

Preliminary Study Using Medical Student Stressor Questionnaire in Faculty of Medicine Pelita Harapan University.

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Abstract

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Background : Best teaching program for students is certainly the main focus of the faculty. However, we must consider from the student perspective, cause student in Faculty of Medicine is high risk of being stress. Prolonged stress could harm the student physically and or mentally and will disrupt the competencies achievement. One of the validated tools for identifying a group of stressors is Medical Student Stressor Questionnaire (MSSQ).

Methods : A cross-sectional univariate done within 30 medical students batch 2016. Age around 16-18 years old consist of 8 male and 21 female.

Result : The highest stressor facing by the student was interpersonal related stressors (IRS) mean 2.547, followed by teaching and learning-related stressors (TLRS) 2.485, academic related stressors (ARS) 2.304, group activities related stressors (GARS) 2.259, drive and desire related stressors (DRS) 2.195, and social related stressors (SRS) 2.173.

Conclusion : All the stressors domains were in a high level of stress. Further research needed in larger population and level of the study

Introduction

As a lecturer, one of our job is delivering a good content and material in our expertise. Sometimes we are too busy to find the best methods in teaching, so the student could achieve all the competencies needed. However, the student success is not only because of the lecture capability in teaching. There are many aspects that could influence the student achievement. One of the contribution aspect is the student capability in stress management.^{1,2}

Stress is a changing situations that makes a tension and will affect a person both in physically and or mentally. The impact of stress could be positive and negative. The positive site could encouragie someone to be better, but if the stress prolong and the person could not manage the stress will

leads to anxiety, depression, sleeping disorders, decreased attention, reduced concentration, conflicts, cynicism, academic dishonesty and even leads to burnout. Burnout is a disorder consists of 3 symptoms. The symptoms are emotional exhaustion, depersonalization, and low accomplishment. All the negative symptoms could make the student have low achievement and even ended in committed suicide.^{1,3,4,5,6}

Medical school is one of the stressful study programs among others. Including in Faculty of Medicine Pelita Harapan University (UPH). In UPH learning goes through 2 phases. First is bachelor program/academic/preclinical stage for 7 semesters and second phase is professional/clinical phase for 4 semester. The characteristic of student year one is

around age 17 to 18 years old and graduates students from 12th grade high school.

Lots of stressful things facing by the medical student. The stress factor divided into academic and non-academic factors. Academic stressors such as excessive material to learn, tight schedule, teaching-learning methods, lots of examination, grading method, bad score and remedial process, some competencies that must be achieved, and so on. Non-academic stressors such as conflict with peer group and other personnel in the faculty, peer group expectation, not interested in medical school cause parents/family member wishes, family/social relation factor, and other factors.^{5,7}

Aim of the study was to know the stressors domains that are facing by the student and the level stress in all stressors domain.

Method

A cross sectional univariate measurement using Medical Student Stressor Questionnaire (MSSQ). Total statements are 40 divided among 6 domains. Data was calculated manually.

Validated tools used for identifying a group of stressors in medical is Medical Student Stressor Questionnaire (MSSQ). The MSSQ develop by Muhamad Saiful Bahri Yusoff, and Ahmad Fuad Abdul Rahim from Malaysia. It is consists of 40 items representing the six stressor domains randomly. Domain 1 is Academic Related Stressors (ARS), domain 2 is Interpersonal & Intrapersonal Related Stressor (IRS), domain 3 is Teaching and Learning Related Stressor (TLRS), domain 4 is Social Related Stressor (SRS), domain 5 is Drive & Desire Related Stressor (DRS), last domain is Group Activities Related Stressor (GARS).⁵ The stressors domain and all the items can be seen in Table 1.

Table 1. MSSQ stressors domain and items:

Stressors Domains	Items number	Statements Example
I: Academic Related Stressor (ARS)	1, 4, 7, 10, 12, 17, 19, 23, 25, 27, 30, 33, 36	No.10: Heavy workload No.33: Large amount of content to be learnt
II: Interpersonal and intrapersonal Related Stressor (IRS)	3, 5, 9, 26, 28, 31, 39	No.3: Conflict with other students No.28: Verbal or physical abuse by teacher(s)
III: Teaching and Learning Related Stressor (TLRS)	8, 14, 16, 20, 22, 35, 37	No.14: Lack of guidance from teacher(s) No.35: Not enough feedback from teacher(s)
IV: Social Related Stressor (SRS)	2, 18, 21, 24, 29, 38	No.18: Lack of time for family and friends No.29: Frequent interruption of my work by others
V: Drive and Desire Related Stressor (DRS)	6, 32, 40	No.6: Parental wish for you to study medicine No.40: Family responsibilities
VI: Group Activities Related Stressor (GARS)	11, 13, 15, 34	No.11: Participation in class discussion No.15: Feeling incompetence

Each statement answered using rating scale from 0 to 4. 0 means causing no stress at all, 1 means causing mild stress, 2 means causing moderate stress, 3 means causing high stress, and 4 causing severe stress. From the final calculation from each domain we got the range of stress level. The scales are 0-1.00 cause mild stress, 1.01-2.00 cause moderate stress, 2.01-3.00 cause high stress, 3.01-4.00 cause severe stress.

Result

There are 30 medical students batch 2016 volunteered, with 8 males and 21 females. Age around 16-18 years old. When the research conducted, batch 2016 is in the first year of the study. One of the questionnaire excluded because not giving the answer as instructed. Result in orders shown in Chart 1

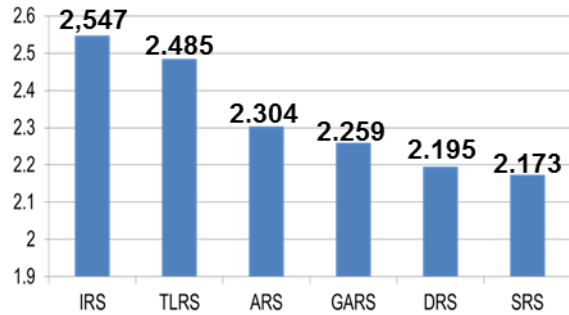


Chart 1. The highest stressors domain and the level of stress

Interpersonal & Intrapersonal Related Stressor (IRS) contributed as the highest stressor domain with 2.547, followed by Teaching and Learning-Related Stressors (TLRS), Academic Related Stressors (ARS), Group Activities Related Stressors (GARS), Drive and Desire Related Stressors (DRS), and Social Related Stressors (SRS) with 2.173 as the lowest score. The stress level in all stressors domain were high stress level with the range between 2.01-3.00.

Discussion

Although various studies provide different picture of the stressors domain but in the end, all the stressors will impact the academic domain. Highest stressors domain in UPH is dominated by IRS. This might be influenced by the process of adaptation that occurred during the early stages of education. In the other hands the academic stressors was not the highest domain because the learning material faced by the student when the research conducted not entered the medical core learning material yet.^{5,8,9}

Previous research also mention, the first year was the highest burden for the medical student, because the student needs to adapt from high school to new environment. Other research mention last year of study was the hardest, cause the learning environment was changing into doctor-patient interaction, work with other professions, and also thinking about career plan in the future. UPH don't have this data yet.^{10,11}

What we need to be considered is not only the highest stressors domain, but we must seek deeper the cause of high stress in all stressors domain. Cause low ability to adapt from various stressor domain in the first year will lead to poor academic achievement and will increase the dropout rates. Not only that, it will harm the student physically and or mentally. Good stress management will help student to cope the stressors.^{1,2}

This preliminary study give us the picture of what facing by the UPH medical student in the first year. We need to seek deeper with further study to help student achieve all the competencies. Next step of research will focus on bigger population, follow each step of every level of study, and bring along the qualitative research with students and education managers to find the cause of stress and solution.

Conclusion

Medical student in the first year needs to learn stress management, so they could cope the stressor and have a healthy live.

Acknowledgement

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Note

This research has been displayed in the proceeding book and presented in the short communications session at the Asia Pacific Medical Education Conference (APMEC) on January 11, 2020 in Singapore.

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