

## Prevalence and Associated Factors of Emotional Disorder among Malaysian University Students

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### Abstract

**Background:** Depression will result in poor academic performance and a large number of psychological problems. Psychological morbidity among university students represents a neglected public health problem and holds major implications for campus health services and mental policy making.

**Objectives:** The objective of this study is to determine the prevalence and associated factors of emotional disorder among university students.

**Methodology:** Cross-sectional study was conducted among Management and Science University students. Three hundred thirty eight students were selected randomly from all faculties. The data was collected from the lectures halls, library and university café. Data analysis was conducted using SPSS version 13, t-test and ANOVA test were used.

**Results:** A total number of 338 university students participated in this study. The majority of the participants were 20 years old and above; female, Malay, and from urban areas (74.6%, 72.8%, 93.5%, 87.3%; respectively). The prevalence of emotional disorders among university students in this study was 48.3%. Residency, gender, and smoking were significantly influenced the emotional disorder among university students ( $p=0.012$ ,  $p=0.030$ ,  $p=0.006$ ; respectively).

**Conclusion:** Emotional disorders are common among university students. Gender, residency and smoking showed a significant influence the emotional disorder among university students. Therefore, psychiatric units in all Malaysian university are an urgent need to counsel and detect the emotional disorder early among students.

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**Keywords:** Prevalence, emotional disorder, students

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## **Introduction**

Emotional disorders defined as feelings of sadness and tiredness in response to life events [1]. Increasing concern has been expressed about the mental health of students in tertiary institutions [2]. Tertiary education considered a highly stressful period and stressful environment can effect negatively on the psychological and physical well being of university students. This will result in poor academic performance and a large number of psychological problems. Therefore, the period of university students is a sensitive period in an individual's life span [3]. Evidence that suggests that university students are vulnerable to mental health problems has generated increased public concern in Western societies [4]. Previous studies suggest high rates of psychological morbidity among university students worldwide, especially depression and anxiety [5, 6, 7, 8, 9, 10 & 11]. Psychological morbidity among university students represents a neglected public health problem and holds major implications for campus health services and mental policy making [8, 12 & 13].

Among adolescents and young adults, emotional disorders are a serious risk to mental health which could lead to the further development of depression episodes, and sometimes even influence them negatively during crucial phases of their life, in which many major decisions are made [9]. Emotional problems are closely associated with substance abuse, co-morbidity, personality changes and suicide attempts [14 & 15]. About 57% of medical students in Singapore had emotional disorders [16]. Another study among US medical students reported that 23% had depression and 57% had high levels of emotional distress [17]. There are number of causes of emotional disorders among university students which are: studying for exam, fear of failure, uncertainty regarding supervisors' expectations and uncertainties regarding performance [18].

In terms of financial cost, emotional disorders have life-long effects that include economic costs for the young people and also for their families, schools, and communities. Emotional problems also can cause serious mental suffering which lead to work disability and economic loss. The related economic costs in 1999 were 120 billion dollars in North America and Europe, with over 60 billion dollars assigned to stress-related disorders [19]. The financial costs in terms of treatment services and lost productivity are estimated at \$247 billion annually. There is no such figure reported in Malaysia. Away from the financial costs, emotional disorders also interfere with young people's ability to accomplish developmental tasks, such as establishing healthy interpersonal relationships, succeeding in school, and making their way in the workforce [20].

In terms of treatment, most people with emotional disorders can be successfully treated due to the existence of effective psychological and pharmacological treatments. Studies on emotional disorders among students found that emotional disorders are under diagnosed and undertreated. Failure to detect emotional disorders will lead to increase psychological morbidity and affects their careers and lives in the future [18]. Early detection shortens the duration of an episode of emotional disorder and results in far less social impairment in the long term [21]. Therefore, emotional disorders must be eradicated or minimized at an early stage for a better quality of life among university students.

The prevention of mental disorders and substance abuse among young people and recommended multiple strategies for enhancing the psychological and emotional well-being of young people. The Preventing Mental, Emotional, and Behavioral Disorders report for Policymakers

recommended the proven approaches for management of emotional disorder as follows: Strengthening families by targeting problems such as substance use or aggressive behavior; teaching effective parenting skills; improving communication; and helping families deal with disruptions such as divorce or adversities such as parental mental illness or poverty. Strengthening individuals by building resilience and skills and improving cognitive processes and behaviors. Preventing specific disorders, such as anxiety or depression, by screening individuals at risk and offering cognitive training or other preventive interventions. Promoting mental health in schools by offering support to children encountering serious stresses; modifying the school environment to promote prosocial behavior; developing students' skills at decision making, self-awareness, and conducting relationships; and targeting violence, aggressive behavior, and substance use. Promoting mental health through health care and community programs by promoting and supporting pro-social behavior, teaching coping skills, and targeting modifiable life-style factors that can affect behavior and emotional health, such as sleep, diet, activity and physical fitness, sunshine and light, and television viewing [20].

Several studies reported that depressive symptoms also are frequent among university students worldwide and their prevalence appears to be increasing dramatically [5, 7, 22, 23 & 24]. Several studies reported the emotional disorders among medical students [1, 25 & 26]. However no previous study conducted among undergraduate university students in general. In order to fill in this gap we decided to conduct this study to determine the prevalence and associated factors of emotional disorder among university students.

## **Methodology**

A cross-sectional study was conducted among Management and Science University (MSU) students. Students from all faculties were selected randomly included in this study from semester one through semester six. The protocol of this study was approved by the ethics committee of Management and Science University (MSU). The questionnaires were distributed randomly to all faculties' students. The questionnaires were distributed to the following areas: lectures halls, library and university café. The inclusion criteria were students who able to speak English, 18 years old and above. However the exclusion criteria were not being able to communicate in English and being below 18 years of age. Data analysis was conducted using SPSS version 13, for which the t-test and ANOVA test were applied.

## **Results**

A total number of 338 university students participated in this study. The majority of the participants were 20 years old and above; female, Malay, stayed in urban areas (74.6%, 72.8%, 93.5%, 87.3%; respectively). Majority of the participants were from health and medical faculty i.e. International Medical School (IMS), Faculty of Health and Life Sciences (FHLS), School of pharmacy (SOP) 54.4%. As for the family monthly income; majority of the participants were with income less than RM 5000 (=1663 US\$). Thirty one participants (9.2%) reported a family history of emotional disorder and thirty five 10.4% with separated parents. The majority of the

participants were non-smokers and non-drinkers alcohol (84.3%, 92.6%; respectively) (Table 1). The prevalence of emotional disorders among university students was 48.3%.

**Table 1: Socio-demographic characteristics of the study participants (n = 338)**

Variable	Categories	Number	Percentage (%)
Age (years)	< 20	86	25.4
	≥20	252	74.6
Gender	Male	92	27.2
	Female	246	72.8
Race	Malay	316	93.5
	Non-Malay	22	6.5
Residency	Urban	295	87.3
	Rural	43	12.7
Major study	Health and Medicine	184	54.4
	Non-health and Medicine	154	45.6
Semester	Junior	220	65.1
	Seniors	118	34.9
Family monthly income (RM)	< 5000	247	73.1
	≥5000	91	26.9
Family history of emotional disorder	Yes	31	9.2
	No	307	90.8
Smoking	Yes	53	15.7
	No	285	84.3
Drinking alcohol	Yes	25	7.4
	No	313	92.6
Separated parents	Yes	35	10.4
	No	303	89.6

**Table 2: Factors associated with emotional disorder among university students (n=338)**

Variable	Number (%)	t	p value
<b>Age (Year)</b>			
< 20	86 (25.4)	0.792	0.429
≥20	252 (74.6)		
<b>Gender</b>			
Male	92 (27.2)	2.178	0.030*
Female	246 (72.8)		
<b>Race</b>			
Malay	316 (93.5)	0.195	0.845
Non-Malay	22 (6.5)		
<b>Residency</b>			
Urban	295 (87.3)	2.25	0.012*
Rural	43 (12.7)		

<b>Major study</b>			
Health and Medicine	184 (54.4)	0.447	0.65
Non-health and Medicine	154 (45.6)		
<b>Semester</b>			
Junior	220 (65.1)	1.98	0.053
Seniors	118 (34.9)		
<b>Family monthly income (RM)</b>			
< 5000	247 (73.1)	0.69	0.486
≥5000	91 (26.9)		
<b>Family history of emotional disorder</b>			
Yes	31 (9.2)	0.18	0.85
No	307 (90.8)		
<b>Smoking</b>			
Yes	53 (15.7)	2.50	0.006*
No	285 (84.3)		
<b>Drinking alcohol</b>			
Yes	25 (7.4)	1.06	0.253
No	313 (92.6)		
<b>Separated parents</b>			
Yes	35 (10.4)	0.837	0.409
No	303 (89.6)		

\*statistically significant

Regarding the factors associated with emotional disorder among university students; residency, gender, and smoking significantly influenced the emotional disorder among undergraduate university students ( $p=0.012$ ,  $p=0.030$ ,  $p=0.006$ ; respectively). As for age, race, type of faculty, semester, family monthly income, family history of emotional disorder, drinking alcohol and separated parents were not significantly influence the emotional disorders among university students ( $p=0.429$ ,  $p=0.845$ ,  $p=0.65$ ,  $p=0.053$ ,  $p=0.486$ ,  $p=0.85$ ,  $p=0.253$ ,  $p=0.409$ ; respectively) (Table 2).

## Discussion

The prevalence of emotional disorder among university students in this study is very high (48.3%). Slightly similar prevalence reported by Aktekin et al [27] among medical students in Turkey (47.9%). This is higher than the previous studies conducted in Malaysia which found that the prevalence of emotional disorders among medical students was 46.2% and 41.9 respectively [26][1]. The prevalence of the recent study is higher than the results from Spain and the United Kingdom studies among medical students (30% and 31.2%; respectively) [28 & 29]. However, the result of the current study is lower compared to study conducted by Ko *et al.* [16] reported that the prevalence of emotional disorders was 57% among medical students. Another study from USA reported that 57% of the students suffer from psychological distress [17]. It is worth mentioning that the rates of emotional disorder with moderate and severe symptoms require urgent attention from healthcare professionals.

In this study gender was significantly influence the emotional disorder among university students and the prevalence of emotional disorder was more common among female students. Several studies have also found that emotional disorders are more common among females than males ([21, 30, 31]. A study among female doctors had higher levels of anxiety and depression [32]. Similarly, three studies conducted among medical students from Iran, Sweden and Spain found that female had higher levels of emotional disorders compared to male [15, 28 & 33]. A systemic review of emotional disorder among US and Canadian medical students suggested psychological disorder was probably higher among female students [34]. Other study found that Female students' mean anxiety and stress scores were significantly higher compared to male students'. The same results were obtained from the study by Wong et al. [11]. Similar findings reported by a Nigerian study found that depression to be two times more prevalent among female university students [5]. Another study showed that female students gave higher ratings than males for depression and stress [15]. However, there are also studies that found no differences according to gender in terms of depression or depressive mood [35]. This may be due to females are more likely to report concern, stress due to self-expectation, feeling of lack of competence and tendency to over report symptoms ([36, 37, 38].

In this current study type of faculty showed no significantly influence the emotional disorders among university students. Several studies found higher scores of depression, anxiety and stress among medical students [27]. Another study found no difference regarding stress and depression among medical, graduate and law students [39]. Aktekin et al. [27] found the mean depression score among medical students to be higher than the mean depression score among economics and physical education students. Bostanci et al. [22] found no differences regarding depressive symptoms among students in the education, engineering, art and sciences and economics departments, although it is difficult to generalize these results because of the differences in methodological design and different instrument used in each study.

In this research, urban students experience less emotional disorder compared to rural students. Similar findings by Asri [40] and Muhammad Shah [41] reported that there exist differences in the stress level faced by urban and rural students in Malaysia. Looking at the factors such as surroundings, lifestyle and family, they also contributed to the level of emotional disorder of the students in these different locations. The differences are clear according to home stability, family surrounding, the pattern in parents' behavior, parents' socio-economy status, family education background, parents-children relationship quality and siblings relationship quality give different impact towards emotional disorder level experienced by the students.

The current study reported that smoking is significantly influence emotional disorder among university students. Similar findings showed that cigarette smoking was associated with higher levels of emotional disorder [42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52 & 53]. Similar findings reported by a Chinese study found that emotional disorder was significantly associated with smoking [54]. Similarly, study among adolescents reported that adolescents with depressive feelings were more likely to report lifetime smoking and more likely to report regular smoking than those without depressive feelings [55]. Another study showed that depression has been shown to be associated with increased risk of tobacco use and other substance abuse into adulthood [56].

The limitation of this study includes the fact that students belonging to a single private institute which may impact the generalizability of the factors found to be significant by the current study.

## **Conclusion**

Emotional disorders are common among Malaysian university students. Gender, residency and smoking showed a significant influence the emotional disorder among university students. Therefore, it is important to detect emotional disorders at an early stage so that treatment in the form of counseling, support groups and even medication if necessary can be given to those affected. Therefore, psychiatric units in all Malaysian university are an urgent need to counsel and detect the emotional disorder early among students.

## **Implication of the study**

Understanding the prevalence of emotional disorder and the possible factors associated with higher levels of emotional disorder would help in the designing and provision of institution-based. **This study would help** in the designing and provision of institution-based. Preventive programming efforts should begin early in tertiary education and address a wide variety of concerns from academic to interpersonal relationships and financial worries. National leadership is necessary to make systematic prevention efforts a high priority in the health care system as well as an integral aspect of the network of local, state, and federal programs and systems that serve young people and families.

## **Recommendation**

Educational institutions need to identify the prevalence of negative mental health states among the students, and especially those at high risk. Psychiatrists and other health professionals working with the educational institutions need to be aware of the negative mental health states among the students. This would go a long way in ensuring that the students are able to emerge as healthy adult citizens of the nation.

**Conflict of interest:** None declared

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