Reaching 100 Years of Age May Be More About Attitude and Adaptation Than Health History, Study Finds

Happy senior couple. The research found that critical life events and personal history, along with how people adapt to stressful situations and cope with them are crucial to explaining successful aging. (Credit: iStockphoto/Jacob Wackerhausen)

University of Georgia research has provided new clues on surviving to be 100 years old, finding that how we feel about ourselves and our ability to adapt to an accumulation of challenging life experiences may be as or more important than health factors.

The research, published in the current edition of the journal Current Gerontology and Geriatrics Research, used data collected as part of the Georgia Centenarian Study, one of only two centenarian studies in the country, to measure psychological and social factors in addition to genetics and health of so-called expert survivors. Two hundred forty-four people age 100 years or older were studied between 2001 and 2009. The research found that critical life events and personal history, along with how people adapt to stressful situations and cope with them are crucial to explaining successful aging.

"Understanding health in these terms has huge implications for quality of life," said Leonard Poon, Director of the Institute of Gerontology in the UGA College of Public Health and lead author of the study. "What is happening to you matters, but more importantly, it is your perception of what is happening to you that is really important for your individual health."

A majority of past research on the oldest of the old focused on health factors, but the researchers found that centenarians' feelings about their own health, well-being and support systems, rather than measures such as blood pressure and blood sugar are stronger predictors of survival, said Poon.

Personality also determined how well the centenarians reacted to life stress and change, and therefore whether they were as happy in their old age as they were when young. Healthy 100-year-olds had personalities described as open and conscientious. Neurotic personalities tended to be less healthy, the study found.

An individual confronted with a stressful situation can either find a quick emotional solution or ruminate on the problem, explained Poon. "One is very destructive in terms of general well-being," he said, "and the other is very adaptive."

Other research drawing from the Georgia Centenarian Study compared physical function of the elderly living in the community with those living in retirement facilities and found that physical activity decreased by approximately one-third when community residents moved to retirement facilities.

A decrease in physical activity accelerates a decline in health, explained Elaine Cress, Professor in the Institute of Gerontology and Lead Author of a related study published in the current issue of the Journal Gerontology.

"By understanding physical decline in functioning, caregivers can help maintain a high quality of life for the centenarian with appropriate support," said Cress, who also is a faculty member in the department of kinesiology in the UGA College of Education. "We developed a scale to assess physical performance, which has not been done before with centenarians. This can be used in future research to predict when people are going to start needing more help. They need to know how to plan, and society needs to know how to plan, too."

Although still rare, centenarians are a growing segment of the population. Poon notes there were an estimated 50,454 in 2000, but the number is expected to rise to more than 800,000 by 2050, making accurate information about their well-being increasingly important.

Poon added that one phenomenon that occurs all over the world is that women live longer than men. In industrialized countries such as the U.S., France and Japan, five to six women reach 100 years for every man who does. Only Sardinia has a one-to-one ratio. At the opposite extreme, 13 South Korean women live to be 100 for every man.

"Our next phase is to go to four different countries where there are different gender survival ratios and see why they are the same, why they are different and what makes women live longer than men," said Poon.