

# Diabetes and obesity more common in socioeconomically deprived regions

February 28 2014

---

Living in a socioeconomically deprived region is a risk factor for being affected by diabetes mellitus and obesity. This holds true regardless of the individual social status of the inhabitants. This is the conclusion reached by scientists from the Institute of Health Economics and Health Care Management (IGM) at the Helmholtz Zentrum München (HMGU) and the Department of Epidemiology and Health Monitoring at the Robert Koch Institute (RKI) in Berlin. "Regional factors, such as the population's average income, unemployment or quality of the living environment can affect the health of all inhabitants, regardless of the educational level of the individual people", explains the lead author Werner Maier.

Under the leadership of Werner Maier in a team headed by Dr. Andreas Mielck and Professor Dr. Rolf Holle at the HMGU, the group of authors evaluated data from more than 33,000 people aged 30 years or more who participated in the RKI's German telephone health interview surveys "German Health Update(GEDA)" in 2009 and 2010.

Residents of socioeconomically deprived regions suffer disproportionately from [diabetes](#) and overweight. This geographical influence is referred to as "regional deprivation". It was determined based on the "German Index of Multiple Deprivation" (GIMD) which is formed from regionally available information on income, employment, education, municipal or district revenue, social capital, environment and security in a defined area. In addition to the GIMD, the data analysis also took into consideration individual risk factors such as age, sex, body

mass index, smoking status, physical activity, education and living with a partner.

In the most deprived regions, the frequency of type 2 diabetes was 8.6 percent among those interviewed and that of [obesity](#) was 16.9 percent, compared to 5.8 and 13.7 percent, respectively, among those interviewed in regions that are only slightly deprived. These results were reviewed to determine relevant differences in all individual factors, with the final result showing that people in the areas with the greatest deprivation still had around a 20 percent greater probability to suffer from [type 2 diabetes](#) than men and women in the least deprived regions. In the case of obesity, there was even an almost 30 percent higher probability associated with greater deprivation. For women, high regional deprivation was a particularly influential independent factor for the occurrence of diabetes and obesity. In men, it was possible to show a statistically significant and independent correlation for obesity, but not for diabetes.

"Our results point out the significance of regional factors in association with common health problems such as [diabetes mellitus](#) and obesity in Germany", explains Dr. Andreas Mielck from the HMGU. "Previous investigations in this area were frequently distorted by individual socioeconomic status, or only used data from a particular region or from outside Germany." Werner Maier adds, "Area-based risk factors such as material and social deprivation are an important starting point in order to develop effective region-specific preventive measures." Dr. Christa Scheidt-Nave from the RKI reports, "It is thanks to large, German-wide representative studies such as GEDA that we have current data on the epidemiology of chronic diseases such as diabetes available to us. For comprehensive prevention strategies, we must identify both regional and individual risk factors and also examine their interaction".

According to the results of Germany-wide health monitoring, some six

million people over the age of 18 years are currently affected by diabetes mellitus in Germany, with more than twice as many adults suffering from obesity.

Provided by Helmholtz Association of German Research Centres

Citation: Diabetes and obesity more common in socioeconomically deprived regions (2014, February 28) retrieved 20 March 2024 from <https://medicalxpress.com/news/2014-02-diabetes-obesity-common-socioeconomically-deprived.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--