THE RELATIONSHIP OF DEPRESSION, HOPELESSNESS, ANXIETY AND BURNOUT WITH SUICIDAL IDEATION AMONG PRIVATE MEDICAL STUDENTS IN MALAYSIA.

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ABSTRACT

Medical colleges are thought to prepare a student for future challenges by providing them with the scopes of flourishing. However, Research has indicated an increase in the suicide risks among the students of medicine in Malaysia. Medical students often suffer from higher risks of depression and suicidal tendencies. The influence of demographic attributes of the population on suicidal tendencies is highlighted in this analysis. This research investigates the link between hopelessness, depression, anxiety and burn out with the suicidal tendencies among medical students. A total of 386 medical students were selected. Students suffering from chronic health conditions and international students were not included in this study. Questionnaire consist of 6 parts (demographic description of respondents followed by scales of depression, hopelessness, anxiety, burnout and suicidal ideation) were prepared and the data were collected through google docs. A detailed analysis of the correlation between the acquired variables suggests that there is a positive relationship between depression, hopelessness, anxiety and burnout with suicidal attempt probability. The significant influence of all of these factors on the suicidal ideation among the medical students has been illustrated in this analysis. The medical, educational institutes must cater to the mental wellbeing of their students.

Key words: depression, hopelessness, anxiety, burnout, suicide

I. INTRODUCTION

The field of medicine is concerned with providing quality treatment to the nation's sick citizens. Medical colleges are thought to prepare a student for future challenges by providing them with the scopes of flourishing. However, studies have indicated a different scenario. Research has indicated an increase in the suicide risks among the students of medicine in Malaysia. Medical students often suffer from higher risks of depression and suicidal tendencies. The influence of demographic attributes of the population on suicidal tendencies is highlighted in this analysis. This research investigates the link between hopelessness, depression, anxiety and burnout with the suicidal tendencies among medical students. This study even evaluates the extent of these disorders on the development of suicidal thoughts in the students. The main objective of this study was to determine the prevalence of depression, hopelessness, anxiety, burnout and how it relates to suicidal ideation as well as to identify the predictors of suicidal ideation among private medical students in Malaysia.

II. METHODOLOGY

Study design:
This is a descriptive, cross sectional study that was conducted via a self-administered questionnaire among medical students of private universities in Malaysia.

Study population:
The study population included medical students from private universities in Malaysia. All the students were informed about the study design. Those who agreed to participate were authorized.
**Sample Size:**
The study sample size was 386 medical students from Malaysian universities. Sample size was calculated based on the Krejcie and Morgan table.

**Inclusion and exclusion criteria:**
The inclusion criteria include all Malaysian students of the three major races (Malay, Chinese and Indian) of both genders male and female and who were willing to provide written consent. The students under 18 and those above 40 or those not willing to participate and are not able to provide written consent were excluded from this study.

**Study survey instrument:**
A self-administered validated questionnaire was used with the permission of the publishing author. The questionnaire collected the demographics of the participants and it consists of 6 parts: demographic description of respondents followed by scales of depression, hopelessness, anxiety, burnout and suicidal ideation.

**Data collection and analysis**
Data was collected through online survey (google docs). The participants took approximately 5-10 minutes to fill up the questionnaire completely. The analysis of the gathered data was done by SPSS software. Descriptive statistics were conducted to describe all the continuous (mean and standard deviation) and categorical variables (frequency distributions and percentages). The differences in the total mean score between the two groups (Health Science and Non-Health science) were compared using the Chi-square test. A two-tailed $p$-value of <0.05 was regarded as statistically significant.

**Ethical consideration**
The questionnaire was used with the consent of the author. Approval & ethical consideration was taken from Institutional Research Board of Perdana University. Brief explanation about the study was provided at the cover page of the questionnaires while instructions were stated clearly to the participants on how to fill it up. They were informed that participation was voluntary. All information provided in questionnaires would be kept confidential and data will be used only for research purposes. Participants were reminded not to write their name and other personal identification numbers on the forms. All participants were free to withdraw from study at any time. Strict anonymity and confidentiality was maintained throughout the process of data collection and analysis.

### III. RESULTS AND DISCUSSION

Figure 1: Demographic profile of the participants based on their age
Figure 2: Demographic profile of the participants based on their gender

Figure 3: Demographic profile of the participants based on their academic years

Figure 4: Percentage of the participants based on their satisfaction
Data analysis showed that, 52% of the participants were between 18-22 years old, 42% were between 23-27 years old, 10% were 28-32 years old and 5% were above 32 years old. Gender wise 73% were male and 27% were female. Among the participants, 7% were studying in Year 1, 49% were studying in Year 2, 14% were studying in Year 3, 10% were studying in Year 4 and 20% were studying in Year 5. It was also found that, among the participants, only 11% were extremely satisfied with everything, 50% were somewhat satisfied, 21% were neither satisfied nor dissatisfied, 14% were somewhat dissatisfied and 4% were extremely dissatisfied.

For gender & age, the skewness > 1, it can be said that the distribution is highly skewed. For perceived satisfaction & years of study, < 1, which suggests that the deflection is not that high from the normal distribution [1]. A detailed analysis of the correlation between the acquired variables suggests that there is a positive relationship between depression and suicidal attempt probability. Such massive depression can increase the chance of suicidal attempts among the medical students of Malaysia [2]. A detailed analysis of the variables and the values suggested that there is a relation between hopelessness and tendency, which is positive. Such that an individual feeling highly hopeless may have suicidal tendencies [3].For the selected variables, which is less than 0.05, suggests that the null hypothesis can be neglected. Thus, it can be stated that generalized anxiety can develop suicidal tendencies of the students in Malaysia [4]. In each case, the values of degrees of freedom are greater than 90. Thus, from the obtained result, it can be stated the statement of the alternative hypothesis is true. Thus, with increasing burnout syndrome, the level of suicidal ideation can be increased as well among the Malaysian medical student [5, 6].

IV. CONCLUSION

As proposed in the alternative hypothesis, there exists a relation between the hopelessness, anxiety and suicidal ideation. The prevalence of these influences has been reflected by the results obtained by performing the tests of analysis. The medical, educational institutes must cater to the mental wellbeing of their students. This analysis highlights the needs of incorporating appropriate strategies for the mitigation of mental stress among these students. Proper strategic measures must be taken by the management to reduce the risks of suicide and promote a healthy study environment for the students.

REFERENCES

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