

## Health Status and Survival Needs of the Elderly

In the Manitoba Longitudinal Study on Aging, as reported in this issue of the Journal,<sup>1</sup> interview techniques were combined with utilization and death data from the province's health insurance program to study the usefulness of self-rated health (SRH) as a predictor of mortality in the elderly population. That SRH came up significant for mortality following the interview in both the early and later period, after controlling for objective health, age, sex, and residence, is a very interesting finding. The authors offer several possible reasons for it. SRH may be a finely-tuned indicator of physical well-being; or persons with a durable advantage derived from protective health habits are the ones who report good SRH for any current level of objective health; emotional health, including positive feelings, could also be reflected in SRH and its correlation with longevity.

We should examine the measurement methods to understand better the relation of SRH with objective health status (OHS). The latter was measured by claims data, used both qualitatively and quantitatively (e.g., presence of selected serious diagnoses and number of visits for serious conditions). A correction was applied for underusers by counting in their self-reported conditions, thus reducing their OHS; to correct for high users, the effect on OHS of revisits was held in check, and problems that were more severe or changed the probability of recovery from other illnesses were emphasized.

The predictive contribution of SRH could be partly due to a dependence of OHS on utilization behavior. For example, depressed persons may well pay less attention to their diet, exercise, and safety—may even fail to eat—and may understandably view their health as poor. They may not be able to mobilize themselves to go for care either for chronic and severe conditions or for health problems in general, thus improving the OHS score somewhat. Such effects are worth considering when reduction of financial barriers to care makes psychological and access factors more salient. Multiple losses in old age, including widowhood, may result in undiagnosed depression.<sup>2</sup>

Low performance on these health-related behaviors (utilization and health habits) may also be due to pessimism as a personality characteristic—a way of dealing with uncertainty about the probabilities of future events by expecting the worst outcomes to be most likely. Experiencing wars, economic troughs, and nuclear armament may induce resignation by the time old age is attained. Whether resignation, depression, pessimism, and specific bereavement result in low utilization and thus in good OHS but poor SRH is worth studying.

Aside from psychological factors, declines in hearing and vision in old age may affect receipt of information concerning health matters, and consequently reduce utilization.

The problems of older adults who seek medical attention may not receive the attention accorded younger individuals if the elderly are subjected to negative stereotypes such as intellectual decline. "Objective" health status may be a

less valuable indicator for this reason. Diseases may be misclassified (e.g., rheumatoid arthritis starting after age 60 may be confused with osteoarthritis), or they may be hard to detect (e.g., side effects from salicylate compounds are said to be subtle in elderly patients).<sup>3</sup> Complaints of the elderly may be attributed to nonorganic or nonmedical causes, especially when the answers do not come up on the computer display of laboratory findings. Multiple complaints set up a trap for the investigating professional. Consider a patient in her eighties whom we have observed; she had recovered from a coronary attack but complained that she could not eat although she felt hungry. She was carefully monitored for blood pressure and was told that she had a poor appetite because she was depressed after her illness. A new physician making a house call in response to the patient's distress found an abdominal mass that was diagnosed as cancer of the pancreas, and that explained why she had been unable to swallow.

Does having a reason to live extend life? Mortality is a separation from society that is a bigger loss when life is interesting and meaningful to the individual. The work of Phillips and Feldman<sup>4</sup> showed a dip in death rates before important ceremonial occasions—among the famous, before their own birthdays; in cities with a large Jewish population, before Yom Kippur; and in the general population, before presidential elections. Explanations such as unusual excitement or more medical care do not fit the data. Presumably individuals try harder to stay alive. For an election, this could mean both feeling that one's vote counts and curiosity as to the outcome.

How much could attachment to life be increased by changes in the social participation of the aged, and attention to their needs? Serious unmet needs may decrease the meaning of life. The New York City study of the truly handicapped elderly who were eligible for home-delivered meals showed them to be functionally limited in personal care, attending to personal business, and mobility.<sup>5</sup> Only half had reduced-fare cards, because so many were unable to use public transportation. While those studied needed help with various activities of daily living, over half had no personal sources of aid other than the meals supplied. They were obliged to rely on formal sources of service. Of the total group, over one-third were sick more than one month in the past six, and nearly three-fourths said they were troubled by health problems. Almost half had signs of depression, and two-thirds said they were apt to worry. They said they were not getting enough medical care, for lack of money and lack of escort. Yet even among the very handicapped, as among the general population of elderly studied in the Framingham cohort,<sup>6</sup> there was variability in needs and outlook.

Social participation was stressed in Palmore's original work on longevity.<sup>7,8</sup> He excluded self-reported health status from his study of factors predicting longevity in a North Carolina sample of 268 volunteers. SRH was seen as merely a reflection of general health, which was already measured by means of a score given by a physician based on medical

history, physical examination, and laboratory studies. (In the Manitoba study, coincidence of objective and subjective measures was found in only two-thirds of the population.) Palmore found work satisfaction ("work" was allowed to include gardening and housework) to be an important factor contributing to longevity. Overall happiness also mattered.

Satisfaction in some form of activity can be viewed as an interaction between individual taste and opportunities. The role of satisfaction is suggestive for gerontological policy because it can be influenced by many social interventions, starting at younger ages. Economic investment in adaptations of production and recreation systems, as well as retirement income maintenance, would permit higher activity levels by those with sensory impairment, mobility needs, and reduced personal networks.

Research in arthritis care has shown that perceived seriousness of arthritis of the knee in the elderly was more highly correlated with seeking care than was pain and disability. It would seem that a given amount of discomfort becomes threatening under life circumstances that emphasize difficult role responsibilities or isolation from survival supports. The impact of the disease upon the person was not fully or exactly revealed by either objective examination or communication of symptoms.<sup>9</sup>

Information on health status is an input into the health care production process. If decisions made within the system can be improved by information from clients supplementing the data base assembled through professional procedures, effort and expenditure to acquire information on self-rated health and concerns may be economically justified. Such a move would be concordant with acceptance of reduction of social disabilities of aging—as well as reduction of mortality—as targets for a variety of services. It would

also increase the autonomous participation of the aged in health care processes and communicate respect of professionals for patients' self-assessment.

While the improvement of longevity is a fascinating quest, conservation of health capital to the end of life is a realizable goal.

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### ERRATUM

*In:* Landefeld JS, Seskin EP: The economic value of life: linking theory to practice. *Am J Public Health* 1982; 72:555-566.

On page 560, Table 3, under the "Comments" column for the third equation pertaining to "Adjusted Willingness-to-Pay/Human Capital,"  $NL_1$  is defined as "non-linear income." It should be "non-labor income."