The Presence of the Past
A Life Course Approach to the Social Determinants of Health and Health Inequalities in Northern Sweden

Frida Jonsson

Akademisk avhandling

som med vederbörligt tillstånd av Rektor vid Umeå universitet för avläggande av medicine doktorsexamen framläggs till offentligt förvar i Aulan, Vårdvetarhuset, fredagen den 7 december, kl. 09:00. Avhandlingen kommer att förvaras på engelska.

Fakultetsopponent: Professor Ilona Koupil, Department of Public Health Sciences, Public Health Epidemiology, Karolinska Institute, Stockholm.

Department of Public Health and Clinical Medicine
Unit of Epidemiology and Global Health
The Presence of the Past: A Life Course Approach to the Social Determinants of Health and Health Inequalities in Northern Sweden

Abstract

Background. Positioned at the intersection between the social and life course epidemiological subfields, this thesis builds on the idea that the health implications of life and living conditions can extend over years and decades before becoming expressed in the population patterns of ill-health. The overall purpose was to assess how multiple types of social determinants of health across the life course may contribute to ill-health and health inequalities in midlife. Several gaps in knowledge served as the basis for four research questions that focused on: 1) the intermediate role of socio-economic, material and psychosocial factors in young adulthood, in the long-term association between adolescent socio-economic position and midlife ill-health; 2) the implications of poor social capital in adolescence and accumulated over the life course for midlife ill-health; 3) the consequences of intra-generational social mobility for midlife ill-health and 4) the contribution of socio-economic, material and psychosocial circumstances in adolescence, young adulthood and middle-age to midlife neighbourhood deprivation inequalities in ill-health.

Methods. The setting of the thesis is Sweden spanning over nearly three decades, from the early 1980s and until the mid-2010s. With information drawn from the Northern Swedish Cohort the study population consists of 1,083 pupils (506 girls and 577 boys) who attended, or should have attended, the last year of compulsory school in 1981. The data used came from 7601 questionnaires answered by the participants in the follow-ups at the ages of 16 (in 1981), 21 (in 1986), 30 (in 1995) and 42 (in 2007). The attrition rate was low with 1,010 out of the 1,071 students who were alive over the 26-years participated in all waves (94.3%). Data was also included from the Swedish registers for the same ages as the surveys on the participants’ neighbourhoods and sociodemographic characteristics on all other residents in these areas. The health outcome was functional somatic symptoms, referring to the occurrence of common physical complaints such as musculoskeletal pain, headache, palpitations and fatigue. To capture various social determinants of health, socio-economic, material and psychosocial factors were operationalised as main exposures. The research questions were analysed using: 1) path analysis, 2) multiple linear regression, 3) diagonal reference models and 4) a decomposition analysis.

Results. With regard to the four research questions, the results firstly indicated that the long-term association between adolescent socio-economic position and midlife ill-health was linked by socio-economic position in young adulthood and further via material and psychosocial factors in middle-age. Secondly, that poor social capital in adolescence also could play a role in the development of adult ill-health, but that such influence seem to be largely dependent on recent or current conditions in adulthood. Thirdly, that downward mobility in the socio-economic hierarchy during middle-age may have little to no health implications, while upward movements could have a small positive effect on health. Fourthly, that ill-health was concentrated in more socio-economically deprived neighbourhoods and that this inequality was to a small extent attributed to conditions in earlier life period and mainly to factors in adulthood.

Conclusions. Based on patterns cutting across the original research questions, the findings from this thesis indicate broadly that socio-economic, material and psychosocial conditions may be meaningful for midlife ill-health and health disparities, jointly and independently from each other. The results also suggests that determinants in the present on the surface appear to be more important for midlife ill-health and health inequalities than those of the past, but at the same time that life circumstances in the earlier life course may not be irrelevant. Rather than representing permanent or resilient health implications, however, the long-term influence of adolescent conditions seem to reflect mainly social processes that are conditional on recent or concurrent adult factors. In sum, the results indicate that a continuum of various life and living conditions may be a key phenomenon underlying ill-health and health disparities in midlife. Specifically, this thesis illustrates how the past may become part of the present through the accumulation and chains of unfavourable circumstances over the life course and conversely, how the present health reflects and embodies a life-long past.

Keywords: social determinants, life course, health inequalities, long-term health consequences, functional somatic symptoms, northern Sweden.