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Gender, poverty and location: how much difference do they make in the geography of health inequalities?

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Abstract

It is often said that women live longer than men, but suffer more illnesses throughout their lives. It has also been demonstrated in various studies of women's health that measures of health and health behaviour vary over different geographic scales. Added into this mix is the fact that historically more women than men in relative terms are found on the lower rungs of the socio-economic ladder. What has not been so well-developed is our understanding of the connections among health, gender, poverty and especially location. In 1998, Statistics Canada released the second wave of the National Population Health Survey (NPHS-2). Included with the NPHS-2 public use microdata file are measures of health status, gender, income and location which can be analyzed in the form of logistic regression models. Results are reported which provide a better understanding of the relative roles that gender, poverty and location play in the geography of inequalities.

Keywords: Gender; Poverty; Health inequalities

'...men, being more intemperate than women, die as much by reason of their Vices, as women do by the Infirmitie of their Sex' (John Graunt, 1662 as cited by Kane, 1994, p. 1)

There is a well-known general observation in health research that women have more illnesses, but live longer than men (see Doyal, 1995; Kane, 1994; Lorber, 1997; Lee, 1998). Many explanations for this observation have been suggested over the centuries, and the explanations run the course from the social (''men being more intemperate'') to the biological (''women do by the Infirmitie of their Sex''). No one, today, would reduce the explanation for this observation to those suggested by John Graunt in the 17th century, but today's researchers are de-emphasizing biological explanations in favour of those which place health in a broader social-theoretic framework. Two far-reaching paradigms, in particular, are guiding much of the understanding to this paradox.

The first of these paradigms has become known as the determinants of health or the population health model (see Evans et al., 1994). For example, Hertzman et al. (1994) present this model as a Rubik's cube where differences in health status are explained by combining the various cells along three dimensions: ''stages in the life cycle''; ''alternative partitions by population characteristic''; and ''sources of heterogeneity''. In their model, Hertzman et al. identify gender, poverty and location as three of the five broad population characteristics which divide a population, and in

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combination with other population characteristics and the characteristics of the other two dimensions provide the basis for understanding differences in health status.

The second paradigm comes out of a feminist understanding of health and health care. While there is no *one* uniform feminist theory, there are several common strands which most feminists take in their understanding of why women live longer, but suffer more illness throughout their lives. While accepting that biological differences between women and men cannot be denied, Doyal (1995, p. 1) argues that the gendered nature of most societies also has significant power in explaining the differences in health between women and men. First, "structured inequality" leads to women having less access to the resources required for good health. Secondly, women face "conflicting definitions of womanhood" which for example leads societies to value them as caregivers, but also leads health care providers within those same societies to devalue women's health problems as "all in their heads" or a function of the time of the month. Thirdly, women are by no means a homogeneous group. They are crosscut by their age, race, socio-economic status, etc.

While the approach taken in this paper leans heavily on a population health perspective, we also recognize the importance of the strands of feminist theory articulated in the paragraph above. In addition, we also want to follow Doyal's (1995, pp. 4–6) suggestions that we try to avoid "crude universalisms" (i.e., we want to recognize there is no one category of *woman*) and "crude difference" theories (i.e., denying "any possibility of women having beliefs, values or interests in common").

The primary, but not exclusive, focus of this paper is on understanding the relative importance that gender, poverty and location play in understanding health status. This leads us to one additional introductory comment which is our concern to avoid a "crude geography" (i.e., the lack of recognition that *where* people live and geographic scale make a difference to our understanding of health status).

In the next section, we review the literature which links health status, gender, and poverty. While there are numerous national studies discussed, few analyses have been carried out any sub-national scale. In the following section, we describe the National Population Health Survey (NPHS) of Canada and how it is to be used to analyze health status as a function of gender, poverty, location and other socio-economic variables. In the third section, we begin by examining some of the basic relationships between health status, gender and poverty. Then, we develop a series of logistic regression models adding various measures of geography to demonstrate both the importance of where people live and how geographic scale makes a difference to our understanding of health status. In the final section, we conclude with a discussion of both the substantive and methodological issues raised by the results of our analysis.

Health, gender and poverty

The links among health, gender and poverty have been demonstrated using both population health and feminist perspectives in numerous studies about women in developed and developing countries (see Blaxter, 1983; Doyal, 1995; Kane, 1994; Mburu, 1983). In this section, we focus on the evidence from developed countries only because of the parallels between our case study of Canadian women and women from other developed countries. There are three critical points that the literature raises relevant to the analysis which follows.

First, various approaches are taken to measuring poverty. One group of researchers have used social class based on occupation to capture the differences between those who are better off and those living in poverty (e.g., Aiach and Curtis, 1990; Haynes, 1991; Rodriguez and Lemkow, 1990). Alternatively, another group of researchers uses income measures and "poverty lines" as the basis for distinguishing the better off from those living in poverty (e.g., see Amato and Zuo, 1992; Hahn et al., 1996; Moore et al., 1997; Thiede and Traub, 1997; Waitzman and Smith, 1998). A third alternative is to use an index which combines various socio-economic attributes. For example, Elender et al. (1998) use the Townsend Index which combines employment status, car ownership, level of crowding and housing tenure into a measure of social deprivation. As we shall see in the next section, how one measures poverty tends to emphasize some age cohorts more than others in relative terms.

Secondly, race and ethnicity have often been implicated in the relationships among gender, health and poverty (e.g., Amato and Zuo, 1992; Hahn et al., 1996; Stern, 1983; Waitzman and Smith, 1998). This is a particularly salient issue among US researchers because of the overt racism that continues to plague US society. Rates of poverty are much higher among the black population in contrast to the non-black groups, and rates of poverty among black women are even higher than rates of poverty among black men (Perales, 1988; Wilson, 1988; Grau, 1988). Ethnicity is usually measured in terms of country or region of origin (e.g., Burke et al., 1993; Elender et al., 1998; Moore et al., 1997; Stern, 1983).

While the US Census and the US National Health and Nutrition Examination Survey provide relatively unambiguous measures of race, the same cannot be said for those census and national surveys which measure country or region of origin. Ethnicity