Health-related quality of life and its growing importance in clinical practice

With improving socioeconomic conditions and quality of medical care, patients around the world are becoming more concerned about the impact of disease on their daily life and social interactions. It is particularly important for chronic diseases like diabetes and hypertension that the impact of disease should not only be judged by its mortality but also by its social impact and disability. Unfortunately physicians are often being too concerned about the disease and treatment tend to overlook patients’ perception about their illness and their threshold for tolerance of discomfort.

Health-related quality of life (HRQL) is gaining worldwide acceptance as patient centric approach of any healthcare intervention.\(^1\) HRQL could be defined as physical psychological and social dimensions of health that are influenced by a person’s experiences, beliefs, expectations and perceptions.\(^2\) The idea of HRQL measurement is to convert the subjective feeling of physical and mental health of an individual into an objective numerical score by using properly structured questionnaires. Physical function, emotional status, pain, social function and general perception about health are some of the important components of HRQL measurements.\(^3\)

Patients are the best evaluators for estimating their own HRQL. Perspective of close family members such as a spouse may be considered, for example if there are problems like sexual difficulties or serious behavioural symptoms affecting the patient.\(^1\) By simply asking “Please rate your quality of life or overall health on a scale from 1 to 10,” leaves “quality of life” and “overall health” ambiguously defined.\(^3\) Therefore, HRQL instruments are carefully developed by taking help from clinimetrics and psychometrics analysis.\(^3\)

HRQL instruments could be sub classified into two major subtypes depending on their usage. The instruments which are used across various medical conditions known as generic instruments, prominent examples being SF-36, SF-12, WHO-QOL BREF and EQ-5D. These HRQL scales are important to make comparison across intervention and conditions. They may not cover the disease of interest adequately in sufficient detail and their validation may be inappropriate.\(^1\) Specific instruments are those which focus only on a particular disease of interest and the questions reflect only physical and mental health related to the disease concern. Examples of specific questionnaires include Asthma Impact Survey (AIS-6), Headache Impact Test (HIT-6), Hepatitis Quality of Life Questionnaire (HQLQv2), etc. See [http://www.qualitymetric.com/WhatWeDo/DiseasespecificHealthSurveys/tabid/189/Default.aspx](http://www.qualitymetric.com/WhatWeDo/DiseasespecificHealthSurveys/tabid/189/Default.aspx)

The questionnaires are basically stratified into number of questions which then add up to form a number of domains or dimensions. Mostly equal importance is given on each item considering their values to be equal.\(^4\)

SF-12, one of the most widely used generic questionnaire for quality of life assessment consists of 12 items which assess eight domains: (1) physical functioning;
(2) role-physical; (3) bodily pain; (4) general health; (5) vitality; (6) social functioning; (7) role-emotional; and (8) mental health. The first four domains comprise of physical component summary measure (PCS-12) and mental component summary measure (MCS-12) includes the last four domains.

Physical and mental component summaries are scored from 0 to 100, with 100 representing the best health for scale. If a questionnaire is intended to be used outside the country in which it was developed it is important to translate into local regional language keeping in mind the cultural acceptability and conceptual equivalence.

It is important to establish the validity and accuracy of an instrument before its use in a particular study. The most important property of an instrument used as an outcome measure is responsiveness, the ability to detect changes that occur as the result of an intervention. Cost effective analysis, cost benefit analysis and cross sectional study are some of the important study designs to evaluate HRQL. A HRQL instrument should ideally be administered at the beginning of treatment and subsequently at 3 months or 6 months interval.

The growing importance of HRQL estimation is recognized by clinicians, healthcare policymakers, drug regulatory agencies and pharmaceutical companies all over the world in choosing optimum treatment choice for patients, policy framing, new drug approval and deciding pharmaceutical marketing policies. Physicians are increasing using HRQOL to measure the effects of chronic illness in their patients to understand how an illness interferes with a person's day-to-day life.

HRQL study is also used by public health professional to identify subgroups with poor physical or mental health for better equitable distribution of health care resources. Drug regulatory agencies all over the world giving more emphasis on quality of life data from clinical trials in order give faster approval to a new drug. Pharmaceutical companies also claim superiority of their product and decide marketing price based on quality of life data generated from trials.

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