

Proposal

The Role of Subjective Memory Complaints in Mortality in Incident Dementia

Exposé wurde in AgeCoDe/AgeQualiDe TK 9 am 22.12.2014 genehmigt.

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Background and Aims:

Unawareness of memory impairment has been shown to be common among subjects with dementia (Aalten et al., 2005). It ranges from belittlement to full denial of problems whereby deficits are often attributed to mere aging (Clare, Goater & Woods, 2006). But this unawareness has been shown to implicate less help-seeking behaviour, reduced compliance, and compromised patient safety (Patel & Prince, 2001; Starkstein et al., 2007).

In this study, we want to investigate whether subjective memory complaints (SMC) also have an impact on mortality in incident dementia, hypothesizing that unawareness of memory impairment – the absence of SMC so to speak – increases mortality in dementia, based on the assumption that (I) awareness of SMC has been shown to lead to an earlier detection of dementia (Geerlings et al., 1999; Jessen et al., 2010) and (II) reduces dementia-free survival (Luck et al., 2014). If that is the case, then mortality might be reduced in subjects with SMC and increased in subjects unaware of memory impairment.

If SMC – especially in relation to worry – leads to an early diagnosis, than early treatment strategies and adequate care can be applied. Moreover, SMC might indicate a generally higher health consciousness, a greater compliance to treatments, or a better adaption to dementia, e.g. in adjusting the housing situation or in accepting social support – altogether, this might lead to an extended survival. Such a possible impact of SMC on mortality in dementia would put even more emphasis on the notion that such subjective memory complaints should be taken seriously in clinical practice.

To our knowledge, no study on this topic has been conducted yet.

Sample:

All interviewed AgeCoDe patients with a diagnosis of incident dementia in FUI-V.

Outcome:

- differences in socio-demographic and health characteristics between subjects with SMC with related worry, with SMC without related worry and subjects without SMC at onset of incident dementia
- median survival times after dementia onset in regard to absence and presence of SMC and in relation to worry
- relative loss of life years compared to the general population
- predicting effect (hazard ratio) of SMC on mortality in incident dementia at disease onset adjusted for socio-demographic factors, cognitive functional variables and comorbidity as potentially confounding variables

Analysis:

a) Analysis of group differences (Mann-Whitney *U* test, *t*-Test, and χ^2 -Test as appropriate)

How do subjects with SMC with related worry, subjects with SMC without related worry and subjects without SMC differentiate in terms of socio-demographic and health characteristics? Characteristics will be assessed referring to the point of dementia onset, specifically:

- age
- gender
- level of education
- marital status
- degree of cognitive impairment (MMSE score)
- functional impairment (IADL)
- comorbidity (diabetes mellitus, hypertension, stroke, CHD, TIA, PAOD, TBI, cardiac arrhythmias, hyperlipidaemia, myocardial infarction, hyperthyroidism, hypothyroidism, hypercholesterolemia, stenosis of afferent cerebral vessels)
- depressive symptoms (GDS score)
- smoking
- alcohol consumption
- medication intake
- physical activity

b) Kaplan-Meier analysis

Survival analysis with Kaplan-Meier is to estimate median survival times with regard to the absence of SMC and the presence of SMC with and without related worry in incident dementia cases from disease onset. The results will be compared to estimates of general life expectancy in the German population to evaluate the overall impact in terms of life years lost.

c) Cox regressions

We want to determine the effect of SMC on morality in incident dementia after disease onset adjusted for confounding variables, such as socio-demographic variables (e.g. education) and health characteristics (comorbidity, medication intake, smoking, alcohol consumption, depressive symptoms).

References:

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