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Programme

09.45  Coffee and Poster Display

10.10  Welcome and Introduction

10.15  Yaling Yang: "A condition-specific preference-based instrument: the Asthma Quality of Life utility index (AQL-5D)"

10.45  Heather Brown: "Obesity and discrimination evidence from the British Household Panel Survey (BHPS)"

11.15  Coffee and Poster Session

11.45.1 Hina Patel: A comparison of acupuncture provision by biomedical and non biomedical practitioners; in the treatment of chronic low back pain

12.15  Clara Mukuria: "Exploring the relationship between health and happiness: Results from analysis using HODaR"

12.45  Lunch and Poster Display

14.00  Katherine Stevens: "Development of a generic paediatric preference based measure of health related quality of life for use in economic evaluation"

14.30  Staff-student committee: Opportunity to discuss postgraduate research studies in ScHARR

15.30  Close
Examples of Abstracts

A condition-specific preference-based instrument: the Asthma Quality of Life utility index (AQL-5D)

Background: The quality-adjusted life year (QALY) is typically used in economic evaluation among health care interventions, which relies on some generic preference-based measures of health, such as EQ-5D, HUI and SF-6D etc have been. However, it has been widely assumed that those generic preference-based measurements may not adequately cover important consequences for some specific medical conditions thus they may lack ability to test changes of health status over time or discriminate different severity groups of patients. A new classification system known as AQL-5D, has been derived from Asthma Quality of Life Questionnaire (AQLQ), based on Rasch analysis and other psychometric evidence. AQL-5D contains 5 attributes, each with 5 levels.

Objectives: The objective of the study is to obtain a preference-based algorithm for AQL-5D based on a valuation survey of the UK general population; then to compare psychometric property of AQL-5D with the EQ-5D in terms of discrimination and responsiveness.

Methods:
Valuation: A valuation interview survey of members of the public in South Yorkshire was undertaken, using time trade-off technique. Each respondent was randomly allocated to one of 14 blocks, and valued 7 states each, so that a total of 98 states were valued. A random effect with no interactions was the main regression model, alongside alternative specifications and data transformations. Models were compared using a set of criteria and the best model was selected, which established the asthma-specific preference-based utility algorithm AQL-5D.

Application: The AQL-5D was applied to two datasets which cover a wide range of asthma patients. One dataset contains two asthma measures AQLQ and the Newcastle Symptom Scores (NASS), and two generic measures (SF-36 and EQ-5D). This dataset was used to examine the discriminative ability of the AQLQ scores, EQ-5D indices, and AQL-5D indices by dividing patients into groups using the SF-36 generic health question and the NASS. Mean, standard deviation and effect sizes by patient groups were calculated for each instrument and compared. The second dataset contains AQLQ and mapped EQ-5D indices at baseline and 12 weeks follow-up. Effect sizes by AQLQ scores, AQL-5D indices and mapped EQ-5D indices were calculated to test responsiveness over time.

Results:
Valuation: The sample consists of 308 respondents (40% response rate), with an average of 22 valuations per state. Mean health state valuations range from 0.39 to 0.94, and standard deviations ranging from 0.2 to 0.4, with a negative skew. A random effects model without a constant was the best model and used to build AQL-5D algorithm.
Application: In the first dataset, Standard deviations (SD) for AQL-5D values were consistently smaller than those for EQ-5D, and showed better discrimination ability between groups based on NASS. Performance of AQL-5D indices was comparable to AQLQ overall scores. In the second dataset, effect size of AQL-5D indices over time were slightly smaller (0.51) compared with AQLQ (0.62) and the mapped EQ-5D (0.52).

**Conclusion:** It is possible to estimate a preference-based scoring algorithm for condition-specific measures for use in economic evaluations. AQL-5D showed good discriminative and responsive ability.

Yaling Yang cmp04yy@sheffield.ac.uk
Obesity and Labour Market Participation: Evidence from the British Household Panel Survey.

Obesity is a growing problem in the UK. The World Health Organization classifies anyone with a body mass index (BMI) of over 30 as clinically obese, and in the UK it is estimated that around 22% of the population meet this definition.

Little research has been done to determine the effects of obesity on the labour market. If obesity is understood as a form of disability then we would expect detrimental effects on labour market outcomes such as wages and participation. This paper uses data from the British Household Panel Survey (BHPS) to investigate the effects of obesity on labour market participation for working age individuals. The BHPS is a large nationally representative longitudinal survey of approximately 5000 households. In the latest wave height and weight measures were included for the first time.

The multivariate econometric analysis accounts for a broad range of individual characteristics such as socioeconomic status, education and health as well as regional effects. We also employ methods to deal with endogeneity problems arising from the fact that unobservable factors influencing obesity may also influence labour market participation. Lower labour market participation rates among clinically obese individuals indicate that obesity is not solely a health issue but could have negative effects for individual economic well-being and future growth of the economy.

Heather Brown
A comparison of acupuncture provision by biomedical and non biomedical practitioners; in the treatment of chronic low back pain

Abstract:

Background
In the UK there are around 7500 acupuncture practitioners, belonging to key voluntary regulatory bodies. 5100 or 68% of these are biomedical practitioners, the remaining 2400 or 32% are non biomedical or complementary medicine practitioners

Despite key differences in training between these two groups, little is known about how their practices compare. This raises fundamental implications with regard to: the nature and context of acupuncture that has been evaluated in RCTs and secondly the paucity of information available to patients to enable informed choice.

Objective of this study: To characterise the provision of acupuncture by biomedical and non biomedical practitioners; in the treatment of chronic low back pain.

Methods: A mixed methods study: beginning with a qualitative component to explore the process of acupuncture provision by biomedical and non biomedical practitioners. The findings of the qualitative component will inform the development of a questionnaire. The questionnaire will then be surveyed amongst the wider population of practitioners in the quantitative component.

Hina Patel cmp04hp@sheffield.ac.uk
Exploring the relationship between health and happiness: Results from analysis using HODaR

Abstract

Evidence shows that health can have a considerable impact on happiness. The main objective of this presentation is to report the findings from an initial quantitative analysis of data from the Health Outcome Data Repository (HODaR). The analysis considers the impact of different dimensions of health, as operationalized in the health-related quality of life (HRQoL) concept, on happiness.

HODaR data is collected as a prospective survey of individuals who are either treated as inpatient or outpatients at the Cardiff and Vale NHS hospitals by Cardiff research consortium. Inpatient data is consists of those aged 18 years or over excluding those with psychological illness or learning disability if their primary diagnosis was a psychological illness. Individuals who die are also excluded. Postal questionnaire sent to inpatients includes: socio-demographic data; EuroQol (EQ_5D); Short Form 36 (SF-36); diagnosis (ICD-10 Classification; as well as other data not used in this paper. Multivariate ordered logit analysis is carried out with the responses to the happiness question in the SF-36 as the dependent variable and SF-6D, EQ-5D dimensions as independent variables in separate models while controlling for socio-demographic factors and conditions.

The results indicate that the most important dimensions of health associated with happiness are the mental health and vitality dimensions. Limitations in these dimensions have the largest negative impact on reported happiness. Physical functioning and role limitation due to physical health dimensions have an unexpected result as they indicate positive association with happiness. Role limitation due to emotional health and limitation in social functioning have a negative association with happiness. The pain dimensions are not significant for lower levels of pain but become significant for higher levels of pain. The findings that different health dimensions have different effect on happiness is of particular interest. If we assume that happiness is the goal of individuals, conditions that impact certain dimensions such as energy levels may have far more debilitating effects on the well-being of individuals than obvious physically disabling conditions.

Clara Mukuria cmp05cwm@sheffield.ac.uk
Development of a generic paediatric preference based measure of health related quality of life for use in economic evaluation

Aims
The use of preference based measures (PBM) of health related quality of life (HRQoL) is becoming more common, as they allow the calculation of quality adjusted life years which can be used in economic evaluation. Research in the field of paediatric PBM is lacking.
This work is the first stage in the development of a new paediatric measure. The aim was to identify dimensions of HRQoL using interviews with children. In the past, they have generally been derived from literature, parents or experts. This is the first time work of this type has been done using only children.

Methods
Qualitative interviews were carried out with children aged 7-11 years with a range of health problems, to find out how health affects their lives, focusing on HRQoL (rather than symptoms or quality of life in general). Sampling was purposive, primarily balancing for level of health within age, with gender and ethnicity as secondary criteria. Interviews were analysed thematically using Framework.

Results
74 interviews were undertaken, covering a range of acute and chronic health conditions. Children were able to articulate how their health affects their lives successfully. 11 dimensions were identified: feeling worried/scared; feeling sad/upset; feeling angry/annoyed/frustrated; pain/hurt; feeling weak/tired; sleep; daily routine; school work; joining in; feeling jealous; and feeling embarrassed.

Conclusions
This work has demonstrated that interview work of this type is possible with young children. A range of dimensions were identified, covering social, emotional and physical aspects. They are based entirely on children's views, giving them a voice and ensuring the content validity.
This work is in line with FDA guidelines recommending that development of paediatric instruments should consider age-related vocabulary and language comprehension, and fairly narrow age groupings should be used to account for developmental differences. Further work will develop these dimensions into a questionnaire and system for deriving preference data.

Katherine Stevens