Determinants of self-perceived health status in population-based studies

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Abstract

Self-perceived health status reflects people's overall perception of their health, including both physical and psychological dimensions. Based on longitudinal analyses, it has been demonstrated that self-perceived health is a predictor of chronic disease incidence, recovery from illness, functional decline and use of medical services, even when more objective health measures are taken into account. Besides physical health and health behaviors, factors that may contribute to differences in self-perceived health include age, sex, education, income and psychosocial characteristics. Epidemiological data indicate that higher levels of education, higher income, non-smoking status, recreational physical activity, being male, psychological well-being and high self-esteem are all associated with higher scores of self-rated health status. While physical conditions have been reported to be strongly related to health perceptions, some lifestyle factors, socio-economic characteristics and psychosocial factors have also been shown to be statistically significant predictors of self-perceived health status.

Perceived health status reflects people's overall perception of their health, including both physical and psychological dimensions. It is a relative measure and the evidence suggests that people assess their health in relation to their circumstances and expectations, and their peers. To ensure healthy ageing of the population, the later part of the life span of an individual should be free from chronic diseases and impairments. Besides these objective measures of health, the self-perceived health (also referred to as *self-reported health*) has received considerable attention in the recent literature. This is due to its strong association with life expectancy on the one hand, and with the future state of health on the other (1). Individuals' self-assessment of their health status may include some aspects that are difficult to capture clinically, such as incipient disease, disease severity, physiological and psychological reserves and social function. When people rate their health, they think not only of their current situation, but also of declines and improvements.

Self-perception of one's own health reflects the

capability to function in a definite social and organizational situation (1). It is regarded as a prognostic indicator of prevalence of various chronic diseases, affecting their prognosis. Thus, individuals with low values of self-perceived health status may use more frequently medical services and have higher absence from work compared to those with opposite attitudes towards their health (2). Perceived health is often more effective than clinical measures for predicting help-seeking behaviors and health service use. Also, health status is strongly associated with the presence or absence of disease and, therefore, health is by definition a subjective state (3).

Based on longitudinal analyses, it can be concluded that self-perceived health is predictor of chronic disease incidence, recovery from illness, functional decline and use of medical services, even when more objective health measures are taken into account (4,5). Research indicates that people rate their health based on more than their physical status. People without specific health problems do not always rate their health at the top of the scale, many describe it as good, rather than very good or excellent (6).

As well as physical health and health behaviors, factors that may contribute to differences in perceived health include age, sex, education, income and psycho-social characteristics. Epidemiological data indicate that higher levels of education, higher income, non-smoking status, recreational physical activity, being male, psychological well-being and high self-esteem are all associated with higher scores of self-rated health status (7).

According to the Statistics Canada's National Population Health Survey (NPHS), 62% of Canadians aged 25 years or older reported very good or excellent health. Just 11% reported fair or poor health and the remaining 27% described their health as good. Not surprisingly, at older ages the prevalence of very good/ excellent health declined. Older people more frequently reported their health as poor and very poor compared to those younger than 25 years of age, due to the presence of chronic diseases and physical conditions which are significantly more prevalent among older individuals (8).

To get a clearer picture of the determinants of self-perceived health, multivariate models that control for age were used (2). When physical status, socio-economic variables, health behaviors and psycho-social characteristics were taken into consideration, the association between self-perceived health and age largely disappeared. This suggests that the association between age and self-perceived health is often not actually attributable to age, but to these other factors. The findings according to the age groups may partly result from individuals assessing their health in relation to social roles. Hence, if people feel they cannot fulfill these social roles, their health perceptions may be more negative.

According to NPHS, men were more likely than women to describe their health as very good/ excellent (63% versus 60%, respectively). Conversely, a higher percentage of women than men described their health as fair/poor. Women consider a broader set of factors when making general ratings of health. They are more likely to take into consideration psychological factors and the presence of non threatening illnesses.

Educational level is a strong determinant of perceived health and also an important component in the socioeconomic concept that reflects not only living conditions, but also attitudes and health behavior in general. People with lower levels of education have lower odds of reporting very good/ excellent health compared with those with higher levels of education (9). On the other hand, people with a higher socio-economic status report better health than those with lower socio-economic levels (8).

Numerous studies have reported the existence of an association between the level of income inequality and the population health outcomes: average health among people living in high-inequality areas appears to be lower than their counterparts living in low-inequality areas. Also, several studies have reported that state-level income inequality significantly affects self-reported health status even after controlling for individual incomes and other demographical variables (10). Recently, the European Community Household Panel reported that income inequality was negatively and consistently related to self-rated health status in the European Union member states in both men and women. However, despite its statistical significance, the magnitude of the impact of the inequality on health is small (11). When people rate their general health, psychological

factors play a role in perceptions. Therefore, the degree to which physical and mental factors contribute to associations between community belonging and perceptions of general health is unknown (12). People with a very strong sense of community belonging had higher odds of reporting excellent or very good perceived health compared with those whose sense of community belonging was weak, even when other potentially confounding factors were taken into account (age, sex, marital status, socio-economic factors, chronic conditions, employment status, and geography). People who are socially isolated are more likely to suffer from poor physical and mental health and to die prematurely. However, studies on the associations between acute health problems and perceived health status are rare. As for the physical activity, men indicating no leisure-time physical activity, describe significantly more frequently their health as poor and very poor compared to men with satisfactory levels of physical activity. The same pattern was observed for women but it was not statistically significant (8).

In conclusion, while physical conditions have been reported to be strongly related to health perceptions, some lifestyle factors, socio-economic characteristics and psychosocial factors have been also shown to be statistically significant predictors of self-perceived health status. Heavy smoking, irregular exercise and overweight have been associated with fair/ poor health ratings in several reports. Unhealthy changes in lifestyle have been associated with fair/ poor rather than good health. Distress, low self-esteem and low socio-economic status have been reported to be negatively associated with very good/excellent health. The most significant demographic factors that influence self-assessed health are age and the level of education. The accumulation of evidence from different countries on the association between various diseases and self-perceived health status has increased the interest and has raised new research questions about this useful health indicator. Although its precise links with the presence of specific diseases are still not well known, the concept of self-perceived health status is currently used widely in different population-based studies. However, within this very massive literature, very few studies exist that try to establish whether the relationship persists even in low-income settings, especially in the developing world.

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