# Prevalence and determinants of suicidality among medical students in Oman

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**Objective**
The aim was to explore the stress sources and determine the prevalence of suicidal ideation among medical students and its association with demographic characteristics and stress factors.
**Patients and methods**
A cross-sectional study was conducted on Oman Medical College students of preclinical and clinical years. Data were collected using a semistructured questionnaire with sections on sociodemographic factors, stress factors, and assessment of suicidality. Prevalence of suicidal ideation and behavior in the past was assessed with the help of questions in the General Health Questionnaire pertaining to suicide.
**Results**
A total of 314 medical students participated in the study. The average age of the participants was 22.13 years. Most students who participated in the study were females (76.4%). Regarding the year of study, 66.6% of students belonged to the preclinical years, whereas 33.4% of participants were currently undergoing clinical training. The higher level of stress was associated with problems related to nutrition, poor sleep, emotional problems, and difficulties in the study courses. Overall, 33.4% of medical students had a lifetime prevalence of suicidal ideation. It was also seen that the rates of making a suicidal plan (8%) or attempting suicide (4.5%) were lower. Results also indicate that the prevalence of suicidal ideation is higher among students in the preclinical years when compared with students in clinical training.
**Conclusion**
The prevalence of suicidal ideation and attempts among medical students was in the higher range in international comparison. Medical students are future doctors who are in need to be protected from avoidable causes of morbidity and mortality including suicide. There is a necessity for further investigations to identify the core sources of emotional distress and academic burden in this population and then propose strategies consequently.

**Keywords:**
anxiety, depression, medical students, suicide

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## Introduction

Suicide contributes every year to more than 1% of the global burden of disease, and most of it occurs in young and middle-aged people (Menezes *et al.*, 2012). All strata of life could be affected by suicide. However, medical profession is considered as a high risk for developing suicide. Many factors are found to affect the rate of suicidal ideation and behavior. Such factors include religion, culture, ethnicity, family, and social status (Goldston *et al.*, 2008).

Education in medical schools is stressful and difficult for most of the students. Medical students are always anxious, overwhelmed, and having less chances to recreate owing to excess information and loads of competition to excel (Stecker, 2004). Stress results when pressure surpasses one's perceived capability to deal with it; it does not essentially follow the presence of a potential stressor. Academic stress is a normal, necessary, and helpful part of our lives that can aid one to learn and succeed. However, stress can cause significant difficulties in students' careers if it is prolonged and unmanaged (Moffat *et al.*, 2004). Studies have shown that student distress may affect students' care of patients and relationship with faculty and family members (Shapiro *et al.*, 1998).

Several studies have shown that stress is related to depression, drug abuse, anxiety, and suicide (Moffat



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*et al.,* 2004 and Stecker, 2004). Approximately 30% of medical students experience anxiety (Moutinho *et al.*, 1992; Hem *et al.,* 2005; El-Gilany *et al.,* 2008; Dyrbye and Shanafelt, 2009). In a recent meta-analytic review study, the prevalence rate of depressive symptoms in medical undergraduate students was found to be 27.2% (Rotenstein *et al.,* 2016).

Several reports have demonstrated that medical students experience stress more than their peers in other colleges and later have a higher prevalence rate of depressive symptoms, substance abuse, anxiety, and suicide (Moffat *et al.,* 2004; Stecker, 2004).

In reviewing the literature, physicians have been found to have a higher prevalence of suicidal ideation and behavior than the general population (Schernhammer and Colditz, 2004; Shanafelt *et al.,* 2011). The problem does not rise abruptly when they become physicians, rather it starts when they enter medical schools (Menezes *et al.,* 2012). When a student commits suicide, it is always preceded primarily by suicidal ideation (Menezes *et al.,* 2012). Suicidal ideation means thinking about, considering, or planning for suicide (Watson *et al.,* 2001). Studies from different countries have shown that suicidal ideation was reported by 10–14% of medical students (Okasha *et al.*, 1981; Tyssen *et al.,* 2001; Dyrbye *et al.,* 2008; Goebert *et al.,* 2009; Menezes *et al.,* 2012; Ahmed *et al.,* 2016). Summary prevalence estimates ranged from 7.4 to 24.2% (Rotenstein *et al.,* 2016). Detection of suicidal ideation among students and their related factors can help in recognizing it at a proper time, making the right interventions, and managing the problem (Marcon *et al.,* 2019).

The role of religion as a protective factor against suicidal behavior has been studied extensively in the literature (Colucci and Martin, 2008). All religions forbid suicide with different degrees of severity. Among the three Abrahamic religions, Islam has the most severe forbidden attitude toward self-harm (Eskin *et al.,* 2019). Ritter and his colleagues reported on studying the national suicide rates that, religious values and religiousness served as a protective factor against suicide. Moreover, they found that Islamic countries had lower suicidal behavior (Ritter *et al.*, 2011). However, most of the studies in the Muslim countries are descriptive with lack of scientific investigations on the suicidal behavior (Lester, 2006). The hypothesis that the prevalence rate of suicidal behavior is low in Muslim countries may be challenging for several explanations. First, official suicide rates are likely to be not or underreported owing to stigma and attitudes toward suicide (Pritchard and Amanullah, 2007). Second, the Muslim majority world is heterogenous with variation in their economic growth, values and attitudes, legalization of suicide, social background, culture and traditions, and education. The WHO (2014) stated that ~80% of deaths owing to suicide happen in low-middle income countries, with most of the Muslim countries lie within this category. Certainly and colleagues have called for extensive studies for the prevalence of suicide, especially in Muslim nations (Eskin *et al.,* 2016).

In a recent systematic review about the relationship between suicide risk and religion, Lawrence and colleagues concluded that religiousness is not specifically protective against suicidal ideation but does protect against suicidal attempts and suicidal behavior (Lawrence *et al.,* 2016).

This study investigated the following: first, the prevalence of suicidal ideation and attempts among the medical students at Oman Medical College (OMC), Sultanate of Oman; and second, correlating perceived stress, depression, and anxiety with suicidal ideation in those medical students.

## Patients and methods

A cross-sectional study was done among medical students of OMC in the academic year 2016–2017. Students spend 4 years in preclinical participants (basic sciences) before they address clinical sciences for another 2 years.

Students were selected randomly from the different 6 years of study and were grouped into two groups of basic sciences (year 2, year 3, year 4, and year 5) and clinical sciences (year 6 and year 7). A total of 314 medical students at the OMC participated in this study.

All the students were contacted in the classroom, and they were informed about the study. Investigators took precautions to make sure anonymity and confidentiality of the participated students. Participants were notified that they could withdraw from the study at any time. Students who did not sign the informed consent form or returned incomplete questionnaires were excluded.

The questionnaire is semistructured with sections on sociodemographic factors, stress factors, and assessment of anxiety, depression, and suicidal ideation.

Anxiety and depression assessment was done using Hospital Anxiety and Depression scale; the cut-off point of 8 or more for either the anxiety or depression components denotes possible anxiety and depression (Zigmond and Snaith, 1983). This cutoff point had a sensitivity of 0.89 and a specificity of 0.75 for the anxiety component and a sensitivity of 0.80 and specificity of 0.88 for the depression component (Olsson *et al*., 2005).

Prevalence of suicidal ideation in the recent past was assessed with the help of four questions in the General Health Questionnaire pertaining to suicide. These questions were validated and found to have similar sensitivity in detecting suicidal ideation as other suicidal intent scales (Watson *et al.,* 2001).

Responses to the questions were scored on a Likert-type scale with the first two questions having responses of 'Not at all/No more than usual/Rather more than usual/Much more than usual' and the latter two having responses of 'Definitely not/I don't think so/Has crossed my mind/Definitely has.' If the response was 'Rather more than usual/Much more than usual' and/or 'Has crossed my mind/Definitely has' to any of the four questions, then the responses were considered as positive and the participant was considered to have suicidal ideation. In addition, to find out the life-time prevalence of suicidal ideation, suicidal plan, and suicidal attempt, 3 questions 'Have you ever thought of killing yourself?', 'Have you ever made a plan to kill yourself?' and 'Have you ever made an attempt to kill yourself?' with dichotomous (yes/no) response format were asked, respectively.

The study has been approved by the Institutional Research Review Board at OMC, Oman.

#### Statistical analysis

IBM's SPSS statistics (Statistical Package for the Social Sciences) for windows (version 25, 2017) (IBM Corp. Released 2017, IBM SPSS Statistics for Windows, Version 25.0. Armonk, NY: IBM Corp.) was used for statistical analysis of the collected data IBM Corp. (2017). Shapiro–Wilk test was used to check the normality of the data distribution. All tests were conducted with 95% confidence interval. *P* (probability) value less than 0.05 was considered statistically significant. Charts were generated using SPSS' chart builder and Microsoft Excel for windows 2019. Quantitative variables were expressed as mean and SD, median, interquartile range, minimum, and maximum as appropriate, whereas categorical variables were expressed as frequency and percentage. Independent sample *t* and Mann–Whitney tests were used for intergroup (between participants) comparison of parametric and nonparametric continuous data with no follow-up readings, respectively. Fisher exact and $\chi^2$ tests were used for intergroup comparison of nominal data using the cross-tabs function.

## Results

A total of 314 medical students participated in the study. The average age of the participants was 22.13 years (SD±2.05). Most students who participated in the study were females (76.4%). Regarding the year of study, 66.6% of students belonged to the preclinical years, whereas 33.4% of participants were currently undergoing clinical training. Most medical students presently resided on campus (57.6%). History of smoking was reported by 2.9% of the participants (Tables 1 and 2).

Results from Table 3 indicate that there are multiple factors in lifestyle and routine that contributes to the experience of stress by medical students. The most predominant factors include concerns about nutritional status (50.3%), difficulty with sleep routine (46.2%), and facing emotional difficulties (46.2%). Other contributory factors included coping with academic demands, relationship with teachers and friends, and problems in the family. There was no significant difference in these factors among students in the clinical and preclinical years. However, students in the preclinical years reported more stress owing to the inability to participate in recreational and social activities when compared with students in clinical training.

Results from Table 4 indicate the anxiety and depression scores of participants in the study. Most students in the medical program experience features of anxiety (31.9%) and depression (39.2%). Students in the preclinical years report higher levels of anxiety and depression when compared with students in the clinical years.

Inferences from Table 5 show that suicidal ideation is excessively prevalent among medical students. Approximately 21.3% of students felt that life was not worth living, 22.3% wished to escape from the demands of life, and 20.7% of students had considered the idea of taking their own lives within the past 12 months. Further analysis also indicated that suicidal ideation was more prevalent among the students in the preclinical years when compared with the students in the clinical years ($P<0.05$).

**Table 1 Demographic characteristics of the participants**

| All patients (*n*=314) | Mean±SD | Median | Minimum | Maximum | IQR |
|---|---|---|---|---|---|
| Age (years) (*n*=298) | 22.13±2.05 | 22 | 18 | 27 | 20–24 |
| Previous year grade (*n*=120) | 3.16±0.68 | 3.05 | 2 | 5 | 2.51–3.75 |
| Sex (*n*=308) | | | | | |
| Male | 22.7 (68) | | | | |
| Female | 76.4 (240) | | | | |
| Nationality (*n*=255) | | | | | |
| Omani | 38.5 (121) | | | | |
| Non-Omani | 42.7 (134) | | | | |
| Academic year | | | | | |
| Clinical | 33.4 (105) | | | | |
| Preclinical | 66.6 (209) | | | | |
| Residence (*n*=243) | | | | | |
| Urban | 63.4 (199) | | | | |
| Rural | 14 (44) | | | | |
| Current residence (*n*=288) | | | | | |
| Family | 11.5 (36) | | | | |
| Campus | 57.6 (181) | | | | |
| Off Campus | 22.6 (71) | | | | |
| History of smoking (*n*=258) | 2.9 (9) | | | | |
| History of addiction (*n*=258) | 1 (1) | | | | |

Data are expressed as mean and SD, median, minimum, maximum, and interquartile range or as percentage and number. Some data were missing owing to participants' refusal to share personal data. IQR, interquartile range.

**Table 2 Demographic characteristics of the participants from preclinical and clinical years**

| | Clinical students (*n*=105) [% (*n*)] | Preclinical students (*n*=209) [% (*n*)] | 95% CI | *P* |
|---|---|---|---|---|
| Age (years) (*n*=298) | 23.83±1.35 | 21.3±1.8 | 2.16, 2.89 | <0.001 |
| Previous year grade (*n*=120) | 3.33±0.61 | 3.06±0.7 | 0.02, 0.52 | 0.033 |
| Sex (*n*=308) | | | | |
| Male | 21.9 (23) | 22.2 (45) | –0.1, 0.09 | 1 |
| Female | 78.1 (82) | 77.8 (158) | | |
| Nationality (*n*=255) | | | | |
| Omani | 63.4 (59) | 38.3 (62) | –0.38, –0.15 | <0.001 |
| Non-Omani | 36.6 (34) | 61.7 (100) | | |
| Residence (*n*=243) | | | | |
| Urban | 80.2 (69) | 82.8 (130) | –0.15, 0.08 | 0.73 |
| Rural | 19.8 (17) | 17.2 (27) | | |
| Current residence (*n*=288) | | | | |
| Family | 6.1 (6) | 15.8 (30) | – | 0.06 |
| Campus | 68.4 (67) | 60 (114) | | |
| Off campus | 25.5 (25) | 24.2 (46) | | |
| History of smoking (*n*=258) | 2.2 (2) | 4.2 (7) | –0.02, 0.05 | 0.5 |
| History of addiction (*n*=258) | 0 | 1.8 (3) | –0.002, 0.03 | 0.31 |

Data are expressed as mean and SD or as percentage and number. 95% CI, 95% confidence interval of the mean difference between both groups. $P<0.05$, significant.

Results from Tables 6 and 7 indicate that ~33.4% of medical students had a lifetime prevalence of suicidal ideation. It was also seen that the rates of making a suicidal plan (8%) or attempting suicide (4.5%) were lower. Results also indicate that the prevalence of suicidal ideation is more among students in the preclinical years when compared with students in clinical training. Female students were at a higher risk of experiencing suicidal ideation. Experiences of anxiety and depression were also strong indicators/ contributing factors to suicidal ideation among medical students.

## Discussion

The lifetime prevalence of suicidal ideation among medical students at OMC was 33%, which lies in the upper end of that reported in studies from other

**Table 3 Stress factors as reported by medical students**

| Stress factor | All students (*n*=314) [% (*n*)] | Clinical students (*n*=105) [% (*n*)] | Preclinical students (*n*=209) [% (*n*)] | *P* value |
|---|---|---|---|---|
| Nutritional status | 50.3 (158) | 44.8 (47) | 53.1 (111) | 0.19 |
| Not getting enough sleep | 46.2 (145) | 42.9 (45) | 47.8 (100) | 0.47 |
| Emotional problems | 46.2 (145) | 51.4 (54) | 43.5 (91) | 0.19 |
| Coping with course of study | 38.5 (121) | 43.8 (46) | 35.9 (75) | 0.18 |
| Class attendance | 36.3 (114) | 37.1 (39) | 35.9 (75) | 0.9 |
| Not exercising enough | 34.4 (108) | 34.3 (36) | 34.4 (72) | 1 |
| Relation with teachers | 34.1 (107) | 36.2 (38) | 33 (69) | 0.61 |
| Family problems | 29.9 (94) | 30.5 (32) | 29.7 (62) | 0.9 |
| Social activities | 28 (88) | 22.9 (24) | 30.6 (64) | 0.18 |
| Sleeping too much | 26.8 (84) | 20 (21) | 30.1 (63) | 0.06 |
| Problems with colleagues and friends | 26.4 (83) | 26.7 (28) | 26.3% (55) | 1 |
| Close contact with serious diseases and illness | 15.6 (49) | 12.4 (13) | 17.2 (36) | 0.32 |
| Unable to participate in college recreational and social activities | 14.3 (45) | 5.7 (6) | 18.7 (39) | 0.002 |
| Over exercising | 12.1 (38) | 6.7 (7) | 14.8 (31) | 0.043 |

**Table 4 Medical students' scores on the Hospital Anxiety and Depression Scale**

| | All students [% (*n*)] | Clinical students [% (*n*)] | Preclinical students [% (*n*)] | *P* |
|---|---|---|---|---|
| Anxiety score | 8.6±3.48 | 8 (4, 10) | 10 (7, 11) | <0.001 |
| Anxiety grade | | | | |
| Noncase | 33.1 (104) | 48.6 (51) | 25.4 (53) | <0.001 |
| Borderline | 35 (110) | 30.5 (32) | 37.3 (78) | |
| Case | 31.9 (100) | 21 (22) | 37.3 (78) | |
| Depression score | 9.58±3.36 | 9 (5, 11) | 10 (9, 12) | <0.001 |
| Depression grade | | | | |
| Noncase | 23.2 (73) | 41 (43) | 14.4 (30) | <0.001 |
| Borderline | 37.6 (118) | 28.6 (30) | 42.1 (88) | |
| Case | 39.2 (123) | 30.5 (32) | 43.5 (91) | |

**Table 5 Prevalence of suicidal ideation in medical students**

| | Rather more than usual/ definitely has [% (*n*)] | Much more than usual [% (*n*)] | No more than usual [% (*n*)] | Not at all [% (*n*)] |
|---|---|---|---|---|
| Have you recently (within the past 12 months) felt that life is not worth living? | 21.3 (67) | 20.7 (65) | 29.6 (93) | 28.3 (89) |
| Have you recently (within the past 12 months) found yourself wishing that you were dead and away from it all? | 22.6 (71) | 18.5 (58) | 25.8 (81) | 33.1 (104) |
| Have you recently (within the past 12 months) had thoughts of the possibility that you might do away with yourself? | 20.7 (65) | 20.7 (65) | 29.6 (93) | 29 (91) |
| Have you recently (within the past 12 months) found the idea of taking your own life coming into your mind? | 19.7 (62) | 21.3 (67) | 27.7 (87) | 31.2 (98) |

**Table 6 Lifetime prevalence of suicidal ideation among medical students**

| | Clinical students (*n*=105) [% (*n*)] | Preclinical students (*n*=209) [% (*n*)] | *P* |
|---|---|---|---|
| Have you ever thought of killing yourself? | 23.8 (25) | 38.3 (80) | 0.011 |
| Have you ever made a plan to kill yourself | 4.8 (5) | 9.6 (20) | 0.19 |
| Have you ever made an attempt to kill yourself?' | 2.9 (3) | 5.3 (11) | 0.4 |

countries, where the range of lifetime prevalence rates was from 3 to 53% (Menezes *et al.*, 2012; Van Niekerk *et al.*, 2012; Amiri *et al.*, 2013; Miletic *et al.*, 2015; Wege *et al.*, 2016; Sun *et al.*, 2017; aCoentre and Gois, 2018).

Suicidal ideation in the past 12 months among the participants in the current study was 21%, which is slightly more than the past 12-month prevalence of suicidal ideation of 17.5% (Chen *et al.*, 2004) and even more than the results of various studies, wherein

**Table 7 The characteristics of medical students with reported lifetime suicidal ideation**

| | No ideation (*n*=209) [% (*n*)] | Suicide ideation (*n*=105) [% (*n*)] | *P* |
|---|---|---|---|
| Age (years) | 22.13±2.11 | 22.14±1.92 | 0.95 |
| Sex | | | |
| Male | 17 (35) | 83 (171) | 0.003 |
| Female | 32.4 (33) | 67.6 (69) | |
| Academic years | | | |
| Clinical | 38.3 (80) | 23.8 (25) | 0.011 |
| Preclinical | 61.7 (129) | 76.2 (80) | |
| Nationality | | | |
| Omani | 50.8 (95) | 38.2 (26) | 0.09 |
| Non-Omani | 49.2 (95) | 61.8 (42) | |
| History of smoking | 2.7 (5) | 5.5 (4) | 0.45 |
| Anxiety score | 7.84±3.74 | 10.11±2.96 | <0.001 |
| Anxiety grade | | | |
| Noncase | 43.1 (90) | 13.3 (14) | <0.001 |
| Borderline | 31.6 (66) | 41.9 (44) | |
| Case | 25.4 (53) | 44.8 (47) | |
| Depression score | 8.9±3.43 | 10.92±2.78 | <0.001 |
| Depression grade | | | |
| Noncase | 30.6 (64) | 8.6 (9) | <0.001 |
| Borderline | 37.3 (78) | 38.1 (40) | |
| Case | 32.1 (67) | 53.3 (56) | |

7–14.2% of participants reported suicidal ideation within the past 12 months (Okasha *et al*., 1981; Tyssen *et al.,* 2001; Wallin and Runeson, 2003; Dyrbye *et al.,* 2008; Eskin *et al.,* 2011; Menezes *et al.,* 2012; Amiri *et al.,* 2013; MacLean *et al*., 2016). However, the prevalence of suicidal ideation is lower than the rates of 31.3 and 35.6% found by two studies in Pakistan (Khokher and Khan, 2005; Osama *et al.,* 2014).

Such differences in the lifetime and past year prevalence rates between published studies and the present study may be attributed mainly to diverse measurements used to evaluate suicidal ideation and the differences in the past times in which suicidal ideation was asked. Other factors may include variation in the education, social backgrounds, attitudes and values, legal system, and economic growth across countries (Eskin *et al.,* 2019).

The lifetime suicidal plan and attempts in the present study were 8 and 4.5%, which were lower than the study of Osama and his colleagues where both prevalence rates were 13.9% and 4.8% for suicidal plan and attempts (Osama *et al.,* 2014). However, other studies have reported lower life time prevalence rates for suicidal plan and attempts, which ranged from 1 to 6.2% for suicidal plan and from 0.6 to 4.3% for suicidal attempts (Van Niekerk *et al*., 2012; Ahmed *et al.,* 2016; Coentre *et al*., 2016; Sun *et al.,* 2017). The finding in this study of prevalence rate of suicidal attempts is quiet similar to that reported by Marcon *et al.* (2019) where they reported a rate of 8.9% ().

Regarding the university students, two recent multinational studies examined the prevalence rate of suicidal thoughts and behavior. The first one was done by Eskin *et al.* (2016) and found that the prevalence of suicidal ideations and attempts were 29 and 7%, respectively, in 5572 university students from 12 nations (). The second study reported that the prevalence of suicidal thoughts was 22% and that of suicidal attempts was 8.6% in 1825 university participants from 12 Muslim countries (Eskin *et al.,* 2019).Depressive symptom prevalence in medical students in the present study was found to be 39%. This finding is in accordance with the prevalence range of 9–55% noted from a recent meta-analytic study that extracted the prevalence of depressive symptoms across 183 studies in 43 countries (Rotenstein *et al.,* 2016).

In a previous study from Oman, the prevalence of depressive symptoms among students in Sultan Qabous Faculty of Medicine was 24.5% (Al-Alawi *et al.,* 2019). Another study from Oman showed that 27.7% of the students at Sultan Qabous University had depressive symptoms (Al-Busaidi *et al.,* 2011).

Most of the instruments used to evaluate depressive symptoms are self-reported. Although these self-report

measures of depression have limitations, they are important instruments for precisely evaluating depression in medical students because they protect anonymity which is not possible through classic interviews (Rotenstein *et al.,* 2016).

In the present study, the preclinical students experienced more suicidal ideation, suicidal plan, and suicidal attempts than the clinical students. Moreover, they showed more depressive and anxiety symptoms and frequency of stressors than the clinical students. This finding is in agreement with the study of suicidal ideation in Egypt, where students in their first year of studying in the medical school have more prevalence of suicidal ideation and depressive symptoms than those in the clinical years (Ahmed *et al.,* 2016). This can be explained by a variety of personal, academic, and social aspects. The need for self-independence and lack of social support are possible causes for stress among preclinical students in OMC. Additionally, the frustration of studying in-depth theoretical courses with fewer options of practice could be a cause for incredible emotional stress (Al-Alawi *et al.,* 2019). Before enrolling in the medical school, Omani and most of the non-Omani medical students have been living with their families. From the social point of view, family is central to Omani society (Jaju *et al.,* 2009). After joining medical school, most of the students would be obliged to live away from their families.

Considering the high rates of suicidality, anxiety, and depression at OMC, the student counseling services on campus were strengthened. The establishment of the 'Student Counseling Center,' with full-time student counselors, supported by the faculty members of the Department of Psychiatry and Behavioral Science, offers effective services for students with emotional difficulties. In addition, programs on mental health promotion are frequently organized.

This study has many limitations. First, the cross-sectional nature of this study reported associations rather than causal relationships. Second, psychiatric morbidity was not explored in this study, which could have explained the reasons of suicidal ideation. Third, anonymous and self-administered questionnaires may not be the best to collect data about culturally sensitive topics, such as suicide. Fourth, there may be discrepancies involving the way some questions are understood by students as it is self-report, as asking students if they have suicidal thoughts or attempts may sometimes give a uncertain picture in what attempting suicide definitely means.

## Conclusion

In conclusion, the prevalence of suicidality among medical students at OMC was in the higher range in international comparison. Medical students are future doctors who are in need to be protected from avoidable causes of morbidity and mortality, including suicide. There is a necessity for further investigations to identify the core sources of emotional distress and academic burden in this population and then propose strategies consequently.

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Nil.

### Conflicts of interest

There are no conflicts of interest.

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