EQ-5D can be a valuable tool for studies on health outcomes and health inequalities in Polish population.

**IS THE EQ-5D QUESTIONNAIRE A PREDICTOR OF MORTALITY AND HOSPITALIZATION IN A GENERIC ELDERLY POPULATION?**

Pacelli B1, Broccoli S2, Puccini A1, Cavrini G2
1Health Authority of Bologna, Bologna, Italy; 2University of Bologna, Bologna, Italy

**OBJECTIVES:** This study aimed to evaluate the prognostic ability of EQ-5D questionnaire for hospitalization and mortality in an elderly Italian population. Although many studies show that Health-Related Quality of Life is a significant predictor of survival and morbidity, even after controlling for socio-demographic covariates and physical health status, to date there are few studies that prove the efficacy of EQ-5D questionnaire to predict mortality and hospitalization on a general population.

**METHODS:** A retrospective cohort study on 5256 subjects aged 65 years or more, recruited in 2003 in Italy. EQ-5D Index and VAS, socio-demographics variables and some medical covariates (collected with a postal questionnaire) were used to predict hospitalization and mortality. Mortality and hospitalization data during the 12-months period after the completion of the questionnaire were obtained by record linkage with administrative mortality and discharge datasets. Hospitalization was defined as any hospital admission for natural causes (ICD-9 CM diagnosis codes: 0-799) that included at least one overnight stay in the hospital. Kaplan-Meier’s method in univariate analysis and Cox proportional hazards model with robust variance estimator to calculate the relative risks of mortality and first hospitalization were used.

**RESULTS:** The EQ-5D questionnaire is a significant predictor of mortality. The curves estimated with Kaplan-Meier’s method show significant differences in survival time at one year (Log rank test, p-value < 0.005) among individuals reporting different health status. The Cox proportional hazard model performed controlling for sex, age, BMI, physical activity and functional activity shows increasing risk for people perceiving worse health status. Hospitalization results are not yet available as the record linkage procedure between survey and discharge data is in progress.

**CONCLUSIONS:** Evaluation of EQ-5D instrument as a mortality and morbidity predictor will make it a proxy of prognostic mortality score systems, including various laboratory parameters, seldom available in surveys not specifically designed for epidemiological study.

**DO LIKERT-TYPE SCALE AND VISUAL ANALOGUE SCALE MEASURE THE SAME QUALITY OF LIFE?**

Hisao Y1, Yao G2
1National Taiwan University, Taipei, Taiwan, 2National Taiwan University, Taipei, Taiwan

**OBJECTIVES:** Likert-Type Scale and Visual Analogue Scale (VAS) are two common psychometric methodologies for measuring Quality of Life (QOL). However, these two scales are different from their constructions and rating methods. Besides, whether these different attributes will result in different psychometric properties for Likert-Type Scale and VAS on measuring QOL has not yet been examined.

**METHODS:** A total of 496 adult subjects were used in the current study (58.9% female, n = 292; 40.2% male, n = 200; mean age = 24.64 yrs). Each subject was asked to fill in the WHOQOL-BREF in two different visions, one was measured by Likert-type scale and the other was by VAS. Reliability analyses were applied by using Cronbach’s alpha coefficient and split-half coefficient. Besides, agreement analyses were applied by using Pearson’s r, Intraclass Correlation Coefficient (ICC), Lin’s Concordance Correlation Coefficient (CCC), and Bland-Altman Plot. Finally, a MTMM matrix and Confirmatory Factor Analysis (CFA) were used for examining the validity and ME/I across Likert-type Scale and VAS.

**RESULTS:** The result indicated that both Likert-Type Scale and VAS were easy for subjects to answer, and possessed adequate reliability although reliability for VAS measures were consistently higher than Likert-Type measures.

**CONCLUSIONS:** The agreements between these two scales were high, indicating adequate reproducibility of test scores across scales. In ME/I analyses, the result showed that VAS measures and Likert-Type measures did not reflect the same structure, furthermore, the VAS defined a better construct of QOL. VAS seemed to have better psychometric properties for measuring QOL over Likert-Type Scale. More discussion on the two measurement scales will be provided in our presentation.