



Valuations of epilepsy-specific health states: a comparison of patients with epilepsy and the general population



Brendan Mulhern^{a,*}, Donna Rowen^a, Dee Snape^b, Ann Jacoby^b, Tony Marson^c, Dyfrig Hughes^d, Gus Baker^c, John Brazier^a

^a Health Economics and Decision Science, School of Health and Related Research, University of Sheffield, Regent Court, Sheffield S1 4DA, UK

^b Institute of Psychology, Health and Society, University of Liverpool, UK

^c Division of Neurological Sciences, University of Liverpool, UK

^d Centre for Health Economics and Medicines Evaluation, Bangor University, UK

ARTICLE INFO

Article history:

Received 21 February 2014

Revised 14 April 2014

Accepted 16 April 2014

Available online 16 May 2014

Keywords:

Time Trade Off

Health-related quality of life

Health state valuation

Quality adjusted life year

Patient

ABSTRACT

Aims: Utility values that can be used in the economic evaluation of treatments for epilepsy can be elicited from the general population and the patient population, but it is unclear how the health state values differ. The aim of this study is to compare the preferences of the general population and a sample of people with epilepsy for health states described by the NEWQOL-6D QALY measure.

Methods: The Time Trade Off preference elicitation technique was used to value eight NEWQOL-6D health states. The general population sample was recruited and interviewed in their homes, and the sample with epilepsy was recruited and interviewed in an epilepsy service in North West England. Descriptive analysis and regression modeling were used to compare health state values across the populations.

Results: A sample of 70 people with epilepsy and a sample of 60 members of the general population were included. The populations differed across a range of background characteristics, but there were limited differences between the health state values. Patients provided significantly higher (better) values for the most severe health state described by the NEWQOL-6D ($p < 0.01$) and nonsignificant higher values for states with intermediate severity. The general population health state value was only higher for the best health state described by the NEWQOL-6D.

Conclusions: The similarities in the patient and general population values for NEWQOL-6D health states suggest that the use of the general population utility weights for the estimation of QALYs in the economic evaluation of epilepsy interventions is appropriate and largely representative of patient preferences.

© 2014 Elsevier Inc. All rights reserved.

1. Introduction

Cost utility analysis (CUA) can be used to assess the cost effectiveness of treatments for epilepsy, with the quality adjusted life year (QALY) as the outcome measure. The QALY combines the health-related quality of life (HRQL) and time spent in a health state as a single figure to allow for comparisons across interventions and conditions. The quality aspect of the QALY is a figure anchored on a 0 (dead) to 1 (full health) scale described as the utility score. Utility values can be generated using many different measures, although the National Institute of Health and Care Excellence (NICE) recommends the use of EQ-5D [1] which has five dimensions of health (mobility, self-care, usual activities, pain/discomfort, anxiety/depression) scored according to one of three levels of severity (no problems, some or moderate problems, extreme problems). Utility scores for each of the 243 health states are derived

from a tariff of values based on direct valuations of the general population using the Time Trade Off (TTO) method [2].

The generic nature of EQ-5D means that it is used across a wide range of patient groups, but the validity of the instrument has been questioned in epilepsy [3–6]. In response to these concerns, the authors developed an epilepsy-specific QALY measure from the NEWQOL instrument, the NEWQOL-6D [7]. The NEWQOL-6D (Fig. 1) assesses health across six dimensions (worry about attacks, depression, memory, concentration, control, stigma), each with four response levels, therefore describing 4096 (4^6) possible health states. To produce the utility values for use in the estimation of QALYs, a selection of health states was valued by a representative sample of the UK general population using the TTO preference elicitation technique. This produced a utility value set with a range from 0.341 (for the worst state) to 0.954 (for the best state).

Preferences for health states described by QALY measures that are used in the generation of utility values can be gained from both general population and patient samples. General population values are preferred by agencies such as NICE as it is argued that, where health care is publicly funded, general public values should inform decision-making [8]. Evidence regarding differences in preferences for health

* Corresponding author at: School of Health and Related Research, University of Sheffield, Regent Court, 30 Regent St, S1 4DA, UK. Tel.: +44 114 222 0794.

E-mail address: b.mulhern@sheffield.ac.uk (B. Mulhern).

Worry about attacks

You are not worried at all that you might have another epileptic attack

You are a little worried that you might have another epileptic attack

You are fairly worried that you might have another epileptic attack

You are very worried that you might have another epileptic attack

Depression

You never have problems with depression

You rarely have problems with depression

You sometimes have problems with depression

You always or often have problems with depression

Memory

You never have problems with your memory

You rarely have problems with your memory

You sometimes have problems with your memory

You always or often have problems with your memory

Concentration

You have no problem concentrating for more than a short period of time

You have mild problems concentrating for more than a short period of time

You have moderate problems concentrating for more than a short period of time

You have serious problems concentrating for more than a short period of time

Control

You feel that you have complete control over things that happen to you

You feel that you have some control over things that happen to you

You feel that you have little control over things that happen to you

You feel that you have no control over things that happen to you

Stigma

You do not feel that people treat you like an inferior person

You feel that some people maybe treat you like an inferior person

You feel that some people probably treat you like an inferior person

You feel that some people definitely treat you like an inferior person

Fig. 1. The NEWQOL-6D classification system.

states elicited from general population and patient samples is mixed, with evidence both for [9] and against [10] differences. This means that the choice of population may affect the values obtained and the subsequent economic evaluations carried out, but potential differences must be considered across different conditions. Values may differ across samples due to differences in interpretation and experience of living in and/or adapting to a particular health state or aspect of the state. Respondents are asked to imagine living in the health state presented, and the subsequent valuation is influenced by the individual's experience of their own or other people's health [11].

Values may differ based on whether the health state described relates to a physical or mental health condition, and this may be an important feature in epilepsy. However, no evidence regarding the valuation of epilepsy-specific health states across different populations is available.

The aim of this study was, therefore, to compare health state preferences from general population and patient samples using NEWQOL-6D health states. The aim was to understand how different populations perceive epilepsy-specific health states, and whether this impacts on the equivalence of health state values across the samples that could be used in the economic evaluation of epilepsy-specific interventions.

Download English Version:

<https://daneshyari.com/en/article/6012381>

Download Persian Version:

<https://daneshyari.com/article/6012381>

[Daneshyari.com](https://daneshyari.com)