# **ORIGINAL ARTICLE**

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# The prevalence of panic disorder among English Class students at Medical Faculty, Universitas Udayana, Bali, Indonesia in 2018



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#### ABSTRACT

**Background:** Panic disorder is diagnosed in people who experience spontaneous, seemingly out-of-the-blue panic attacks and are very preoccupied with the fear of a recurring attack. Panic disorder usually begins in adulthood (after age 20) and can interfere a lot with daily life, causing people to miss work, go to many doctor visits, and avoid situations where they fear they might experience a panic attack. This study aims to determine the prevalence of panic disorder among English Class students at Medical Faculty, Universitas Udayana, Bali, Indonesia in 2018

**Methods:** An observational cross-sectional study was conducted among 89 medical students from English Class at the Faculty of Medicine, Universitas Udayana in 2018 using total sampling techniques. A self-administered questionnaire was carried out to determine the prevalence of panic disorder by several valid and reliable questions. Data were analysed using SPSS version 20 for Windows and presented in frequency and percentage.

**Results:** Most of the respondents were 20 years old (57.3%). There are only 12.0% of English class Semester 7 students are free from panic disorder, 51.0% suffers from mild panic disorder, and 37.0% suffers from moderate panic disorder. Around 64% of female respondents have panic disorder while 34% in male respondents. Female respondents are tended to get more panic attacks than male respondents in a ratio of 2:1.

**Conclusion:** Female medical students tend to have a higher risk of panic disorder compared with males. The majority age of students suffering from panic attacks is from 20 to 23 years old.

#### Keyword: panic disorder, prevalence, medical student.

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#### INTRODUCTION

Adolescence is a phase transition from a phase child to a mature phase. The adolescent period is a transition phase that is most important in humans because there were many changes.<sup>1</sup> A significant change is perceived on aspects of growth and development of a person. Their process of growth and development which increased due to the change in terms of biological, psychological, and social. One of the natural developments that occur in adolescent is puberty.<sup>1</sup> Puberty showed hormonal changes that affect sexual attitudes change, global communications, and changes in behaviour. Physical growth rose sharply, identity developments, acquisition and development of skills needed in adult stage also occurs in the phase of puberty. And one thing that characterises the puberty is a change of mood. Mood changes in adolescents directly or indirectly will affect the mindset and behaviour. One form of feeling that often occurs in adolescence are depression and panic disorder.<sup>2,3</sup>

Panic disorder is diagnosed in people who experience spontaneous seemingly out-of-the-blue panic attacks and are very preoccupied with the fear of a recurring attack.<sup>4</sup> Panic attacks occur unexpectedly, sometimes even when waking up from sleep.<sup>4</sup> Panic disorder usually begins in adulthood (after age 20), but children can also have panic disorder and many children experience panic-like symptoms ("fearful spells").<sup>3,4</sup> Panic disorder can interfere a lot with daily life, causing people to miss work, go to many doctor visits, and avoid situations where they fear they might experience a panic attack.<sup>5</sup> So from what we have seen, more in-depth research should be done in order to overcome panic disorder.

According to those above, this study aims to the prevalence of panic disorder among English Class students at Medical Faculty, Udayana University, Bali, Indonesia in 2018. The respondents included in this study were enrolled from the 7<sup>th</sup> Semester of Medical Students who were vulnerable to panic disorder due to many tasks and assignment prior to graduate as Bachelor Medicine.

# **METHODS**

An observational cross-sectional study was conducted to determine the total number of cases in Semester 7 students of Medical Faculty, Universitas Udayana who are suffering from panic disorder. This study was held at the Medical Faculty of Universitas Udayana, Denpasar, Bali. The target of population of this study is 89 students from semester 7 students. These students will mainly be chosen from University Udayana who are currently pursuing their studies in semester 7. These students age must be particularly more than 17 years old who will be categorised as teenagers. Sample collection technique is total sampling techniques. Total sampling is a sampling method in which the determination of the sample by using all the existing population until a predetermined time limit. This method was chosen because this research aims to describe the epidemiology where to find the total number of panic attack cases among the students. The calculation of the sample size used is the formula to calculate the estimated proportion of a population and the authors got 89 respondents as a minimum number.

A specially designed questionnaire was formulated and validated. The questionnaire was filled in by 89 English class students of Semester 7 students, in their regular lecture schedule for other projects and it was presented unannounced to them. They were asked to answer all the questions independently. The students were assured that neither would they be given any marks nor the result of individuals was declared. The interpretation of self-administered questionnaire was no panic disorder (0-9), mild (10-19), moderate (20-29), and severe (30-39. )The data was then analysed with the help of IBM SPSS Statistics version 20 software for Windows in frequency and percentage.

# Table 1The characteristics of respondents in English classSemester 7 students based on gender, age, and maritalstatus

Status			
Variables	Frequency (N=89)	Percentage (%)	
Gender (%)			
Male	32	36.0	
Female	57	64.0	
Age (%)			
20	51	57.3	
21	30	33.7	
22	8	9.0	
Marital Status (%)			
Single	89	100.0	
Married	0	0.0	

# RESULTS

The characteristics of respondents asked in the questionnaire was the gender, age and marital status. Table 1 shows the data of 89 English class students' semester 7 of Universitas Udayana which consist of 36.0% of males and 64.0% females. As for age, 57.3% are aged 20, 33.7% are aged 21 and 9.0% are aged 22. Based on their marital status, our study found that 100.0% of students are single (Table 1).

According to the severity of panic attack disorder, the recent findings suggest that about 11 students (12%) did not have panic disorder, 45 students (51%) who have mild panic disorder, and 33 students (37%) suffering from moderate panic disorder (Table 2). Moreover, this study did not found respondents who were suffering from severe panic disorder (0%) (Table 2).

# DISCUSSION

Based on the questionnaire answered by the respondents, 75 (84.2%) respondents answered mild panic attack for sweating, and 75 (84.2%) respondents answered mild panic attack for chills or hot flashes. This result is similar to a previous study conducted by Hanisch LJ et al. whereas hot flashes were the most determinant symptoms felt by the patient.<sup>6</sup> While 60 (67.4%) respondents answered mild panic attack for shortness of breath. Other than that, 75 (84.2%) respondents answered moderate panic attack for fear of losing control and 51 (57.3%) respondents answered moderate panic attack for choking. Moreover, 60 (67.4%) respondents answered severe panic attack feel dizziness. This symptom also similar to the previous findings by Simon et al., where there was an association between dizziness and panic disorder.7 So, there are 5 main symptoms which we can conclude that respondents marked. Sweating and chills or hot flushes and fear of losing interest have the highest marked symptoms.

From this, we can conclude that 88% from respondents from English class semester 7 students have panic disorder and 12% are free from panic disorder. Most importantly, respondents only feel panic attack for specific situations and not all conditions. In my opinion, this issue needs to be taken seriously because it is vital to check on the

#### Tabel 2 Severity score of panic disorder among English class Semester 7 of medical students

	Panic Score (N=89)			
Variables	(0-9) No Panic Disorder	(10-19) Mild	(20-29) Moderate	(30-39) Severe
Severity of Panic Disorder (N,%)	11 (12.0)	45 (51.0)	33 (37.0)	(0.0)

respondents who have panic disorder. This will be very helpful for their daily lifestyles. Consulting a psychiatrist would be very helpful.

Data from large scale epidemiological surveys suggest that panic disorder is more common in women than in men.8 The National Comorbidity Survey (NCS) examined the presence of psychiatric morbidity, including depression, panic disorder and general anxiety, in a large national sample.8 Based on NCS data, it was found that panic disorder is 2.5 times more prevalent among women than men. Besides, gender difference appears to increase according to age.8 For example, the prevalence rate of panic disorder for women ages 15 to 24 was 2.5%, compared to 1.3% of same-age men. For older women and men, the overall rates drop, but the difference between genders appears to grow. Among women ages, 35 to 44, the prevalence of panic disorder was 2.1%, compared to the 0.6% rate among same-aged men.8 Thus, when this research is compared to other researches in the world, the recent findings are in accordance with the previous study because female respondents have higher risk of getting panic disorder than male with ratio of 2:1.

# CONCLUSION

Based on the result of the research conducted on panic attack among medical students, it can be concluded that half of them suffers from mild panic disorder, and a third of them suffers from moderate panic disorder. Female respondents tend to get more panic attacks than male respondents. The majority age of students suffering from panic attacks is from 20 to 23 years old. All the respondents are single.

## **ETHICS CONSIDERATION**

An ethics approval has been obtained from the Ethics Committee, Faculty of Medicine, Universitas Udayana based on COPE.

# **CONFLICT OF INTEREST**

There is no competing interest regarding the manuscript

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None

## **AUTHOR CONTRIBUTION**

All of the authors are equally contributed to this study from data gathering, data analysis until reporting the results of study.

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