CORRESPONDENCE

Primary Care in Germany – an International Comparison

Results of a Survey Using a Validated Instrument

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in volume 38/2007

Response Rate Too Low

The Seven Countries Study obtains its sample of physicians interviewed in Germany from classified telephone directories. 18.1% of responding interview partners are insufficient for a generalization. The statistical bias of list-based selection is associated with a low survey rate. Recruitment of the interviewed persons referred to as random and representative does not describe the selection-by-lot procedure. The methodology section refers to simple randomness, and yet the data are adjusted according to German Federal States. Conversely, it would have been necessary to define the sample sizes in advance to obtain a representative picture of state contingents.

Significance is the result of inferential statistics and not of descriptive statistics which evaluate distribution. "No adjustment was made for multiple testing" – hence, testing was multiple. A correction of the significance, e.g., a Lilliefors correction for nonparametric testing of distribution, or a Bonferroni correction for inferential testing, was not performed. Knowledge questions which would have revealed awareness of guidelines were not asked. "Very many – several – very few" was the criterion for accuracy of the permissible responses.

Inferential statistics presuppose the prior existence of a pair of hypotheses. Workload as a source of professional dissatisfaction is not proven with the Seven Countries comparison. Final thinking of the kind practiced in the scholastic sphere becomes apparent in the discussion when the authors offer self-culpable working patterns as an explanation. Presumption, i.e., working with a preconceived opinion, is the hallmark of imprecise discourse.

DOI: 10.3238/arztebl.2008.0084a

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In Reply:

As described, this was a simple random selection. Precisely because of the low response rate, special arrangements were necessary to check the structural identity of the sample and total population. One such expedient was weighting according to relevant influencing variables. In Germany, these were gender, specialty

area, and Federal State. Although these were representatively distributed for Germany (see *additional table 2*), this was not the case in all countries. In the UK, for example, there were considerable structural deviations in terms of gender and region. Since the structural identity of the sample with the total population was not assured from the outset, the weighting was required as described. A further provision was to compare the sample with the total population for two further possible influencing variables, for which no weighting had been performed: age distribution and proportion of physicians in one-person practices (see *supplement*). Here too there were no relevant differences. As a third step, the multivariate analyses were adjusted according to other potential influencing variables.

The definition of significance used in the article is indeed to be understood purely descriptively, as expressly stated in the methodology section. Relevant hypotheses are therefore only generated through the descriptive p values and not statistically proved. Further, confirmatory studies would be necessary to deliver such proof. An adjustment for multiple testing is not useful in a descriptive analysis because the type and number of hypotheses are not established from the outset. The hypothesis that workload could be a source of professional dissatisfaction is also only generated, but not statistically proved, by the results of the survey.

DOI: 10.3238/arztebl.2008.0084b

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Conflict of interest statement

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