More equal than others? `Fundamental causes' of health disparities in Canada and the United States

Canadians are in better health than Americans, and good health is more equally distributed across income groups in Canada than in the US, according to a recent study by sociologist Andrea Willson, published recently in *International Sociology*. Canada’s more advanced social policy programs appear to reduce the strength of the relationship between economic resources and health.

Researchers have long sought to understand why disparities in health between socio-economic groups persist despite improvements in sanitation, infectious disease and other factors that have historically linked “better-off” with better health.

One theory, fundamental cause theory, suggests that high-income, educated individuals have at their disposal a range of resources including knowledge, money, power and social connections. As risk factors in the health-wealth relationship change over time - from sanitation to high cholesterol, for example - they draw on these resources to learn about and protect themselves from these new risks.

Willson’s ingenious analysis used nationally-representative survey data from Statistics Canada’s National Population Health Survey (1998/9) and the US Panel Survey of Income Dynamics (1999) to test two predictions of fundamental cause theory: i) that socio-economic status will be more strongly linked to the risk of developing preventable diseases than of unpreventable diseases; ii) that this link will be stronger in countries with greater economic inequality.

Overall, Canadian adults (25+ years) were in better health (Table 1). Not only were they less likely to assess their own health as “fair” or “poor”, a much smaller proportion had received a medical diagnosis of heart disease / stroke or cancer – surprising, given that Canadians are more often smokers.

**Table 1: Some Descriptive Characteristics**

<table>
<thead>
<tr>
<th>Variable</th>
<th>US</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular disease</td>
<td>9.7%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Cancer</td>
<td>4.8%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Fair/poor health</td>
<td>15.6%</td>
<td>11.2%</td>
</tr>
<tr>
<td>High School education at most</td>
<td>49.9%</td>
<td>40.1%</td>
</tr>
<tr>
<td>Smokes cigarettes</td>
<td>19.1%</td>
<td>26.8%</td>
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*Source: Table 1, Willson, A.E., 2009.*

**Figure 1**  Fair/Poor Health by Household Income Quintile in the US and Canada, 1998/9

*Note: Q1…Q5 = Quintile 1…Quintile 5.*
Self-reported health was also more closely related to income levels in the United States than in Canada (Figure 1).

The subsample of individuals who had been diagnosed with cardiovascular disease or cancer were used to test whether socio-economic status (income and education) had a stronger effect on the risk of developing a more preventable disease (cardiovascular) rather than a less preventable one (cancer), while controlling for age, sex, race and smoking.

Results of the logistic regression clearly support both predictions of fundamental cause theory. In the two countries, lower levels of education and income increased the odds of experiencing a preventable disease over a less-preventable one. In the United States, however, these odds increased to statistically significant levels, whereas in Canada, they did not.

With the healthcare debate raging south of the border, this study makes it clear that health is not just about health care, and that health inequalities go far beyond unequal access to health care. The findings from this study suggest that Canadian public policy, with its broad ‘health supportive infrastructure’, is more effective than US policy in altering the social conditions that affect the determinants of disease.

To find out more about this fascinating study, and discuss its implications, come and join us at the UWORDC Brown Bag on Wednesday, February 10 at the Social Science Centre Room 5220.

Note: Summary prepared by Heather Juby, CRDCN Knowledge Transfer Coordinator, based on Willson, Andrea A. 2009. ‘Fundamental Causes’ of Health Disparities: A Comparative Analysis of Canada and the United States, *International Sociology* 24(1): 93-113. Online version - [http://iss.sagepub.com/cgi/content/abstract/24/1/93](http://iss.sagepub.com/cgi/content/abstract/24/1/93). For more information on this study please contact Andrea Willson at willson@uwo.ca.

The analysis was carried out at the University of Western Ontario Research Data Centre. The Research Data Centre program is part of an initiative by Statistics Canada, the Social Sciences and Humanities Research Council, the Canadian Institutes of Health Research and university consortia to strengthen Canada’s social research capacity.