PREDICTORS OF HEALTH STATUS CHANGE AMONG PATIENTS TREATED WITH A CALCIUM ANTAGONIST: OR AN ATENOLOL-LED HYPERTENSION STRATEGY IN THE INTERNATIONAL VERAPAMIL SR-TRANDOLAPRIL STUDY (INVEST)

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OBJECTIVES: To examine associations between 1) hypertension treatment strategy; 2) demographic characteristics; and 3) change in utility scores for SF-6D dimensions with patients’ self-reported change in health status. METHODS: INVEST patients randomized to a calcium antagonist- or atenolol-led high blood pressure treatment strategy residing in the United States were surveyed between April 1 and October 31, 1999 (N = 2317). The survey contained the SF-36 HRQoL items. Baseline and 12 month SF-6D utility indices were calculated for study subjects who completed both surveys (n = 1010). Subjects who indicated that their health was better or worse compared to last year were classified as having an important change in their self-reported health status. Baseline and 1-year mean SF-6D indices and utility scores for each SF-6D dimension were compared within each treatment strategy using paired t-tests. Independent t-tests assessed differences between treatment strategy and utility scores for each SF-6D dimension and for change in SF-6D index. Hierarchical logistic regression models were used to identify variables associated with health status change. RESULTS: Mental health, role limitation, and pain utility scores were improved among those assigned to the verapamil-SR-led strategy; only mental health was improved among those assigned to the atenolol-led strategy (p < 0.05). Patients reporting worsened health status were more likely to have negative utility score changes on the physical and social functioning, role limitation, pain, and vitality domains. Patients reporting improved health status had positive utility score changes in the mental health, social functioning, role limitation, pain, and vitality domains. Treatment strategy was not associated with health status change. Non-Caucasians were more likely to report improved health status. CONCLUSIONS: Verapamil-SR hypertension treatment was associated with utility score improvements in multiple SF-6D domains. However, drug treatment’s effect was apparently not noticeable enough for it to be associated with patients’ judgments that their health improved or worsened.

SOCIODEMOGRAPHIC AND CARDIOVASCULAR RISK FACTORS INFLUENCES ON EQ-5D SOCIAL PREFERENCES SCORES AND SELF-REPORTED HEALTH: A GENERAL POPULATION SURVEY IN ARGENTINA

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OBJECTIVES: To evaluate the influence of demographic, socioeconomic, and risk factors variables on the EQ-5D time trade-off [TTO] and visual analogue scale [VAS] population values as well as in the self-reported health by VAS [VAS-SR] in Argentina. METHODS: We included data from 41,392 adults in the first National Risk Factor [RF] Survey (2005), a general population nationally representative sample. Survey variables included self-reported sociodemographic parameters and RF (diabetes [DBT], high blood pressure [HBP], dyslipemia [DLP], obesity [OB], smoking [SMK], healthy diet [HD], physical activity [PA], as well as the EQ-5D instrument (including the descriptive system and the VAS-SR item). TTO and VAS preference values were mapped from a local EQ-5D Value study. We assessed the independent relationships between EQ-5D scores (TTO and VAS) as well as the VAS-SR with sociodemographic variables and RF. We used multivariable linear regression modeling. We considered clinically meaningful a coefficient of >=0.02. RESULTS: Final models included 33,964 subjects, representing 17,586,759 Argentineans, and had an R2 of 0.16–0.19. In fully adjusted models, the following variables were statistically, consistently, and clinically associated with both TTO and VAS EQ-5D scores as well as VAS-SR: age, gender, income, selected provinces, health coverage, DBT, HBP, DLP, PA, with coefficients ranging from 0.02 to 0.09. Though there were statistical differences among housing, household, education, employment status, gender of household head, SMK, OB, and HD subgroups, they had a small magnitude (coefficients < 0.02) or were not consistently associated with TTO/VAS/VAS-SR. CONCLUSIONS: In Argentina, in addition to sociodemographic factors, diabetes, hypertension, physical activity and dyslipemia, were significantly and strongly associated with scores on the EQ-5D as well as with self-reported VAS. This is, to our knowledge, the first study in Latin America that evaluates the determinants of EQ-5D weights and VAS-SR using a general population health survey as well as locally derived weights.

ACCEPTABILITY OF TECHNOLOGICAL TREATMENT AND THE EFFECT OF RESPONDENT CHARACTERISTICS ON TREATMENT PREFERENCE

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OBJECTIVES: Surgical and/or technological treatment such as nerve stimulation is becoming increasingly popular in the treatment of acquired ankle-foot deformity in rehabilitation medicine. It is known that the older and impaired population can be technology adverse. The purpose of this study was to determine the acceptability of invasive technological treatment to patients and healthy controls and to study the influence of respondent characteristics on the preference for treatment. METHODS: A total of 204 Respondents participated in a conjoint analysis discrete choice experiment. Ankle-foot impairment was related to either central neurological (n = 38), or peripheral neurological disease (n = 54). Healthy respondents were also included (n = 92). The amount of information on the decision problem which was provided to the healthy controls varied. A multinomial logit regression model was used to estimate part worth utilities for the attribute levels of 8 criteria (treatment duration, treatment impact, duration and ease of use of aids, complication severity and rate, comfort & cosmetics, result type and success rate on choice of treatment) with 2–4 levels and attribute importance and to study the influence of age, gender, educational level, cognitive impairment, physical impairment and extent of information provision prior to the experiment on the fit of the regression model. RESULTS: All treatment attributes have a significant influence on treatment choice. Most important are impact of treatment (20%) and duration & ease of use of aids (19%). No operation (46) and minimal use of aids (39) is preferred. Age has a significant influence (W = 4.92; p = 0.026). No effect of cognitive impairment or ankle-foot impairment was found. CONCLUSIONS: It could be concluded that 1) surgical treatment and the use of technology are considered negative aspects of treatment, and 2) age-matched healthy respondents’ preferences can be used as predictors for cognitively and physically impaired patients.