HOW DOES AN 11-POINT PAIN SCALE RELATE TO PREFERENCE ESTIMATES IN PATIENTS WITH CHRONIC PAIN AND CAN IT BE USED TO PREDICT PREFERENCES?

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OBJECTIVES: An 11-point pain scale from 0 (No Pain) to 10 (Worst Possible Pain) is a frequent outcome measure in pain studies. The measure is easily administered, understandable and useful in many diseases in which pain is a factor. However, results from pain scales are difficult to compare with results from alternative outcome measures when making policy decisions across diseases. Our objective was to examine the relation between an 11-point pain scale and preferences and evaluate the performance of the scale in estimating preferences. Thereby, possibly providing a method to estimate preferences in studies including an 11-point pain scale but no direct preference measure.

METHODS: We used data from two clinical trials of patients with chronic low back pain (N = 382). Patients were divided into an estimation (N = 287) and validation (N = 95) sample. At follow-up visits, patients completed an 11-point pain scale and the EuroQol (EQ-5D). The measure is easily administered, understandable, and useful in many diseases in which pain is a factor. However, results from pain scales are difficult to compare with results from alternative outcome measures when making policy decisions across diseases. Our objective was to examine the relation between an 11-point pain scale and preferences and evaluate the performance of the scale in estimating preferences. Thereby, possibly providing a method to estimate preferences in studies including an 11-point pain scale but no direct preference measure.

RESULTS: In the overall cohort, average preference values in four categories of pain were 0.843 (SD = 0.201) for No Pain, 0.626 (SD = 0.226) for Mild, 0.492 (SD = 0.282) for Moderate and 0.245 (SD = 0.314) for Severe. A regression model from the estimation sample provided preference estimates for Mild pain of 0.628 and differences from that value were 0.172 for No Pain, –0.135 for Moderate pain, and –0.387 for Severe pain. When these values were applied to the validation sample, absolute differences between actual and predicted preferences for the pain categories ranged from 0.003 to 0.129. Generally, the prediction methods did reasonably well at predicting group averages, however the methods did not accurately predict individual preferences. CONCLUSIONS: Our findings provide investigators a reasonable method for estimating preferences in studies including an 11-point pain scale but no preference measure. However, the properties of these estimates need to be evaluated in other patient populations and are only a second-best alternative for determining preferences.

PATIENT PREFERENCE-BASED TREATMENT RECOMMENDATIONS FOR ENDOMETRIOSIS PAIN: CHOICE OF METHOD MATTERS

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OBJECTIVES: To assess the validity of patient preference assessments of short-term health states associated with endometriosis pain treatments; and to compare individual treatment recommendations generated by a decision-analytic model incorporating patients’ rating scale (RS) versus modified time tradeoff (mTTO) values.

METHODS: Seventy patients with endometriosis pain valued nine health states associated with 3 equally-effective treatments with different side effect profiles (danazol, GnRH agonist, laparoscopy), using RS and mTTO with sleep as the trading metaphor. With mTTO, subjects chose between spending the next month in each health state versus spending X days “asleep” (an unrestful period of time one would miss) and 30-X days in good health with no symptoms. We examined the internal and across-method consistency of the valuations by checking for violations of logical adherence (valuing states with increasing adverse effects progressively worse) and procedural invariance (consistent rank ordering of states across assessment methods). Finally, we incorporated individual patients’ valuations into a decision-analytic model and assessed the concordance of treatment recommendations based on mTTO and RS values (converted into utilities with a power transformation).

RESULTS: Mean mTTO values in order of increasing side effects were: danazol –0.96, 0.80, 0.58, 0.47; GnRH agonist – 0.97, 0.78, 0.59; laparoscopy –0.77, 0.48. The vast majority of subjects (97% with RS; 99% with mTTO) consistently valued states with increasing morbidity progressively worse; and 97% valued each treatment’s health states in a consistent rank order with RS and mTTO. Based on mTTO valuations, individual treatment recommendations were: 42% laparoscopy, 38% danazol, and 20% GnRH agonist. However, recommendations based on transformed RS values differed for 49% of subjects.

CONCLUSIONS: Both RS and mTTO demonstrated internal and across-method consistency in assessing the temporary health states associated with endometriosis treatments. However, the choice of assessment method can greatly affect decision-analytically derived treatment recommendations made to individual patients.

AGE AND GENDER-STRATIFIED DIFFERENCES IN QUALITY OF LIFE IN ELDERLY CHRONIC PAIN PATIENTS

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OBJECTIVES: Chronic pain is common in older patients. Data are presented from the University of Utah Pain Management Center (PMC) to compare HRQoL in older chronic pain patients with younger patients. METHODS: Patients at the PMC are administered the TOPS (Total Outcome of Pain Scale), a pain enhanced SF-36 that is more sensitive and specific for chronic pain HRQoL out-