

CORRESPONDENCE

Health and Lifestyle in Rural Northeast Germany: The Findings of a Rural Health Study from 1973, 1994 and 2008

by Prof. Dr. med. Dipl.-Soz. Thomas Elkeles, Dr. PH Dipl.-Soz. David Beck, B. Sc. Public Health and Administration Dominik Röding, B. Sc. Public Health and Administration Stefan Fischer, MA Jens A. Forkel in volume 16/2012

2. Elkeles T, Beck D, Röding D, Fischer S, Forkel JA: Health and lifestyle in rural northeast Germany: the findings of a rural health study from 1973, 1994, and 2008. *Dtsch Arztebl Int* 2012; 109(16): 285–92.

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Comparability of Data Is an Issue

The authors presented a data collection on the self-assessment of health and lifestyle of residents of the region Neubrandenburg in the former German Democratic Republic (GDR). For those who have not got the facts at the ready, after re-unification, the GDR regions were disbanded and the Neubrandenburg region was allocated primarily to the federal state of Mecklenburg-Western Pomerania. The downfall of the GDR and the transformation of especially these rural areas in Mecklenburg-Western Pomerania resulted in substantial social dislocations that were partly mentioned in the study but were only marginally considered in the calculation and interpretation of the results.

The results—especially the unanimously expressed lower satisfaction compared with the data of the socioeconomic panel for the west (SOEP), but also the burden of disease—are primarily due to the structural change and to a lesser extent to the rural character and peripheralization of the region under study and the “benefits of modernization.” These include:

- A substantial increase in unemployment after reunification (around 20% in the mid-1990s, currently around 12%, and in some regions of Mecklenburg-Western Pomerania still some 20%),
- The strong trend for young people and families to move away while fewer people move in and the rising number of single-person households,
- The fall in the population (minus 300 000 in 1989–2010, >20% in some areas), and
- The ageing population that has remained (40% drop in people younger than 20 years, 40% increase in those aged 85 or older).

The statement is further qualified by the exhaustion of investigation waves, which dropped over time, as the authors themselves discussed. This study is therefore subject to primarily the bias of the fundamental socioeconomic changes in the federal state (or region) and the bias of unemployed and elderly persons, which makes it difficult to compare the collected data with those collected in other studies within Germany.

DOI: 10.3238/arztebl.2012.0712a

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To Be Interpreted With Caution

I welcome the survey on health and lifestyle in north-eastern Germany, over a lengthy period of time, which Elkeles and colleagues reported. I wish to add two aspects (1).

The more than fourfold increase of the population exercising actively to a total of 56.3% in 2008 compared with 1994 should be interpreted cautiously or put into perspective. Studies that specify criteria about exercise behavior to a measure from which health effects can be expected have shown poignantly lower rates. This means that a classification of physical activity and exercise on the basis of energy consumption can be classed as more meaningful than individual information about exercise activity (2).

Furthermore, from the perspective of ecotrophology, the reduction in the proportion of people with enough time to eat and consume their main meal that was observed over the study period may be partly responsible for the slight increase in the prevalence of obesity, since significant evidence exists for the association of a high eating speed and the development of overweight for children as well as adults (3). DOI: 10.3238/arztebl.2012.0712b

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In Reply:

We thank both our correspondents for their comments and additions.

Professor Gillissen’s hypothesis, that the changes we reported for health and satisfaction with life compared with 1973 were not so much because of the rural environment and peripheralization of our study region but social transformation as a result of the GDR’s downfall, is consistent with discussions that we ourselves had in

the context of the project as well as in the final report (1). Regrettably we did not give enough space in our article to discussing this important hypothesis. We tried to control the “transformation effects” by comparing data from the Rural Health Study (Landesgesundheitsstudie, LGS) with data from national health reports for the old and new federal states. The LGS data show consistently worse regional results than the national data for the new states in total. From this we deduced our hypothesis, that in addition to the “transformation effect” (2), the rural character and peripheralization of our study region had a role. However, we were not able to come up with a direct proof. The reason, among others, is poor comparability of our LGS data with other surveys in health and social reporting. We used our hypothesis of rural character and peripheralization to provide one interpretation, which we presented using the arguments mentioned above and the choice of the term peripheralization. Something that supports our modernization theory is the fact that in spite of pervasive social dislocations in the context of the GDR’s breakdown, living conditions and the rural population’s health have improved compared with 1973.

We agree with Dr Hofmeister’s interpretation that the decrease in the proportion of persons who had sufficient time to eat or for their main meal contributed to the increase in the rate of obesity, and we will consider this hypothesis in planned further analysis of the data regarding nutrition. We also agree that classifications of physical-exercise activity would be more meaningful if data on energy consumption were available. In our online supplement, we explained reasons for why statements about the change of the reported frequencies are to be interpreted with caution on the basis of the

different operationalizations used in precursor studies. If, in common with Rütten et al. (3), one defined a time period of two hours or more of exercise as health-promoting, the people surveyed in the Rural Health Study in 1973 reach proportions of 5.4% and in 2004/08 of 20.8% after adjusting for age. Although the results should be interpreted with caution, our result, that exercise activity has increased in the long term, is therefore confirmed (with the exception of one drop, in 1994).

DOI: 10.3238/arztebl.2012.0712c

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Conflict of interest statement

The authors of all contributions declare that no conflict of interest exists