

Measuring and monitoring quality-of-life in population surveys: still a challenge for public health research

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Monitoring the health status of the population is one of the main activities in public health research. In the past years a paradigm shift has occurred in monitoring and evaluating population health: not only the changes in morbidity or extension of the life span but also the way in which individuals experience their health has gained importance as an outcome criterion.

As we have come to appreciate, health is more than just a constellation of symptoms or the simple presence or absence of disease. As stated early by the World Health Organization, it is "a state of complete physical, mental and social well-being" and can also be viewed as a subjective representation of function and well-being. The WHO definition holds an important expansion of the view of health, which also comprises how an individual feels, psychologically and physically, and how she or he manages with other persons and copes with every day life (Bullinger 1991; Rosser 1988; Spilker 1996). This perceived health is known as health-related quality-of-life (HRQOL) and is described as a multidimensional construct covering physical, emotional, mental, social, and behavioural components of well-being and function as perceived by patients and/or other individuals (Bullinger 1991; Bullinger & Hasford 1991; Stewart & Ware 1992). Historically the quality of life concept was primarily used in political science and politics as well as in the social science literature including sociology, political science, anthropology, and psychology (Spilker 1996). Indicators of quality-of-life of a population were mostly structurally oriented (e. g., gross national product, infant mortality) especially in the 1950s and 1960s. However, from the 1970s and in to the 1980s subjective indicators of quality-of-life, mostly in terms of satisfaction with different areas of every-day-living, were introduced in large population-based surveys. Quality-of-life is now increasingly used as a measure of health status in national health surveys

(Anonymous 1999; World Health Organization 1999) and is one of the major descriptors and outcome criteria discussed in the health care systems in recent years. The term quality-of-life brings a new perspective on population oriented outcomes into the focus of attention. Including HRQOL instruments in public health surveys allows researchers to monitor population health status over time, to detect sub-groups within the general population who might be at risk for poor HRQOL, and to assess the impact of public health interventions within a given population.

The orientation towards quality-of-life as a concept reflects not only the prevalent scepticism concerning the relevance of classical clinical endpoints but has also to be seen in relationship with recent developments in the health care field. These include the increase of the age in populations, resulting in a larger proportion of potentially chronically ill patients along with reduced health care budget. Such changes, implicating also a different allocation of resources, require in most of the health care systems world-wide, especially in the western industrialised nations, a critical view on how quality-of-life is measured on a population level.

During the past several decades there has been an increased recognition of the need to develop brief, standardised and psychometrically robust health status (HRQOL) questionnaires for use in population-based health surveys, in health services research, and in clinical studies of health care interventions (Aaronson 1992). Over 800 quality-of-life instruments have been published in the literature. Among them are internationally available measures such as the Nottingham Health Profile (Hunt et al. 1981), the WHOQOL questionnaire (Orley 1994), and the SF-36 Health Survey (Ware et al. 1993). The use of the SF-36 Health Survey has been wide spread and it has been established as a standard framework for quality-of-life research, having been translated,

psychometrically tested and normed in various representative populations over the years. Normative data make it possible to interpret SF-36 scale and summary measure scores for a group of respondents by comparing them with the distribution of scores for the population and answer the question of whether or not an observed score is typical.

Because perceived health varies with age, gender, the presence of diseases and complaints, with region and socioeconomic status, and because perceived health in a population changes over time, new reference data for the general German population from the 1998 German Health Interview and Examination Study are presented in this issue (Kurth & Ellert 2002). New "norm-based" estimates of scores for the scale and summary measures of the German SF-36 have the

advantage of a direct interpretation on whether this is the score we would expect to find for a defined group of individuals in the German population. Not only are valuable reference data provided on health-related quality-of-life after the change of the German society, but also the analysis on influencing factors on the reported quality-of-life. In asking what are the contributions of social and other determinants to HRQOL, we are going beyond just introducing a new set of variables. We are expanding our understanding of the relationship between influencing factors and health. This level of analysis is urgently needed for developing public health and health care policy on a national and regional basis.

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