Social Institutions and Health Inequalities: A Cross-National Perspective

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Short abstract (147 words): This paper uses nationally representative samples of adults over 50 from the United States, United Kingdom, and ten European countries to address two objectives: (1) assessing the association of national social and healthy policy (e. g., measures of income replacement for unemployment, healthcare access and quality, and Esping-Anderson typology), with health inequalities and (2) assessing whether these associations support derived hypotheses about the causal relationship between SES and health. Our approach takes advantage of the substantial variation in country-level social welfare policies and benefits, using data from the Health and Retirement Survey, English Longitudinal Study of Aging (ELSA), and the 2004 Survey of Health, Ageing, and Retirement in Europe (SHARE). Preliminary results suggest that the extent of heath inequalities by income is more strongly related to broader social policy, such as income replacement rates for unemployment, than it is to health policy, such as health care benefits.

Long abstract:

Throughout the developed world, policy-makers are coping with the financial burdens associated with aging populations. In many cases, policy-makers are reducing or targeting benefits or otherwise streamlining social welfare programs. At the same time, policy-makers in many of these same countries are increasingly cognizant of and trying to reduce health inequalities by income and other indicators of socio-economic status (SES). We examine whether changes in levels of different social welfare programs might exaggerate health disparities and, if so, which aspects of social welfare systems may be most problematic.

Secondly, we derive a set of hypotheses with respect to the patterns of association between different characteristics of the social welfare system and income inequalities in health implied by each of several causal explanations of how SES and health come to be associated. For example, if income causes health, then we would expect that higher levels of income maintenance would move people with very low income (and corresponding health) to a higher level of income (and health) but that this would have no impact on the strength of the health-income gradient. On the other hand, if health causes income, increasing levels of income maintenance would add exogenous income to the health-income association and therefore weaken the income-health measure of association. This paper will assess which set of hypotheses are most consistently supported in these data in an effort to try to advance the debate about how and why SES and health are associated.

We use newly available, synchronized data from a representative sample of adults over 50 from 12 countries to explore the cross-sectional association of social institutions and policy with health inequalities. Our data are from the 2002 Health and Retirement Study (HRS), the 2002 English Longitudinal Study of Aging (ELSA), and the 2004 Survey of Health, Ageing, and Retirement in Europe (SHARE). Each data set contains a probability panel of non-institutionalized adults over 50 and their spouses or partners. ELSA and SHARE were each harmonized with HRS so that, combined, the datasets provide comparable measures of health, socio-economic status, and other key characteristics for older adults from 12 countries. Our key measure of SES is household income; we use nine health measures that range from highly subjective to relatively objective. We combine these data with country-level policy and program measures available through the Organization of Economic Co-Operation and Development. We will focus on several national policy measures that represent income replacement rates for unemployment, health care access, and health care quality.

We estimate the following model (based on the models and parameterizations used by Decker and Kemler (2004).

(1) Bad health = $B_o + B_1$Social institution measure + B_2 Income percentile + B_3 Social institution measure * Income percentile + $B_x X_i$

Bad health is measured by each of nine self-reported health items. We examine six social institutional measures that represent four constructs (income replacement rate, health care access, health care quality, and Esping-Anderson social welfare classification).

Table 1 summarizes preliminary results. It presents the odds ratio association with income by social institutional measure for each of nine outcomes and four institutional measures. An odds ratio above one indicates steeper income gradient compared with the countries that fall in the middle according to each social institutional measure where an odds ratio less than one indicates a small income gradient. Preliminary results indicate that income replacement rates are significantly associated with overall levels of health inequalities: countries with low income replacement rates experience significantly higher income inequalities (for four of nine health outcomes) and countries with high income replacement rate have lower health inequalities (for one of nine health outcomes). However, our results reveal mixed evidence about health care access—while universal health care is associated with lower health inequalities (for seven of nine health outcomes) and countries in which a low percentage of health care costs are publicly paid for have higher health inequalities (for seven of nine health outcomes), countries in which a high percentage of health care costs are publicly paid for also have higher health inequalities (for six of nine health outcomes). We are in the process of exploring the association between other institutional measures (e.g., quality of health care indicators and type of social welfare system) and health inequalities. We will also explore how these patterns of results compare with our derived hypotheses about the nature of the income-health association in mid- adulthood and discuss the implications for how policy-makers may want to reduce benefits to older adults without worsening health inequalities.

Table 1: Odds Ratio Associated with Income * Social Institutional Indicator Relative to Omitted Groups, by Social Institutional Measure and Health Outcome, 55-64 year olds in 12 Countries

	Poor/fair self-rated health	Any ADLs	Arthritis	Stroke	Heart disease	Cancer	Lung problems	Hi blood pressure	Diabetes
Universal health care									
Yes (non-US)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
No (US)	3.5***	2.8***	1.4**	2.4***	1.5**	0.9	2.1***	1.2	2.1***
Percent healthcare expenditures publicly paid for									
High	2.1**	2.2*	1.4*	2.2**	1.8***	1.0	1.6*	1.2	1.0
Middle	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Low	4.3***	3.3**	1.6*	3.0***	1.8***	1.1	1.7*	1.6**	1.3
GRR									
High	1.2	0.9	0.9	0.5*	1.1	1.4	1.8	0.9	1.0
Middle	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Low	3.1*	2.5*	1.3	1.9	1.8**	1.6	2.0*	1.4	1.3
NRR									
High	1.0	0.8	1.2	0.8	1.0	0.6	1.3	0.8	0.7
Middle	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Low	2.6**	1.9	1.6*	1.9*	1.3	1.1	1.5	1.4*	1.2

Includes control for gender, education, and age (single years).