

Indicators of subjective health in population studies

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Assessment of perceived health status, subjective well-being or health-related quality of life has nearly become a standard in many clinical studies. These concepts are used, for example, as end points to evaluate the impact on the patient of both illness and treatment, to screen for non-specific side effects of therapy, or to compare the patient benefit from treatment alternatives that have similar medical outcomes. In the clinical setting, many different validated measurement tools are available to researchers, who can select the most suitable instrument for a study.

There is also a growing interest in indicators of subjective health in epidemiologic studies and population health surveys. In this area, measures of subjective health serve to describe and monitor over time the burden of illness or to assess the impact of interventions in populations or subgroups of populations (Ravens-Sieberer 2002). Advantages of these indicators include their adaptability to health interview and mail surveys, the direct comparability of results with findings from other (clinical and population) studies using the same instruments, and the broad range of physical and mental conditions that are reflected in these measures.

Much effort has gone into developing standardized measures of subjective health for population studies and carefully evaluating the applicability of instruments originally developed in clinical settings. Results from the German National Health Survey, for example, indicate that Version 1.0 of the Short-Form Health Survey SF-36, one of the most widely used instruments for assessing health-related quality of life, provides valuable information about the association between individual health status and age, gender, social status, place of residence, and health care consumption (Kurth & Ellert 2002). In this issue of SPM Morfeld and co-workers (Morfeld et al. 2005) demonstrate that the revised Version 2.0 of the SF-36 yields psychometrical results that are almost equivalent to those of the original instrument in a

representative population sample. As a considerable number of changes in the wording of questions and response formats have been made in the SF-36 Version 2.0, detailed information about the comparability of results obtained with different versions is of crucial importance for researchers who are planning a new study with the SF-36 and have to decide which version to use. Furthermore, comparative analyses of data from studies with different versions of the SF-36 directly depend on the psychometric equivalence of both versions. While there is growing evidence that indicators of subjective health are valuable tools for health surveys in the adult population, assessment of subjective health in special subgroups, such as children and adolescents, has remained a scientific challenge. The KIDSCREEN instrument is the result of a cross-national collaborative effort of researchers from seven European countries (Ravens-Sieberer et al. 2001). Using this standardized questionnaire specific dimensions of the health-related quality of life of children and adolescents (8–18 years) can be reliably measured. The study of Bisegger and colleagues in this issue (Bisegger et al. 2005) addresses hypotheses about the association of quality of life dimensions with gender and age, which were derived from theories in developmental psychology and empirically tested in an impressive multi-national sample of children and adolescents. It was found that many facets of quality of life included in the KIDSCREEN begin to deteriorate in both boys and girls with the onset of adolescence, in a way that differs between boys and girls. Given the unresolved paradox of puzzling gender differences observed in many population studies of subjective health, findings from this study provide further insight into the processes that may underlie the general observation that women report greater impairment in subjective health than men in most indicators of subjective health status.

Subjective reports of health can be collected in different

ways. Using existing instruments such as the SF-36 or KID-SCREEN is one option. Yet, for specific purposes a tailored set of indicators may be required that cover specific topics of a study. Single questions, original or modified subscales of existing instruments, and newly developed items can be included in a questionnaire or interview. In the study of von dem Knesebeck (2005, in this issue) respondents were specifically asked about their perceived overall health status, depression, and functional limitations. The study showed that the differential exposure hypothesis (assuming higher exposure to psychosocial risk factors in lower social strata) and the differential vulnerability hypothesis (assuming higher impact of psychosocial risk factors on health in lower social strata) are not supported by data collected in a large-scale telephone survey among older people. This

study not only illustrates the appropriate choice of measures according to research objectives, but also demonstrates the suitability of subjective health indicators for substantive research in social epidemiology.

The three papers on indicators of subjective health published in this issue emphasize that application of quality of life and related concepts in population studies is a lively area of research. While these papers add to the increasing evidence about the good applicability and robustness of measures of subjective health in population-based surveys, there is still a need for further studies to determine the best choice of measures for a given purpose and to explore the potential uses and limitations of these indicators in public health studies.

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