



UNDERGRADUATE

INTRODUCTION & OBJECTIVE

COVID-19 pandemic affected one's mental health and this include university students. Mental health problems among university students became one of the global main issues. There was increment in the prevalence of depression, anxiety and stress among university students during the COVID-19 pandemic.^[1,8,9,10,11] In Malaysia, there is limited study on factor associated with mental health among university student during this COVID-19 pandemic. The objective of this study was to determine the associations between socio-demographic, body mass index, body image perception, physical activity and sleep quality with mental health among university students in Universiti Putra Malaysia during the COVID-19 pandemic.

METHODOLOGY

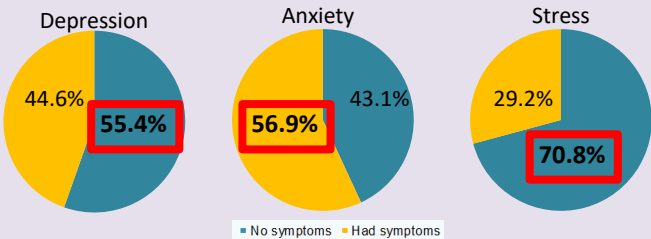
- Study design** → Cross-sectional study
- Study location** → Universiti Putra Malaysia
- Sampling design** → Multistage sampling
- Respondents** → 130 undergraduate students aged 18-25 years old
- Data collection** →
 - April to May 2021
 - Questionnaire distributed through GoogleForm platform
- Statistical analysis** →
 - Chi Square test
 - Pearson correlation test
 - Spearman correlation test

Instruments → Online self-administered questionnaire (GoogleForm)

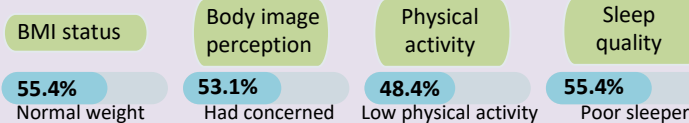
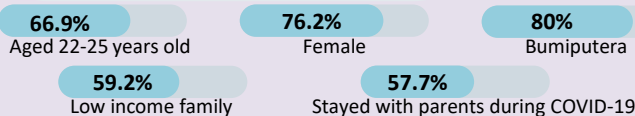
Section A	Self-developed socio-demographic characteristics
Section B	Self-reported weight and height
Section C	Body Shape Questionnaire (BSQ-8C)
Section D	Global Physical Activity Questionnaire (GPAQ)
Section E	Pittsburgh Sleep Quality Index (PSQI)
Section F	Depression Anxiety Stress Scale (DASS-21)

RESULTS & DISCUSSION

Mental health status



Socio-demographic characteristics



Correlation between BMI with depression subscale

Variable	Depression subscale	
	r	p
BMI (kg/m ²)	0.205	0.019

- BMI was correlated with depression subscale (p=0.019)
- Obese students were tend to had depressive symptoms^[11,13]

Correlation between body image perception with mental health status

Variable	Depression		Anxiety		Stress	
	r	p	r	p	r	p
Body image perception	0.538	<0.01	0.449	<0.01	0.473	<0.01

- Body image perception was correlated with depression, anxiety and stress subscales (p<0.01) which in line with previous study^[2,4,6,7]
- Exposure to social media & increased screen time could create insecurity and affected one's emotion^[5]

Correlation between sleep quality with mental health status

Variable	Depression		Anxiety		Stress	
	r	p	r	p	r	p
Sleep quality	0.460	<0.01	0.450	<0.01	0.492	<0.01

- Sleep quality was correlated with depression, anxiety and stress subscales (p<0.01).
- Consistent with previous study among China population during COVID-19 pandemic^[3]
- Short sleep duration was found as the mediator for mental health^[10]

CONCLUSION

Affected students should be helped and referred to professional health practitioner to ensure they able to overcome with these problems and remains healthy during this pandemic

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