

# MENTAL HEALTH STATUS OF HEALTH-RELATED PROVIDERS IN A TERTIARY NON-COVID-19 HOSPITAL

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NMRR-20-852-54721

## INTRODUCTION

Coronavirus Disease-2019 (COVID-19) is caused by a coronavirus that has not been previously identified (1,2). The outbreak has been declared as pandemic by World Health Organisation (WHO) on 12<sup>th</sup> March 2020 (3).

COVID-19 pandemic caused serious threat and triggered various psychological problems. Healthcare workers exposed to COVID-19 patients experienced various degree of symptoms of depression (50.4%), anxiety (44.6%), insomnia (34.0%) and distress (71.5%) (4).

Hospital Tunku Azizah Kuala Lumpur (HTAKL) is a tertiary referral centre for Paediatric and Obstetric and Gynaecology cases that does not primarily manage COVID-19 patients. However, due to its proximity to Hospital Kuala Lumpur (HKL) complex, which is a COVID-19 hospital under Ministry of Health Malaysia (MOH), some of the staff were deployed to HKL. We wanted to study how this impacted HTAKL health-related workers.

## MATERIALS AND METHODS

This is a cross-sectional study conducted in a tertiary hospital without active COVID-19 admissions. Questionnaires included demographic data, basic knowledge about COVID-19, DASS-21 and ProQOL Version 5 (English and Malay). Microsoft Excel used for data entry and SPSS V25 for data analysis.

## RESULTS

### Demographic Data

Variable	Frequency (%)
<b>Gender</b>	
Female	61 (85.9)
<b>Education level</b>	
Secondary	7 (9.9)
Tertiary	63 (88.8)
<b>Marital status</b>	
Married	47 (66.2)
<b>Household income (RM)</b>	
< 1,000	1 (1.4)
1,000 – 4,000	17 (23.9)
4,001 – 10,000	43 (60.6)
> 10,000	8 (11.3)
<b>Working hours per week</b>	
< 40 hours	9 (12.7)
41 – 50 hours	37 (52.1)
> 50 hours	25 (35.2)
<b>Worked with Covid-19 patients?</b>	
Yes	8 (11.3)
<b>Close contact with Covid-19 positive person outside work?</b>	
Yes	5 (7.0)

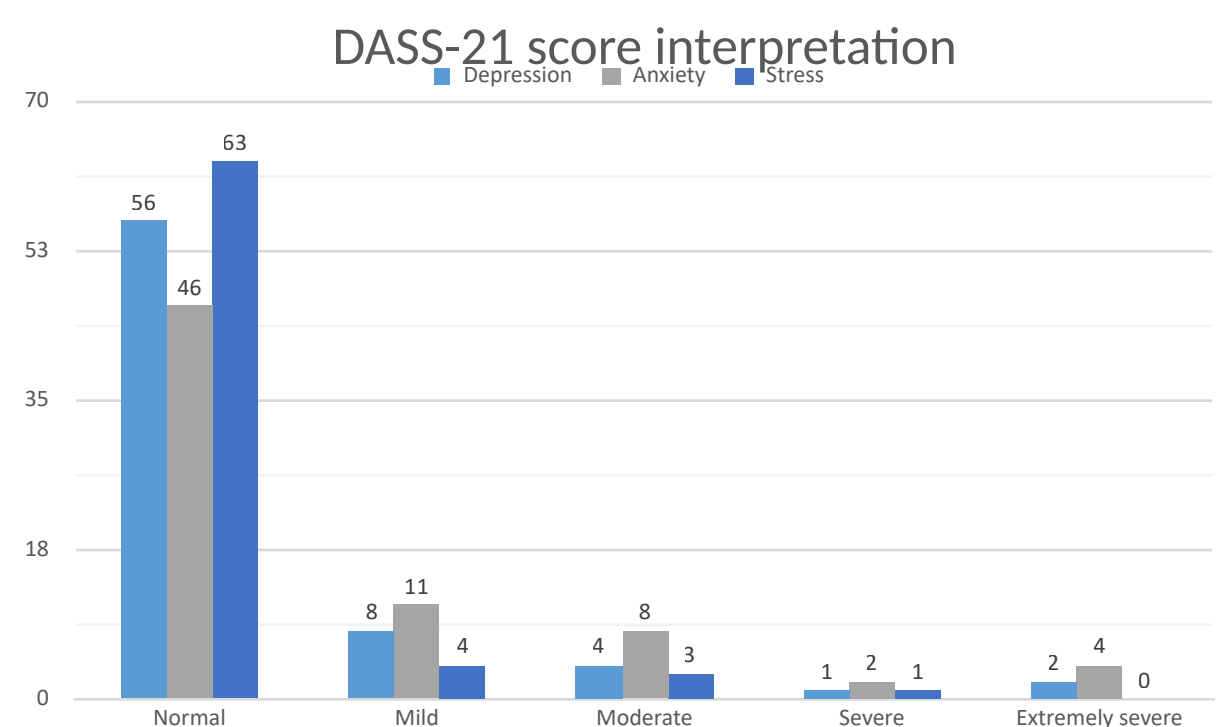
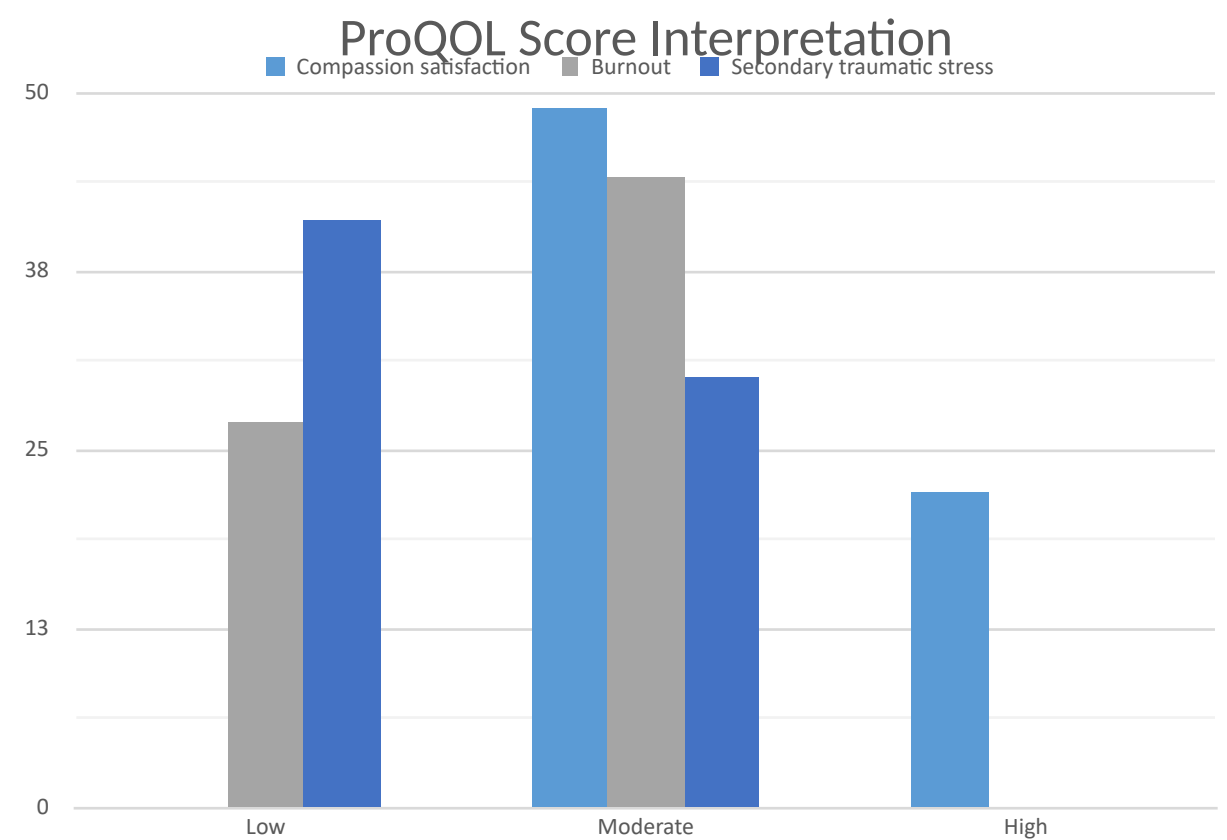
### Knowledge of Staff of COVID-19

- 95% participants answered correctly on symptomatology of the infection and prevention of spread.
- 60.6% participants answered correctly on treatment of COVID-19 infection.

### Correlations

Household income with anxiety score (DASS-21)				
Household income (RM)	n	Mean (SD)	F statistics (df) <sup>a</sup>	p-value <sup>a</sup>
1,000 – 4,000	17	4.94 (4.52)	7.699 (3,65)	< 0.001
4,001 – 10,000	43	2.21 (2.21)		
Household income with stress score (DASS-21)				
Household income (RM)	n	Median (IQR)	X <sup>2</sup> statistics (df) <sup>b</sup>	p-value <sup>b</sup>
1,000 – 4,000	17	6 (6)	9.73 (2)	0.008
4,001 – 10,000	43	3 (5)		
Working hours per week with burnout (ProQOL)				
Working hours per week	n	Median (IQR)	X <sup>2</sup> statistics (df) <sup>b</sup>	p-value <sup>b</sup>
< 40 hours	9	21 (3)	8.124 (2)	0.017
41 – 50 hours	37	24 (5)		
> 50 hours	25	25 (5)		

<sup>a</sup>One-way ANOVA test    <sup>b</sup>Kruskal-Wallis test    IQR – Interquartile range



## DISCUSSION

Majority of our subjects had normal DASS scores, which maybe a reflection of being well informed about COVID and not working in a COVID hospital (5). Higher workload and having an income of less than RM 4000 was associated with significant psychological symptoms, which may have due to change in working arrangements during the COVID period. Limitations were that the nature of our survey may have led to selection bias as respondents may not represent the entire population and usage of self reports did not reply on diagnostic assessments.

## CONCLUSIONS

In preliminary findings of this study, lower household income and longer work hours was associated with adverse impact on mental health of the healthcare-related providers.

## ACKNOWLEDGEMENTS

1. Dr Nanthiny Mahalingam
2. DK Nurshahidah Nafesah Abd Adzim

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