

# KNOWLEDGE, PERCEIVED RISK, AND PREVENTIVE BEHAVIOURS AMIDST COVID-19 PANDEMIC AMONG DENTAL STUDENTS IN MALAYSIA

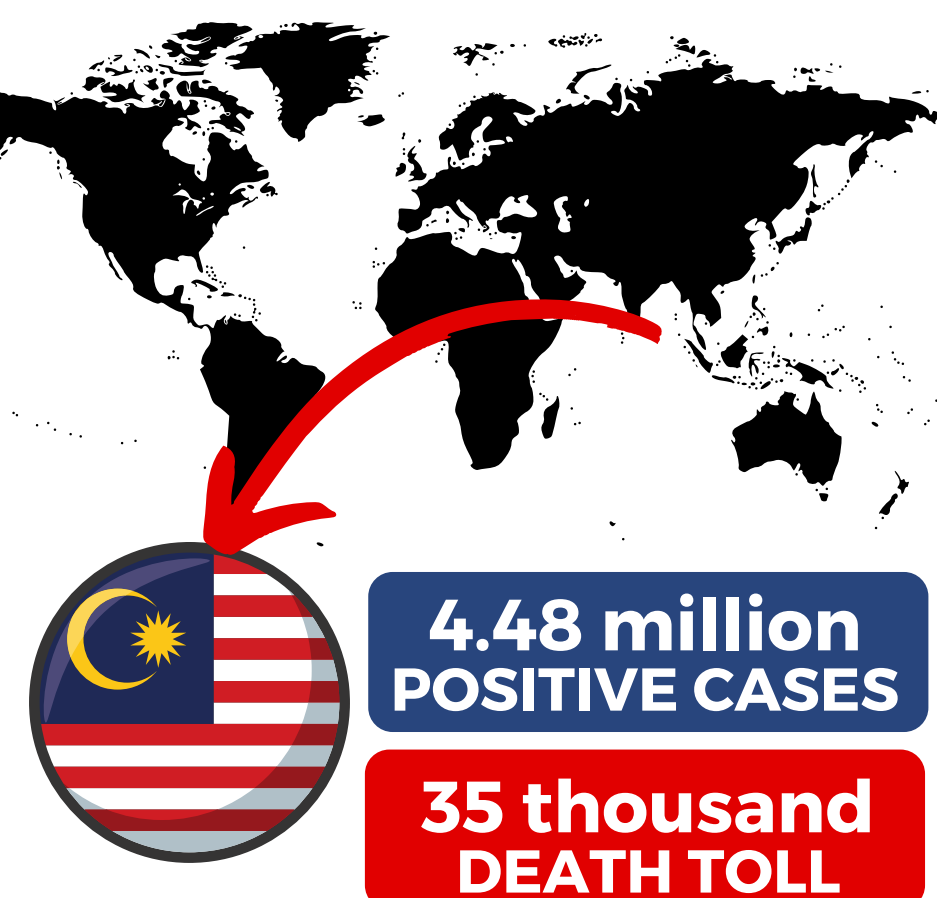
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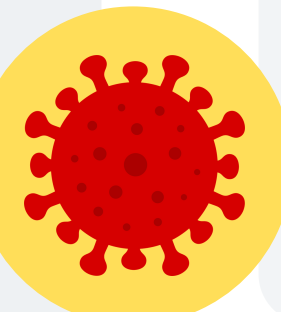
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## INTRODUCTION

Aerosol-generating procedures pose a **significant risk to those related to the practice of dentistry**, as SARS-CoV-2 has been detected in the saliva of infected individuals.<sup>[1]</sup>



Dental students are **exposed to the same threats**.

But their knowledge, perceived risk and preventive behaviours with regards to COVID-19 are **not known**.<sup>[2]</sup>



To determine knowledge level, risk perception and the preventive behaviours among dental students in Malaysia during COVID-19 pandemic.

## MATERIALS AND METHODS



### ETHICAL APPROVAL

IREC 2021-013



### STUDY DESIGN

Cross-sectional study using Google Form (March to April 2021)



### STUDY POPULATION

Undergraduate dental students in Malaysia



### SAMPLE SIZE

347

### STUDY INSTRUMENT

### KNOWLEDGE OF COVID-19

26 True & False questions adapted from local study with modifications.<sup>[3,4]</sup>

### PERCEIVED RISKS

5 items adapted from COVID-19 Perceived Risk Scale (CPRS).<sup>[5]</sup>

### PREVENTIVE BEHAVIOURS

17 statements with 5-point Likert scale adapted from questionnaire.<sup>[3]</sup>

### Testing Validity

**1** Face-to-face validity among 5 IIUM dental students

### Questionnaire Reliability

**2** Pilot study among 42 IIUM dental students (Cronbach's alpha >0.7)

### Data Collection

**3** Survey was distributed through Whatsapp by contacting student reps from each university

### Statistical Analysis

**4** IBM SPSS 25.0 (Chicago, US)  
Mann-Whitney U and Kruskal-Wallis test

## RESULTS AND DISCUSSIONS

### PART I: SOCIO-DEMOGRAPHIC DATA



**76.9%**  
FEMALE



**64.8%**  
ON-CAMPUS



**62.8%**  
CLINICAL



**76.1%**  
MALAY



**31.0%**  
YEAR 4

### PART II: KNOWLEDGE ON COVID-19

**93.5%**  
High score: >80%

- Transmission (100%)
- Sign and symptoms (>95%)
- Treatment (<85%)

Chinese, on-campus students, year 5 and clinical students scored significantly higher ( $p < 0.05$ ) in knowledge on COVID-19.

- Dental students in Malaysia have **good knowledge** on COVID-19, similar to dental students from Palestine, Saudi Arabia and Austria.<sup>[6-8]</sup>
- Clinical students had better knowledge than pre-clinical students presumably because they are working at a high-risk environment.<sup>[9]</sup>

### PART III: PERCEIVED RISK

**63.9%**

**Worried about family member contracting COVID-19**

**33.0%**

**Worried about themselves contracting COVID-19**

Female, Malay, students who were on campus, Year 5 and clinical students had the highest perceived risk score compared to other groups.

- Students were more concerned about their elder family members than themselves as the elderly are more vulnerable and have worse prognosis with COVID-19 infection.<sup>[10]</sup>

### PART IV: PREVENTIVE BEHAVIOURS

**>70%**

- Wear mask
- Quarantine if close contact or having symptoms

**51-69%**

- Physical distancing
- Not handshake or hug

Female and students who were off-campus had significantly higher ( $p < 0.05$ ) scores in preventive behaviours compared to other groups.

- In accordance with preventive measures recommended by WHO, generally students performed **good preventive behaviours**.<sup>[11]</sup>
- Students staying off-campus practiced more preventive behaviours since they need to travel, which exposes them to a higher risk of infection.<sup>[12]</sup>

## CONCLUSION

Most dental students in Malaysia have good knowledge about COVID-19. Hence, their perceived risk of the disease is high, and they are well practicing preventive behaviours.

However, knowledge on the disease should be incorporated into dental schools' curriculums and updated from time to time.

## ACKNOWLEDGEMENT

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