CORRESPONDENCE

The Prevalence of Dementia and Cognitive Impairment in Hospitals

Results from the General Hospital Study (GHOSt)

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Prolonging Influence on Length of Stay

According to Bickel et al., “Two out of five elderly patients in general hospitals suffer from a cognitive disturbance” (1). 18.4% were afflicted with dementia. Correctly, the authors note that this was the proportion of those patients who were in the hospital at the same time. In our opinion, the 18.4% point prevalence rate corresponds to a period prevalence rate of almost 10% of patients aged 65 and older for whom dementia has been recorded as a secondary diagnosis in routine data (2).

In studies on the frequency of illnesses in hospitals, the influence of length of stay should be considered. The likelihood that a treatment case is included in a survey on a reference date increases with the corresponding patient’s length of stay. For instance, a long-term patient cared for all year round is included on each reference date; for a one-day case, the probability is only 1/365. Illnesses for which hospitalization represents a risk of acquisition therefore have a higher point prevalence rate than period prevalence rate. The same applies to illnesses that prolong the stay. As both effects can be combined, deviations of a factor of 2 are possible.

Dementia as an influencing factor that increases length of stay has been discussed (3). This can also be assumed for dementia-related illnesses as well as for older age. We therefore recommend that you recalculate the results so that a comparison can be made with

period prevalence rates, for example using a direct standardization using the number of days of the length of stay. We would not be surprised if the conclusion were: one of every ten elderly patients in general hospital care is afflicted with dementia. This would be a validation for using routine data when including vulnerable populations into multi-institutional quality management initiatives.

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Conflict of interest statement

The authors declare that no conflict of interest exists.

In Reply:

With respect to dementia in the general hospital setting, the term “prevalence” is often used in an undifferentiated form.

This may give the false impression that it always refers to the same measurement of frequency of illness, to which Stausberg and colleagues draw our attention. We have to differentiate between at least two frequency measurements: on the one hand, the average proportion of patients with dementia of all patients who are hospitalized on a reference date (point prevalence); and on the other hand, the proportion of patients with dementia of all patients treated (admission or period prevalence).

The greater the differences between the length of stay of patients with and without dementia, the more these two measurements diverge from each other.

Stausberg and colleagues suspect that our prevalence rate of 18.4% might be based on a period prevalence of around 10% and recommend that we directly standardize against the length of stay for comparative purposes.

According to a recent review, most studies indeed suggest that length of stay is significantly longer for patients with dementia as a comorbidity (1). Whether that also applies to Germany is still unclear. The most extensive study to date, of insured persons in Saxony, showed no differences (2).

As our study was cross-sectional, we do not know the total length of stay of patients (3). However, the length of stay from hospital admission until the reference date survey did not differ for patients with or without dementia. In accordance with the analysis results from Saxony (2), we see this as an indication that the high point prevalence in Germany is mainly due to higher hospital admission rates of people with dementia, and not due to a longer length of stay per treatment episode.

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