

The uniqueness and overlap of the candidate EQ-HWB items, a head-to-head comparison with EQ-5D-5L in patients with four different diseases and general public in China

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Introduction

- The EuroQol Health and Well-being (EQ-HWB) is a generic quality of life instrument in development, which is designed to capture both health and well-being.
- Identifying the conceptual framework of the candidate items is warranted.
- In this study we explore the uniqueness and overlap of the EQ-5D and the candidate items of the EQ-HWB in China.

Methods

Sample

- Disease: HIV/AIDS, Chronic Hepatitis B (CHB), or Generalized Anxiety Order (GAD), Depression
- Online; General public

Statistics analysis

- Combined and recorded data
- Distribution: Ceiling effect
- Convergent and divergent validity: Spearman’ s rank correlations; Mean score in each domain
- Factor structure: An explorative factor
- Known group validity: Cohen’ s D analysis to calculate the 'effect size'

Results

Sample

- 500 respondents; 140 healthy people; 122 CHB; 101 HIV/AIDS; 107 depression; 90 GAD; 40 healthy caregivers

Statistic results

- The ceiling effect: EQ-HWB candidate items and EQ-5D-5L were 0.40% and 19.6%, separately
- Spearman’ s rank correlation: from moderate to low association
- The five-explorative factors of the EQ-HWB: cognition (fatigue); activities; feelings and emotion; three positive wording framework, and physical sensation
- EQ-5D-5L and EQ-HWB could identify diseases and caregiving burdens

Explorative factor analysis-five factors

EQ-HWB-Long	Fatigue	Activities	Emotion	Positive	Physical sense
Remember	0.62				
Unable cope	0.65				
Look forward	0.63				
Exhausted	0.63				
Discomfort fre	0.51				
Nocontrol nodef	0.61				
See	0.48				
Walk	0.82				
Activities		0.71			
Hear		0.57			
Think		0.57			
Difficult wash		0.62			
Frustrated			0.56		
Unsafe			0.55		
Anxious			0.66		
Sad			0.52		
Sleep			0.58		
Unsupported			0.61		
Lonely			0.69		
Do wanted				-0.64	
Good				-0.80	
Accepted				-0.62	
Discomfort sev					0.63
Pain sev					0.67
Pain fre					0.50

Mean Spearman correlations in each domain between the EQ-5D-5L and EQ-HWB items

EQ-HWB Domain(Mean)	EQ-5D-5L				
	Mobility	Self-care	Usual activities	Pain/discomfort	Anxiety/depression
Activity	0.45	0.41	0.45	0.39	0.34
Physical sensation	0.37	0.33	0.40	0.52	0.46
Self-identify	-0.08	-0.05	-0.15	-0.20	-0.33
Cognitive	0.13	0.13	0.21	0.35	0.45
Autonomy	0.26	0.25	0.31	0.40	0.44
Feelings and emotions	0.23	0.19	0.29	0.34	0.49
Relationship	0.27	0.17	0.32	0.29	0.41

Mean Effect size on four diseases in each domain on the EQ-HWB (*recorded mean)

Domain(Mean)	CHB	HIV	Depression	GAD
Activity	-0.79	-0.81	-0.93	-0.91
Physical sensation	-0.78	-0.76	-1.02	-1.12
Self-identify*	-0.29	-0.15	-0.61	-0.80
Cognitive	-0.42	0.18	-0.82	-0.93
Autonomy	-0.73	-0.21	-1.10	-1.14
Feelings and emotions	-0.48	-0.42	-0.95	-1.04
Relationship*	-0.36	-0.64	-0.70	-0.86
Mean*	-0.61	-0.55	-0.92	-1.00