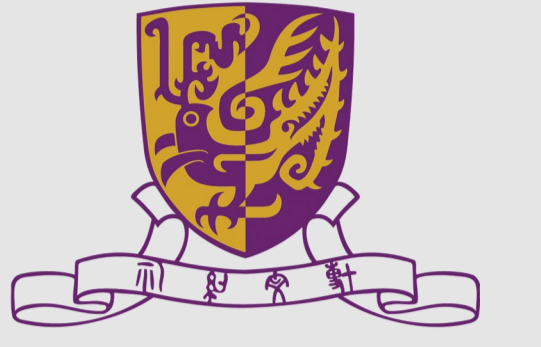


HEALTH-RELATED QUALITY OF LIFE (HRQOL) MEASUREMENT IN PATIENTS WITH HYPERTENSION IN HONG KONG (HK) SAR, CHINA



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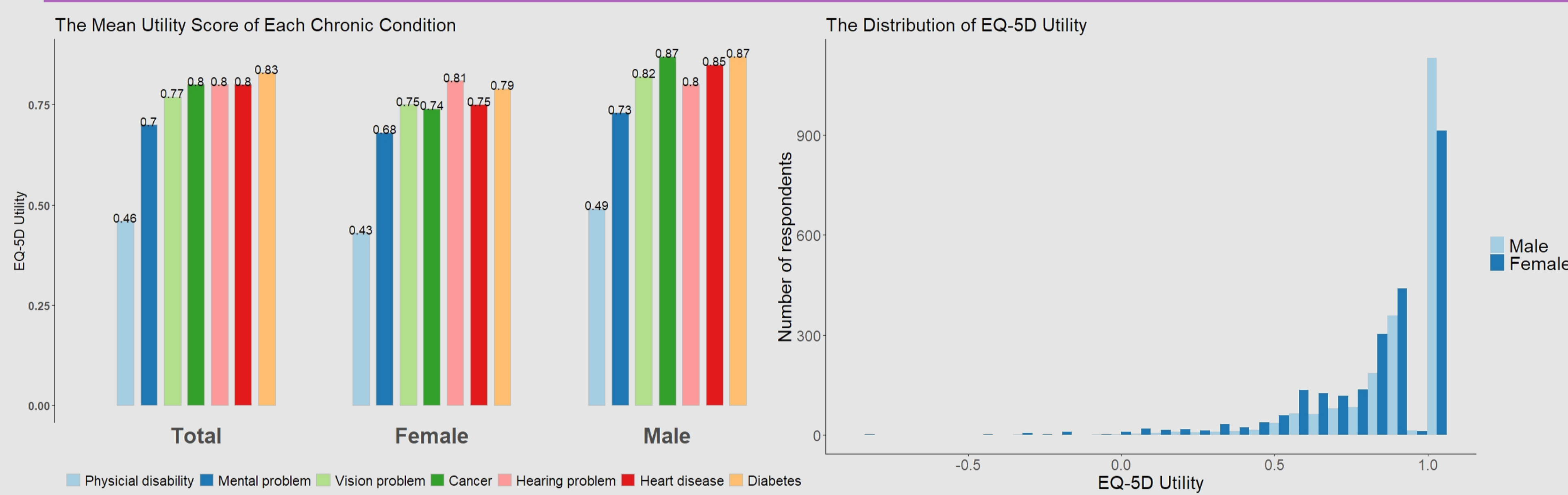
OBJECTIVE

The aim of this study was to evaluate the effect of hypertension and associated co-morbidities on the HRQoL in HK using EQ-5D-5L.

METHOD

The data were collected from a population-based survey on patient experience by using the specialist-outpatient clinic services in HK. 4,528 patients completed the questionnaire and reported living with hypertension. EQ-5D-5L HK version was used for evaluating the people's HRQoL. Differences of EQ-5D utility between socio-demographic subgroups were assessed using a bootstrap version of the heteroscedastic one-way ANOVA for trimmed means. Ordinal least square, Tobit and two-part regression model were used separately to estimate the effect of hypertension and associated seven co-morbidities on HRQoL adjusted by socio-demographic characteristics.

RESULTS



More respondents were female (53.9%), aged ≥ 65 years old (60.1%), and with no or primary educational attainment (52.3%). 1,466 respondents (32.4%) reported to co-suffer from diabetes, followed with heart disease (20.8%). In the OLS model, utility decreased most when patients reported having physical disability associated with hypertension. In the Tobit model, the utility reduced most for co-morbidity of physical disability, and then mental problem, cancer, and vision problem. For first part of two-part model, respondents co-living with mental problem were 10% less likely to report a full health. For the second part of two-part model, the respondents with physical disability had 0.294 lower in utility.

CONCLUSION

This study applied the EQ-5D-5L HK version in a large sample of hypertensive patients in HK, China. Compared with normal population, patients reported with hypertension presented lower HRQoL and the effect varied with the patients' socio-demographic characteristics and co-morbidities.

Table 1 Socio-demographic characteristics

	With condition				Without condition		
	N	%	Mean	sd	Mean	sd	p-value
Overall	4528		0.85	0.22	0.91	0.17	<0.001
Sex							
Male	2089	46.1	0.89	0.18	0.91	0.17	<0.001
Female	2439	53.9	0.82	0.24	0.90	0.18	
Age group							
18-44	129	2.9	0.94	0.16	0.95	0.11	<0.001
45-64	1676	37.0	0.91	0.16	0.91	0.15	
≥ 65	2723	60.1	0.82	0.25	0.86	0.23	
Educational attainment							
No/Primary	2362	52.3	0.81	0.25	0.80	0.28	<0.001
Secondary/ Post-secondary	1767	39.2	0.90	0.16	0.88	0.19	
Tertiary or above	386	8.5	0.91	0.17	0.90	0.18	
Living arrangement							
Alone	279	6.2	0.78	0.26	0.85	0.22	<0.001
W/ family/others	4208	93.2	0.86	0.21	0.91	0.17	
In institution	29	0.6	0.54	0.44	0.54	0.59	
Employment status							
Retired	2600	57.6	0.81	0.25	0.85	0.18	<0.001
Unemployed	830	18.4	0.87	0.19	0.91	0.15	
Employed	1081	24.0	0.94	0.12	0.95	0.10	

Table 2 Comparisons of model performance

	Model 1 OLS With comorbidity	Model 2 Tobit With comorbidity	Model 3 Two-part With comorbidity
			Logistic regression
AIC	-1471.278	4041.414	5817.105
BIC	-1355.901	4156.791	5926.027
R ²	0.140		
Pseudo R ²		0.151	0.072
RMSE	0.205		
Sigma		1.09	
			Truncated OLS regression
AIC			-358.792
BIC			-254.213
Sigma			0.224

