

Body weight influences both the physical and mental quality of life

Neuherberg, Germany, September 3, 2013. Body weight has a great influence on our quality of life. While physical health deteriorates when weight is gained, mental well-being seems to improve, especially in women. This has been reported by scientists from the Helmholtz Zentrum München in the 'International Journal of Public Health'. These results offer valuable information for preventive strategies in the fight against obesity.

HelmholtzZentrum münchen
Deutsches Forschungszentrum für Gesundheit und Umwelt



Prof. Rolf Holle (left), Michael Laxy (right); Image: Helmholtz Zentrum München

Scientists from the Institute of Health Economics and Health Care Management (IGM) and from the Institute of Epidemiology II (EPI II) discovered that weight gain leads to deterioration in physical health. Female study participants, however, experienced improved mental quality of life as their weight increased, a result that was observed even in women who were already overweight when the study began. For this study, Professor Dr. Rolf Holle, Michael Laxy and their team evaluated data from the population-based longitudinal KORA study on the association between body weight and health-related quality of life. Over a period of seven years, the weight of more than 3000 people was measured, the body-mass index (BMI) was calculated and the health-related quality of life was assessed on the basis of a standardized questionnaire.

"The results show that the influence of body weight on physical and mental health is complex", Holle explains. "However, the understanding of these associations is crucial for developing medically effective and cost-effective strategies to prevent and manage obesity. The challenge is to prevent weight gain and its harmful health consequences, such as diabetes, while simultaneously structuring the programmes in such a way that they counteract impairments in mental well-being. In this context, also gender-specific approaches should be considered", the head of the Economic Evaluation workgroup at IGM concludes.

Around sixty percent of the adult population in Germany is affected by overweight

and obesity. The objective of the Helmholtz Zentrum München is to develop new approaches to diagnose, treat and prevent major widespread diseases.

Further Information

Original publication:

Laxy, M. et al. (2013), The longitudinal association between weight-change and health-related quality of life: The KORA S4/F4 cohort study, International Journal of Public Health, doi: 10.1007/s00038-013-0506-x

[Link to publication](#)

As German Research Center for Environmental Health, Helmholtz Zentrum München pursues the goal of developing personalized medical approaches for the prevention and therapy of major common diseases such as diabetes mellitus and lung diseases. To achieve this, it investigates the interaction of genetics, environmental factors and lifestyle. The Helmholtz Zentrum München has about 2,100 staff members and is headquartered in Neuherberg in the north of Munich. Helmholtz Zentrum München is a member of the Helmholtz Association, a community of 18 scientific-technical and medical-biological research centers with a total of about 34,000 staff members. www.helmholtz-muenchen.de

The Institute of Health Economics and Health Care Management (IGM) examines approaches to improving the effectiveness and efficiency of health care. The health care system faces the challenge of delivering high-quality, economically viable medical services to meet the needs of the population. Rapid advances in medical technology and fast-changing demographics further aggravate this problem. A firmly based evaluation of the effectiveness and efficiency of health care structures and processes is therefore an essential prerequisite for a rational health care policy.

The Institute of Epidemiology II (EPI II) focuses on the assessment of environmental and lifestyle risk factors which jointly affect major chronic diseases such as diabetes, heart disease and mental health. Research builds on the unique resources of the KORA cohort, the KORA myocardial infarction registry, and the KORA aerosol measurement station. Aging-related phenotypes have been added to the KORA research portfolio within the frame of the Research Consortium KORA-Age. The institute's contributions are specifically relevant for the population as modifiable personal risk factors are being researched that could be influenced by the individual or by improving legislation for the protection of public health.

For more than 20 years, the research platform Cooperative Health Research in the

Augsburg Region (KORA) has been collecting and analyzing data on the health of thousands of people living in the Augsburg region. The objective is to elucidate the effects of environmental factors, behavior and genes. KORA focuses on the development and course of chronic diseases, in particular myocardial infarction and diabetes mellitus. Risk factors are analyzed with regard to individual health behavior (e.g. smoking, diet, exercise), environmental factors (e.g. air pollution, noise) and genetics. From the perspective of health care research, questions regarding the utilization of health care resources and the cost of health care are also studied. www.helmholtz-muenchen.de/kora

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