

Dubai Medical College students' scores on the Beck Depression Inventory

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Abstract

Background: The fact that the adaptive capacities of medical students are decreased by psychiatric symptoms, especially depression, is well documented in the literature. Persistent dysphoric mood has also been associated with medical school dropout. This study was carried out to assess depression scores of medical students at Dubai Medical College using on Beck Depression Inventory.

Methods: 103 medical students were selected randomly and evaluated by Beck Depression Inventory (BDI). A confidential questionnaire (BDI) was distributed, completed by the students and collected in the same sessions in 2007.

Results: The mean age for the students was 18.85 years (Minimum: 17, Maximum: 22), and 90.3% were between 18 and 20. The mean depression score of the students was 14.88. Of the participants, 64.07% reported that they were particularly hopeful about the future and 73.78% indicated that they had no self-harming thoughts. Among them, 27.18% were in the normal depression range (0-9), 45.63% in the marginal depression range (10-19) and 23.30 in the moderate depression range (20-29). Only 3.88% were found to be in the moderate to severe depression range (30-39). None of the students had severe depression (BDI score > 40). The majority of the participants were particularly optimistic about the future. Most of the participants were in the normal or just marginal depression range and none of them had severe depression.

Conclusions: Our results indicated that although a low percentage of Dubai Medical College students were found to have a significant level of depression, this should not be underestimated, and actions should be taken to encourage Dubai Medical College students to seek help for psychiatric problems especially depression. The risk factors as well as protective ones must be identified nation-wide to promote the mental health of the medical students.

Keywords: Medical students; Beck depression inventory; United Arab Emirates

Introduction

The goal of medical education is to train physicians who will promote the health of all people, as stated in Edinburgh Declaration. However, this has not been realized and efforts to introduce greater social awareness into medical schools have not been notably successful.¹ The fact that the adaptive capacities of medical students are hampered by psychiatric disor-

ders, especially depression, is well documented in the literature.² Persistent dysphoric mood has also been associated with medical school dropout.³ Evidence that medical students are subjected to considerable stress has been reported over the last decade.⁴⁻⁷ There is evidence that emotional disorders, especially depression in the medical school, result in some problems for physicians in future,^{8,9} which in addition to the personal suffering for them, it might negatively affect patient care.¹⁰ It is reported that physicians do not seek the kind of professional help for themselves as they do for their patients.¹¹⁻¹³ It seems that medical students follow a similar behavior.^{14,15} However, we know little about the prevalence of emotional distress,

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especially depression. Based on Beck Depression Inventory (BDI) scores, prevalence rates of depression have been reported to be in the range of 14–24%.^{3,16,17} In a longitudinal study, using General Health Questionnaire-12 (GHQ-12), 22–36% of medical students had psychiatric disorders.¹⁸ In a study, it was reported that 14–19% of Swedish university students had depression during the academic year before.¹⁹ Zoccolillo showed that medical students had higher rates of depression than the general population even before entering medical school.²⁰ One hundred and forty Hong Kong Chinese students were studied at the beginning of the second year of their medical education (year 2), and compared with one hundred and thirty eight students studied before the beginning of their first year of medical school and with seventy four non-medical students in their second year. Among the sophomores, distress, as reflected in their scores on anxiety and depression self-reported scales, was high.²¹ It is well known that healthy medical students are likely to become healthy physicians who can then model and promote healthful lifestyles in their patients. Depression decreases the students' capacity and disturbs their relationships with patients.^{2,3,7,22} To decrease depression, its rate and causes should be identified. In a survey in Iran, using BDI, the mean scores of depression among 651 students were 12 for physiotherapy students, 11.2 for junior medical students, 9.7 for senior medical students and 6.2 for residents.²³ In another study, mean scores among Iranian non-medical students were 11.6 for men and 9.9 for women.²² Because medical students are the health care professionals who most directly and frequently interact with patients, they are likely to affect them by their behavior and attitudes. So it is of interest to assess the rate of depression among them. The aim of the present study was to assess the rate of depression, hopelessness and self-harm tendencies among medical students at Dubai Medical College for Girls.

Materials and Methods

A cross-sectional study was conducted in an international Medical College in the city of Dubai. The participants were 103 pre-clinical medical students selected by random cluster sampling, from Dubai Medical College for Girls. Beck Depression Inventory (a multiple choice questionnaire) was administered to determine the depression rate in the students.

The reasons behind choosing a multiple-choice questionnaire (BDI) are to limit the responding time, and to elicit more specific and objective answers. The questionnaires were distributed, completed by the students, and collected in the same session. Distribution was followed by a full explanation of the reasons for the implementation of the study and the students were informed that their responses would be confidential. They were asked to write their personal comments and recommendations at the end of the questionnaire. Special attention was paid to ensure that the students clearly understand the instructions about answering the questionnaire. In addition, they were asked not to write their name or student number on the questionnaire in order to encourage them to provide more open and honest answers. The students were given enough time to complete and return BDI.

The BDI is a culture-free set of 21 items and requires self-report by subjects.²⁴ The minimum score is 0 and the maximum 63. Ratings from 0 to 9 are considered in the normal range, 10–19 marginal, 20–29 moderate, 30–39 moderate to severe, and 40 or above severe depression.^{24,25} The questionnaires were administered to students in classes, and were completed in the same session. In addition to a total score on all items, items 2 (I am not particularly pessimistic/I am pessimistic or discouraged about the future) and 9 (I do not have any thoughts of harming myself/I have thoughts of harming myself) were analysed separately for pessimism and self-harming tendencies among the students.

Results

All of the students completed the questionnaires. The participants' age ranged from 17 to 22 years. Their mean age was 18.85 years (SD, 0.99). A total of 93 (90.30%) respondents ranged from 18 to 20 years and only 7 (6.80%) were older than 20 years. The students' mean depression score was 14.88, (SD: 7.41). Concerning item 2, 66 students (64.07%) rated themselves as particularly hopeful about the future and regarding item 9, 76 (73.78%) reported not having any self-harming thoughts. Of the participants, 28 (27.18%) had their BDI score in the normal range (0-9), 47 (45.63%) in the marginal depression range (10-19) and 24 (23.30%) in the moderate depression range (20-29). Only 4 (3.88%) had their BDI score as moderate to severe depression range (30-39). None of the students were found to have severe depression (BDI score > 40).

Discussion

The major findings of this cross-sectional study of medical students were that 23.30% of them were in the moderate depression range (20-29), and only 3.88% were in the moderate to severe depression range (30-39). It is also important to mention that none of the students had severe depression (BDI score > 40). Overall, most (64.07%) of the participants were particularly optimistic about the future. The majorities of the medical students (72.81%) were found to be in the normal range or just had marginal depression. Nobody was found to have severe depression. Our findings showed that only a low percentage (3.88%) of Dubai Medical College students had a significant level of depression. Actions should be taken to encourage Dubai Medical College students to seek help for psychiatric problems, especially depression, and to provide adequate facilities. Interventions addressing the mental health of medical students might be directed towards those revealing depressive symptoms. As in all epidemiological and self-report surveys, our research study has a couple of limitations including recall bias and reporting errors. In spite of assuring the confidentiality, there is a probability that some of the students did not answer all the questions accurately. Therefore, there is a probability of underre-

porting. In addition, the subjects were only Dubai Medical College for female students. Consequently, care should be taken not to generalize the results of this study to all UAE students. Large-scale studies at the community level must be carried out to reach a more comprehensive picture of depression in UAE.

The majority of the participants were particularly optimistic about the future. Most of the medical students reported that they were in the normal range or just had marginal depression. Nobody reported severe depression. Our findings showed that although a low percentage of Dubai Medical College students reported a significant level of depression, this should not be underestimated, and actions should be taken to encourage Dubai Medical College students to seek help for psychiatric problems, especially depression. The risk factors as well as the protective factors must be identified nation-wide to promote the medical students' mental health.

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