Self-rated health is a simple epidemiological variable with a remarkable ability to predict different health outcomes. But is it equally suitable for all social groups?

Health and mortality – two sides of the same coin?

Although health is our most important asset, the concept of health is a difficult and controversial one (1). It has physical, mental and social aspects, and we speak of a holistic, biopsychosocial model of health. The WHO defines health as «a state of complete physical, mental and social well-being», and it is widely accepted that health is more than the absence of disease.

For many years, population-based health surveys have been high on the list of priorities for politicians and researchers. The work of developing sound methods to measure health has been central to this, in addition to surveying specific illnesses and risk factors (2). The Nord-Trøndelag Health Study (HUNT) is one of the most significant health studies, including at international level, and has generated a large body of knowledge that can be used to improve the population’s health. That said, HUNT also has its limitations (3).

Self-rated, also called self-reported or self-perceived, health is an ingenious and simple method of assessing health using one question: In general, how would you rate your health today? Four response alternatives are commonly used: very good, good, fair or poor. Self-rated health is known as an intuitive or spontaneous health assessment: the respondents may be expected to answer quickly, and various alternatives are weighed against each other. There is evidence, however, that the method reflects an enduring, but also dynamic self-concept (4). A number of studies, including in Norway (5), have investigated why different response alternatives are selected (6) and what aspects of the individual’s health and life situation are associated with the responses given (7).

Mortality is another key concept in epidemiology and health research, easier to quantify and relate to than health. The life span of different individuals and groups is compared. Life expectancy is frequently used as a measurement of the health of populations (1).

One might think that mortality is only associated with objective or disease-related aspects of health, but that does not appear to be the case. Numerous studies have shown that self-rated health, as a simple health measurement, is a predictor of mortality even after adjusting for known physical health problems (8–9). Health aspects that are unconnected to fatal diseases, but which originate from everyday ailments and functional impairments, are more crucial to self-rated health and are also stronger predictors of mortality than, for example, medically diagnosed diseases (7, 9). The association between self-rated health and mortality is complex. For example, people who rate their health as good might practice more health-promoting and less risky behaviour (9), which may explain the excess mortality from accidents in the group reporting less good health.

In the past decade, social inequalities in health and mortality have been placed on the Norwegian agenda. Studies have shown that despite their social democratic systems of government, the Nordic countries have equally large differences in self-rated health and mortality as other western European countries. This is also known as the Nordic health paradox (10).

A group of researchers at the Norwegian University of Science and Technology (NTNU) and HUNT have questioned whether there are methodological flaws in the research upon which the authorities base their action plans to reduce the social health inequalities (11). Do the disadvantages misreport their state of health, whereas academics perceive their health more «correctly» based on better knowledge about health? The group has previously published a study in which different educational groups are compared (12), while this issue of the Journal of the Norwegian Medical Association contains an article in which Holseter and colleagues have investigated possible differences between occupational classes and income groups (13). Similar studies have previously been conducted in Sweden, the USA, the Netherlands and France (14).

The authors use mortality as the gold standard and investigate the «credibility» of studies based on self-rated health. As with other countries, they find that the association between self-rated health and mortality is fairly similar between social classes. An important finding is that the mortality of unemployed persons with poor self-rated health was even higher than expected, compared to other groups – highest of all for men. The authors suggest that this excess mortality is not related to health, but probably more correctly, it is not related to identified disease. The authors use the term real or actual health, or objective health. By this they appear to mean diseases or risk factors. We should never forget that health involves more than mere biology (14).

Health and mortality are two different phenomena, which certainly covary to a great extent. It is a matter of a long life and a good life, of adding years to one’s life and life to one’s years. Both are important in public health and in the work to reduce social health inequalities in Norway, a challenge the NTNU researchers rightly highlight in their current studies.

Sturla Gjesdal
sturla.gjesdal@uib.no

Sturla Gjesdal (born 1952), dr.med., professor of family medicine and head of the research group for social epidemiology at the Department of Global Public Health and Primary Care, University of Bergen. The author has completed the ICMJE form and declares no conflicts of interest.

References