

ORIGINAL ARTICLE

Descriptive Study on the Medical Students Well-being Workshop.

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Abstract

Background: Tertiary education environment has always been regarded as highly stressful to students. Medical training further adds to the already stressful environment. The stress of medical training was associated with negative consequences to the mental and physical health of medical students. We describe in this article a stress-management program known as the 'Medical Student Well-Being Workshop' in our medical school.

Methodology: The workshop was run over two half-days over a weekend. Prior to the workshop the society announced the workshop to the students and participation was voluntary. It was open to students from all years of the medical course except for first year students. A separate stress management workshop is planned for them.

Results: A total of 55 students participated in the workshop, out of which 55 (82%) were female students. The years of study were almost equally represented; 14 students (26%) from years two and three, 20 (37%) from year four and 6 (11%) from year five. All sessions were rated as highly useful; the lowest rated, the introduction session, obtained an overall usefulness rating of 3.73 out of the possible 5 (74.6%).

Conclusion: Medical Students Well-being Workshop is a promising intervention program in improving medical students' ability in managing stress. Perhaps similar approach can be considered relevant to be incorporated in other medical schools.

KEYWORDS

Medical Students, Stressors, Coping Strategies, Stress, Stress Management

Introduction

Tertiary education environment has always been regarded as highly stressful to students. Medical training further adds to the already stressful environment. The stressors of medical training and associated negative consequences to the mental and physical health of medical students have been described in many studies [1-10]. Several medical education constituencies have

emphasized the importance of teaching stress management and self-care skills to medical students [11-12]. Accreditation standards for The Malaysian Qualification Agency (MQA) requires that each school must have programs that promote the well-being of students and facilitate their adjustment to the emotional, spiritual, mental and physical demands of medical school [13]. A recent literature review discovered that, although more than

600 articles addressed the importance of stress management programs in medical curricula, only 24 reported intervention programs with accompanying data [14]. Although there is large literature on stress management in general, their specific application to medical education has been largely unexplored [14]. To fill this gap, we describe in this article a stress-management program known as the 'Medical Student Well-Being Workshop' in our medical school.

Overview

The School of Medical Sciences (SMS), Universiti Sains Malaysia runs a five-year undergraduate medical degree course using an integrated, problem-based and student-centered curriculum. Apart from the core medical programme, another parallel programme which runs through the course is the Student Soft Skills and Professional Development (PPIP) programme. The programme was formed in 2006 by the union of two entities in the SMS curriculum, the Bioethics and Communication Skills programme and the Student Development Unit, to streamline strategic planning and administrative efforts.

The PPIP oversees the planning and administration of bioethics and professional skills teaching as well as student development in the curriculum. It is headed by a Programme Chairperson who is elected by the Vice Chancellor of USM and staffed by volunteers from various departments of the School. Apart from formal bioethics input in various places in the curriculum, it also runs activities such as learning skills workshops, student interactions with NGOs in the community as well as a peer-counseling programme known as the BigSib programme [15].

This Student Wellbeing Workshop was one of the latest activities run by the PPIP. It was initiated by and ran with the cooperation of the Medical Student Society of SMS as well as the SMS Student Alumni.

Description of the Student Wellbeing Workshop

Background and participation

The workshop was run over two half-days over a weekend. Prior to the workshop the society announced the workshop to the students and participation was voluntary. It was open to students from all years of the medical course except for first year students. A separate stress management workshop is planned for them.

The first day workshop programme

The first half-day of the programme was run by academic staff from the Medical Education Department. The objectives of this first session were to enable students to measure their stress levels, recognize the main stressors that they are facing and to identify their main coping styles. After knowing their personal results on these three fronts, students should be able to recognize their own strengths and weaknesses and develop their own self-improvement strategy to increase their resistance to stressors.

After a short initial presentation to highlight the problems related to stress in medical study as well as in the medical career, participants were given time to fill in three questionnaires related to the objectives stated above.

To measure participants' stress level, the 12-item General Health Questionnaire (GHQ 12) was used. The GHQ 12 is a well-validated instrument used to measure overall emotional wellbeing and is commonly used in studies looking into stress in populations [16-19]. Its use in the local medical student population has also been validated [20].

The instrument used to help participants in the identification of their major stressors was the Medical Students Stressors Questionnaire (MSSQ). Validation of this instrument was done previously in another study [21]. It groups stressors into six major groups: academic-related stressors (ARS), intra- and

interpersonal - related stressors (IRS), teaching and learning - related stressors (TLRS), social-related stressors (SRS), drive and desire - related stressors (DRS), and group activities - related stressors (GARS). Each group is measured by items scored using 5 - point Likert scale ranging from 0 (causing no stress at all) to 4 (causing severe stress). The mean score of each group is calculated based on a provided formula and plotted on the Stressor Diagram. Participants identified the intensity of their stressor based on the diagram.

Identification of coping styles was done using the Brief COPE inventory. Validation of this well-known inventory was done by Carver et al in 1989 [22]. The Brief COPE inventory consists of 15 coping scales; Active coping, Planning, Seeking Instrumental Social Support, Seeking Emotional Social Support, Suppression of Competing Activities, Religion, Positive Reinterpretation and Growth, Restraint Coping, Acceptance, Focus on and Venting of Emotions, Denial, Mental Disengagement, Behavioral Disengagement, Alcohol/Drugs Abuse, and Humor. Each scale has 2 statements and are scored using a 4 - point Likert scale ranging from 1 (I haven't been doing it at all) to 4 (I've been doing it a lot). Participants calculated the total score of each group based on a provided formula. They were asked to rank the total score and the top - scoring scale was considered to be the main coping strategy.

A description and discussion of the findings from the questionnaires will be described in another paper.

After the questionnaire - filling session, participants were given some input regarding the relationship between stress, stressors and coping methods. Some elaboration of positive and negative coping styles was also given. Simultaneously in the discussion, participants were asked to calculate their scores for all the questionnaires so they can immediately relate their position to the theoretical input given. They were also asked to regroup themselves according to stress levels, stressor types and coping styles, a sort of 'cross-tabulation in

action'. This was done so that they can compare notes between their peers and to provide a stimulus for discussion and sharing of experiences.

After this active session, the day's programme was closed by inviting a psychiatrist from the school to talk to participants about stress as well as to teach relaxation therapy by proper breathing technique. This session also generated lively discussion afterwards.

The second day workshop programme

In the second day, 15 volunteer academic staff from various departments was invited to attend the workshop for a small - group discussion session. The aims of the session were sharing of experiences between academic staff and participants as well as providing an opportunity for participants to ask questions and express their feelings.

Evaluation of the workshop

At the end of the first day, evaluation questionnaires were distributed to participants. Apart from basic biographic data, the questionnaire solicited participants' ratings regarding the usefulness of the introductory session, the three questionnaires, the discussion sessions and the facilitators. Participants were also asked to rate the success of the workshop in achieving the objectives and its overall usefulness. In an open-ended section participants were asked to describe the most important thing they learnt from the workshop as well as the most important thing that can be improved.

Results

A total of 55 students participated in the workshop, out of which 55 (82%) were female students. The years of study were almost equally represented; 14 students (26%) from

years two and three, 20 (37%) from year four and 6 (11%) from year five.

The participants' perceptions of the usefulness of the workshop sessions as well as the achievement of objectives are given in table 1. All sessions were rated as highly useful; the lowest rated, the introduction session, obtained an overall usefulness rating of 3.73 out of the possible 5 (74.6%). The three questionnaires; the GHQ, MSSQ and Brief COPE, obtained the highest average ratings (90.2%, 92% and 93.8% respectively). The participants rated the overall workshop as highly useful (86%) and as having achieved the objectives (82.6%).

Among the comments written in the open-ended section regarding the most important thing participants learnt from the workshop, 40% wrote comments related to improved self-awareness. The importance of positive coping skills was commented by 27.5% of them. The fact that stress is related to one's perception was mentioned as most important by 17.5% and another 15% appreciated the usefulness of increased knowledge such as identification of stressors.

As regards the areas of the workshop to be improved, 35.7% of the comments urged for more sharing sessions. In relation, another 20% suggested more time for the workshop. 17.9% noted that the publicity for the workshop should be improved. The rest of the comments included diverse topics such as punctuality and use of music in the workshop.

Discussion

Considering the well-researched fact that medical study is highly stressful [1-10], the positive response of the students to the workshop can be understood. It is also reflected in the fact that the initial idea for the programme came from the students. It should be remembered, however, that this was a voluntary workshop so the participants were motivated to attend and the positive evaluation should be interpreted with caution.

The activities of the workshop were based on the premise that 'knowledge is power' – given relevant theoretical input about stress as well as insight about their own stress level, stressor types and coping styles, students will be able to start strategizing towards their self-improvement. The effectiveness of this approach is reflected in the high ratings given to the questionnaire-filling sessions. A participant wrote:

"I start to realize that my distress condition will not improve if I do not change the ways of how I think, perceive and cope with stressful events."

Several areas identified in the evaluation can guide the PPIP on future directions in terms of content and method of future stress intervention programmes.

Firstly, the use of screening instruments seemed to be an effective strategy and more thought have to be given on how to promote more students to come forward for screening. Even in this workshop, which was attended by only approximately 7% of the student population, a number of participants were identified as being in the 'high risk' group. The worry is how to make those who really need such intervention come forward. Clearly identified resource persons whom students can approach and a well-coordinated system of referral are needed, apart from intervention programmes such as this.

Secondly, providing students with the relevant knowledge about stress seemed to be a move in the right direction. Discussions about coping styles seemed to be very highly appreciated by students. These are content areas that can be introduced to students at strategic times and places in the curriculum.

Thirdly, sessions where academic staffs are invited to share their experiences with students seemed to be highly appreciated. It was heartening to note that a high proportion of the 15 academic staff volunteers in the workshop were graduates of the school. More thought must be given on how to increase

participation from interested academic staff, including addressing issues such as further training for interested staff and possible incentives.

The actual long-term impact of such workshops still remains to be seen. Follow-up and prospective studies would have to be designed and implemented. Apart from that, more data is needed to clarify issues such as the major sources of stress and the

prevalence of stress-related problems among students. This is to ensure that the problem of stress in this medical school is addressed in an efficient and holistic manner.

In conclusion, Medical Students Well-being Workshop is a promising intervention program in improving medical students' ability in managing stress. Perhaps similar approach can be considered relevant to be incorporated in other medical schools.

Table 1: Summary of workshop evaluation findings.

Items	*Mean	Standard Deviation
Introduction session**	3.73	0.87
GHQ-12**	4.51	0.69
MSSQ**	4.60	0.63
Brief COPE Inventory**	4.69	0.57
Attainment of workshop objectives***	4.13	0.65
Overall usefulness**	4.30	0.65

*Maximum mean score was 5; **1 = not useful, 5 = highly useful; ***1 = not successful, 5 = very successful

References:

1. Aktekin, M., Karaman, T., Senol, Y. Y., Erdem, S., Erengin, H. & Akaydin, M. (2001). Anxiety, depression and stressful life events among medical students: a prospective study in Antalya, Turkey. *Med Educ*, **35**(1), 12-7.
2. Dahlin M, Joneborg N, Runeson Bo (2005). Stress and depression among medical students: a cross sectional study, *Medical Education*, **39**, 594-604.
3. Firth, J. (1986). Levels and sources of stress in medical students. *Br Med J (Clin Res Ed)*, **292**(6529), 1177-80.
4. Guthrie, E., Black, D., Bagalkote, H., Shaw, C., Campbell, M. & Creed, F. (1998). Psychological stress and burnout in medical

5. Guthrie, E. A., Black, D., Shaw, C. M., Hamilton, J., Creed, F. H. & Tomenson, B. (1995). Embarking upon a medical career: psychological morbidity in first year medical students. *Med Educ*, **29**(5), 337-41.
6. Ko SM, Kua EH, Fones CSL (1999). Stress and the undergraduate, *Singapore Med. J*, **40**: 627-30.
7. Liselotte N. Dyrbye, Matthew R. Thomas and Tait D. Shanafelt (2005). Medical students distress: causes, consequences, and proposed solutions, *Mayo Clin Proc*, **80** (12), 1613-22.
8. Saipanish, R. (2003). Stress among medical students in a Thai medical school. *Med Teach*, **25**(5), 502-6.

9. Sherina MS, Lekhraj R, Nadarajan K (2003). Prevalence of emotional disorder among medical students in a Malaysian university, *Asia Pacific Family Medicine*, **2**: 213-217.
10. Zaid, Z. A., Chan, S. C. & Ho, J. J. (2007). Emotional disorders among medical students in a Malaysian private medical school. *Singapore Med J*, **48**(10), 895-9
11. Steven Rosenzweig, Daine K. Reibel, Jeffrey M. Greeson,, George C. Brainard and Mohammadreza Hojat (2003). Mindfulness-based stress reduction lowers psychological distress in medical students, *Teaching & Learning in Medicine*, **15**(2), 88-92.
12. Susan K. Redwood and Michael H. Pollak (2007). Student-lead stress management program for first-year medical students, *Teaching and Learning in Medicine*, **19**(1), 42-46.
13. Guidelines for the accreditation of basic medical education programmes in Malaysia (2007), Malaysian Qualification Agency, Malaysia.
14. Shapiro, S. L., Shapiro, D. E. & Schwartz, G. E. (2000). Stress management in medical education: a review of the literature. *Acad Med*, **75**(7), 748-59.
15. Yusoff M.S.B, Rahim A.F.A, Noor A.R., Yaacob N.A and Hussin Z.A.M.. The BigSib Students Peer-Group Mentoring Programme, *Medical Education*, in press.
16. Jackson C (2007) The General Health Questionnaire, *Occupational Medicine*, **57**, 59.
17. Banks M H (1983) Validity of the General Health Questionnaire in a young community sample, *Psychological Medicine*, **13**, 349-54.
18. Radanovic Z, Eric L J (1988) Validity of the General Health Questionnaire in Yugoslav student population, *Psychological Medicine*, **13**, 205-7.
19. Maniam T. (1996). Validation of the General Health Questionnaire (GHQ-30) for a Malaysian population, *Malaysian Journal of Psychiatry*, **4** (2), 25-31.
20. Yusoff M.S.B, Rahim A.F.A and Yaacob M.J. The Sensitivity, Specificity and Reliability of the Malay version 12-item General Health Questionnaire (GHQ-12) in detecting distressed medical students, *ASEAN Journal of Psychiatry*, in press.
21. Yusoff M.S.B, Rahim A.F.A and Yaacob M.J. The Development and Validity of Medical Student Stressors Questionnaire (MSSQ), *ASEAN Journal of Psychiatry*, in press.
22. Carver, C.S, Scheier, M.F, & Weintraub, J.K. (1989). Assessing coping strategies: A theoretically based approach, *Journal of Personality and Social Psychology*, **56**, 257-283.

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