Comparison of educational inequalities in general health in 12 European countries: application of an integral measure of self-assessed health

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Abstract

Background and objectives.
Much international research is inspired by the question whether health inequalities are smaller in some countries compared to other countries. Whereas fairly solid evidence has been generated in the field of mortality, the evidence on general health is fragmentary, inconsistent and possibly outdated. The aim of this study is to compare a large number of European countries with respect to the magnitude of socioeconomic inequalities in self assessed health.

Data and methods.
Micro-level data were obtained from national health interview surveys of 12 countries. SAH was measured with answer categories “very good” to “very poor” in all countries. The two lowest answer categories were combined. The 4 remaining answer categories were quantified with reference to a measure of “disease weighted” SAH, with scores 1, 1.85, 1.852 and 1.853. Educational level was classified in three hierarchical levels corresponding to the ISCED. The magnitude of educational differences in SAH with was assessed by means of the Relative Index of Inequality (RII). Comparable analyses were carried out with the conventional measure of “less than good” SAH.

Results.
We observed substantial variations between the countries in the magnitude of educational inequalities in “disease weighted” SAH. Relatively small inequalities, but of still substantial size, were observed in a series of countries in both the northern and southern part of Western Europe. Much larger inequalities, up to two times as large, were observed in the British Isles, Portugal and Central Eastern Europe. As in previous analysis, there is no consistent evidence of smaller inequalities in health in the Nordic countries; inequalities in SAH among Danish and Norwegian women are even relatively large. These patterns differ from those that would have been observed using the conventional “less than good” SAH measure.

Discussion.
Our available evidence does not support the original hypothesis that health inequalities are likely to be smallest in Nordic welfare states. The smallest inequalities are observed in both the northern and southern parts of Western Europe. As with mortality, countries with large inequalities, rather than those with smaller inequalities, were the exceptions to the rule. For SAH, these countries include Portugal, England and the CEE. Explanations of this pattern should consider the role of specific risk factors such as smoking and overweight. The evidence for some countries also point to the fundamental of the wider political, social, and economic context

Introduction

European overviews of health inequalities have been made since the late 1980s. This comparative work was originally inspired by the wish to identify countries where health inequalities would be smaller than elsewhere in Europe. Such countries would show to other countries that health inequalities can be smaller than they are now. In addition, a closer inspection of the situation in countries with small inequalities would possible suggest ways to achieve smaller health inequalities in other countries as well.

The most convincing evidence of cross-national differences in the magnitude of health inequalities comes from several studies on mortality. These studies have shown that there is no single European country where inequalities in mortality are substantially and consistently smaller than elsewhere. In the 1980s, mortality inequalities among middle-aged men were of the same order of magnitude in several countries in different parts of Europe. Mortality inequalities were larger in a few countries in the west (Finland, France) and in countries in Eastern Europe. Thus, countries with large inequalities, rather than those with smaller inequalities, were the exceptions to the rule. Later studies showed that broadly similar patterns existed in the 1990s, among both men and women.

Mortality is only part of the general picture. It is would be of interest to determine the international pattern of inequalities in non-fatal outcomes, such as people's assessment of their own health. Data from national surveys from all European countries showed large inequalities in these non-fatal outcomes as well. Comparisons between these countries were made in a series of comparative studies using national health survey data for the late 1980s. For example, educational differences in self assessed health (SAH) were found to be relatively small in Sweden, Spain, and especially Germany. However, results from other studies, including those using data from European surveys, only partially confirmed these patterns. For example, analyses of ECHP data showed that income-related health inequalities were small in Germany, but not in Spain.

One complicating factor is that the relative position of countries may change over time. For example, socioeconomic inequalities in SAH were found to have widened between the 1980s and 1990s in Italy and Spain, but not in most Nordic countries. As a result, the relative position of the latter countries may have become more favorable over time, and perhaps during the 1990s some Nordic countries have developed into the exemplary countries where health inequalities are clearly smaller than elsewhere.

The aim of this study is to compare a large number of European countries with respect to the magnitude of socioeconomic inequalities in self assessed health. The comparison refers to the early 2000's. The study is based on a large data file that includes harmonized data from national health interview surveys of similar surveys from 19 European countries. For the present paper, we utilize the data from a subset of countries for which information on health and education was maximally comparable. In each of the selected countries, the educational level of respondents could be classified according to the international educational classification (ISCED). In addition, the selected surveys have with highly comparable questions on SAH, including nearly identical answer categories ("very good", "good", "fair", "poor" and "very poor").

Most previous studies compared countries with regards to inequalities in "less than good" health SAH, i.e. by combining the "fair" and "(very) poor" states. This approach however ignores large variations between countries in the proportion of respondents reporting "(very) poor" SAH, and the large inequalities that are usually observed for this SAH state. For this paper, we developed an

integral measure of SAH that takes into accout socioeconomic inequalities in each SAH state separately.

For each country, we will first describe educational inequalities in the distribution of respondents according to the SAH states. Next, we will describe educational inequalities in the conventional measure of 'less than good' health, and we will compare countries with respect to the magnitude of these inequalities. Finally, we will describe inequalities in SAH using the new integral measure, and we will assess whether the application of this measure results in a different ordering of countries.

Data and methods

Data

The selected countries are given in table 1, together with the size of the survey samples. For more details on the selected surveys, we refer to the www.eurothine.org. All surveys were conducted in or after the year 2000, except the Portuguese survey, which was conducted in 1999. Sample sizes were above 4500, except for Estonia, Czech Republic and Slovakia. Non-response rates were relatively low in Italy (10%) and high in Belgium (37.7%).

Educational level represents the highest level of completed education of the respondent. The level of education was initially classified according to national categories, which were subsequently reclassified into four levels of education (1= no or only primary, 2= lower secondary, 3=upper secondary and post non-tertiary, 4=tertiary), approximately corresponding with the following levels of the International Standard Classification of Education. Table 2 shows describes the distribution of the population by educational level.

SAH was measured by a question such as "How would you describe your current state of health: very good, good, fair, poor or very poor?". For details on these questions we refer to the www.eurothine.org. The answer categories "very good", "good", "poor" and "very poor" were applied in all selected surveys. For the middle category, the words "fair" or "average" were used. In the text below, the answer categories will be called "SAH states". Because very few respondents report "very poor" health, this SAH state is combined with the "poor" state in all analyses.

Statistical analyses

The proportion of respondents reporting a specific SAH state is measured by means of age-standardised prevalence rates. We applied direct standardisation, with the European population as the standard. Standardised prevalence rates were calculated for two broad educational groups: those with at least upper secondary education (levels 3 and 4) and those with lower levels of education.

We measured the magnitude of educational differences in the prevalence of "less than good" SAH (i.e. the "(very) poor" and "fair" states combined) by means of the Relative Index of Inequality (RII). This regression-based measure takes into account all educational groups separately. It assesses the association between SAH and the relative position of each educational group across all educational groups. This relative position is measured ass cumulative proportion of each educational group within the educational hierarchy. For details on its method, we refer to previous papers. In this paper, the regression model had a log link function and assumed a binomial distribution using the

Genmod procedure of SAS. The resulting RII can be interpreted as a Prevalence Rate Ratio that express prevalence of “less than good” health at the bottom of the educational hierarchy compared to top.

An integral measure of SAH

The conventional measure of “less than good” SAH ignores information on SAH within the broad categories of “(very) good” and “less than good” health. It ignores information on different each SAH state separately. We developed a new measure of SAH that takes into the distribution of the population across each of the four SAH states.

The new SAH measure was constructed along a continuous, quantitative scale. In order to be able to rank SAH states along this scale, we measured the “relative burden of disease” that was associated with each SAH state. This conceptualisation of SAH in terms of “burden of disease” is based on the finding that respondents’ answers to the question on SAH are mainly determined by the presence of diseases, especially diseases that are disabling.

With the information that we had available from most surveys, we could estimate the relative burden of disease per SAH state by using information of the prevalence of a large number of diseases among respondents to these surveys. For most surveys, we observed that the number of reported diseases increased exponentially when moving from the “very good” to “(very) poor” SAH state. In addition, in most surveys, the exponentiation coefficient was within a narrow range from 1.80 and 1.90, the average being 1.85. A weaker relationship (ca. 1.60) was however observed for Denmark and Norway. For all countries together, the exponentiation coefficient hardly varied by gender or by educational level (variations less than 0.05 units). This suggested that, within each country, relative differences between SAH states in the burden of disease were of the same magnitude for each sex and each educational level

For the current analyses, the relative burden of disease of “very good” health was used as the reference (=1.00). For other SAH states, we assumed an exponentiation coefficient of 1.85. This yielded estimates of the relative burden of disease for “good” of 1.85, for “fair” of 1.85^2 (= 3.42), and for “(very) poor” of 1.75^3 (=6.33).

The magnitude of educational differences in this quantitative SAH measure was measured by means of the RII. Loglinear regression analysis was applied. The resulting RII ca be interpreted in terms of Rate Ratios that express the burden of disease at the bottom of the educational hierarchy compared to top.

Results

See tables and graphs.

Discussion

Summary

Recent international overview of inequalities in self reported health focussed on common patterns in different countries, such as patterns by age, chronic disease, or socioeconomic indicators, of at trends over time. In this paper, we turned back to the idea that originally inspired many international overviews: the wish to identify countries where health inequalities are smaller than elsewhere. This implied a change from international overviews (aimed to identify commonalities) to the more challenging task of cross-national comparisons (aimed to identify differences between countries).

The results suggested substantial variations between the countries in the magnitude of educational inequalities in SAH. Relatively small inequalities, but of still substantial size, were observed in a series of countries in both the northern and southern part of Western Europe. Much larger inequalities, up to two times as large, were observed in different parts of Europe, including the British Isles, Portugal and Central Eastern Europe. As in previous analysis, there is no consistent evidence of smaller inequalities in health in the Nordic countries, and even relatively large inequalities in SAH among Danish and Norwegian women.

Comparison to the conventional "less than good" measure

A much more heterogeneous pattern was observed when using the conventional measure of "less than good" SAH. According to this measure, there are much larger variations between the countries in the magnitude of health inequalities, and the geographical pattern of variations is much more diffuse. This pattern reminds to the often haphazard patterns that were observed in previous comparative studies that employed the measure of "less than good" SAH. Different and more stable patterns were observed using a new integral measure of SAH, because it extends the conventional measurement in two ways: (a) it takes into account separate all SAH states separately; (b) it weights the different SAH according to their prevalence in the total population.

It is illustrative to compare England to France, which represents a more general north-south pattern. In terms of "less than good" SAH, inequalities are about equally large in the two countries. In terms of "disease weighted" SAH, inequalities are clearly larger in England. Inequalities appeared to be larger in England because the "poor" SAH state is more prevalent in England, and especially so in the lowest educational groups. In addition, also the "very good" state is more prevalent in England, but now more so in the upper educational groups. In short, England shows much larger inequalities in the "very good" and "(very) poor" extremes of the SAH measure. The conventional "less than good" SAH measure failed to take these into account.

Another important illustration is Italy compared to France, which illustrates comparisons between countries with widely different overall prevalence of "less than good" health. Italy has high levels of "less than good" health and a shallow gradient in these levels, at least in relative terms. Below this high overall level of "less than good" health, however, Italy shows a substantial proportion of respondents with "poor" health. Educational inequalities with respect to poor SAH are large. The "less than good" approach would ignore these important inequalities in the Italian situation. The "disease weighted" SAH approach is able to integrate these inequalities into an integral measure of

inequalities in SAH. It is able to demonstrate that, despite large variations between France and Italy in overall SAH levels, inequalities in SAH states are of similar size in the two countries.

Limitations to available data

We utilised data from national surveys. These data have important advantages, such as large sample sizes and the representation of the entire national populations at ages of about 18 years and over. None the less, cross-national comparisons may be biased because of variations between countries in survey design and questionnaires. Even though we applied nearly identical measurements of the two key variables, surveys differ in other respect such design. It is therefore be of interest to compare our results with those that used data from international surveys, especially the ESS and ECHP. Our results of our analyses are mostly in agreement with these previous studies.

A specific problem inherent to interview survey is the sometimes high non-response rates. This may bias estimates of health inequalities if non-response is related to socioeconomic position and, given a socioeconomic position, related to SAH. We cannot exclude this possibility. It is particularly important to assess whether effect of non-response may be larger in some countries than in others. For example, may this explain the relatively small inequalities in SAH in France, Italy and Spain? Non-response rates in these countries are relatively low, instead of high. Even though this possibility cannot be excluded, we think it to be unlikely that in these southern countries non-response has greater effects than elsewhere.

Educational classifications were highly similar in terms of the ISCED. The distributions of populations over educational categories however strongly differ between countries, mainly due to differences in educational systems and levels. We took into account this differential distribution by using the RII. A main advantage of the RII is that it yields estimates that are comparable across countries, provided that the educational distribution of each country is hierarchical and sufficiently detailed. This applied to our study, with the exception of Portugal. The large inequalities in SAH in this country must be understood in relationship to its highly uneven educational distribution.

Our new, quantitative measure of SAH aimed to take into account all SAH states separately. It therefore quantified the relative distance between SAH categories in terms of “burden of disease”. This quantitative measure of SAH can only be used to compare SAH states within individual countries. We must warn that it cannot be used to measure differences between countries in the ‘burden of disease’ associated with SAH categories. For example, the relatively high proportion of respondents in Italy and Portugal reported having “(very)poor” SAH may not imply a higher occurrence of health problems in these countries. This high proportion may be due to reporting-related factors, such as a greater propensity of people in these countries to say that their health “poor” instead of “fair”. Given this uncertainty about cross-national comparability of absolute levels of SAH, we only compared countries with regards to relative inequalities (instead of absolute differences) between socioeconomic groups.

The quantitative measure of SAH measure assumed a fixed relative distance between SAH answer categories, on the exponential scale. The exponentiation factor was set at 1.85, which is close to the value observed empirically for most countries (see methods). However, Denmark and Norway had smaller factors, at about 1.60. This implies smaller differences between SAH states in the associated number of chronic conditions. Assuming that these variations might reflect real differences in the meaning of SAH states in these two countries, we performed sensitivity analyses, in which we assumed a factor of 1.60 instead of 1.85 for Denmark and Norway. We observed that RII estimates

for these countries declined to a modest extent, by about 0.05 units. Inequalities among Danish and Norwegian men became as small as in Sweden, while inequalities among women remained much larger.

A fundamental assumption is that reporting-related factors do not affect the comparison between high and low socioeconomic groups. Indirect support comes from our observation, that the relationship between SAH and the number of chronic conditions reported was nearly identical in low and high educated groups. Further support comes from in-depth studies on the validity and meaning of reporting to SAH questions, which observed that there are no important variations between high and low groups in the way in which this question is answered. In both groups, the answer is mainly determined by the presence of chronic diseases with disabling consequences. However, some differences may exist, at least in some countries, and these will affect estimates of relative inequalities in SAH. Future studies, e.g. using anchoring vignettes, may be used to detect these differences and to calibrate estimates of SAH prevalence per socioeconomic group.

Thus, because of number of uncertainties inherent to the use of survey data, results should be interpreted with caution. We should add that there are problems of statistical precision, because the 95 percent confidence intervals of inequality estimates for most pairs of countries overlapped. Therefore, results for individual countries should not be over-interpreted. Instead, below we will focus on a few general patterns that emerge from this international overview.

Interpretations

We observed that inequalities were at least about 1.25 units large in all European countries. This lower limit implies a 25% differences in disease burden, as measured through SAH. This corresponds broadly to estimates of educational inequalities in the prevalence of specific chronic diseases. The magnitude of these inequalities strongly differ between chronic diseases but, taken all conditions together, A European study observed a difference between higher and lower educational groups of about 30% (as measured in Odds Ratios). Although the data and methods are not directly comparable, the combined results suggest that inequalities in general health are at least at about 25 or 30 percent in most European populations.

This bottom line is attained in both northern and southern European countries. Previous studies also observed that smallest inequalities are not exclusively found in the northern countries of Europe, even though the Nordic welfare states were initially expected to have achieved to have made further progress in reducing health inequalities. We should add that our estimates are of relative inequalities, not of absolute differences, between socioeconomic groups. There are indications that overall levels of health are worse in southern Eruopean countries compared to northern countries. If so, similar relative inequalities would translate into large absolute differences in southern countries compared to northern countries.

Even though relative inequalities in north and south are about equally large, different disease clusters may underlie inequalities in these two regions. Within Western Europe, there are important north-south difference with regards to both mortality and prevalence of heart disease: important inequalities in north, but not in south. In the south, small inequalities with regards to heart disease may be counterbalance by larger (relative or absolute) inequalities for some other diseases. Possible examples include accidents and alcohol-related disease.

The situation in Portugal is of special concern because sharp inequalities seem to go together with high overall prevalence rates of poor health. Portugal also showed large inequalities in international comparative studies based on international surveys (the ESS and the ECHP). The case of Portugal shows that inequalities in SAH may be large even in countries where inequalities in some behavioural risk factors are small, or even the reverse, as in the case of smoking. The Portuguese situation should perhaps be understood in relation to its slow socioeconomic development; trends in GDP in Portugal lag behind those in the EU at large. Also, the Portuguese population has much lower levels of education, especially among women. It is perhaps no coincidence that another poor southern country, Greece, also has been found to have relatively large inequalities in health.

England, the homeland of research on health inequalities, appeared to have relatively large inequalities in SAH. This unfavourable position was also observed in recent overviews based on international surveys, but not in international overviews using data for the 1980s. This supports the finding of a previous overview that health inequalities in England may have widened to a greater extent in England than elsewhere in the western part of Europe. English studies suggest that the rapid increase in income inequalities since the 1980s may have long-term effects on health inequalities in England.

This is one of the first studies that generate comparative evidence on health inequalities in Central Eastern Europe (CEE). Previous studies focussed on mortality, and observed large inequalities in Hungary and the Czech Republic, both in relative and absolute terms. Our study suggested a similar pattern for SAH. We should add that we had data for another CEE country, the Slowak Republic, which was however excluded because of deviations in the SAH question. The admittedly less comparable estimates for this country also suggest relatively large inequalities (RII=1.44 for men, and 1.63 for women). The generalised and large inequalities in CEE are likely to stem from underlying process that affect people's lives in multiple ways. These problems may in part be inherited from communist era, but also related to the rapid social change in the 1990s.

Conclusion

The current overview should be considered as a new attempt to determine which countries have smaller or larger inequalities than other countries. As in other international overviews, our available evidence does not support the original hypothesis that health inequalities are likely to be smallest in Nordic welfare states. Instead, the data suggest that the smallest inequalities are observed in both the northern and southern parts of Western Europe. The lower limit represents about 25 or 30% excess in disease burden, as measured through SAH. As with mortality, countries with large inequalities, rather than those with smaller inequalities, were the exceptions to the rule. These countries include Portugal, England and the CEE. Explanations of this pattern should consider the role of specific risk factors such as smoking and overweight. The evidence for some countries also point to the fundamental of the wider political, social, and economic context

Table 1. Number of respondents and distribution by educational level

Country	Total number of respondents		% by education – men			% by education - women		
	Men	Women	Lowest	Mid	Highest	Lowest	Mid	Highest
Sweden	5702	5786	17.1	50.7	32.1	14.2	49.9	35.9
Norway	2435	2346	11.3	58.0	29.3	12.4	52.3	33.7
Denmark	4720	5803	18.0	60.2	20.8	20.4	56.3	22.5
England/W	3803	3940	24.5	36.1	36.9	27.6	40.1	26.6
Ireland	4706	4863	59.4	22.7	17.7	51.6	32.1	16.0
Belgium	6146	6223	35.1	30.5	31.3	36.3	28.6	31.5
France	5831	6050	53.7	14.4	28.5	50.2	17.7	29.9
Italy	54437	56096	56.1	34.8	9.0	57.3	33.8	9.0
Spain	6568	6675	59.4	22.4	17.9	66.7	17.7	15.5
Portugal	11960	13080	83.0	9.2	7.7	82.0	8.1	9.9
Hungary	3322	3896	59.5	24.9	15.4	50.2	33.6	15.7
Czech R.	762	842	55.5	28.1	16.4	48.6	36.7	14.7

[a] Educational levels are: ISCED 1+2 (low); ISCED 3+4 (mid); and ISCED 5+6 (high).

Table 2. Prevalence of "less than good" self assessed health according to educational level in 10 European countries.

Country	Prevalence rate (%) of "less than good" health					
	Women			Men		
	Low education	High education	Low minus high	Low education	High education	Low minus high
Sweden	38.7	29.1	9.7	32.6	25.0	7.6
Norway	38.1	21.8	16.3	29.6	18.4	11.2
Denmark	39.7	22.5	17.2	33.1	22.8	10.3
England	39.5	21.4	18.1	39.2	22.1	17.0
Ireland	28.8	16.3	12.5	28.8	12.1	16.7
Belgium	42.4	26.2	16.2	37.2	21.1	16.1
France	40.4	26.7	13.7	33.3	20.8	12.6
Italy	64.4	52.1	12.2	55.8	43.2	12.6
Spain	46.0	30.7	15.3	34.3	20.8	13.5
Portugal	83.8	52.6	31.2	69.6	45.2	24.4
Hungary	83.8	62.8	21.0	73.9	58.5	15.4
Czech R	61.3	45.0	16.2	56.9	36.7	20.2

Table 3. Magnitude of educational differences in "less than good" self assessed health in 10 European countries.

Country	Relative Index of Inequality (as Prevalence Rate Ratio)					
	Women			Men		
	RII	(95% confidence interval)		RII	(95% confidence interval)	
Sweden	2.09	(1.72-	2.53)	2.05	(1.64-	2.55)
Norway	4.85	(3.22-	7.31)	4.21	(2.57-	6.89)
Denmark	2.78	(2.39-	3.22)	1.96	(1.67-	2.30)
England	3.04	(2.57-	3.60)	2.51	(2.11-	2.98)
Ireland	4.50	(3.41-	5.93)	5.15	(3.77-	7.04)
Belgium	3.16	(2.68-	3.72)	3.48	(2.89-	4.19)
France	3.08	(2.51-	3.78)	2.84	(2.22-	3.63)
Italy	1.67	(1.59-	1.75)	1.89	(1.79-	2.00)
Spain	2.62	(2.16-	3.18)	3.12	(2.49-	3.90)
Portugal	3.19	(2.75-	3.71)	4.32	(3.33-	5.60)
Hungary	2.10	(1.92-	2.30)	1.69	(1.52-	1.89)
Czech R	2.84	(2.05-	3.93)	2.54	(1.77-	3.63)

Table 4. Prevalence of "disease weighted" self assessed health according to educational level in 10 European countries.

Country	Average of "disease weighted" health					
	Women			Men		
	Low education	High education	Low minus high	Low education	High education	Low minus high
Sweden	2.63	2.27	0.35	2.38	2.16	0.22
Norway	2.76	2.11	0.66	2.39	2.03	0.36
Denmark	2.71	2.10	0.60	2.46	2.10	0.36
England	2.65	1.99	0.65	2.70	2.05	0.65
Ireland	2.16	1.78	0.38	2.20	1.69	0.51
Belgium	2.63	2.22	0.41	2.54	2.08	0.46
France	2.59	2.22	0.37	2.42	2.12	0.30
Italy	3.17	2.79	0.38	2.94	2.58	0.36
Spain	2.86	2.37	0.49	2.58	2.22	0.35
Portugal	4.19	2.96	1.23	3.57	2.64	0.93
Hungary	4.12	3.26	0.86	3.73	3.11	0.62
Czech R	3.26	2.58	0.68	3.08	2.53	0.55

Table 5. Magnitude of educational differences in "disease weighted" self assessed health in 10 European countries.

Country	Relative Index of Inequality (as Prevalence Rate Ratio)			
	Women		Men	
	RII	(95% confidence interval)	RII	(95% confidence interval)
Sweden	1.32	(1.22- 1.42)	1.32	(1.22- 1.43)
Norway	1.58	(1.42- 1.75)	1.43	(1.28- 1.59)
Denmark	1.45	(1.36- 1.54)	1.35	(1.27- 1.46)
England	1.59	(1.49- 1.70)	1.51	(1.41- 1.61)
Ireland	1.41	(1.25- 1.60)	1.45	(1.29- 1.63)
Belgium	1.38	(1.30- 1.47)	1.39	(1.31- 1.48)
France	1.32	(1.22- 1.43)	1.28	(1.18- 1.39)
Italy	1.23	(1.20- 1.26)	1.24	(1.21- 1.27)
Spain	1.30	(1.21- 1.40)	1.27	(1.19- 1.36)
Portugal	1.66	(1.55- 1.78)	1.63	(1.49- 1.77)
Hungary	1.58	(1.48- 1.70)	1.40	(1.29- 1.50)
Czech R	1.60	(1.36- 1.89)	1.34	(1.13- 1.58)

Figure 1. Prevalence of SAH categories among low and high educated respondents in 10 European countries. Women.

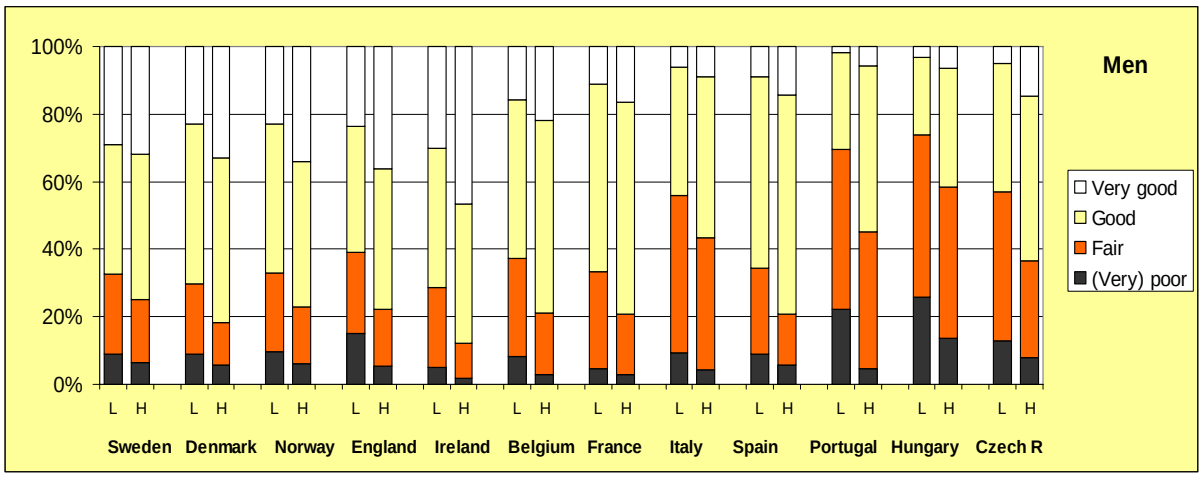

Figure 2. Prevalence of SAH categories among low and high educated respondents in 10 European countries. Men.

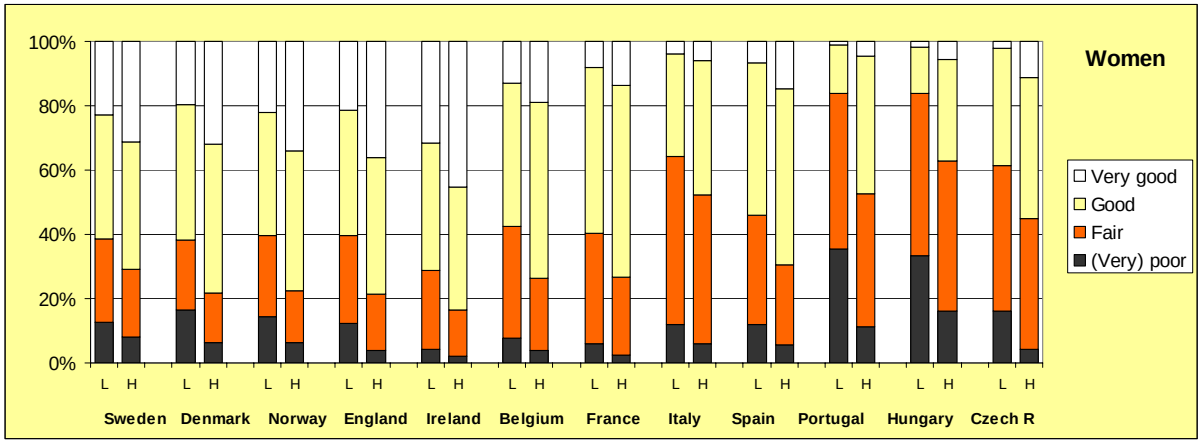

Figure 3. Educational inequalities in "disease weighted" SAH in 10 European countries. Comparison of estimates for men and women.