Poster session 1

P1-222 PREDICTORS OF INSTITUTIONALISATION IN INDIVIDUALS WITH AND WITHOUT DEMENTIA: RESULTS FROM THE LEIPZIG LONGITUDINAL STUDY OF THE AGED (LEILA75+)

doi:10.1136/jech.2011.142976e.15

¹M Luppa,* ^{1,2}T Luck, ³H Matschinger, ⁴H H König, ³S G Riedel-Heller. ¹Institute of Social Medicine, Occupational Health and Public Health, Public Health Research Unit, Leipzia, Germany: ²LIFE—Leipzia Research Center for Civilisation Diseases, University of Leipzig, Leipzig, Germany; ³Institute of Social Medicine, Occupational Health and Public Health, Leipzig, Germany; ⁴Department of Medical Sociology and Health Economics, University Medical Center Hamburg-Eppendorf, Hamburg, Germany

Background In previous decades a substantial number of studies examined predictors of nursing home admission (NHA) among elderly individuals with and without dementia. As the first, this study aims to analyse predictors of NHA of incident dementia cases and of individuals without developing dementia before NHA.

Methods Data were derived from the Leipzig Longitudinal Study of the Aged (LEILA 75+), a population-based study of individuals aged 75 years and older. Socio-demographic, clinical, and psychometric parameters were requested every 1.5 years over six waves. Kaplan-Meier estimates were used to determine mean time to NHA. Cox proportional hazards regression was used to examine predictors of long-term institutionalisation for both subsamples.

Results Of 109 subjects with incident dementia who resided in private home at the time of the dementia diagnosis, 52 had become residents by the end of the study. Being widowed/divorced (compared to being married) was associated with a significantly shorter time until institutionalisation (univariate model: HR = 4.50, 95% CI 1.09 to 18.57). Of the dementia-free elderly individuals, 7.8% (n=59) were institutionalised during the study period. Characteristics associated with a shorter time to NHA were increased age, living alone, functional and cognitive impairment, major depression, stroke, myocardial infarction, a low number of specialist visits and paid home helper use. **Conclusions** Being without a spouse seems to be a predictor of institutionalisation in incident dementia cases. For dementia-free individuals, the effect of severe physical or psychiatric diseases and living alone on NHA is considerably increased.

| P1-223 |

MILD COGNITIVE IMPAIRMENT: INCIDENCE AND RISK FACTORS: RESULTS OF THE LEIPZIG LONGITUDINAL STUDY OF THE AGED (LEILA75+)

doi:10.1136/jech.2011.142976e.16

^{1,2}T Luck, ¹M Luppa,* ¹S Briel, ⁵H Matschinger, ³H H König, ⁴A Villringer, ⁵S G Riedel-Heller. ¹Institute of Social Medicine, Occupational Health and Public Health, Public Health Research Unit, University of Leipzig, Leipzig, Germany; ²LIFE—Leipzig Research Center for Civilisation Diseases, University of Leipzig, Leipzig, Germany; 3Department of Medical Sociology and Health Economics, University Medical Center Hamburg-Eppendorf, Hamburg, Germany; ⁴Max Planck Institute for Human Cognitive and Brain Sciences and Day Clinic of Cognitive Neurology, University of Leipzig, Leipzig, Germany; 5 Institute of Social Medicine, Occupational Health and Public Health, University of Leipzig, Leipzig, Germany

Objectives Mild Cognitive Impairment (MCI) constitutes a prestage of dementia in many cases. The aims of the present study were to estimate age- and gender-specific incidence of MCI and to identify risk factors for incident MCI in a population-based sample of cognitively healthy subjects aged 75 years and older.

Methods Data were derived from the Leipzig Longitudinal Study of the Aged (LEILA75+), a population-based study of individuals aged 75 years and older. Incidence was calculated according to the 'person-years-at-risk' method. Cox proportional hazards models were used to identify risk factors for incident MCI.

Results During the 8-year follow-up period, roughly one fourth (n=137; 26.4%) of the population at risk developed MCI. The overall incidence of MCI for subjects aged 75 years and older was 76.5 (95% PCI 64.7 to 90.4) per 1,000 person-years (overall personyears =1791.08). The incidence rate was highest in age group 85+ years and higher in women than men (80.8, 95% PCI 66.6 to 98.0 vs 65.8, 95% PCI 47.0 to 92.1). Cox proportional hazards model identified older age, subjective memory complaints, impairment in instrumental activities of daily living, and lower cognitive performance as significant risk factors for incident MCI.

Conclusions MCI has high incidence in the elderly population. The inclusion of restrictions in instrumental activities of daily living in the criteria of MCI particularly might be useful to improve the prediction of dementia. Subjective memory complaints in previously cognitively healthy individuals should be taken seriously as a possible pre-stage of MCI.

P1-224 I IMPACT OF IMPAIRMENT IN INSTRUMENTAL ACTIVITIES OF DAILY LIVING AND MILD COGNITIVE IMPAIRMENT ON TIME TO INCIDENT DEMENTIA: RESULTS OF THE LEIPZIG LONGITUDINAL STUDY OF THE AGED (LEILA75+)

doi:10.1136/jech.2011.142976e.17

^{1,2}T Luck, ¹M Luppa,* ^{3,4}M C Angermeyer, ⁵A Villringer, ⁶Hans-Helmut König, ⁷S G Riedel-Heller. ¹Institute of Social Medicine, Occupational Health and Public Health, Public Health Research Unit, University of Leipzig, Leipzig, Germany; ²LIFE— Leipzig Research Center for Civilisation Diseases, University of Leipzig, Leipzig, Germany; 3Center for Public Mental Health, Gösing a. W., Austria; 4Department of Public Health, University of Cagliary, Cagliary, Italy; 5Max Planck Institute for Human Cognitive and Brain Sciences and Day Clinic of Cognitive Neurology, University of Leipzig, Leipzig, Germany; ⁶Department of Medical Sociology and Health Economics, University Medical Center Hamburg-Eppendorf, Hamburg, Germany; ⁷Institute of Social Medicine, Occupational Health and Public Health, University of Leipzig, Leipzig,

Background Early diagnosis of dementia requires knowledge about associated predictors. The aim of this study was to determine the impact of mild cognitive impairment (MCI) and impairment in instrumental activities of daily living (IADL) on the time to an incident dementia diagnosis.

Methods Data were derived from the Leipzig Longitudinal Study of the Aged (LEILA75+), a population-based study of individuals aged 75 years and older. Kaplan-Meier survival analysis was used to determine time to incident dementia. Cox proportional hazards models were applied to determine the impact of MCI and impairment in IADL on the time to incident dementia.

Results 180 (22.0%) of 819 initially dementia-free subjects developed dementia by the end of the study. Mean time to incident dementia was 6.7 years (95% CI 6.5 to 6.9). MCI combined with impairment in IADL was associated with a higher conversion rate to dementia and a shorter time to clinically manifest diagnosis. The highest risk for a shorter time to incident dementia was found for amnestic MCI combined with impairment in IADL: the mean time to incident dementia was 3.7 years (95% CI 2.9 to 4.4) and thus half as long as in subjects without MCI and impairment in IADL.

Conclusions Subjects with MCI and impairment in IADL constitute a high-risk population for the development of dementia. The consideration of impairment in IADL should constitute an important step towards an MCI concept being clinically more useful for prediction of dementia.

P1-225 Incidence of mild cognitive impairment: A SYSTEMATIC REVIEW

doi:10.1136/jech.2011.142976e.18

^{1,2}T Luck, ¹M Luppa,* ¹S Briel, ³S G Riedel-Heller. ¹Institute of Social Medicine, Occupational Health and Public Health, Public Health Research Unit, University of