

## CORRESPONDENCE

## Mortality Following Myocardial Infarction in Women and Men

by Priv.-Doz. Dr. med. Günther Heller, Dr. P. H. Birgit Babitsch, Dipl. Math. Christian Günster, Priv.-Doz. Dr. med. Martin Möckel in volume 15/2008

### Death Risk of Younger Women Does Not Differ Significantly From That of Older Women

We welcome a sex specific analysis of the data from hospital stays, so as to analyze possible existing inequalities in the quality of medical care.

The authors state that 1 year mortality in women is lower than in men (age adjusted odds ratio 0.93; 95% confidence interval 0.91 to 0.96; *table 2*). On the other hand they say that in some forms of transmural infarctions of the posterior wall, mortality in women is raised "to a low extent and non-significantly", but the confidence interval includes 1 (1.08; 0.95 to 1.23; *figure 1*). 30 day mortality in women <50 years of age is supposedly slightly raised, but the confidence interval in this setting also includes 1, as in other age groups. The confidence intervals are inversely related (*figure 2*). As I understand it, no reliable statistical results of the analyzed data sets are available to demonstrate obvious deficits in the care of women after myocardial infarction. Obviously, not even myocardial infarction registers such as MONICA/KORA contain robust data to suggest that women experience care of a lesser quality. However, why in this southern German region, more myocardial infarctions were diagnosed in younger women aged 25 to 54 in 2001 to 2003 than in 1985 to 1987, whereas infarction rates dropped in older women (55 to 74 years of age) is unclear.

Possibly, risk factor profiles have changed to different degrees over time and across age groups; maybe even an increased awareness among doctors in dealing with heart diseases has had an influence.

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### Conflict of interest statement

The author is a member of an advisory working group for the internet portal "Women's health and health promotion" (BZgA: Bundeszentrale für gesundheitliche Aufklärung).

### In Reply:

The conclusion in the first paragraph of the letter from Prof. Dören seems to match the statements and interpretations of our study and does not seem to require a reply. The second paragraph addresses the results of the MONICA (Augsburg) and KORA studies, especially the increase in myocardial infarctions in younger patients (25–54) from 1985/87–2001/03. No confidence intervals are given for the mentioned incidence rates in younger women in the cited study; no statistical test was conducted either. In view of the small number of cases in this subgroup it might almost be presumed that the described increase in the incidence of myocardial infarction in younger women does not reach significance. However, the rise in incidence rates in this cohort may be explained by "increased awareness among doctors" in this cohort—an assumption that is supported by only little empirical proof, as far as we're aware. In reverse, a clear increase in smoking—a crucial, behavior related risk factor that is bound to result in an increase in myocardial infarction—has been shown for younger women in Germany in several large population based studies.

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The authors declare that no conflict of interest exists according to the guidelines of the International Committee of Medical Journal Editors.