The paradox of BMI and life expectancy

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(Medical Xpress)—Although the medical cost to the community rises as more and more people become obese, there is little adverse association between being overweight and life expectancy, new research has confirmed.

The increasing rates of obesity and associated disability and illness mean greater financial costs for the community. This expenditure is partly why obesity may have little effect on life expectancy in the aged.

The Monash University-led collaborative study of over 110,000 people examined the effect of BMI (Body Mass Index, regarded as a measure of

obesity) on life expectancy and the repercussions for health-care systems. The 12-year study included men and women across all age groups.

The results of the research were recently published in the *Asia Pacific Journal of Clinical Nutrition*. The study also included researchers from the National Health Research Institutes, Taiwan and the National Defense Medical Centre, Taiwan.

Co-author, Emeritus Professor Mark Wahlqvist from Monash University's Department of Epidemiology and Preventive Medicine and the Monash Asia Institute, said the study drew attention to the growing need to recognise paradoxes with weight disorders in health care systems, both clinical and public health.

"We found that especially in the elderly, medical expenditure continues to rise with increasing BMI, but there was little relationship with how long a person lived," Professor Wahlqvist said.

One reason for this greater expenditure is that, with age, excess weight is increasingly accompanied by loss of muscle (sarcopenia) and bone (osteopenia or osteoporosis), with their own health consequences.

"The study showed that to maintain a favourable life expectancy for those who fall outside the desirable BMI range, more money is being spent," Professor Wahlqvist said.

BMI indicates a relationship between weight and height. The findings show that, if medical expenditure is to be reduced, people must maintain their BMI in the lower end of the desirable range between 18.5 and 24.

"To reduce the health burden, and the associated medical expenditure by both individuals and governments, it is important that people are

encouraged to maintain a desirable BMI - and to do so by inexpensive exercise as well as diet," Professor Wahlqvist said.

"It also means greater government effort for the well-being of ageing communities is needed."

Professor Wahlqvist said that the economic impact for both individuals and society was a consequence not only of the health costs of obesity but also of the effects it had on independent living, workforce participation and livelihoods.

"Another difficulty to be actively addressed is that the socio-economically disadvantaged are at greater risk of obesity in the first place," Professor Wahlqvist said.

"In times of international financial crisis, vulnerability in the health system becomes more apparent. This can be seen in those countries in the euro-zone with demanding terms for debt alleviation, including cut-backs to health system funding."

More information: apjcn.nhri.org.tw/server/APJCN …/13_2239_577_587.pdf

Provided by Monash University