#3122 Title: Is Subjective Cognitive Decline (SCD) a better marker of susceptibility to Functional Cognitive Disorder (FCD) than to neurodegeneration?: the Caerphilly Prospective Study

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Objective/ aims:
Does Subjective Cognitive Decline (SCD) indicate susceptibility to Functional Cognitive Disorder (FCD) more often than it indicates neurodegeneration? Prior research has focused on clinical populations where FCD is increasingly identified, but associations could differ at the community level. A clinical diagnosis of FCD requires cognitive symptoms, internal inconsistency, the absence of another explanatory disorder, and significant impairment; but we know little about its aetiology and prevalence. Cognitive internal inconsistency has not been systematically studied.

Methods:
1,143 men were followed in the Caerphilly Prospective Study. Their subjective experience of cognitive change at average age 73 years was compared to their previous rate of objective cognitive change (using the Cambridge Cognition Examination). Logistic regression models examined potential predictors of SCD (measured in the preceding decade) including sociodemographic factors, vascular risk markers (ischaemic heart disease, vascular medications, smoking history), alcohol exposure, sleep problems, depression, anxiety trait, and objective cognition. We also looked for markers of cognitive internal inconsistency (delayed recall proportionately better than immediate recall, using the Rivermead Behavioural Memory Test). Finally, subjective and objective cognition at average age 73 were used to predict change in objective cognition nine years later.

Results:
SCD was common (30%), and only weakly related to prior objective cognitive decline (sensitivity 36% [95% CI 30-42], specificity 72% [95% CI 68-75]). Longitudinal independent predictors of SCD were older age, poor sleep quality and higher trait anxiety: rate of decline in objective cognition did not independently predict subsequent SCD (adjusted OR 1.18 [95% CI 0.72 – 1.95]). Those with SCD (compared to those without) had mildly worse scores on immediate recall, but their delayed recall was in proportion to their immediate recall, i.e., there was no evidence of cognitive internal inconsistency. SCD did not predict future objective cognitive change (p=0.84). Important limitations include the male-only sample and the possibility of survivor bias.

Conclusions:
SCD is common, but is only weakly associated with prior objective cognitive decline, is not predicted by vascular risk markers (aside from age), and does not predict future objective cognitive decline. The high community prevalence of SCD is instead driven partly via sleep difficulties and anxiety. Our results suggest those with SCD may have a mild deficit in attentional processes but relatively intact memory for the items they do encode. Subjectively experiencing cognitive decline in the absence of an objective decline appears to be a highly prevalent example of poor meta-cognition, which could be a driver to later FCD.