



AGING RESEARCH CENTER (ARC)
KAROLINSKA INSTITUTET & STOCKHOLM UNIVERSITY
GÄVLEGATAN 16 SE-113 30 STOCKHOLM SWEDEN

ARC publications

2012



**Karolinska
Institutet**



**Stockholm
University**

ORIGINAL ARTICLES

A. Longevity, morbidity and functioning

1. Almborg AH, Welmer AK. Use of the International Classification of Functioning, Disability and Health (ICF) in social services for elderly in Sweden. *Disabil Rehabil* 2012; 34(11):959-964.
2. Kåreholt I. Age and sex differences in the relation between education and physical and cognitive functioning among men and women aged 76 years and older. *Int J Behav Med* 2012; 19(S1):224.
3. Rizzuto D, Orsini N, Qiu C, Wang HX, Fratiglioni L. Lifestyle, social factors, and survival after age 75: population based study. *BMJ* 2012; 345:e5568.
4. Rydwick E, Welmer AK, Kåreholt I, Angleman S, Fratiglioni L, Wang HX. Adherence to physical exercise recommendations in people over 65 – The SNAC-Kungsholmen study. *Eur J Public Health* [In press: online] 2012. Available from: doi: 10.1093/eurpub/cks150.
5. Shaw BA, Agahi N. A prospective cohort study of health behavior profiles after age 50 and mortality risk. *BMC Public Health* 2012; 12:803.
6. Sommerfeld DK, Welmer AK. Pain following stroke - initially and at 3 and 18 months after stroke, and its association with other disabilities. *Eur J Neurol* 2012; 19(10):1325-1330.
7. Wang HX, Jin Y, Hendrie HC, Liang C, Yang L, Cheng Y, et al. Late life leisure activities and risk of cognitive decline. *J Gerontol A Biol Sci Med Sci* 2012; 68(2):205-213.
8. Wang HX, Xu W, Pei JJ. Leisure activities, cognition and dementia. *Biochim Biophys Acta* 2012; 1822(3):482-491.
9. Welmer AK, Kåreholt I, Angleman S, Rydwick E, Fratiglioni L. Can chronic multimorbidity explain the age-related differences in strength, speed and balance in older adults? *Aging Clin Exp Res* 2012; 24(5):480-489.
10. Welmer AK, Mörck A, Dahlin-Ivanoff S. Physical activity in people 80 years and older as a means of counteracting disability, balanced in relation to frailty. *J Aging Phys Act* 2012; 20:317-331.

B. Treatment and care of elderly persons

11. Haasum Y, Fastbom J, Fratiglioni L, Johnell K. Undertreatment of osteoporosis in persons with dementia? A population-based study. *Osteoporos Int* 2012; 23(3):1061-1068.
12. Haasum Y, Fastbom J, Johnell K. Institutionalization as a risk factor for inappropriate drug use in the elderly: a Swedish nationwide register-based study. *Ann Pharmacother* 2012; 46(3):339-346.
13. Johnell K, Fastbom J. Comparison of prescription drug use between community-dwelling and institutionalized elderly: a nationwide study. *Drugs Aging* 2012; 29(9):751-758.
14. Sköldunger A, Wimo A, Johnell K. Net costs of dementia in Sweden - an incidence based 10 year simulation study. *Int J Geriatr Psychiatry* 2012; 27(11):1112-1117.

15. Wastesson JW, Parker MG, Fastbom J, Thorslund M, Johnell K. Drug use in centenarians compared to nonagenarians and octogenarians in Sweden: a nationwide register-based study. *Age Ageing* 2012; 41:218-224.
16. Weitoft GR, Ericsson O, Fastbom J. Prescription drugs: Health in Sweden: The National Public Health Report 2012. Chapter 18. *Scand J Public Health* 2012; 40(9 Suppl):293-304.

C. Health trends and inequality

17. Ahacic K, Kennis R, Kåreholt I. Changes in sobriety in the Swedish population over three decades: age, period, or cohort effects? *Addiction* 2012; 107(4):748-755.
18. Ahacic K, Trygged S, Kåreholt I. Income and education as predictors of stroke mortality after the survival of a first stroke. *Stroke Treat* 2012; 2012:983145.
19. Lovén J, Rehnman J, Wiens S, Lindholm T, Peira N, Herlitz A. Who are you looking at? The influence of face gender on visual attention and memory for own- and other-race faces. *Memory* 2012; 20:321-331.

D. Brain aging

20. Andel R, Crowe M, Hahn EA, Mortimer JA, Pedersen NL, Fratiglioni F, et al. Work-related stress may increase the risk of vascular dementia. *J Am Geriatr Soc* 2012; 60(1):60-67.
21. Besga A, Cedazo-Minguez A, Kåreholt I, Solomon A, Björkhem I, Winblad B, et al. Differences in brain cholesterol metabolism and insulin in two subgroups of patients with different CSF biomarkers but similar white matter lesions suggest different pathogenic mechanisms. *Neurosci Lett* 2012; 510 (2):121-126.
22. Brehmer Y, Westerberg H, Bäckman L. Working memory training in younger and older adults: training gains, transfer, and maintenance. *Front Hum Neurosci* 2012; 6(63):1-7.
23. Brose A, Schmiedek F, Lövdén M, Lindenberger U. Daily variability in working memory is coupled with negative affect: the role of attention and motivation. *Emotion* 2012; 12(3):605-617.
24. Burzynska A, Nagel IE, Preuschhoff C, Gluth S, Bäckman L, Li SC, et al. Cortical thickness is linked to executive functioning in adulthood and aging. *Hum Brain Mapp* 2012; 33:1607-1620.
25. Caracciolo B, Gatz M, Xu W, Pedersen NL, Fratiglioni L. Differential distribution of subjective and objective cognitive impairment in the population: a nation-wide twin-study. *J Alzheimers Dis* 2012; 29(2):393-403.
26. Cavallin L, Bronge L, Zhang Y, Oksengård AR, Wahlund LO, Fratiglioni L, et al. Comparison between visual assessment of MTA and hippocampal volumes in an elderly, non-demented population. *Acta Radiol* 2012; 53(5):573-579.
27. Clerici F, Caracciolo B, Cova I, Fusari Imperatori S, Maggiore L, Galimberti D, et al. Does vascular burden contribute to the progression of mild cognitive impairment to dementia? *Dement Geriatr Cogn Disord* 2012; 34:235-243.
28. Ebner NC, Johnson MK, Fischer H. Neural mechanisms of reading facial emotions in young and older adults. *Front Psychol* 2012; 3:223.

29. Gavazzeni J, Andersson T, Bäckman L, Wiens S, Fischer H. Age, gender, and arousal in recognition of negative and neutral pictures one year later. *Psychol Aging* 2012; 27:1039-1052.
30. Hartikainen P, Räsänen J, Julkunen V, Niskanen E, Hallikainen M, Kivipelto M, et al. Cortical thickness in frontotemporal dementia, mild cognitive impairment, and Alzheimer's disease. *J Alzheimers Dis* 2012; 30(4):857-874.
31. Hooshmand B, Solomon A, Kåreholt I, Rusanen M, Hänninen T, Leiviskä J, et al. Associations between serum homocysteine, holotranscobalamin, folate and cognition in the elderly: a longitudinal study. *J Intern Med* 2012; 271(2):204-212.
32. Howner K, Eskildsen S.F., Fischer H, Dierks T, Wahlund LO, Jonsson T et al. Thinner cortex in the temporal lobes in mentally disordered offenders. *Psychiatry Res* 2012; 203(2-3):126-131.
33. Ibáñez C, Simó C, Martín-Álvarez PJ, Kivipelto M, Winblad B, Cedazo-Mínguez A, et al. Toward a predictive model of Alzheimer's disease progression using capillary electrophoresis-mass spectrometry metabolomics. *Analyt Chem* 2012; 84:8532-8540.
34. Kalpouzos G, Fischer H, Rieckmann A, MacDonald SW, Bäckman L. Impact of negative emotion on the neural correlates of long-term recognition in younger and older adults. *Front Integr Neurosci* 2012; 6:74.
35. Kalpouzos G, Persson J, Nyberg L. Local brain atrophy accounts for functional activity differences in normal aging. *Neurobiol Aging* 2012; 33(3):623.e1-623.e13.
36. Kramberger M, Jelic V, Kåreholt I, Enache D, Eriksdotter Jönhagen M, Winblad B, et al. Cerebrospinal fluid Alzheimer markers in depressed elderly subjects with and without Alzheimer's disease. *Dement Geriatr Cogn Extra* 2012; 2:48-56.
37. Laukka EJ, MacDonald S, Fratiglioni L, Bäckman L. Preclinical cognitive trajectories differ for Alzheimer's disease and vascular dementia. *J Int Neuropsychol Soc* 2012; 18(2):191-199.
38. Lexomboon D, Trulsson M, Wårdh I, Parker MG. Chewing ability and tooth loss: association with cognitive impairment in an elderly population study. *J Am Geriatr Soc* 2012; 60(10):1951-1956.
39. Lill CM, Schjeide BM, Röhr JT, Akkad DA, Damotte V, Alcina A, et al. Closing the case of APOE in multiple sclerosis: no association with disease risk in over 29 000 subjects. *J Med Genet* 2012; 49:558-562.
40. Lövdén M, Brehmer Y, Li SC, Lindenberger U. Training-induced compensation versus magnification of individual differences in memory performance. *Front Hum Neurosci* 2012; 6:141.
41. Lövdén M, Schaefer S, Noack H, Bodammer NC, Kühn S, Heinze HJ, et al. Spatial navigation training protects the hippocampus against age-related changes during early and late adulthood. *Neurobiol Aging* 2012; 33(3):620.e9-620.e22.
42. Lövdén M, Schmiedek F, Kennedy KM, Rodrigue KM, Lindenberger U, Raz N. Does variability in cognitive performance correlate with frontal brain volume? *Neuroimage* 2012; 64C:209-215.
43. MacDonald SW, Karlsson S, Rieckmann A, Nyberg L, Bäckman L. Aging-related increases in behavioral variability: relations to losses of dopamine D1 receptors. *J Neurosci* 2012; 32(24):8186-8191.
44. Mangialasche F, Xu W, Kivipelto M, Costanzi E, Ercolani S, Pigliautile M, et al. AddNeuroMed Consortium. Tocopherols and tocotrienols plasma levels are associated with cognitive impairment. *Neurobiol Aging* 2012; 33(10):2282-2290.

45. Marklund P, Persson J. Context-dependent switching between proactive and reactive working memory control mechanisms in the right inferior frontal gyrus. *Neuroimage* 2012; 63:1552-1560.
46. Miralbell J, Soriano JJ, Spulber G, López-Cancio E, Arenillas JF, Bargalló N, et al. Structural brain changes and cognition in relation to markers of vascular dysfunction. *Neurobiol Aging* 2012; 33(5):1003.e9-1003.e17.
47. Miralbell J, Spulber G, Hooshmand B, Besga A, Mataro M, Cedazo-Minguez A, et al. Grey matter and cognitive patterns in cognitive impaired subjects using CSF biomarkers cut-offs. *J Alzheimers Dis* 2012; 29(4):741-749.
48. Mårtensson J, Eriksson J, Bodammer NC, Lindgren M, Johansson M, Nyberg L, et al. Growth of language-related brain areas after foreign language learning. *Neuroimage* 2012; 63(1):240-244.
49. Noack H, Lövdén M, Lindenberger U. Normal aging increases discriminational dispersion in visuospatial short-term memory. *Psychol Aging* 2012; 27:627-637.
50. Olesen J, Gustavsson A, Svensson M, Wittchen HU, Jönsson B; CDBE2010 study group; European Brain Council. The economic cost of brain disorders in Europe. *Eur J Neurol* 2012; 19(1):155-162.
51. Paillard-Borg S, Fratiglioni L, Xu W, Winblad B, Wang HX. An active lifestyle postpones dementia onset by more than one year in very old adults. *J Alzheimers Dis* 2012; 31(4):835-842.
52. Qiu C, Cotch MF, Sigurdsson S, et al. Cerebral microbleeds and age-related macular degeneration: the AGES-Reykjavik Study. *Neurobiol Aging* 2012; 33:2935-2937.
53. Qiu C, Zhang Y, Bronge L, Herlitz A, Aspelin P, Bäckman L, et al. Medial temporal lobe is vulnerable to vascular risk factors in men: a population-based study. *Eur J Neuro* 2012; 19(6):876-883.
54. Richard E, Andrieu S, Solomon A, Mangialasche F, Ahtiluoto S, Moll van Charante EP et al. Methodological challenges in designing dementia prevention trials - the European Dementia Prevention Initiative (EDPI). *J Neurol Sci* 2012; 322(1-2):64-70.
55. Rieckmann A, Karlsson S, Fischer H, Bäckman L. Increased bilateral frontal connectivity during working memory in young adults under the influence of a dopamine D1 receptor antagonist. *J Neurosci* 2012; 28:17067-17072.
56. Rizzuto D, Bellocco R, Kivipelto M, Clerici F, Wimo A, Fratiglioni L. Dementia after age 75: survival in different severity stages and years of life lost. *Curr Alzheimer Res* 2012; 9(7):795-800.
57. Shing YL, Schmiedek M, Lövdén M, Lindenberger U. Memory updating practice across 100 days in the COGITO study. *Psychol Aging* 2012; 27(2):451-461.
58. Spulber G, Niskanen E, Macdonald S, Kivipelto M, Padilla D, Julkunen V, et al. Evolution of global and local grey matter atrophy on serial MRI scans during the progression from MCI to AD. *Curr Alzheimer Res* 2012; 9(4):516-524.
59. Svärd J, Wiens S, Fischer H. Superior recognition performance for happy masked and unmasked faces in both younger and older adults. *Frontiers Psychol* 2012; 3:520.
60. Tolppanen AM, Solomon A, Soininen H, Kivipelto M. Midlife vascular risk factors and Alzheimer's disease: evidence from epidemiological studies. *J Alzheimers Dis* 2012; 32:531-540.

61. Tukiainen T, Jylänki P, Mäkinen V-P, Gröhn O, Hallikainen M, Soininen H, et al. Mild cognitive impairment associates with concurrent decreases in serum cholesterol and cholesterol-related lipoprotein subclasses. *J Nutr Health Aging* 2012; 16(7):631-635.
62. Verrel J, Lövdén M, Lindenberger U. Normal aging reduces motor synergies in manual pointing. *Neurobiol Aging* 2012; 33(1):200.e1-200.e10.
63. Verrel J, Lövdén M, Lindenberger U. Older adults show preserved equilibrium but impaired step length control in motor-equivalent stabilization of gait. *PLoS One* 2012; 7(12):e52024.
64. Wallin K, Solomon S, Kåreholt I, Tuomilehto J, Soininen H, Kivipelto M. Midlife rheumatoid arthritis increases the risk of cognitive impairment two decades later: a population-based study. *Alzheimers Dis* 2012; 31(3):669-676.
65. Wang HX, Gustafson DR, Kivipelto M, Pedersen NL, Skoog I, Windblad B, et al. Education halves the risk of dementia due to apolipoprotein ε4 allele: a collaborative study from the Swedish Brain Power initiative. *Neurobiol Aging* 2012; 1007.e1–1007.e7.
66. Wang HX, Wahlberg M, Karp A, Winblad B, Fratiglioni L. Psychosocial stress at work is associated with increased dementia risk in late life. *Alzheimer Dement* 2012; 8(2):114-120.
67. Wenger E, Schaefer S, Noack H, Kühn S, Mårtensson J, Heinze HJ, et al. Cortical thickness changes following spatial navigation training in adulthood and aging. *Neuroimage* 2012; 59(4):3389-3397.
68. Wolff JK, Brose A, Lövdén M, Tesch-Römer C, Lindenberger U, Schmiedek F. Health is health is health? Age differences in intraindividual variability and in within-person versus between-person factor structures of self-reported health complaints. *Psychol Aging* 2012; 27:881-891.
69. Xu WL, Xu Z, Jia J, Xie Y, Wang H, Qi X. Detection of prediabetes and undiagnosed type 2 diabetes: a large population-based study. *Can J Diabetes* 2012; 36(3):108-113.

REVIEW ARTICLES

A. Longevity, morbidity and functioning

70. Sommerfeld DK, Gripstedt U, Welmer AK. Spasticity after stroke: an overview of prevalence, test instruments and treatment. *Am J Phys Med Rehabil* 2012; 91(9):814-820.

D. Brain aging

71. Ferencz B, Karlsson S, Kalpouzos G. Promising genetic biomarkers of preclinical Alzheimer's disease: the influence of APOE and TOMM40 on brain integrity. *Int J Alzheimers Dis* 2012; 2012:1-15.
72. Mangialasche F, Kivipelto M, Solomon A, Fratiglioni L. Dementia prevention: current epidemiological evidence and future perspective. *Alzheimers Res Ther* 2012; 4(1):6.
73. Nyberg L, Lövdén M, Riklund K, Lindenberger U, Bäckman L. Memory aging and brain maintenance. *Trends Cogn Sci* 2012; 16:292-305.

74. Qiu C. Preventing Alzheimer's disease by targeting vascular risk factors: hope and gap. *J Alzheimers Dis* 2012; 32(3):721-731.
75. Solomon A, Akenine U, Andreasen N, Mangialasche F, Wimo A, Jelic V, et al. Practical lessons from amyloid immunotherapy trials in Alzheimer disease. *Curr Alzheimer Res* 2012; 9(10):1126-1134.

BOOKS

A. Longevity, morbidity and functioning

76. Rydwick E, editor. Äldres hälsa - ett sjukgymnastiskt perspektiv. Lund: Studentlitteratur; 2012.

BOOK CHAPTERS

A. Longevity, morbidity and functioning

77. Mangialasche F, Marengoni A, Kivipelto M. Multimorbidity. In: Schenck-Gustafsson K, DeCola PR, Pfaff DW, Pisetsky DS, editors. *Handbook of clinical gender medicine*. Basel: Karger; 2012. p.489-494.

B. Treatment and care of elderly persons

78. Johansson L, Thorslund M. Valfrihet och vanmakt - på äldre dar. In: Jederlund L, editor. *Dröm och mardröm. En antologi om friska seniorer och beroende gamlingar*. Stockholm: Vårdförbundet; 2012. p.88-104.

C. Health trends and inequality

79. Fors S. Ojämnlikhet och hälsa i ett livsloppsperspektiv. In: Andersson L, Öberg P, editors. *Jämlik ålderdom? I samtiden och framtiden*. Solna: Liber; 2012. p.112-136.
80. Lennartsson C, Fors S. Sociala skillnader i hälsa bland äldre. In: Rostila M, Toivanen S, editors. *Den orättvisa hälsan: om socioekonomiska skillnader i hälsa och livslängd*. Stockholm: Liber; 2012. p.342-360.
81. Parker MG, Agahi N. Cohort change in living conditions and lifestyle among middle aged Swedes: the effects on mortality and late-life disability. In: Phellas C, editor. *Aging in European societies*. New York: Springer; 2012. p.237-253.
82. Parker MG. Aging in a gendered society: social and biological determinants of health in the elderly population. Chapter: Geriatrics. In: Schenck-Gustafsson K, DeCola PR, Pfaff DW, Pisetsky DS, editors. *Handbook of clinical gender medicine*. Basel: Karger; 2012. p.482-488.

83. Thorslund M. Hälsa och ohälsa bland äldre. In: Andersson L, Öberg P, editors. Jämlik ålderdom? I samtiden och framtiden. Solna: Liber; 2012. p.137-163.

D. Brain aging

84. Kalpouzos G, Nyberg L. Multimodal neuroimaging in normal aging: structure-function interactions. In: Naveh-Benjamin M, Ohta N, editors. Memory and aging: current issues and future directions. New York: Psychology Press; 2012. p.273-304.
85. Nyberg L, Bäckman L. Minnet. In: Josephson A, Olson L, editors. Hjärnan. 2nd ed. Stockholm: Karolinska University Press; 2012. p.133-144.
86. Wang HX, Kivipelto M. Dementia. Chapter: Geriatrics. In: Schenck-Gustafsson K, DeCola PR, Pfaff DW, Pisetsky DS, editors. Handbook of clinical gender medicine. Basel: Karger; 2012. p. 495-503.

REPORTS

B. Treatment and care of elderly persons

87. Dahlberg L, Bruhn Å, Marusz M, McKee K, Turunen P. Socialt deltagande och tillgång till service: upplevda hinder och hur de kan reduceras [Social participation and access to services: reported barriers and how they could be reduced]. Falun: Dalarna Research Institute; 2012.
88. Hagman L, Johansson L, Wånell SE, Thorslund M. Försöksprojekt och nätverk för en bättre samverkan i vården och omsorgen om de mest sjuka äldre. [Trial project and network for better cooperation in the care of frail elderly people]. Stockholm: Aging Research Center/ Stiftelsen Stockholms läns Äldrecentrum [Stockholm Gerontology Research Center]; 2012.
89. Laflamme L, Möller J, Elling B, Söderberg KC, Monárrez-Espino J, Johnell K. Prescribed medications and fall injuries: a descriptive Swedish national study. Stockholm: Karolinska Institutet; 2012.
90. Schön P, Hagman L, Wånell SE. Kan två bli en? TioHundraprojektets effekter på vård och omsorg för målgruppen de mest sjuka äldre. [Can two become one? Implementing an integrated health and social care organization for the oldest old with complex health problems] Stockholm: Stiftelsen Stockholms läns Äldrecentrum [Stockholm Gerontology Research Center]; 2012:1.

C. Health trends and inequality

91. Lennartsson C, Agahi N, Wånell S-E. Hälsa, livssituation och levnadsvanor i åldrarna över 65 år. Resultat från Stockholms läns folkhälsoenkät. [Health, lifestyle and habits in those over 65 years of age. Results from the Stockholm County public health questionnaire] 2010. Äldrecentrumrapport 2012:06.

DOCTORAL DISSERTATIONS

B. Treatment and care of elderly persons

92. Haasum Y. Drug use in institutionalized and home-dwelling elderly persons [PhD Thesis]. Stockholm: Karolinska Institutet; 2012.

C. Health trends and inequality

93. Lovén J. Mechanisms of women's own-gender bias and sex differences in memory for faces [PhD Thesis]. Stockholm: Karolinska Institutet; 2012.

D. Brain aging

94. Mangialasche F. Exploring the role of vitamin E in Alzheimer's disease [PhD Thesis]. Stockholm: Karolinska Institutet; 2012.