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Educational inequalities in health in European welfare states: A social expenditure approach

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ABSTRACT

A puzzle in comparative health inequality research is the finding that egalitarian welfare states do not necessarily demonstrate narrow health inequalities. This paper interrogates into this puzzle by moving beyond *welfare regimes* to examine how *welfare spending* affect inequalities in self-rated across Europe. We operationalise welfare spending in four different ways and compare both absolute and relative health inequalities, as well as the level of poor self-rated health in the low education group across varying levels of social spending.

The paper employs data from the EU Statistics of Income and Living Conditions (EU-SILC) and includes a sample of approximately 245,000 individuals aged 25–80+ years from 18 European countries. The data were examined by means of gender stratified multilevel logistic regression analyses. The results show that social expenditures are associated with lower health inequalities among women and, to a lesser degree, among men. Especially those with primary education benefit from high social transfers as compared with those who have tertiary education. This means that lower educational inequalities in health – in absolute and relative terms- are linked to higher social spending. The four different operationalisations of social spending produce similar patterns.

Introduction

A puzzle in comparative health inequality research is the finding that egalitarian policies do not necessarily lead to smaller health inequalities. Many studies suggest that the egalitarian nations (e.g. the Nordic countries) fail in a systematic way to perform better than other Western countries, whether one uses measures of mortality or morbidity (e.g. Bambra, 2012; Eikemo, Bambra, Judge, & Ringdal, 2008; Mackenbach et al., 2008). More, recent systematic reviews indicate that the lack of consistency in the conclusions from studies on welfare states and health inequalities currently seems to be the most consistent finding within this field of research. Among the 11 studies concerned with welfare states and health inequalities reviewed by Beckfield and Krieger (2009), only 5 reported 'suggestive evidence' that strong welfare states and generous social policies can dampen health inequalities (pp. 157). Similarly, Muntaner et al. (2011: 954) states that '… more than any other political theme, approximately a third of welfare state studies (11 studies, 35.5 per cent) reported inconclusive and contradictory associations regarding its effect on reducing of social class inequalities in health'. Other reviews conclude in the same manner (Bambra, 2012; Brennenstuhl, Quesnel-Vallee, & McDonough, 2012).

Most of the studies underlying these reviews have, however, used a regime approach, simply comparing countries belonging to different welfare regimes. In this paper we investigate whether the use of *welfare generosity,* in terms of social spending, changes the picture. For this purpose we conduct multilevel analyses of self-rated health in Europe using individual level data from 18 countries as well as social expenditure data. Since a social expenditure approach is new in this field of research, we operationalise four different measures of spending. In this way, the article has a methodological aim as well.

Education, the measure of social inequality chosen in this paper, is a widely used proxy for socio-economic position (e.g. Eikemo et al., 2008; Gesthuizen, Huijts, & Kraaykamp, 2011: 591; Huisman et al., 2005) and provides fairly similar conclusions as income in comparative European analyses (Mackenbach et al., 2008). Theoretically, it may be argued that education, perhaps more than income or occupational class, captures the social distribution of a broader spectrum of health determinants as it signifies both financial, material, psychological and social resources (Ross & Wu, 1995) as well as important cultural divides and life-styles (Bourdieu, 1984).

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Practically, when studying the entire population – not only those who have an income or an occupation – education is the most available measure. Also, educational level is less likely to be affected by the onset of poor health than income and occupation.

Defining and operationalising 'welfare'

For some decades, at least three methodological approaches have been prominent in comparative welfare state research, *the expenses approach, the institutional approach and the regime approach*. *The expenses approach* utilises information on public spending on social purposes to measure welfare state effort and generosity. The book by Wilensky and Lebaux (1965) is a classic example of this approach. The spending approach has however received extensive criticism over the years for a number of reasons. The approach is accused of being conceptually misguided since it does not address social citizenship and social rights which are at the core of the definition of a welfare state. The linear scoring of the variables violates the notion that welfare states consist of qualitative relationships between social actors. Also 'the bigger-the-better' notion underlying this approach fails to acknowledge that 'bigger' might simply reflect 'bigger' social problems (e.g. unemployment). Further, the common use of Gross domestic product (GDP) as a denominator assumes a sense of proportionality that implies that: 'regardless of how wealthy a nation is or how equally that wealth is distributed, the government should be transferring relatively the same level of social expenditure as other nations in order to be considered as providing an equivalent degree of generosity and protection' (Gilbert, 2009). In addition, the frequent use of gross transfers is questionable as a measure of generosity and aggregate social spending as such tells little if anything about the nature of the programs and their redistributive profiles (Esping-Andersen, 1990; Gilbert, 2009). Data from Eurostat and OECD on expenses have undergone a refining process over the years, in terms of specification and disaggregating of such expenses (e.g. into health care, pensions, poverty, unemployment), by separating out administrative costs, and by distinguishing between gross and net expenses (Castles, 2004, 2009; Gilbert, 2009). These advances meet some of the earlier criticisms of this approach.

The institutional approach focuses on the design of welfare institutions and specific social policies and programs. It is based on a notion that social citizenship is key to the analysis of the welfare state. This approach addresses social policy program characteristics like qualifying criteria, conditions of receipt, replacement rates, duration and coverage (Korpi & Palme, 2007). Several international comparative databases provide historical information on such characteristics, e.g. Social Citizenship Indicator Programme -SCIP (Korpi & Palme, 2007) and the Comparative Welfare Entitlements Dataset – CWED (Scruggs, 2005). These include the following programs: pensions, sickness pay, unemployment benefit, family policies and work accidents (the two latter in SCIP only). In order to construct relevant program features, both SCIP and CWED applies a number of assumptions of a 'standard worker'. In SCIP, for example, the standard worker is working in the manufacturing industry and has an average production worker's wage; he is thirty years of age, has worked for ten years and for five years at the present place of employment. The typical family situation refers to a married couple with one full-time wage-earner and two minor children aged 2 and 7 (Korpi & Palme, 2007: 6). In Europe, few fit this description. For instance, in EU-SILC only 8 per cent of the working age population holds a manual job (ISCO-88 $>$ 70), a proxy for wage, in manufacturing. Applying additional criteria such as age, employment history or family situation would result in even smaller proportions. This casts some doubt over the validity of this approach.

The regime approach builds on the institutional approach but argues that countries' social program profiles tend to cluster into groups that are qualitatively different. Gösta Esping-Andersen's (GEA) defining characteristics of the 'three worlds of welfare' (the liberal, the conservative, the social democratic regime type) are de-commodification and social stratification, concepts that in turn are derived from the notion of social citizenship (Esping-Andersen, 1990; 1999). An advantage of the regime approach is thus the opportunity it gives to assess the totality and the interconnected nature of social structures and welfare institutions. This comes at the cost, though, of leaving the 'black box' closed. The regime approach has been extensively debated among social researchers over the past 20 years. It has been accused of being gender blind, focussing too narrowly on selected income transfer programs, and of leading to misclassification of countries by lumping together countries that are quite different – with respect to the outcome in question, and/or with respect to the institutions that matter (for a brief review, see e.g. Bambra (2007)). In this context, it should be noted that the regime approach to welfare was never developed to account for cross-national variations in levels of (ill)-health or in health inequalities. Hence, it is not self-evident that the defining criteria for GEA's welfare typology should have immediate and straight-forward impacts on these outcomes. The main criterion that defines the regime clusters, i.e. de-commodification, may be too crude to capture the mechanisms that generate health inequalities. Specific characteristics of social policy or labour market policies or systems of wage setting may be equally or more important. This discussion illustrates that all three macro approaches to quantitative studies of welfare states have their problems and shortcomings.

Theoretical considerations

The concept of 'welfare resources' may be useful to justify a spending approach. Fritzell and Lundberg (2007) and Lundberg et al. (2008) argue that collectively provided welfare resources to compensate for market failure and/or family failure are crucial to the understanding of population health and well-being. In the realm of public health research, welfare resources are associated with 'the social determinants of health', e.g. power, status, knowledge, work, income, social networks and general living conditions (Link & Phelan, 2010; Lundberg et al., 2008). Welfare resources are expected to build human capital, strengthen human agency, expand the capacity to cope with stressful events, and to reduce or remove exposures to health risks. Government provision of compensatory welfare resources is thus hypothesised to result in better population health and smaller health inequalities and enhance social integration and participation among disadvantaged groups, typically identified by low socio-economic position or low educational level. Among the welfare resources, cash is expected to play a crucial role. Lundberg et al. (2008: 63) argue:

'Since poverty and income are often seen as crucial factors influencing health, and since a general feature of welfare state programs is to create a buffer against income loss and to redistribute income both over the life course and between individuals, we obviously have one general path how welfare states might affect population health.'

In market societies, money is easily converted into numerous health enhancing resources. Income transfers may reduce susceptibility, prevent or reduce exposures to health risks like poverty, and have a positive impact on the social consequences of disease/illness (Lundberg et al., 2008: 15–17). The welfare resources perspective has intellectual links to the 'command over resources' notion, termed by Titmuss (1969), the Scandinavian living conditions tradition, as well as to Sen's capability approach. A notion of