Distress or affective response

Distress refers to an emotional or effective response to a stressor. Research methods like interviews have been used to measure this response. Numerous research also made use of diaries to track participants' moods, behaviors, and stress levels. However, most of these studies are unclear whether they use measurements that are reliable across cultures.

3. Physiological responses

Stressors cause the sympathetic adrenal medullary system (SAMS) and hypothalamus pituitary adrenal axis (HPA) to become active. Three methods can be used to study physiological stress: Physiological responses are measured 1) in the laboratory, where people are exposed to stressors; 2) using the ecological approach, which is frequently used in anthropology and human biology, which compares groups that differ according to cultural characteristics; and 3) by keeping a diary of one's physiological responses.

2. Method

This study has a cross sectional design and is a quantitative descriptive study. The population in this study were students of the medical faculty, Universitas Airlangga, class of 2020. The number of samples was determined by Slovin's formula to be 74 respondents. The sampling method utilized is by consecutive sampling.

The DASS-21 questionnaire was included in a google form and was used to collect data and then disseminated online. Data was collected from March - June 2021. The answers from the questionnaire were then analyzed by coding, data entry and editing.

3. Results

Table 1. Characteristics of Respondents

| Characteristic | | N | % |
|----------------|--------|----|------|
| Age | 19 | 31 | 41,9 |
| | 20 | 38 | 51,4 |
| | 21 | 4 | 5,4 |
| | 22 | 1 | 1,4 |
| Gender | Female | 53 | 71,6 |
| | Male | 21 | 28,4 |

Table 1 shows the characteristics of the research respondents, it can be seen that there were 31 respondents aged 19 years (41.9%), aged 20 years there were 38 people (51.4%), aged 21 years there were 4 people (5.4%), and finally aged 22 there was 1 person (1.4%). The most respondents were female, namely 53 people (71.6%), and 21 men (28.4%).

Table 2. Frequency distribution of stress level

| Stress Level | N | % |
|--------------|----|------|
| Normal | 40 | 54,1 |
| Mild | 10 | 13,5 |
| Moderate | 9 | 12,2 |
| Severe | 11 | 14,9 |
| Very Severe | 4 | 5,4 |

Table 2 shows the stress level of the respondents, the majority of respondents were at the normal level which is 40 people (54.1%), followed by severe level namely 11 people (14.9%), then a mild level namely 10 people (13.5%), moderate level with 9 people (12.2%), and last, very severe level, namely 4 people (4%).

4. Discussion

The average age found in this study was 19.7, this age is almost the same as the characteristics of students in research at a university in Indonesia with an average of 19.65 (Rahmayani, Liza and Syah, 2019), and lower than the average age of a university abroad at 20 years old (Sani et al., 2012). The number of female

respondents is greater than that of men, which can be revealed by research on medical faculty students in various countries (Rahmayani, Liza and Syah, 2019; Shah et al., 2010; Sani et al., 2012).

In five studies comparing the mental health of medical students and the general population by Dyrbye et al. (2006) showed that overall, psychological distress was higher among medical students. Medical students report stress levels ranging from 25% to 75%. (Koochaki et al., 2011).

Numerous research on the effects of stress on medical students have been conducted over the previous few decades. There have been several studies regarding the prevalence of stress among students in Indonesia, the results of research on medical students at the University of Muhammadiyah Palembang showed that 50.8% of students experienced stress (Legiran, Azis and Bellinawati, 2014). 57.23% of first-year students at the University of Riau's Faculty of Medicine reported experiencing moderate levels of stress due to academic stresses (Wahyudi, Bebasari & Nazriati, 2017). Studies done in Syria revealed a stress rate (52.6%) that was comparatively substantially higher. However, data from Malaysia indicates a lower stress level (29.8%) (Yusoff et al., 2013).

Academic, social and personal issues, as well as money financial issues, are the three main categories of stress factors for medical students (Vitaliano et al., 1984). According to study done on medical students at Universitas Airlangga, the most common stressors are related to academic, such as tests, the amount of material that needs to be studied, and not having enough time to review what has been taught (Rahmi, Karimah, and Rehatta, 2019).

Excessive stress can cause mental and physical problems, can reduce students' self-esteem, and affect their academic achievement (Shah et al., 2010). A high prevalence of stress can cause fatigue and affect performance, progress, or personal life in the long run (Afsar and Kulsoom, 2015).

5. Conclusion

The conclusion that can be drawn from this study is that the most stress level in students of the Faculty of Medicine, Airlangga University Class of 2020 is normal with a total of 40 people (54.1%). Special attention needs to be given to students. Regular check-ups of medical students should include counseling and assistance for preventive mental health.

Future research can use a longitudinal/cohort design to find out why students experience stress. Future research can examine the impact of religious coping, depression, anxiety, and stress on the quality of life of students.

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