

# The Impact of Family, Community and Chronic Conditions on Late-Life Depression in China

Akademisk avhandling

Som för avläggande av medicine doktorexamen vid Sahlgrenska akademien, Göteborgs universitet kommer att offentligens försvaras i M106 K Isaksson, Medicinaregatan 16, Onsdagen den 15 maj, klockan 9:00

av Xiaowei Dong

Fakultetsopponent:

Docent Stefan Fors

Stockholms universitet, Sverige

## Avhandlingen baseras på följande delarbeten

- I. Dong, X., Ng, N., Santosa, A. Family structure and depressive symptoms among older adults in China: A marginal structural model analysis. *Journal of Affective Disorders*. 2023; 324: 364–369. doi:10.1016/j.jad.2022.12.067.
- II. Dong, X., Ng, N., Jacobsson, L., Santosa, A. The offspring's marital status and parental depressive symptoms in China. (Manuscript)
- III. Dong, X., Ng, N. Contribution of multiple pathways to the relationship between visual impairment and depression: Explaining mental health inequalities among older Chinese adults. *Journal of Affective Disorders*. 2021; 278: 350–356. doi:10.1016/j.jad.2020.09.068.
- IV. Dong, X., Ng, N., Jacobsson, L., Santosa, A. Chronic health conditions and trajectories of depressive symptoms in late adulthood: The moderating role of age-friendly community. (Submitted)

**SAHLGRENKA AKADEMIN  
INSTITUTIONEN FÖR MEDICIN**



# The Impact of Family, Community and Chronic Conditions on Late-Life Depression in China

Xiaowei Dong

School of Public Health and Community Medicine, Institute of Medicine, Sahlgrenska Academy, University of Gothenburg, Sweden

## Abstract

**Background:** With the increasing ageing population in China, investigating risk factors for late-life depression is of particular importance. This thesis aims to investigate how family dynamics, community factors, and chronic conditions are associated with depression risk among older adults in the Chinese context.

**Methods:** This thesis utilised data from the China Health and Retirement Longitudinal Study (CHARLS) and the WHO Study on Global AGEing and Adult Health (SAGE). Marginal structural models (MSMs) were performed to estimate the causal effects of family structure and offspring's marital status on depressive symptoms (Study I & II). Causal mediation analyses were conducted to assess the mediating roles of material, behavioural, and psychosocial factors in a vision-depression association (Study III). Three-level growth curve models were used to examine whether community factors may buffer or reinforce the effect of chronic health conditions on trajectories of depressive symptoms (Study IV).

**Findings:** Older individuals living in single-member households and extended families were at greater risk of developing depressive symptoms than those living in couple families. Furthermore, older Chinese adults with offspring who were divorced or delayed marriage also exhibited higher levels of depression. In the Chinese population, visual impairment was associated with depression, and material, behavioural, and psychosocial mediators together account for a substantial proportion of the total effect. The results indicated a strong association between chronic diseases and the trajectories of depressive symptoms. Depressive symptoms appeared to be less pronounced in more age-friendly communities where chronic diseases were less prevalent.

**Conclusion:** This thesis supports that family dynamics, community factors, and chronic conditions exert significant impacts on late-life depression in China. Thus, it's essential to enhance community capacity, and target modifiable material, behavioural and psychosocial factors to address the demands of these vulnerable older population groups.

**Keywords:** depression, family structure, offspring, neighbourhood, association, trajectory, chronic health conditions, mediation, visual impairment