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Evaluation of health-related quality of life among healthcare professionals– A cross-sectional study findings

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ABSTRACT

Objective: The aim of the current study was to evaluate HRQoL among HCPs in Malaysia. *Methods:* A cross-sectional study was designed and conducted among HCPs using "WHOQOL-BREF" which is a standardized HRQoL measuring tool. Data were obtained and analyzed using both, descriptive and inferential statistics by the Statistical Package for Social Sciences (SPSS) version 24.0. *Results:* A total of 310 HCPs participated the study. There were more females than males (n=188, 60.6%, and n=122, 39.4% respectively). The mean scores for four domains of the WHOQOL-BREF i.e. physical health, psychological, social relationships and environmental domains were 68.91±13.60, 72.31±15.93, 73.49±16.17, and 70.42±15.86, respectively. *Conclusion:* In Malaysia, overall the HCPs had better HRQoL and had good access to excellent healthcare facilities, good self-esteem, and friendly social circles.

Keywords: HCPs, HRQoL, WHOQOL-BREF, Malaysia

1. INTRODUCTION

Healthcare professionals (HCPs) play several roles for the overall wellbeing of their patients in particular and the society in general (Walsh et al., 2019; Campbell et al., 2003). They provide not only pharmacological treatment of a disease but also offer professional

advice and proper directions preventing any physical injury to their patients (Campbell et al., 2003; Shields et al., 2009). Numerous studies have reported that decreased HRQoL among HCPs can affect their professional practice that may result in undesirable patient outcomes like medication errors, dispensing errors, inapt prescribing patterns, and inappropriate patient counseling (Leary et al., 2007; Shields et al., 2009).

Moreover, decreased HRQoL also has a significant impact on the overall health state of HCPs irrespective of their professional practice and responsibilities (Colby et al., 2018; Ibrahim et al., 2016). Among HCPs, the HRQoL can be affected by various factors related to the physical, psychological, social relationships, and environmental features can affect the overall HRQoL among HCPs (Engstrom et al., 2001; Fronteira et al., 2001). Eventually, the decreased HRQoL among HCPs can lead to reduced work capacity, the unnecessary burden of work, negative feelings, low therapeutic outcomes, and unwanted conflicts with peers (Kheiraoui et al., 2012; Oyama et al., 2015; Su et al., 2009). To date, HRQoL among HCPs in Malaysia has not been explored using the WHOQOL-BREF. This study was specially designed to fill this scarcity and the need for published literature about overall HRQoL among HCPs in Malaysia. This study determined the overall HRQoL of HCPs and its relationship with some sociodemographic variables like gender, age, marital and working status, educational level, practice sites and nature of the job. This study was novel among its types as there was no study evident so far that measured HRQoL among HCPs using the WHOQOL-BREF.

2. MATERIALS AND METHODS

Study design, participants and duration

A cross-sectional study was conducted at two hospitals in Malaysia among HCPs. All aspects of the study protocol were strictly confidential. A written consent according to the declaration of Helsinki 1964 and its amendments on comparable ethical standards was taken from all the participants. The study duration was from December 2016 to January 2018.

Research tool and data collection

A convenient sampling technique was used to obtain the sample size for the present study. Data were collected using the WHOQOL-BREF (WHO, 1996). The reliability and validity were also performed.

Statistical analyses

Descriptive statistics were used to evaluate the demographic and personal characteristics of the HCPs. Percentages and frequencies were used for the categorical variables, while means and standard deviations were calculated for the continuous variables. Spearman's correlation coefficient test was used to assess the inter domain correlation and the correlation between various demographic factors and domain scores. Data from the questionnaire were analyzed using Statistical Package for the Social Sciences (SPSS) version 24.0.

3. RESULTS

The demographic characteristics of the study's participants are presented in Table 1. There were a total of 310 participants, with more females than males (n=188, 60.6%, and n=122, 39.4%, respectively). Two hundred and thirty-four (75.5%) had a post bachelor's level of education and 76 (24.5%) had a bachelor's level education. Two hundred eighty-nine (93.2%) participants were serving the public sector, whereas 21 (6.8%) were private-sector employees. One hundred eighty-eight (60.6%) participants had attended continuous professional development (CPDs) or continuous medical education (CMEs) courses, and 122 did not.

Table 1 Demographic characteristics of the study participants (n = 310).

Characteristics	Frequency	%
Gender		
Male	122	39.4
Female	188	60.6
Marital Status		
Single/Separated	95	30.6
Married	215	69.4
Highest Education		
Bachelors	76	24.5
Masters	234	75.5
Job Nature		
Public	289	93.2

Private	21	6.8
Experience		
≤10 Years	189	61.0
>10 Years	121	39.0
Income		
≤ RM 15000	170	54.8
> RM 15000	140	45.2
Attending CPDs/CMEs		
Yes	188	60.6
No	122	39.4

Table 2 depicts the participants' responses against each item of the questionnaire. The Cronbach's alpha for the entire WHOQOL-BREF was 0.935. The Cronbach's alpha for the physical, psychological, social, and environmental domains was more than 0.7.

Table 2 Distribution of WHOQOL-BREF items' responses (n = 310)

WHOQOL-BREF items	Very Poor (1)	Poor (2)	Average (3)	Good (4)	Very Good (5)
QoL Rating	2	5	15	174	114
Health Satisfaction Status	0	9	38	187	76
Life Safety	3	4	99	126	78
Healthy Environment	2	27	103	133	45
Body Appearance	8	11	77	109	105
Financial Satisfaction	1	20	93	126	70
Leisure Activities	6	65	116	95	28
Get around Ability	1	30	80	151	48
Sleep Satisfaction	12	27	89	157	25
Capacity for Work	4	8	60	160	78
Relationship Satisfaction	0	5	47	171	87
Sexual Satisfaction	16	9	67	149	69
Healthcare Satisfaction	4	15	63	167	61
Transport Satisfaction	9	24	54	172	51

Table 3 presents the mean HRQoL scores for all four domains of the WHOQOL-BREF among the participants. The mean score for the physical health domain was 68.91±13.60. Mean scores for the psychological, social relationships and environmental domains were 72.31±15.93, 73.49±16.17, and 70.42±15.86, respectively.

Table 3 Mean HRQoL scores for four domains of WHOQOL-BREF

Domains	HRQoL scores (Mean±SD)
Physical	68.91±13.60
Psychological	72.31±15.93
Social	73.49±16.17
Environment	70.42±15.86

Table 4 shows the correlations between the four different domains of the WHOQOL-BREF. Based on the observed findings, statistically significant positive correlations were noted between all four domains of the WHOQOL-BREF.

Table 4 Correlation coefficients in overall health and domains of WHOQOL-BREF

	Correlations	QoL	Overall Health	Physical	Psychological	Social	Environment
QoL	Correlation (r)	1					
	Sig. (2-tailed)						
Overall Health	Correlation (r)	0.597	1				
	Sig. (2-tailed)	<0.001					
Physical	Correlation (r)	0.442	0.472	1			

	Sig. (2-tailed)	<0.001	<0.001				
Psychological	Correlation (r)	0.595	0.577	0.683	1		
	Sig. (2-tailed)	<0.001	<0.001	<0.001			
Social	Correlation (r)	0.461	0.421	0.523	0.674	1	
	Sig. (2-tailed)	<0.001	<0.001	<0.001	<0.001		
Environment	Correlation (r)	0.505	0.490	0.723	0.743	0.634	1
	Sig. (2-tailed)	<0.001	<0.001	<0.001	<0.001	<0.001	

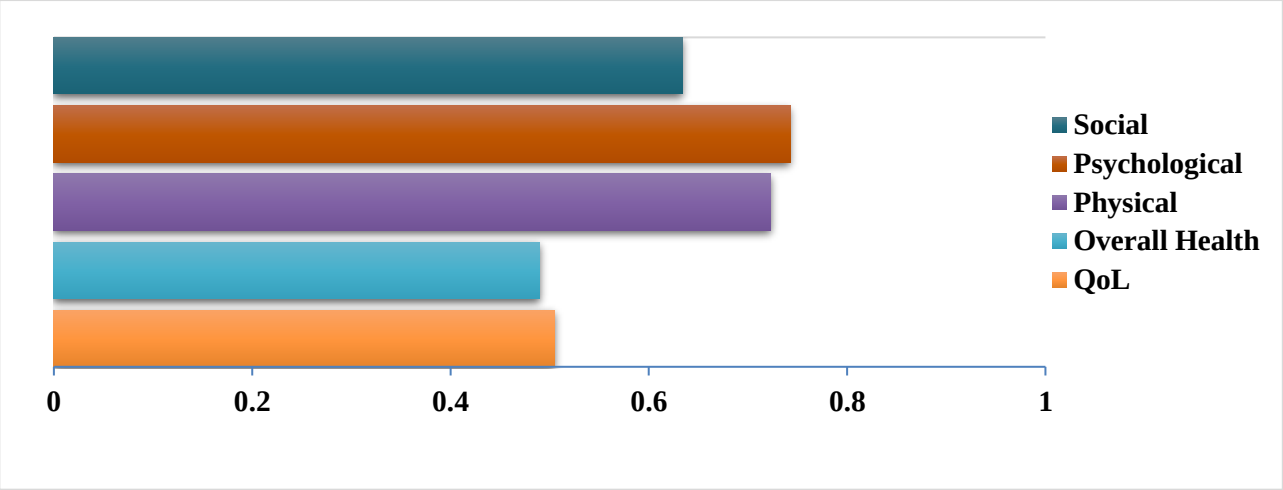

Figure 2 Correlation of environment domain with other domains of WHOQOL-BREF ($p<0.001$)

4. DISCUSSION

In the past decade, HRQoL has been an emergent concept and an important treatment outcome parameter in assessing individuals' general health state and monitoring treatment efficacy and overall disease management (Eltayeb *et al.,* 2017; Ioannou *et al.,* 2015). This study determined HRQoL in the four different domains of WHOQOL-BREF among HCPs. These days, the diversity of the chronic diseases demands that HCPs should pay due attention to their own HRQoL first then to their patients (Malik *et al.,* 2017; Skevington *et al.,* 2004). Several studies conducted in numerous countries have explored diverse aspects of HRQoL among HCPs, but there is a scarcity of evidence in the literature from Malaysia. Frequent access to healthcare facilities, job frustration, availability of a variety of treatment regimens and medication use, and positive and negative psychological influences are among the major concerns affecting HRQoL among HCPs (Elbur *et al.,* 2015; Heo *et al.,* 2015). To the best of our knowledge, to date, this is the first-ever study done in Malaysia regarding HRQoL of HCPs using WHOQOL-BREF. Thus no study is evident in the literature as a cross-reference to this study.

The results of the current study confirmed the highest mean score (satisfaction level) was found in the social domain (73.49±16.17), possibly due to the frequent availability of leisure activities, friendly social circles, and their satisfaction, lesser negative feelings, religious freedom, more positive feelings, a greater level of self-esteem, spiritual applicability, personal beliefs, better memory, less dependence on self-pocket expenses, and acquiring better healthcare needs (Almeida *et al.,* 2011; Joshi *et al.,* 2017). Moreover, the lowest mean score (satisfaction level) was observed for the physical domain (68.91±13.60), which may be due to less satisfaction with their bodily appearance, more physical responsibilities, less mobility, and job-related physical discomfort, fatigue, and inability in handling job-related stress and its management. Overall, good mean scores were observed for the psychological and environment domains (72.31±15.93 and 70.42±15.86, respectively), showing acceptable individual relationships, greater social support and satisfactory personal relationship activities, better financial means, excellent healthcare facilities, and availability of cheaper and frequent public transportation (Almeida *et al.,* 2011; Barcellona *et al.,* 2000). The HCPs in Malaysia are moderately-satisfied with their HRQoL in social, psychological, and environment domains and are relatively less satisfied in their physical domain. In Malaysia, overall, the HCPs have better access to excellent healthcare facilities, self-esteem, and social circles.

Incorrelation matrix analysis, all of the domains and the 2 main questions were significantly correlated with other, whereby one affected the others, p value <0.05. There was also a statistically significant positive correlation between the first two WHOQOL-BREF questions, that is, QoL and overall health satisfaction status, and scores were obtained from different domains. The strength of

correlation among QoL and overall health status was moderately-strong (Spearman's "r">0.5), whereas four domains showed moderately-strong and strong correlations (Spearman's "r" ranged from 0.421 to 0.743).

This study used the WHOQOL-BREF to measure domains pertaining to physical, psychological, social relationships, and working environments. The results of this study determined that the social aspect of HRQoL exhibited the highest scores, while physical health was the lowest among HCPs. In Malaysia, HCPs are self-motivated, capable, and competent that are putting their share in achieving national and global healthcare goals. The presence of highly qualified and motivated healthcare staff is only a key to better healthcare system performance. HRQoL among healthcare workers is imperative for achieving optimum healthcare demands, motivating paramedical staff and improving overall job performance. As higher HRQoL and job satisfaction are known to improve HCPs' professional performance and patient satisfaction. In opposition, decreased HRQoL and job dissatisfaction result in high HCPs' turnover, exacerbates HCP's shortage and high burn out that may cause patients' decreased HRQoL.

5. CONCLUSION

The findings from this study confirmed that the WHOQOL-BREF research tool is a reliable instrument to measure HRQoL among HCPs in Malaysia. In Malaysia HCPs enjoy overall good HRQoL. This study's findings could help HCPs and their family members to understand better the physical, psychological, social, and environmental problems HCPs usually face while performing their professional duties. This, in return, will help and encourage them further to provide more physical, psychological, and social support to the HCPs.

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Abbreviations

HCPs:	Healthcare Professionals
PHC:	Primary Healthcare
HRQoL:	Health-Related Quality of Life
WHO:	World Health Organization
WHOQOL:	World Health Organization Quality of Life
CVDs:	Cardiovascular diseases
SPSS:	Statistical Package for the Social Sciences

Conflicts of interest

The authors declare that there are no conflicts of interest.

Ethical approval

The ethical committee approval code of the study was 16-6060.

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