CORRESPONDENCE

Social Gradients in Myocardial Infarction and Stroke Diagnoses in Emergency Medicine

An Analysis of Socioeconomic Regional Disparities in a German City

by PD Dr. med. Christoph Hanefeld, Alexander Haschemi, PD Dr. PH Thomas Lampert,
Prof. Dr. rer. nat. Hans J. Trampisch, Prof. Dr. med. Andreas Mügge, Janine Miebach, Dr. med. Cordula Kloppe,
and Dipl.-Stat. Renate Klaußen-Mielke in issue 4/2018

Analyzing Socioeconomic Regional Disparities for the Purpose of Healthcare Planning

It is 12 years ago that I first became aware of the subject discussed in the article. The city of Essen had set up a network for myocardial infarction, which divided the city into four areas of roughly the same population share, each to fall under the responsibility of one specific hospital. Much to participants' surprise, the numbers of infarctions subsequently requiring care were widely divergent, as Essen's north and south have very different social structures, which had not been considered in the set-up of the network. Professor Michael Haude, now in Neuss, reported the findings at the time.

Otherwise I welcome the article by Hanefeld et al. (1) without any reservations and congratulate them on their courage in publishing their findings.

In 2015 a senior consultant cardiologist from Bayreuth was dismissed from his job because, according to a population-based assessment, he had undertaken far too many catheter-based interventions. The case made it into the media as a medical scandal, reported in *Spiegel* magazine, among others. Together with Alfred Müller, a statistician in Munich who specializes in analyzing regional socioeconomic disparities, we reproduced the results by simply applying the NICE-deprivation index. Such indexes are used in countries whose health policies include planning measures, in order to adjust structures and needs.

The result was that the consultant cardiologist had not undertaken far too many interventions, but a bit too few of them. The underlying calculations may well be met with interest when presented at international health economics conferences, but cardiologists in Germany are not even curious to see them on a poster. One key message of Hanefeld et al. is therefore that socioepidemiologically, Germany is a backwater. Any medium-level health planner in Denmark or England will conduct such analyses of regional socioeconomic disparities as a matter of default; in Germany, this is still an event of note.

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References

1. Hanefeld C, Haschemi A, Lampert T, et al.: Social gradients in myocardial infarction and stroke diagnoses in emergency medicine—an analysis of socioeconomic regional disparities in a German city. *Dtsch Arztebl Int* 2018; 115: 41–8.

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In Reply:

We thank Dr. Wahler for his comments and his positive comments on our article (1). We agree that in the context of health political planning, analyses of regional socioeconomic disparities make sense in terms of structural adjustments and determining need and that they are necessary. For this reason we explicitly pointed out in our article that the results of the analysis should be considered when organizing emergency medical services.

Dr. Wahler recounts in his letter an incident that he was aware of—which happened in the city of Essen 12 years ago—of an association between the number of patients with myocardial infarctions requiring care and their origin from regions of the city with different socioeconomic profiles. We are not aware of this observation in this form from the local myocardial infarction network, *Herzinfarktverbund Essen*. In the publications regarding *Herzinfarktverbund Essen* that we have at our disposal (2, 3), analyses of regional socioeconomic disparities of this type have not been studied. In these articles, the focus is on the results of regionwide implementation of guideline-conform therapy in patients with myocardial infarction. For this reason we cannot comment on the incident reported by Dr. Wahler.

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Conflict of interest statement

All authors declare that no conflict of interest exists.