PDF hosted at the Radboud Repository of the Radboud University Nijmegen

The following full text is a publisher's version.

For additional information about this publication click this link.
http://hdl.handle.net/2066/23919

Please be advised that this information was generated on 2020-04-02 and may be subject to change.
DOES FAMILIARITY WITH A DECISION AFFECT PATIENT PREFERENCE JUDGMENTS? TIME PREFERENCES IN FAMILIAR AND UNFAMILIAR DISEASE SCENARIOS

GB Chapman, RL Nelson, J Winausl, ML_Fu, BS Novak. gotLPELbUsr.
similar rates for the two scenarios
discount rates for the scenario familiar
question presented a series of choices between a treatment that took effect immediately
condition) and thB disease from which they did not suffer (unfamiliar condition). Each
healthy subjects to consider hypothetical disease scenarios, raising the question of
DOES FAMILIARITY WITH A DECISION AFFECT PATIENT PREFERENCE JUDGMENTS?
temporal discount rates were exceedingly high. Crohn's patients showed lower
converted to monthly temporal discount rates (percent increase in effectiveness needed
to compensate for a one month delay), which are shown in the table. Subjective
temporal discount rates were exceedingly high. Crohn's patients showed lower
discount rates for the scenario familiar
to them, but Migraine patients showed
similar rates for the two scenarios
interaction P(1,77) = 6.44, p<.02.

Thus, familiarity did not affect time preference in a consistent manner.

A MEDICAL DECISION MAKING

MEDICAL DECISION MAKING

A MULTI-ATTRIBUTE MODEL OF PROSTATE CANCER PATIENTS' PREFERENCES FOR HEALTH STATES

GB Chapman, AS Elstein, A Andrews, C Alexander, T Kugel, R Nadler, R Sharifi, and CL Bennett. University of Illinois at Chicago and Department of Veterans Affairs West Side and Lakeside Medical Centers

We mathematically modeled patient preferences using multi-attribute utility theory. Study participants were 75 patients with localized or metastatic prostate cancer (mean age = 71) at two Chicago VA clinics; 57 patients provided complete data for this analysis. Patients were asked to evaluate health states described in terms of 5 health attributes affected by prostate cancer: pain, mood, sexual function, bladder and bowel function, and fatigue and energy. Each attribute had 3 levels that were combined to form three clinically realistic health state descriptions (A = good, B = fair, C = poor). A fourth personalized health description (P) matched the patient's current health.

We first measured patients' preferences using time trade-off (TTO) judgments for the three health states (A, B, and C) and for their own current health state (P). Patients provided the number of years of perfect health they were willing to take in exchange for 10 years in each health state. The mean TTO scores were A = 0.84, B = 0.66, C = 0.23, and P = 0.79. The TTO for the patient's own health state (P) was standardized by comparison to TTO judgments for states A and C preference = (P - CIA)

We next constructed a multi-attribute model. Patients rated the relative importance of the five attributes by dividing 100 points among them and indicated their current level of health along each attribute on a 3 point scale. The mean attribute weights were pain = 29, mood = 15, sex = 19, bladder & bowel = 20, and fatigue = 17. A multi-attribute utility (MAU) score was computed by multiplying, for each attribute, the level by the attribute weight, and summing across the attributes. The MAU scores were correlated with the TTO preference judgments (Pearson r = 0.38, N = 57, p<0.01). Thus, patients' preference judgments are moderately consistent and systematic.

MEASURING READINESS FOR INCREASED PALLIATIVE CARE AMONG END-STAGE AIDS PATIENTS

PJ De Jong, DA Cherin, SJ Dodd. School of Social Work, University of Southern California, Los Angeles, CA

Health care providers struggle to determine the optimal mix of care, curative treatment and palliative care training among terminally ill patients. Timely introduction of palliative care could have positive effects on patient quality of life, appropriate service utilization and reduced spending on futile care.

A sample of AIDS patients (n=166) receiving home health care, in the terminal stage of the disease, produced data for the development of an Emotional Readiness Scale for increased palliative care. The scale measures patient denial and acknowledgment of impending death.

The scale included 148 males and 18 females, aged ranged from 22 to 72 with a mean of 37. The ethnicity of the sample included 41% Hispanic, 32.2% White and 16.0% African American subjects. The majority of respondents (61%) were in the last stage of AIDS, which is associated with CMV.

The Emotional Readiness Scale builds upon the theoretical work of Weisman (1972), regarding stages of terminal prognosis. The scale is operationalized into five concepts: emotional exhaustion; diminished hope for improvement; withdrawal; delusion of control; and, overburdened caregivers. Constructs are measured on a five-point Likert scale item completed by the visiting nurse. A high scale score is associated with emotional readiness for palliative and/or hospice care.

A factor analysis demonstrates the scale is unidimensional. A Cronbach's Alpha shows reliability as .93. It is hoped that the scale will be useful for clinical decision-makers, assisting more timely introduction of palliative care in the end-stage of terminal illness.

Funding for the study came from a federal, Title V Demonstration grant to the Visiting Nurses Association of Los Angeles (FRU 001120-1).

DIFFERENCES BETWEEN RISKY AND RISKLESS VALUES

PFM Stalmeyer, ThGG Bezembinder, IJ Unic. LCG V&rhoef, Radiotherapy/The Nijmegen Institute of Information and Cognition (NICI), University of Nijmegen, the Netherlands.

Differences between risky and riskless values, such as obtained by gambling and rating methods, respectively, have traditionally been explained through invoking risk attitude. The purpose of our study is to test whether risk attitude as modelled in Prospect Theory (PT) is indeed capable to explain differences between risky and riskless values. Risky and riskless values were measured for a continuous health state, namely living a days/week with migraine.

Certainty equivalents were measured for three gambles, constructed from 5 probability levels (0.1, 0.3, 0.6, 0.85, 0.95) and 6 outcome pairs chosen from the set (3,2,1,0,50) days/week.

Subjects were offered a choice between a risky medicine or a x day/week for migraine.

In the first experiment with healthy students (N = 8), convex functions were found for riskless methods, indicating that riskless health states are interpreted as losses. Surprisingly, gamble always yielded neutral or concave value functions, indicating that with gambles, some health states were viewed as gains. The difference between the PT values, which are 'corrected' for risk attitude, and the riskless values was significant (F=132, df=7, p=.000). We conclude that risk attitude as modelled in PT is not capable of explaining the differences between risky and riskless values.

In a second experiment (N = 7), all health states in the gambles were presented as losses with respect to the states quo 'healthy'. As a result, convex value functions were also found for the gamble method: now, the risky and riskless value functions coincided. We conclude that the effects of loss/gains framing may partly explain that risky values are larger than riskless values. Riskless methods, health states are viewed as losses. With gambles, if the risky option is presented as a surgical operation or a medicine, the best outcome is interpreted as a gain, which, according to PT, leads to higher values.

FRAMING AND THE DIFFERENCE BETWEEN RISKY AND RISKLESS VALUES

PJM Böhminger, ThGD Grasberger, U Usche, LLC Verhoeef, Radiology/The Nijmegen Institute of Information and Cognition (NICI), University of Nijmegen, the Netherlands.

Comparisons made by risky versus riskless value judgments showed that the framing effect is greatest for riskless values and diminishes with risk.

In the first experiment with healthy students (N = 8), convex functions were found for riskless methods, indicating that riskless health states are interpreted as losses. Surprisingly, gamble always yielded neutral or concave value functions, indicating that with gambles, some health states were viewed as gains. The difference between the PT values, which are 'corrected' for risk attitude, and the riskless values was significant (F=132, df=7, p=.000). We conclude that risk attitude as modelled in PT is not capable of explaining the differences between risky and riskless values.

In a second experiment (N = 7), all health states in the gambles were presented as losses with respect to the states quo 'healthy'. As a result, convex value functions were also found for the gamble method: now, the risky and riskless value functions coincided. We conclude that the effects of loss/gains framing may partly explain that risky values are larger than riskless values. Riskless methods, health states are viewed as losses. With gambles, if the risky option is presented as a surgical operation or a medicine, the best outcome is interpreted as a gain, which, according to PT, leads to higher values.

COMPARISON OF THE EFFICACY AND SAFETY OF THE DISEASE-MODIFYING ANTI-RHEUMATIC DRUGS OM 8960, AURACIN, HYDROXYCHLOROQUINE, AND SULFASALAZINE IN RHEUMATOID ARTHRITIS: A META-ANALYSIS OF RANDOMIZED, DOUBLE-BLIND CLINICAL TRIALS

Palmer AJ, Singh G. Institute for Medical Informatics and Biostatistics (IMIB) Riehen, Switzerland; and Stanford University Medical Center, Stanford University, California, USA.

A meta-analysis techniques were used to compare the efficacy and safety of disease-modifying anti-rheumatic drugs (DMARD) OM 8960, auranin (AUR), hydroxychloroquine (HCQ), and sulfasalazine (SSZ) in rheumatoid arthritis (RA).

A fixed effects meta-analysis model was used to combine the results of randomized, double-blind trials satisfying predefined inclusion criteria. 18 randomized, double-blind, placebo-controlled studies and 20 randomized, double-blind comparative studies with a total of 63 relevant treatment arms were included in the analysis. Efficacy parameters assessed were ESR, pain scale, morning stiffness, swollen joint count, a combined efficacy score, and non-drop-outs due to drug inefficacy. Safety parameters assessed were drop-outs due to toxicity, and the toxicity index (TI) score of side-effects causing drop-out. Drop-outs due to all causes were calculated as a combined measure of efficacy and safety.

The combined efficacy score showed that SSZ and OM 8680 were superior to both AUR and HCQ, however OM 8960 demonstrated advantages compared to the other drugs in terms of the safety parameters assessed.

The summary results obtained by meta-analysis allow a comparison of the relative efficacy and safety of each drug group, and assist the clinician to weigh the potential benefits offered against the possible detrimental effects. When efficacy is weighed against safety parameters within the limitations of the meta-analysis, OM 8960 is preferable to AUR, HCQ, and SSZ for the treatment of RA patients.