

Received : 30 July 2024, Accepted: 27 August 2024

DOI: <https://doi.org/10.33282/rr.vx9i2.77>

SUICIDAL IDEATION AND SELF-ESTEEM IN MEDICAL STUDENTS

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Abstract

The current study aims to determine the association between low self-esteem and suicidal ideation in medical students. The present research is a correlational study with a cross-sectional research design. A total sample of 500 medical students (250 males and 250 females) was selected purposively for the study. The age range of the target group was 18 to 25 years (Mage=21.7, SD=3.61). Entire sample belonged to middle and upper middle socioeconomic status. To assess the variables, Rosenberg's Self-Esteem Scale and The Suicidal Behaviours Questionnaire-Revised (SBQ-R) scales were used along with demographic form which covered the basic information. Responses were scored according to the procedure given in the manuals. Participants were approached through purposive sampling technique after taking approval from different medical universities, Karachi. The mean \pm SD of age was 21.07 \pm 3.61 years. Findings suggested that low self-esteem as a significant predictor of suicidal Ideation in medical

students. It is to be concluded that low self-esteem is an important predictor of suicidal ideation in medical students. Educational institutes should develop a guideline on how to screen and manage suicide ideation among medical students.

Keywords: self-esteem, suicidal ideation, medical students

1. INTRODUCTION:

Suicide is one of the leading cause of deaths throughout the world. Nearly 800, 000 individuals die every year because of suicide which is one individual commit suicide every 40 seconds. According to WHO, it is the second foremost cause of death globally (World Health Organization, 2019). Consequently, thoughts of suicide is a major issue among medical students as well with the rate of approximately 1.8% to 53.6% (Ahmad et al., 2023). Suicidal ideations can be a consequence of variety of mental health concerns like depression, belonging from a low socioeconomic background, substance addiction and poor self esteem (Coentre & Góis, 2018).

Low self-esteem has been found to be contributing factor in suicidal ideation (Mitsui et al., 2014). Many researches have highlighted different level of self esteem among medical students belonging to countries like Nepal, India, Iran and Pakistan (Daryazadeh et al., 2022). Stressors like academic achievement, gender discrimination, performance and financial pressures and perceived social pressure are experienced by medical students (Ahmad et al., 2023). Considering these factors medical students are the most vulnerable to low self-esteem due to the stress they have while completing their studies (Schernhammer & Colditz, 2004). Many studies have also reported that suicidal ideation is highest among medical students (Schwenk, Davis, & Wimsatt, 2010). Study conducted on Chinese medical students concluded that 24.5% students experienced suicidal ideation in their medical career (Zhang, Yu, & Zhao, 2007). High prevalence rate of suicidal ideation ranging from 9.1% to 48.2% found among medical students

(Dyrbye et al., 2008). Suicidal ideation has become the global issue among medical students.

Research conducted in Germany indicated that 11.8% students studying medicine suffered through thoughts of committing suicide along with concerns like consumption of tranquilizers, symptoms of depression, loneliness, no time for hobbies and mental health problems leading to poor self-esteem (Keuch et al., 2023).

Medical students face self-esteem issues due to the expectation people have with them and this usually takes place during first year (Kaur & Rani, 2012). First year of medical school have found to be crucial for students in USA as well which eventually leads to suicidal ideation (Arria et al., 2008). Self esteem has been found to be the predictor of suicidal ideation as well (Bhar, Ghahramanlou-Holloway, Brown, & Beck, 2008).

Among Pakistani medical students, 35.6% student had suicidal ideation and 4.8% students attempted suicide in the previous year (Osama et al., 2014). In Norwegian medical students, 1.4% students attempted suicide and 14% had suicidal ideation in their life time (Tyssen et al., 2001) whereas in the past year 11.2% medical students in America had suicidal ideation (Dyrbye et al., 2008).

It is unfortunate that very few studies have been conducted on suicidal ideation among medical students in Pakistan. It is observed that not only in Pakistan but also in other underdeveloped countries like Nepal and India very few researches on medical students regarding suicidal ideation have been conducted. There is a lot of burden of studies and expectations on the medical students and living in under privileged circumstances may also be a stressful variable which may infuriate the suicidal ideation (Menezes et al., 2012). This study would have the relevance to look into the one of the main factors which contributes in mental health.

Considering literature review, following hypothesis was formulated

- Low self-esteem would be associated with suicidal ideation among medical students.

2. LITERATURE REVIEW

Medical education being a very demanding vocation has raised concerns over the mental health of medical students in the recent times. The rise in stress disorders has made it imperative that stressors in medical students should be researched and studied. Suicidal ideation is referred to as active thinking of behaviours that would cause one's life to end which is becoming an apprehension in medical students. Rotenstein et al (2016) reported in his stud that approximately 11.2% medical students were struggling with thoughts if committing suicide in 2016; due to the academic pressure, anxiety of failure, burnout and perfectionism (Hope et al., 2018). Self esteem is a major component of someone's mental wellness as it is the way one think about themselves and evaluates self worth and abilities. It is indicated that medical students with low levels of self-esteem have higher chances of experiencing suicidal ideations (Gutiérrez et al., 2019).

A longitudinal study conducted by Alvi et at. (2018) indicated that medical students with lower levels of self esteem and anxiety were more susceptible to suicidal ideations and eventually committing suicide. Kumar et al., (2020) indicated a significant negative relationship between self esteem and thoughts of committing suicide scores in medical students in his research. Subsequently, gender differences can be observed in this phenomenon i.e., a study by Shah et al., (2017) stated that females students indicated lower self esteem and higher suicide ideation as compared to male students indicating that gender differences should be factor to be considered when developing effective interventions.

Medical students in Pakistan have been in spotlight for struggling with mental health concerns due to academic and family pressures, financial constraints and fear of failure which has led to self esteem and suicidal ideation becoming a primary challenge. A study revealed that 26.3%

medical students in Pakistan reported of suffering with suicidal ideation at some point of their medical education journey (Shah et al., 2017). Stress related to academic performance, anxiety of failure, social pressure and competition are some of the reported factors of medical education (Shanafelt et al., 2015); along with stigma of mental health makes it difficult for these students to reach out for help which deteriorates the concerns and effect their self esteem. (Javel at al., 2019). Alvi et al., (2018) stated in his research that low self esteem is correlated with depression and stress and eventually leading to ideas of suicide.

In Pakistan, expectations from the family and society along with cultural customs adds to the pressure (Khalid et al., 2016) especially with medical students since of most of the families dreams of having at least one doctor in their households. Many researches across Pakistan studying the relationship between suicidal ideation and self-esteem has persistently showed a negative relationship between the two. Longitudinal research (Khan et al., 2020) indicated that medical scholars with poor self esteem experiences consistent suicidal ideations as time passes. Moreover, Malik et al., (2018) stated that higher thoughts of committing suicides were reported by students with low self esteem.

Suicide ideation and poor self esteem are pressing mental health concerns among medical students of Pakistan and significantly correlated. It is important that mental health awareness strategies and interventions are developed to deal with these issues which are gender-appropriate and relevant to our culture so that mental well-being of medical students can be improved.

3. RESEARCH METHOD

3.1 Research Design

The current study was quantitative and employed cross-sectional research design.

3.2 Population of the study

Participants were approached through purposive sampling technique after taking approval from different medical universities, Karachi.

3.3 Sample

A sample of N=500 medical students (250 males and 250 females) with age range from 18-25 years (mean age=21.7 years; SD=3.61) were included. The participants belonged to upper and middle class from different medical universities of Karachi.

3.4 Sampling Technique

The non-probability sampling method known as purposive sampling was used to gather the data for the current research.

3.5 Inclusion and Exclusion

Student enrolled in medicinal studies in Karachi were included. Any students diagnosed with mental health concerns were excluded.

3.6 Instrument

3.6.1 Demographic Form

Self developed participants' demographic information sheet was used that included, age, gender, education, birth order, medical illness, suicide related history (in family or previous attempt).

3.6.2 Rosenberg Self-esteem Scale (SES)

Rosenberg Self-esteem Scale (Rosenberg, 1965) is 10 item scale which measures global self-worth. It is a 4-point Likert scale ranging from 1 (strongly agree) to 4 (strongly disagree). Score

less than 15 indicate low self-esteem, scores between 15-25 are considered to be in normal range while scores more than 25 indicates high self-esteem. The Cronbach alpha of the scale is .77. The test-retest correlation ranges from .82-.88.

3.6.3 Suicide Behavior Questionnaire Revised (SBQ-R)

Suicide Behavior Questionnaire Revised (Osman et al., 2001) consists of 4 items and each item taps different dimension of suicide. Item 1 taps lifetime suicide ideation and/or suicide attempt, item 2 taps the frequency of suicidal ideation over past twelve months, item 3 taps the threat of suicide attempt and item 4 taps the likelihood of suicidal behavior in the future. The total scores give the idea about the suicide, the score ranges from 0-18. The cut off score for general population is 7 or higher than 7 and for psychiatric population it is 8 or higher than 8. This scale has good validity and reliability (Amini-Tehrani et al., 2020).

3.7 Procedure

Students were approached after obtaining approval from different medical universities in Karachi. Following this the demographic form was given along with instruments for measuring Self-esteem and Suicidal ideation and data was collected. The data was entered in the Excel sheet and SSPS for further analysis.

3.9 Statistical Analysis Plan

After gathering the data, it was analyzed through SPSS 21 where linear regression and ANOVA was applied for further investigation.

3.9 Ethical Considerations

Written informed consent from the respondents has been received for the ethical consideration. Respondents briefed about the purpose of the study and given the right to withdraw at any point of the study.

4. RESULTS

The application of linear regression analysis and Analysis of Variance on self-esteem and suicidal ideation in medical students indicated a significant relation between the two. Poor self-esteem was found to be significant predictor of suicide as shown in table below.

4.1 Descriptive Analysis

Table 1

Summary of Linear Regression with low self-esteem as a predictor of suicidal Ideation

| Predictor | R | R ² | Adj. R ² |
|-------------------|------|----------------|---------------------|
| Suicidal Ideation | .562 | .316 | .311 |

Table 2

Analysis of Variance for Linear Regression with low self-esteem as a predictor of suicidal Ideation

| Model | SS | Df | MS | F | Sig. |
|------------|----------|-----|---------|--------|------|
| Regression | 769.267 | 1 | 169.267 | 70.565 | .000 |
| Residual | 1667.933 | 153 | 10.902 | | |
| Total | 2437.200 | 154 | | | |

4.2 DISCUSSION:

Finding of the study indicates statistically significant impact of low self esteem onto suicidal ideation. This result is consistent with plenty of researches that have been done which indicated that low self esteem is linked with suicidal ideations (Dyrbye et al., 2008). This finding means that low self esteem impacts an individual in a sense that they wish to end their life. Few of the researches speculated that depression, anxiety and low self esteem are few of the factors that contribute in developing suicidal ideation (Dyrbye et al., 2010).

Prevalence of suicidal ideation among American and Australian students were high (Schweitzer, Klayich, & McLean, 1995). Life time prevalence of suicidal thoughts is 43.1% among medical students. Similarly, 35.6 % medical students had suicidal ideation in Pakistan, 13.9% students had planned to commit suicide in their lifetime while 4.8% medical students made an effort to attempt suicide in their lifespan (Osama et al., 2014).

Medical students are at risk of developing mental illnesses, and there is high probability of burn out among medical students. Depressive symptoms and burnout have been associated with suicidal ideation and low quality of life among medical students (Dahlin, Joneborg, & Runeson, 2005). Moreover, low self esteem can lead to irrational thoughts, affect academic achievement and social behavior of medical students (Naz et al., 2019).

Researches indicate that stigma, under-treatment, depressive and anxiety symptoms and stress also encourages suicidal ideation in students studying medicine. (Salman et al., 2022). Harming one self, depression, academic failure and anxiety have a significant positive correlation with suicidal ideation (Meezab, Dr. Khadeeja, & Fahad, 2021) Medical students were more likely to adapt maladaptive coping strategies such as drug abuse or they want to escape from the problem and suicide seems last option to them (Rosenthal & Okie, 2005). Above findings implies that many medical students silently suffer from the misery and hardships in isolation and do not seek help due to fear of being evaluated negatively and this despair and helplessness results in making them being suicidal or developing maladaptive coping strategies.

Excessive stress is part of medical life so there is a need to teach students about adaptive ways of dealing with stress to reduce the suicidal rate among medical students. Normalizing mental health issues will also help in seeking professional help which is found to be alleviating suicidal thoughts (Qin et al., 2000). Working on healthy self-esteem will also improve the coping skills and helps the students in adjusting to adaptive and healthy ways of coping.

5. CONCLUSION

Medical students go through a lot of stress and traumatic circumstances to heal the sufferings of others. It is very important to help them in the times of crisis to prevent them to develop unhealthy and impractical ways dealing with their problems. It is the high time to address their mental health issues to deal effectively in stressful situations and difficult emotions. It is recommended to plan or develop effective management plan and supportive groups for medical students to manage and assist them to deal with difficult situations more successfully and proficiently.

5.1 Limitations and Recommendations

This study highlights important aspects of medical students' mental health related to self-esteem that contribute to suicidal ideation. However, this study is based on a sample among particular medical colleges minimizing its generalizability. Other potential variables would also help to evaluate mediating roles that buffer the risk of suicide among these students.

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