

(1066) A comparison of generic preference-based measures in patients with chronic obstructive pulmonary disease (COPD)

Jing Chen, University of Hong Kong, Hong Kong; Carlos KH Wong, PhD, MPhil, BSc, Department of Family Medicine and Primary Care, The University of Hong Kong, Hong Kong Island, Hong Kong; Sarah McGhee, The University of Hong Kong, Hong Kong; Polly KP Pang, Department of Medicine and Geriatrics, Princess Margaret Hospital; Wai Chou Yu, Department of Medicine and Geriatrics, Princess Margaret Hospital

AIMS: The appropriate use of generic preference based measures determines the accuracy of disease assessment and further decision on healthcare policy using quality adjusted life years as outcome. The discriminative capacity of different instruments would differ across disease groups. Our study was to examine the difference in utility scores for COPD patients measured by EQ-5D and SF-6D and to assist the choice of a proper instrument in this disease group. **METHODS:** differences of mean utility scores of EQ-5D and SF-6D in groups defined by socio-demographic characteristics, comorbidities, health service utilization and severity of illness were tested using Mann–Whitney test, t-test, Kruskal–Wallis test, Pearson’s correlation coefficient and ANOVA, as appropriate. The discriminative properties of the two instruments were compared against three indicators of quality of life using receiver operating characteristic (ROC) curves. The statistical significance of the area under the ROC curves (AUC) was tested by ANOVA and F-statistics used to compare the efficiency with which each instrument discriminated between disease severity groups. **RESULTS:** Mean utility scores of EQ-5D and SF-6D were 0.644 and 0.629 respectively in the 154 subjects included in the analysis. EQ-5D scores were significantly higher than SF-6D in groups with less severe disease and these differences corresponded to a minimally important difference of greater than 0.03 ($p<0.001$). EQ-5D and SF-6D scores were strongly correlated across the whole sample ($r = 0.677$, $p<0.001$) and in pre-defined groups ($p<0.05$ for all correlation coefficients). AUCs were above 0.5 against all three indicators of Health related quality of life for both instruments. F-ratios suggested SF-6D was more efficient in discriminating cases of different disease severity than EQ-5D. **CONCLUSIONS:** Both EQ-5D and SF-6D appeared to be valid and discriminative preference-based measures in Chinese patients with COPD. SF-6D was more efficient in detecting differences among subgroups with differing health status.