Commentary: The contingencies of income inequality and health: reflections on the Canadian Experience

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In this issue of the *International Journal of Epidemiology*, Amir Shmueli recounts several health and economic indicators for Israel between 1979 and 2000.1 On the health side of things, life expectancy at birth increased by more than 5 years for both men and women as infant mortality declined precipitously. On the economic side of things, absolute wealth (measured in 1995 dollars per capita) rose from about 36 000 IS in 1979 to more than 54 000 IS in 2000. Inequality in the distribution of income also rose during the period, however, there were only modest increases in post-transfer and disposable income inequality. The most obvious increases in income inequality were to be found in the increasing gap in earned income. In other words, between 1979 and 2000 the gap created by polarized wages and returns from investment income was really quite significant. During the period, on average everyone was getting healthier and the Israeli economy was indeed growing but the health gains and growth appeared alongside increasingly polarized labour market opportunities and returns. In order to keep the post-transfer and post-tax (disposable) Gini coefficient fairly steady over time, it’s clear in Shmueli’s time series that the Israeli government had to up its involvement in terms of income transfers over the period.

There are two important findings from Shmueli’s study. First, there was no effect of income inequality on population health over time. Shmueli’s results are consistent with other trend studies examined in a recent systematic review of the literature on income inequality and health.2 That review clearly shows income inequality does not map easily onto overall population health trends.3,4 It depends on how income is linked to specific exposures for specific population health outcomes.5 The other important finding is that the increasingly ambitious fiscal efforts to keep greater disposable economic inequality at bay—particularly for the most disadvantaged—may have paid important population health dividends, especially for infants and women.

We think that the temporal trends seen in these aggregate Israeli time series resonate well with the ongoing cross-national experiment that has compared Canada and the US (emphasizing the differences in urban environments) on the relationship between income inequality and mortality. There was no reason to believe when the work began that summary measures of population health in Canada would not also be patterned by income inequality like they had been shown to be internationally3,6 and in the US.7,8 But, income inequality has not turned out to be particularly helpful in explaining mortality patterns within Canada at multiple geographical scales, even though like in Israel, there has been a sharp increase in Canadian earnings inequality since about 1980.9

Other than Shmueli’s work, it has, to our knowledge, only been in the Canada–US comparative context that multiple conceptualizations of income inequality have been considered in relation to health status.9 After the initial study which showed that mortality was patterned by income inequality in the US at both the state and metropolitan level but not in Canada,10 there remained the possibility that inequalities generated in economic returns from participation in the labour market were in and of themselves health-compromising even though the disposable income for many Canadian households was supplemented with transfers. This raises the important issue of whether income that is earned through a job may be more important for health than income received but not earned.

In the US, the cross-sectional aggregate effect of income inequality on working age mortality in 1990 holds across multiple income concepts and inequality measures. In Canada, however, the only significant relationship between income inequality and mortality occurs when we consider inequality in labour market income including the unemployed (i.e. including households reporting zero earnings as opposed to considering only those with a non-trivial amount of earnings). Sanmartin and colleagues have interpreted their findings to mean that in order to understand the distribution of mortality across Canada, it is necessary to consider the role of labour market exclusion. In the US it makes no difference if labour market exclusion is considered or not, possibly because in the US labour market there is little distinction for health outcomes between being employed in a low wage job and being without work. Thus whether or not we find a relationship between income inequality and mortality between nations may be contingent, at least in part, upon the particular historical, economic, and political context that influences policies toward the labour market experience of the least well-paid workers. Furthermore, within any national context our ability to pick up a pattern of mortality by income inequality would appear to be contingent upon our conceptualization of inequality as inequalities in earnings, unemployment, or wealth.

In addition to these contingencies, if we also consider a study that has compared the relationship between residential

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segregation by income and mortality in Canada and the US, the story converges even more tightly around the idea that there is something fundamental about the nature of social policy that seems to be protective of population health. Universal health care aside (which we know can only be part of the story), a key distinction of Canadian urban environments when viewed in a North American context may be best summarized by their essentially ‘public’ nature which appears protective of population health. In the US, higher income inequality is significantly associated with many aspects of state and metropolitan infrastructure, including unemployment levels, health insurance, social welfare, work disability, educational and medical expenditure, and even library books per capita.

Shmueli’s conclusions about the importance over time of transfers to the more disadvantaged for the health of the Israeli population seem in line with the findings comparing Canada and the US on the relationship between income inequality and health. Shmueli’s results and those from Canada reassert the rather unsurprising notion that income transfers to the poor matter, but in the context of the debate about the health effects of income inequality, this reassertion is nevertheless important. This is also in line with the conclusion of Wagstaff and van Doorslaer who find that income inequality effects in the US largely reflect state-based policies towards the poor, including labour market and transfer policies. Of course the material matters for health and transfer payments to lower income households surely translate into tangible resources for improving health (stretched further in the Canadian context where health care is universally available). That said, material resources for health also have social meanings and these have additional positive effects on aspects of population health related to people’s sense of well-being, emotions, behaviour, mental health and social participation. Regardless of the details of the mechanisms, though, it is now becoming clearer that the most significant part of the story concerning links between income inequality and health, relates to the labour market experiences of and the levels of income transfers to the socially disadvantaged, and it is these that matter for the health of populations. Thus the debate about whether income inequality is a health determinant is somewhat academic because if income transfers matter for health, then the configuration of the social systems that distribute income and generate income inequality must also matter for health.

References