

Methods: The registration is on line on webpage www.svedem.se. The descriptive statistics, limitation, strengths especially in primary care units be discussed.

Results: The database was initiated in May 2007 and covers almost all of Sweden. There were 50 000 patients registered during 2007–2014. The role of primary care units increased in that time and helped for diagnosis of new cases.

Conclusion: SveDem provides knowledge about current dementia care in Sweden and serves as a framework for ensuring the quality of diagnostics, treatment and care across the country. The special role of primary care in dementia work up is important.

doi:[10.1016/j.jns.2015.08.111](https://doi.org/10.1016/j.jns.2015.08.111)

28

WFN15-1276

Dementia 2

The cost of dementia: The case of Chile. Results of the cuideme study

D. Hojman^a, F. Duarte^a, J. Ruiz-Tagle^a, J. Nuñez-Huasaf^b, M. Budinich^c, A. Slachevsky^d. ^aDepartment of Economics, University of Chile, Santiago, Chile; ^bCoprad, Corporacion Profesional de Alzheimer y Otras Demencias, Santiago, Chile; ^cKintun, Municipalidad de Peñalolen, Santiago, Chile; ^dNeurology Department, University of Chile Hospital del Salvador Clinica Alemana, Santiago, Chile

Background: Few studies have estimated the economic cost of dementia in Latin America and there is scant research on how this cost may vary across different socioeconomic status (SES) groups.

Objective: Study the economic cost of dementia in Chile, and its variation according to SES.

Patients and methods: 391 informal primary caregivers fulfilled the RUD-Lite and a SES questionnaire. The cost is decomposed into direct medical costs (medical care, drugs, exams), direct social costs (social service, daycare) and indirect costs –mostly associated to informal care. The study was approved by the Ethical and Scientific Committee - SSMO.

Result: Mean monthly cost per patient is 915 USD. Direct medical costs account for 20 per cent of the cost; direct social costs are 5 per cent of the total and indirect costs is 75 per cent of total cost. The mean monthly cost is inversely related to SES. The monthly cost for the high SES is 696 USD while for the low SES it's 1021 USD.

Conclusion: Direct medical costs increase with the SES of patients - reflecting differences in purchasing power-, indirect costs are inversely related to SES and more than compensate differences in medical costs. In lower SES groups, informal care is mostly provided by female caregivers who are inactive in the labor market. Compared to other HIC countries, the averaged cost is lower (10980 versus 32865 USD) and the distribution of informal cost is higher (70% versus 40%), consistent with the absence of universal coverage of dementia and a coherent public health response.

Funding: Fondecyt 1140423- CONICYT & Project "IV Concurso de Investigación SSMO Santiago - Chile.

doi:[10.1016/j.jns.2015.08.112](https://doi.org/10.1016/j.jns.2015.08.112)

29

WFN15-1410

Dementia 2

Systemic inflammation is linked to default mode network functional connectivity in mild alzheimer's disease and mild cognitive impairment

M. Balthazar^a, C.V.L. Teixeira^a, T.N.C. Magalhães^a, T.T. Hayata^a, M. Weiler^a, B.M. Campos^a, L. Talib^c, O. Forlenza^c, A.S. Moraes^b, L.M.B. Santos^b, F. Cendes^a. ^aNeurology, University of Campinas, Campinas, Brazil;

^bBiology, University of Campinas, Campinas, Brazil; ^cInstitute of Psychiatry, University of São Paulo, São Paulo, Brazil

Introduction: The default mode network (DMN) is early affected in AD. Inflammatory processes also play a role in pathological AD cascade, but its relationship with changes in the DMN is still unknown. We aimed to investigate the relationship between inflammatory cytokines and DMN functional connectivity (FC) in aMCI and AD patients.

Methods: 34 aMCI (positive CSF biomarker) and 30 mild AD patients were included. Images were acquired on a 3.0 T MRI scanner. DMN mask was used as a template to extract each patients FC value of the DMN subregions. We performed multiple regression tests, adding inflammatory cytokines (IL-1B, IL-6, IL-8, IL-10, IL-12, TNF- α) as independent variables and DMN regions FC values as dependent variables.

Results: In the aMCI group, medial parietal region FC correlated with age ($p = 0,004$, $t = -3,38$) and IL 10 ($p = 0,03$; $t = -2,25$, model $R^2 = 0,50$). The frontal medial region FC correlated with age ($p = 0,03$; $t = -2,23$), IL 8 ($p = 0,001$; $t = -3,71$) and TNF- α ($p = 0,01$; $t = 2,71$, model $R^2 = 0,53$) and the temporal region FC correlated with TNF- α ($p = 0,001$; $t = 3,71$) and age ($p = 0,02$; $t = -2,47$, model $R^2 = 0,51$). Regarding the AD group, the medial temporal region FC correlated only with IL 6 ($p = 0,008$; $t = -3,04$, model $R^2 = 0,39$).

Conclusions: We showed for the first time that systemic inflammation predicts FC in the DMN of aMCI and AD patients.

doi:[10.1016/j.jns.2015.08.113](https://doi.org/10.1016/j.jns.2015.08.113)

30

WFN15-1495

Dementia 2

Subjective spatial navigation complaints are associated with regional brain atrophy and APOE in elderly with subjective memory impairment

Z. Nedelska^a, J. Lacro^a, M. Maciak^b, M. Uller^c, P. Kala^a, P. Klimes^d, J. Cimbalnik^d, M. Vyhnalek^a, J. Hort^a. ^aDepartment of Neurology, Charles University in Prague 2nd Medical Faculty and International Clinical Research Center Brno, Prague, Czech Republic; ^bProbability and Mathematical Statistics, Charles University in Prague Faculty of Mathematics and Physics, Prague, Czech Republic; ^cCybernetics and artificial intelligence, Czech Technical University in Prague, Prague, Czech Republic; ^dBiomedical Engineering, St. Annes University Hospital and International Clinical Research Center, Brno, Czech Republic

Background: subjective memory complaints (SMC) may confer higher risk of developing Alzheimer's disease (AD) known for its spatial navigation impairment. Whether subjective spatial navigation complaints (SSNC) associate with objective impairment in SMC subjects is unknown. We analyzed relationship between SSNC and brain atrophy in SMC compared to aMCI patients and controls.

Methods: after providing consent and study approval, consecutive patients with SMC ($n = 61$), aMCI ($n = 60$) and cognitively normal elderly (CN, $n = 12$) were recruited from memory clinic in Prague. All had neuropsychology, 1.5 T brain scan, APOE genotyping and SSNC questionnaire inquiring about spatial skills developed in house. Brain volumes and cortical thinning were calculated using Freesurfer. Spearman correlations between SSNC and imaging measures were assessed at $\alpha = .05$.

Results: SMC patients scored worse on SSNC questionnaire than CN ($p = .013$), whereas aMCI patients did not ($p = .14$). aMCI patients had more atrophy in several regions including hippocampus, entorhinal, parahippocampal and precuneus cortex compared to CN