

Perceptions, Attitudes, Responses, Knowledge and Emotional Well-being (PARKE) of COVID-19 among Students at Newcastle University Medicine Malaysia

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BACKGROUND

- In December 2019, a series of unknown cause pneumonia cases emerged in Wuhan, China with clinical presentations resembling viral pneumonia which was named SARS-CoV-2 (2019-nCoV) later on as COVID-19.¹
- Public health measures including physical distancing at least 1-meter, wearing face mask, avoiding crowds, cough etiquette and frequent handwashing are main recommended interventions to reduce the transmission of COVID-19.²
- Adherence to preventative measures designed to mitigate transmission of COVID-19 depends on individual's understanding and perception of COVID-19.

AIM

The objective of this study is to assess the perceptions, behavioural adaptation, knowledge and psychological well-being related to COVID-19, among students at Newcastle University Medicine Malaysia (NUMed), and to assess how their understanding towards the COVID-19 disease would change their responses towards the disease.

METHODS

Study design: A cross-sectional study was conducted using convenience sampling of university students from NUMed using the self-administered online questionnaire sent via email to students between 18 April and 30 April 2020.

Participants: 326 university students from NUMed participated in the online survey which consist of medical students from Year 1 to 5, Biomedical Science students in Year 1 and 2, and Foundation year students.

Questionnaire: The questionnaire comprised of six sections focused on sociodemographic; perception, attitude and behavioural responses towards COVID-19; knowledge and sources of information of COVID-19 disease; and anxiety level.

Statistical analysis: Data were analysed using SPSS Version 26. Descriptive analyses were used to determine the sociodemographic data and students' responses for each section; a binary logistic regression analysis was used to analyse the association between response efficacy and behavioural uptakes as odds ratio (OR) and 95% confidence intervals (95% CI).

RESULTS

- Most students (80%) believed that they knew how to protect themselves. More than two-thirds (68%) of students strongly agreed that COVID-19 was a serious public health issue.
- Majority students ($\geq 90\%$) practiced the recommended measures, except for avoid touching eyes, nose and mouth (82%) (Table 1).
- Wearing a face mask was associated with positive behavioural uptake in university students (Table 2).
- Most students (78%) demonstrated good knowledge of COVID-19.
- More than half of the students did not report any symptoms of anxiety (58%) during the COVID-19 pandemic (Figure 1).

Table 1. Measures taken to prevent infection from COVID-19

Behaviours	Yes (%)	No (%)
Social distancing	322 (99)	4 (1)
Avoid crowded places	320 (98)	6 (2)
Stay home if feeling unwell	314 (96)	12 (4)
Cover mouth when coughing	314 (96)	12 (4)
Wearing face mask	297 (91)	29 (9)
Handwashing	295 (90)	31 (10)
Avoid touching eyes, nose and mouth	267 (82)	59 (18)

Table 2. Associations between response efficacy and behavioural uptake in reducing COVID-19 infection risk

Response efficacy	Behavioural uptake		OR	95% CI	P-value	
	Yes	No				
Frequent handwashing			1.65	0.46	5.95	0.44
Effective	277	28				
Ineffective (Reference)	18	3				
Total	295	31				
Avoid going out			0	0	0	0.99
Effective	298	12				
Ineffective (Reference)	16	0				
Total	314	12				
Wearing face mask			6.15	2.43	15.57	<0.001
Effective	183	6				
Ineffective (Reference)	114	23				
Total	297	29				

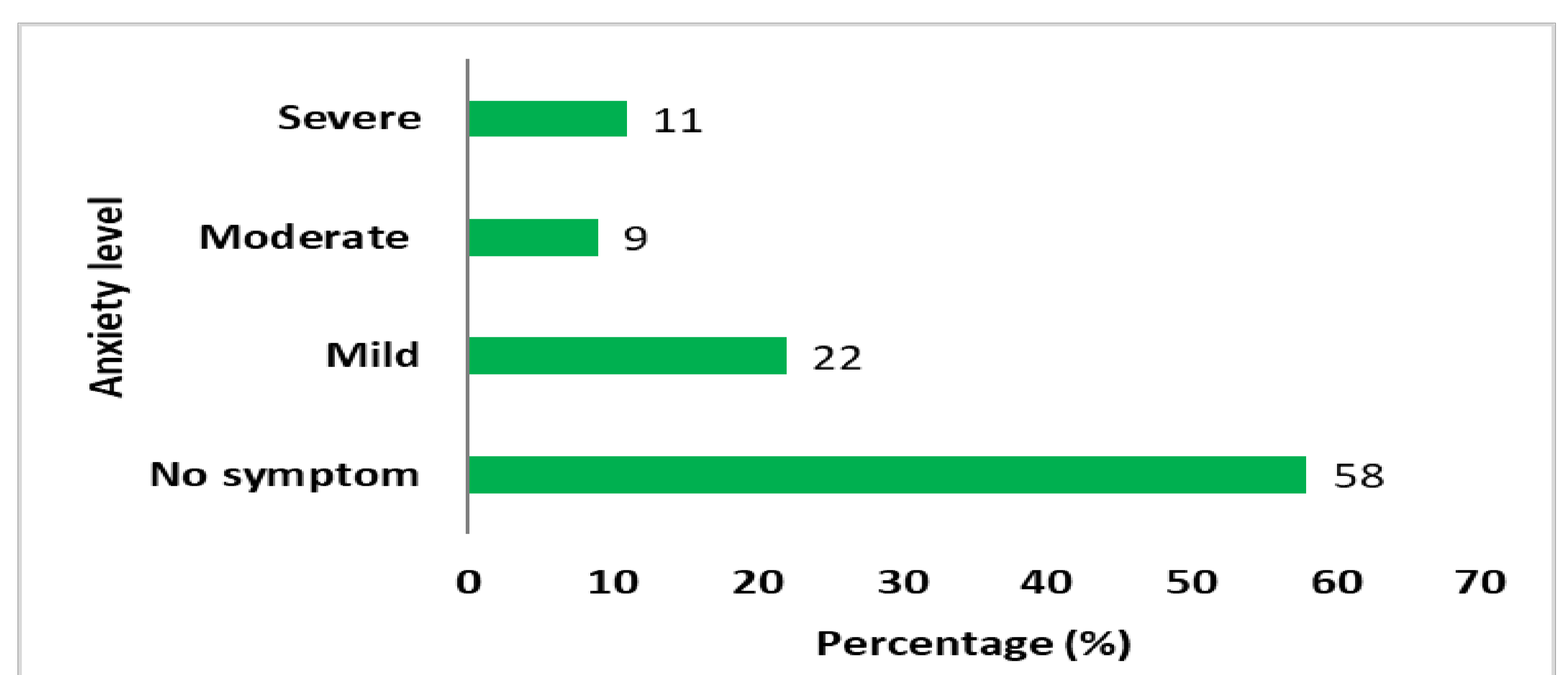


Figure 1. Anxiety level among students in NUMed during the COVID-19 pandemic

CONCLUSION

This study showed a good perception, attitude, behavioural responses, knowledge level and emotional responses among NUMed students towards COVID-19.

REFERENCES

1. Cheng ZJ, Shan J. 2019 Novel coronavirus: where we are and what we know. *Infection*. 2020 Apr;48(2):155-63.
2. World Health Organisation. Coronavirus disease (COVID-19) advice for the public. 2020; <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>

Ethics approval: This study was approved by NUMed Research Ethics Committee and Newcastle Institutional Review Board.