

Suicide Ideas among Hawler Medical College Students

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Abstract

Objectives and aims ; this study done on Hawler Medical University students. To assess the prevalence of suicide ideation among medical students. Comparing the prevalence distribution of suicide ideas among the different medical students' stages, in addition to other sociodemographic variables. **Methods;** Data was collected from 455 medical students through distributing questionnaire forms (convenient sample) from November, 2011 – March,2012. **Results;** An estimated 6% of students at this university had current suicide ideation, with highest frequency being reported among third stage students. Half of those who have suicidal ideation (2.9% of the sample), have a plan to commit it. Gender variation had shown no significant impact on the incidence of suicidal ideation. **Conclusions;** Results highlight potential targets for early intervention among medical college students.

Key words; suicidal idea, medical students.

Introduction

Suicidal ideation is a common medical term for thoughts about suicide, thoughts about how to kill oneself, which may be as detailed as a formulated plan, without the suicidal act itself. Although most people who undergo suicidal ideation do not commit suicide, a significant proportion go on to make suicide attempts.⁽¹⁾ The range of suicidal ideation varies greatly from fleeting consideration to detailed planning, role playing, self-harm and unsuccessful attempts, which may be deliberately constructed to fail or be discovered, or may be fully intended to succeed,⁽²⁾ thus suicide ideation is considered to be an important precursor to later attempted and completed suicide.⁽³⁾ Suicidal ideation is more common than completed suicide.⁽¹⁾ While suicide has been defined as an act with a fatal outcome that deliberately initiated and performed by the person in the knowledge or expectation of its fatal

outcome,⁽¹⁾ it's the tip of the iceberg of suicidal behavior and ideation.⁽⁵⁾

Suicide is considered as a psychiatric emergency and the awareness of the seriousness of suicide in our society should not be overlooked. It is a significant cause of death worldwide.⁽⁶⁾ It accounts for about 30,000 deaths annually in the USA and more than 5,000 deaths annually in South Africa.⁽⁷⁾

Current Average World Suicide Rate is 10.07 per 100,000 people.⁽⁸⁾ Suicide is the third leading cause of death among 15-to-24 year olds,⁽⁹⁾ and the second leading cause of death among college students.⁽¹⁰⁾

Risk factors of suicide includes mood disorders; other co morbid psychiatric disorder (e.g. substance use, anxiety, disruptive and personality problems); previous suicidal behavior ; family history of mood disorder or suicidal behavior, exposure to family violence to trauma or abuse; availability of lethal agents (e.g. Guns); poor child

parent communications, school problem and negative life events.⁽⁵⁾

Despite all the above risk factors there is no doubt that suicide is occasionally the rational act of mentally healthy person.⁽⁴⁾

In a research trying to assess the frequency of suicidal ideation among medical students and explore its relationship with burnout in USA they found that burnout was reported by 49.6% of students and 11.2% reported suicidal ideation.⁽¹¹⁾ this is the first study assessing suicidal ideation and depressive symptoms among students of Hawler medical college. Arising from the idea that medical students are subjected to a stressful life leading them to a hopeless life which eventually ending with a wish to end their lives, the need of an estimation of the actual size of that problem, so be able to design a program of intervention to support medical students to which access can be done easily and with a good degree of privacy. . As it has been shown in study conducted in Finland that 22% of the suicides examined had discussed suicidal intent with a health care professional in their last office visit.⁽¹²⁾

Methods and material

Data have been collected during 5 months from November,2011 – March,2012.

The research sample size was 500 students attending Hawler Medical University / College Of Medicine / Kurdistan region of Iraq / Erbil, with a response rate of (91%).The type of the sample collection was convenient.

A 12 items questionnaire form that included demographic data which are thought to have relation to suicidal ideation to be screened, and in which the assessment of economical status is a subjective one; the form also includes 4

items to assess death wishes and suicidal ideation within the last six months before the questionnaire and to what extent such ideas have been reached. We have collected data from all the stages of our medical college keeping the privacy of each student that made them answered our questions freely. We expected higher prevalence of suicidal ideation in the 1st and 6th stage as the student is prone to the new life stress in the medical college in the former and to the stress of being prepared to carry the responsibility of being a doctor in the next few months in the latter.

Results

The results of this study were based on the analysis of 455 questionnaire forms which have been collected from students of Hawler Medical University; among whom 262 (57.6%) were females, and 193(42.4%) were males (figure 1).

The distribution of the sample among the different stages was as shown in table 1. Among the participants 334(73.4%) were originally from Erbil Governorate, while the other 121(26.6%) have moved to live in Erbil from other governorates (highest percentages being from Baghdad and Al- Sulaymaneya as 8.4 & 7.5 respectively). Death wishes were reported in 63 students (13.8%), distributed among the six stages as shown in table 2.

Females reported higher percentages of death wishes compared to males, 68.25%, and 31.75% respectively (P= 0.06).

Regarding suicidal ideation, it was reported by 26(5.7%) students, and the suicidal ideation were reported with highest frequency among third stage students (13.95% of the third stage students have reported ideas to suicide

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followed by the 5th stage), figure 2. The distribution of suicidal ideation among each stage is shown in table 3, with P value of 0.018.

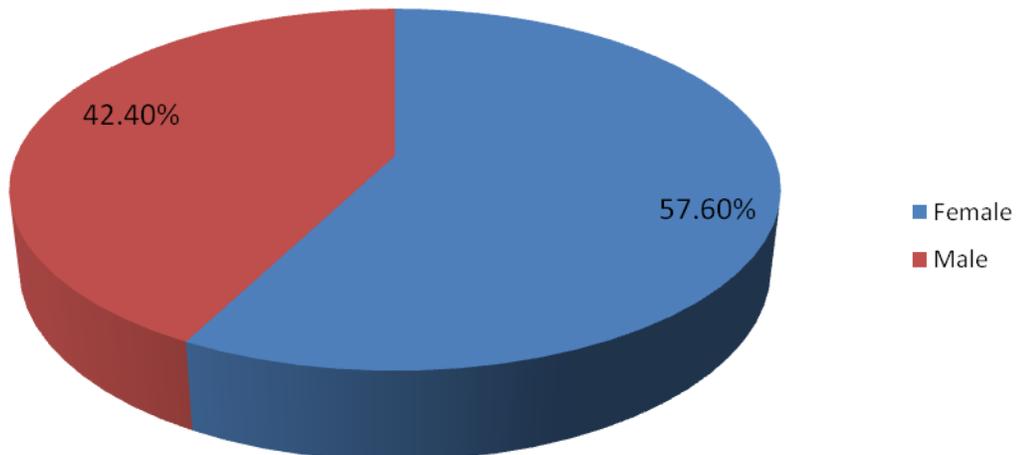
Here again females have shown a higher percentage than males in reporting suicidal ideations (57.7%, 42.3%) respectively (P= 0.09).

The tendency to have a suicidal ideation is shown to be higher among those students who have lost a family member through suicide (P=0.02). See figure 3.

Among the students who have suicidal ideation (whom were 26 students), 13(50% from the total with suicide ideas) have also a plan to commit suicide, and which constitute 2.9% of the whole study sample.

Regarding the gender difference of having a suicidal plan, 69.23% were females and 30.77% were males (P=0.3). The percentages of those who have been rescued from death after tried to commit suicide have reached to 2.2% (10 students) of our sample.

Figure 1: gender composition of the sample



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Table 1: sample distribution among the stages

| Stage | Frequency | Percentage from the total sample |
|--------------|-----------|----------------------------------|
| 1 | 134 | 29.5 |
| 2 | 82 | 18.0 |
| 3 | 43 | 9.5 |
| 4 | 48 | 10.5 |
| 5 | 58 | 12.7 |
| 6 | 90 | 19.8 |
| Total | 455 | 100.0 |

Table 2: distribution of death wishes among the different stages.

| Stage | Death Wishes | | |
|--------------|--------------|-------------------------------|-------------------------|
| | No. | % from the total death wishes | % from the total sample |
| 1 | 17 | 26.98 | 3.74 |
| 2 | 9 | 14.3 | 1.98 |
| 3 | 7 | 11.11 | 1.54 |
| 4 | 7 | 11.11 | 1.54 |
| 5 | 10 | 15.87 | 2.2 |
| 6 | 13 | 20.63 | 2.85 |
| Total | 63 | 100 | 13.8 |

Table 3: distribution of suicidal ideation among the stages.

| Stage | Suicidal Ideation | | |
|--------------|-------------------|------------------------------------|-------------------------|
| | No. | % from the total suicidal ideation | % from the total sample |
| 1 | 5 | 19.23 | 1.1 |
| 2 | 1 | 3.84 | 0.21 |
| 3 | 6 | 23.07 | 1.32 |
| 4 | 1 | 3.84 | 0.21 |
| 5 | 6 | 23.07 | 1.32 |
| 6 | 7 | 26.92 | 1.54 |
| Total | 26 | 100 | 5.7 |

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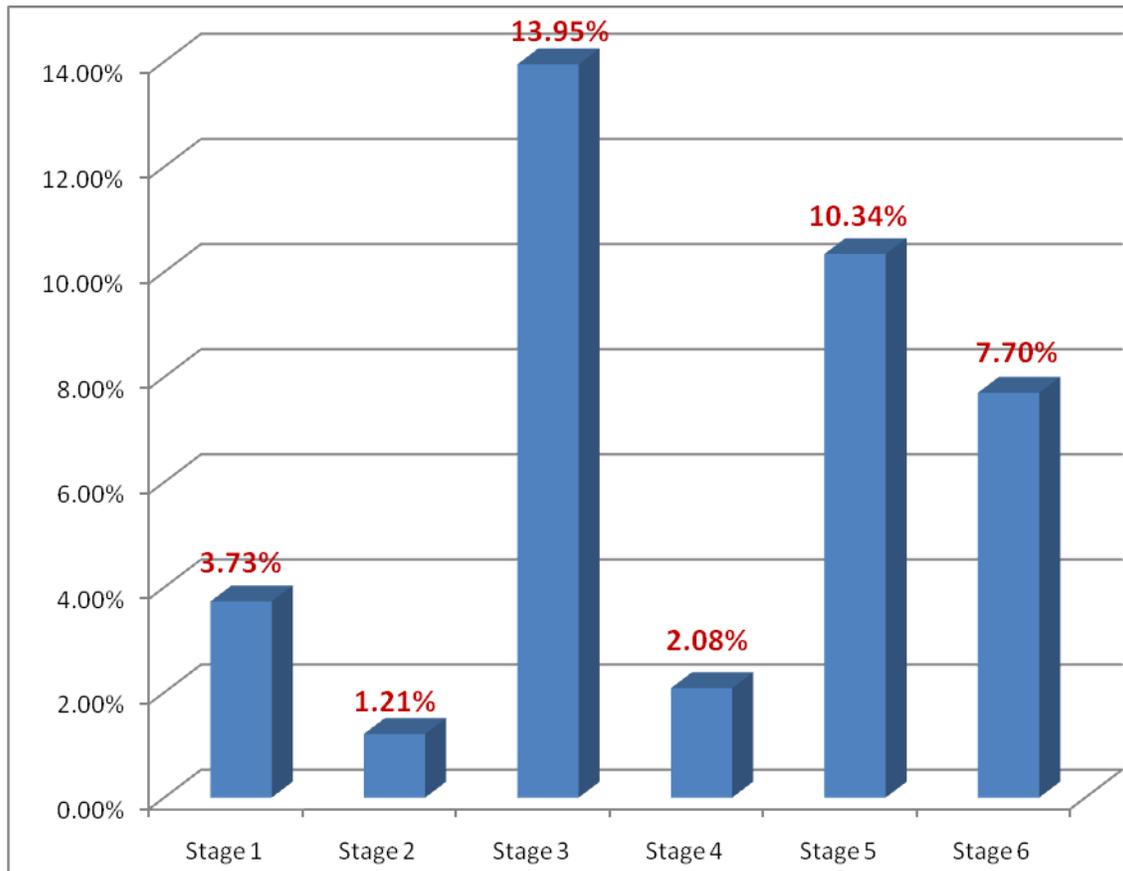


Figure 2, showing the percentages of suicidal ideation among each stage.

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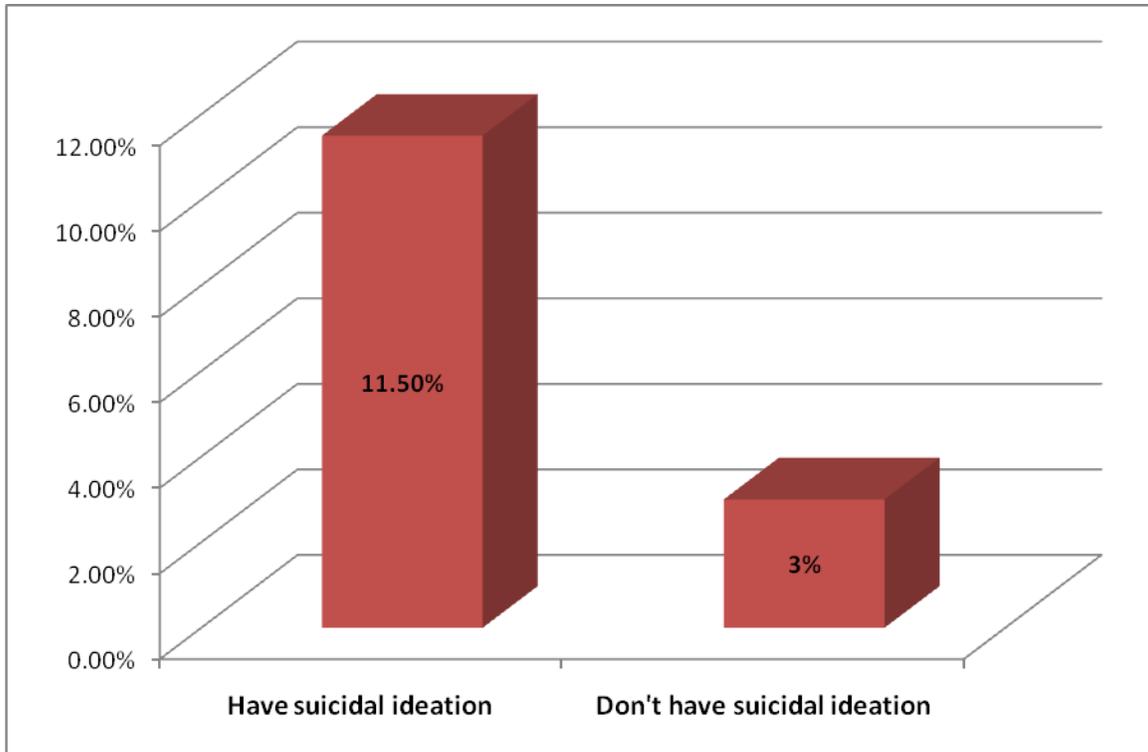


Figure 3, showing the variance between the percentages of positive family history among those who have and don't have suicidal ideation

Discussion

Death wishes were reported in 13.8% of the students, among whom 68.25% were females and 31.75% were males; but this difference was shown to be statistically insignificant ($P= 0.06$), because of higher number of females in the sample (262 females: 193 males).

The highest percentage of death wishes was shown to be among first stage students (26.98%) which could be due to the recent shift to the university life which considered a challenging transition point in which students were introduced to new life standards, new responsibilities, and feel overwhelmed with academic and social pressures after been recruited at their first year that brought a transitional expectation to their

families and social surrounding and that necessitates harder work toward perfectionism and more guilt and worries, not to mention the high school final stages were so tough leading to no rest after.

Next to the first stage in the rank were the Sixth stage students who showed a percentage of (20.63%), as the students in the sixth stage are in a transitional period in their medical practice towards carrying more responsibilities toward becoming doctors, in addition to the burden of the stress of the college final stage with the accumulated work from the previous stages and no rest in between the 5th and the 6th stage as in between the rest of the

stages. “2 years in continuation with the materials of the last years all included”.

But that difference of the death wishes among the different stages was statistically not so much significant can be attributed to the small sample ($P=0.09$).

Suicidal ideation was reported in 5.7%, and this important percentage could be explained on the ground that typical medical students are accustomed to being at the top of their class throughout their prior academic careers. For many students, the transition to being part of a medical school class—consisting of many other extremely bright and accomplished individuals—represents a major shift. Students often have difficulty adjusting to the possibility of not being among the best in their class, provoking anxiety, also in dealing with new materials dealing with life and death issues and acquiring knowledge on variable types of difficult illnesses.

In comparison with a study which was done in 2007, to assess the prevalence of suicidal ideation among students of 7 medical schools in the United States which showed a percentage of 11.2%.⁽¹¹⁾

The highest percentage of suicidal ideation was among third stage students (13.95% of the third stage students have reported ideas to suicide) which was shown to be statistically significant with P value of (0.018), and this could be attributed to that they are still not well adjusted to the stressful life in a medical school after the previous two, somewhat less stressful and loaded with medical subjects, years, and putting them with pessimism toward the coming years. And this finding is consistent with the results of a study which was done in 2009 among all students enrolled at the

University of Michigan Medical School.⁽¹³⁾

The gender difference of having suicidal ideation was statistically insignificant and this is similar to the results of a study which was done in 2009 among the University of Michigan Medical School.⁽¹³⁾

The higher percentage of having suicidal ideation among those students who have lost a family member through suicide was shown to be statistically significant ($P=0.02$), and this finding is supporting the family history of suicide as an important risk factor and the rule of genetic factor.⁽¹⁴⁾

The fact that 50% of those who have suicidal ideation also have a suicidal plan could indicate the severity and the danger of their ideation to end with the action of suicide also could indicate lacking supervision in our college and counseling in helping to cope with stress can be a factor. . Also studies showed that despite medical schools offering an array of counselling and wellness services, it seems that students remain scared of stigmatisation and adverse effects on their careers if they seek help for any mental health issues, which can then persist and worsen over a physician's career. Fear of stigmatisation among medical students was the subject of a study in JAMA by Thomas Schwenk and colleagues at the University of Michigan's Department of Family Medicine, MI, USA. 53% of medical students who reported high levels of depressive symptoms were worried that revealing their illness would be risky for their careers and 62% said asking for help would mean their coping skills were inadequate, according to the study published in September, 2010. “Medical students are under extraordinary demands. They feel they

are making life and death decisions and that they can never be wrong. There is such tremendous pressure to be perfect that any sense of falling short makes them very anxious”, says Schwenk.⁽¹³⁾

Conclusions

1- Medical college students are facing a restless and stressful life that may lead to serious consequences reaching to the point of wishing or attempting to end their lives.

2- The distribution of suicidal ideation peaked among third year students.

3- No significant gender predilection was found among students having death wishes and/or suicidal ideation.

Recommendations

1- Provision of easily reached and confidential mental health services.

2- Supporting students with educational programs about healthy ways to cope with stress.

3- Re-assessing the way of applying the curriculum especially that of the third stage, and involving the students in that process.

4- Peer mentorship and senior student mentors are assigned to first, second, and third year students.

5- Addressing those students with higher suicidal risks and providing them with the necessary care and advices.

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