

# COVID-19 RESTRICTION MOVEMENT ORDER : QUALITY OF LIFE OF PERSONS WITH COMORBIDS AND HEALTHY PERSONS



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## Introduction

Malaysia implemented Restriction of Movement Order (RMO) from 18<sup>th</sup> March – 12<sup>th</sup> May 2020 to reduce Corona Virus Disease 2019 (COVID-19) infection rates.<sup>1</sup>

Quality of Life (QoL) is the individual's perception of their position in life within the context of culture and value systems and in relation to their goals, expectations, standards and concerns.<sup>2</sup>

This paper aims to investigate the QoL of persons with comorbidities (PWC) and healthy persons (HP) in the midst of RMO and pandemic using the World Health Organization Quality of Life-Brief (WHOQoL-Bref) questionnaire in Hospital Tengku Ampuan Rahimah (HTAR).

## Methodology

- Cross sectional study: 4<sup>th</sup> May 2020 to 13<sup>th</sup> May 2020 (Last week of RMO)
- Convenience sampling: All hospital clients (PWC, patient chaperones, hospital visitors etc) at HTAR Ambulatory Care Centre entrance and main building lobby were recruited.
- Exclusion criteria: <18 years old, Unable to understand survey questions
- During office hours, researchers wore face masks and gloves with readily available hand sanitizers for the recruitment process.
- Explanation and flyers with QR code link to English and Malay Google form versions of WHOQoL-Bref were given to hospital clients.
- On site assistance was provided to participants who had difficulty answering the Google form.

## Results

>A total of 745 (100 PWC; 645 HP) out of 1067 persons agreed to participate in this study, which provided a participation rate of 69.8%.

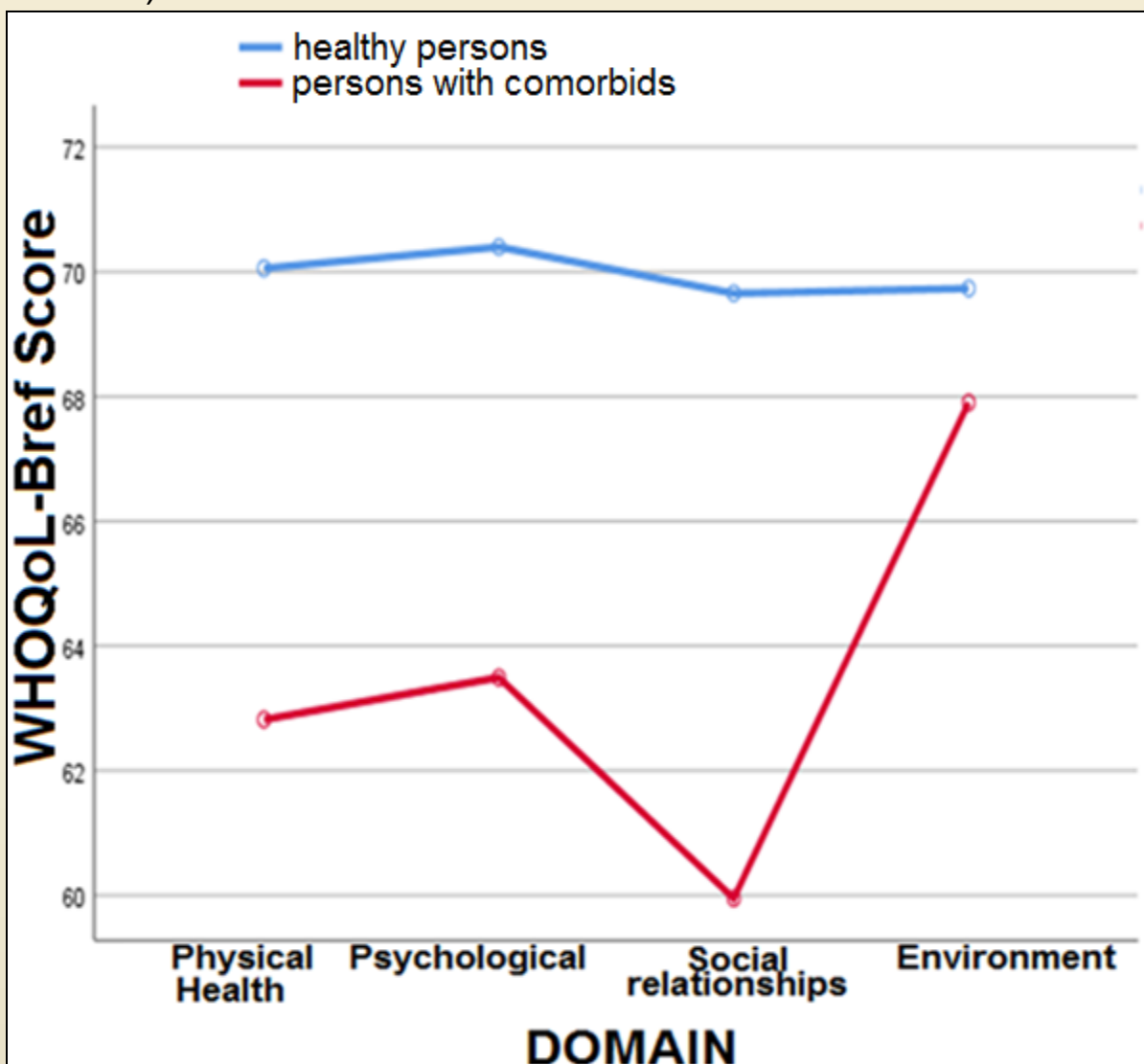
>HP have higher chance to have good QoL when compared to PWC. (a)

>Highest income group reported better QoL compared to lower income groups. (a)

>The QoL for PWC have significantly impaired scores for physical, psychological and social relationship domains compared to HP. This difference was not seen for environment domain. (b)

>Environment domain score was significantly higher for PWC compared to other 3 domain scores. (b)

>Further sub-analysis show that PWC with tertiary education had a significantly higher chance of having good QoL compared to PWC with secondary education and below (OR = 3.6. 95% CI: 1.2–10.7).



(b) Fig. 1: Comparison of WHOQoL-Bref Scores for each Domain and Between HP and PWC

Characteristics	Poor QoL n (%)	Good QoL n (%)	p-Value	AOR	95% CI	
					Lower	Upper
<b>Age</b>	37.9 (13.28)*	37.4 (13.46)*	0.264	0.99	0.97	1.01
<b>Gender</b>			0.674			
Male	105 (34.7%)	198 (65.3%)		R		
Female	149 (33.7%)	293 (66.3%)		1.07	0.77	1.50
<b>Ethnicity</b>			0.929			
Malay	116 (35.0%)	215 (65.0%)		R		
Chinese	52 (35.9%)	93 (64.1%)	0.565	0.88	0.57	1.36
Indian	83 (32.0%)	176 (68.0%)	0.997	1.00	0.69	1.45
Others	3 (30.0%)	7 (70.0%)	0.838	1.16	0.28	4.76
<b>Education level</b>			0.099			
Secondary/below	119 (41.5%)	168 (58.5%)		R		
Tertiary	135 (29.5%)	323 (70.5%)		1.39	0.94	2.07
<b>Occupation status</b>			0.425			
Not working	58 (39.5%)	89 (60.5%)		R		
Working	180 (33.0%)	366 (67.0%)	0.725	1.08	0.71	1.64
Retired	16 (30.8%)	36 (69.2%)	0.195	1.72	0.78	3.91
<b>Marital Status</b>			0.315			
Single	109 (36.2%)	192 (63.8%)		R		
Married	145 (32.7%)	299 (67.3%)	0.06	1.45	0.98	2.14
<b>Income</b>			<b>0.008</b>			
<RM4360	179 (39.4%)	275 (60.6%)		R		
RM4360-RM9619	64 (29.1%)	156 (70.9%)	0.200	1.30	0.87	1.93
RM9620	7 (13.2%)	46 (86.8%)	<b>0.002</b>	<b>3.83</b>	<b>1.62</b>	<b>9.06</b>
<b>Health Status</b>			<b>0.007</b>			
PWC	46 (46.0%)	54 (54.0%)		R		
Healthy	208 (32.2%)	437 (67.8%)	0.027	<b>1.67</b>	<b>1.06</b>	<b>2.63</b>

(a) Table 1: Sociodemographic background and Multiple Logistic Regression on Factors Related to Good QoL

Hosmer-Lemeshow statistics;  $\chi^2=5.91$ ,  $df=8$ ,  $p=0.658$

\*Mean(SD), AOR=Adjusted Odds Ratio, R=Reference

## Discussion

This study found that QoL of PWC is impaired compared to HP during RMO, a finding echoed in various studies. For example, a study by Ping et al (2020) during the Covid-19 pandemic, found that the general population of China with chronic illness had poor QoL showing risks of developing somatic disorders, anxiety or depression.<sup>3</sup> Another study by Ballegooijen et al (2020), reiterated that those with medical comorbidities during the Coronavirus lockdown had lower levels of QoL and higher psychological distress.<sup>4</sup>

Higher levels of education may help PWC achieve better QoL in such crises. Zhang & Ma (2020) found that among the residents in Liaoning Province, China - 75% of them had high levels of education showed mild stress impact and did not feel helpless during the pandemic.<sup>5</sup>

Assessment during the Coronavirus pandemic found that youth mental health problems significantly associated with being less educated, suffering from baseline psychological problems and having negative coping styles.<sup>6</sup>

## Conclusion

The results reveal that QoL of persons with comorbidities is impaired compared to healthy persons during RMO. Findings suggest that higher levels of education may help persons with comorbidities achieve better QoL in such crises.

## References

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